2025 OUTLOOK

Introduction

2025 stands at a crossroads. In the prior year, nearly half of the world's population across more than 70 countries participated in national elections, artificial intelligence gained considerable traction in the marketplace, and several central banks initiated a synchronized interest rate-cutting cycle. Each of these developments alone creates a complex landscape for investors to navigate. Yet, the situation is further complicated by heightened geopolitical risks and an investment environment brimming with uncertainties. Will the impressive performance of US equities continue? Can private equity and venture capital achieve better results? What does the future hold for credit markets? In the following pages, we answer these questions and many others across all asset classes as we present our 2025 Outlook.

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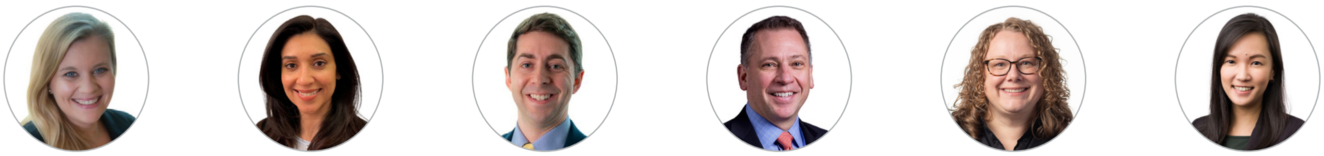

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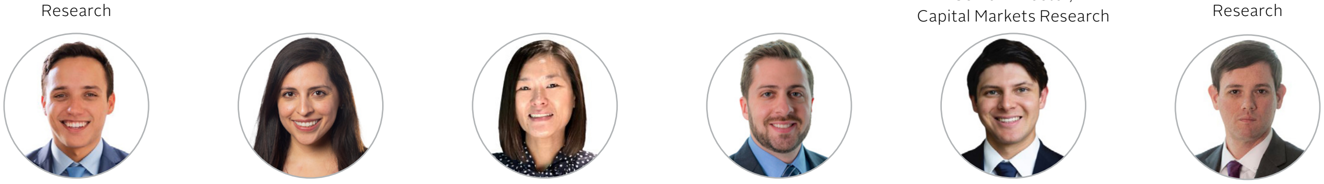

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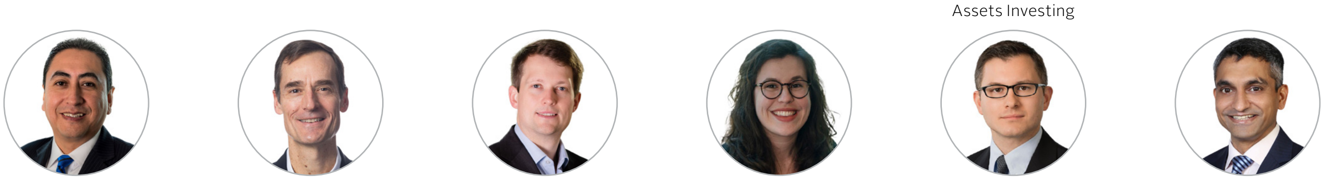

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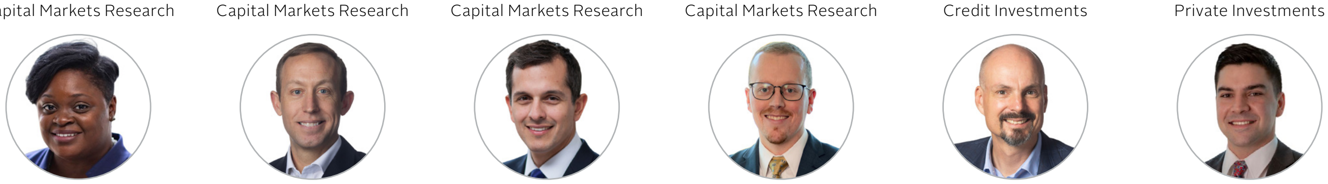

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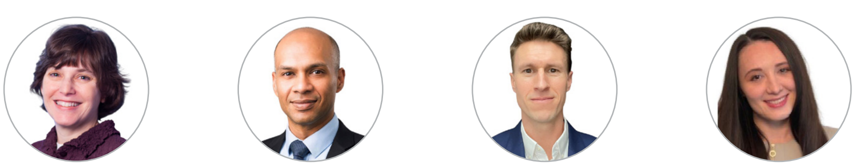

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AN OVERVIEW OF OUR 2025 VIEWS

CROSS ASSET

We expect global equities to outperform bonds, as near trend economic growth should support continued corporate earnings growth and healthy risk appetite. Stock/bond correlations should be lower than the 2023–24 peak levels, even as protectionist US policy may drive global economic uncertainty higher.

INTEREST RATES

We expect most major central banks to continue cutting policy rates, which should allow bonds to outperform cash. With breakeven inflation rates likely to be range bound, returns of inflation-linked and nominal bonds should be similar.

PUBLIC EQUITIES

We expect developed markets (DM) value and small-cap equities to outperform, given our economic views and their steep valuation discounts. Regionally, we believe US equity performance will not match the level set in 2024, allowing European, Japanese, and emerging markets (EM) equities to perform more in line with broader developed markets. Within emerging markets, strong Indian equity gains should moderate, while we doubt Chinese equities will collapse. At the same time, we expect long/short equity strategies will perform better than typical.

PRIVATE EQUITY & VENTURE CAPITAL

We expect private investment performance to improve, as the impact from overinvestment in 2021–22 recedes. The asset class's long-term performance should continue to attract individual investors and managers are creating pathways for them to more easily access opportunities. While M&A and IPO exit opportunities may improve, we believe the importance of continuation vehicles as an exit path will grow. In Asia, we expect Japanese buyout and Chinese venture capital transaction activity to increase.

DIVERSE MANAGER & IMPACT INVESTING

We expect California Carbon Allowances (CCAs) to recover from 2024 losses as clarity on supply reductions emerges. Meanwhile, impact private investment flows will favor strategies with faster distributions and commercial validation. Additionally, headwinds for private diverse manager allocations should ease, but the overhang of emerging funds may lead to consolidation or shut-downs, challenging managers.

CREDIT MARKETS

We expect liquid credit returns to decline due to low credit spreads and anticipated Fed easing. Direct lending returns should moderate but continue to outperform their liquid counterparts. Meanwhile, insurance-linked securities will continue to benefit from strong demand, and increased transaction volumes should support both specialty finance and credit opportunities managers. In emerging markets, currencies should become a tailwind for local bonds.

REAL ASSETS

We expect public infrastructure equities to perform similarly to developed market equities in 2025, propelled by supportive regulations for energy transition and strong demand for power infrastructure to fuel AI. While we believe US REITs should underperform US equities, US private real estate funds raised in 2025 should generate above-average returns, benefiting from distressed deals and solid fundamentals.

CURRENCIES

We expect the US dollar rally will ultimately cool, with early strength giving way to modest weakening. Meanwhile, gold returns are likely to moderate in 2025 after a surge in 2024. Emerging markets' use of stablecoins should support positive crypto returns, driving blockchain innovations and investment opportunities.

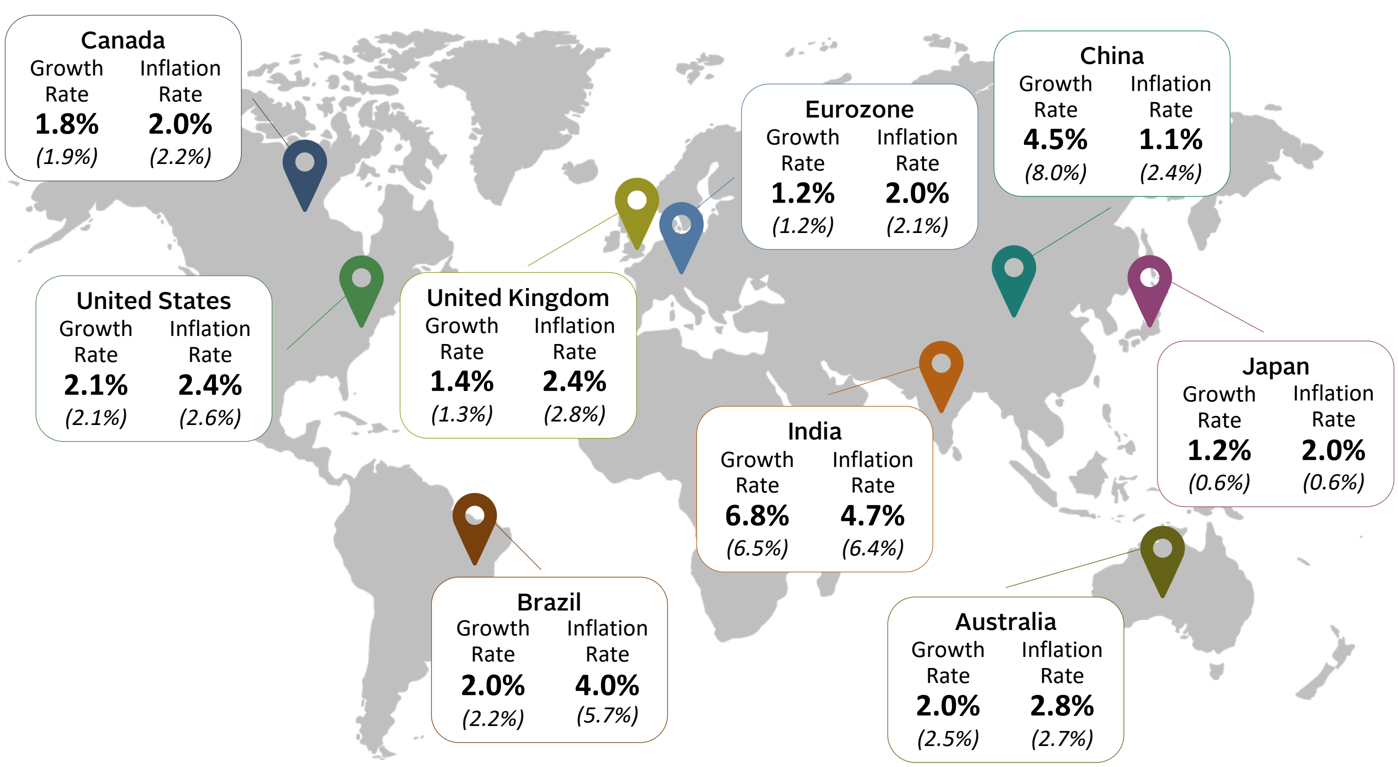
THE GLOBAL ECONOMIC BACKDROP IN 2025

Our investment views are guided by our expectation that global growth will likely remain close to trend in 2025. The consensus expectation is for global growth to grow 3.1% next year, which is the same rate of growth that is anticipated in 2024 and in line with the trailing 20-year average rate of growth of 3.0%. While global growth could slow modestly from these levels, the risk of a global recession remains low, and we do not expect growth will fall materially below its long-term trend. We expect inflation rates in most major economies to experience a bumpy deceleration toward central bank targets, as near-trend growth helps ease price pressures that remain elevated in some cyclical, service-oriented sectors. In our view, this will allow most key central banks to continue modestly easing policy rates next year, which will move rates closer to their long-term neutral rates of interest.

Our economic outlook is based on three major drivers. First, consumer spending growth will likely slow (United States) or remain low (major non-US developed markets), given the depletion of any remaining pandemic-era excess savings in the United States and cooling labor markets across developed markets. Second, the manufacturing sector will remain under pressure due to the lagged effects of tight monetary policy as well as cyclical and structural headwinds in China and the euro area. Third, although lower DM policy rates and stimulative policies in China may help limit downside risks to economic growth, the impact will not be substantial enough to materially boost growth above its long-term trend. Beyond these three major drivers, the results of the US presidential election contribute to global economic uncertainty, broadening the range of possible economic outcomes.

EXPECTED RATES OF REAL ECONOMIC GROWTH AND INFLATION IN KEY MARKETS

As of November 30, 2024 • Bloomberg Consensus Estimates for 2025



Sources: Bloomberg L.P., International Monetary Fund, National Sources, and Thomson Reuters Datastream.
Note: Numbers in parentheses reflect the 20-year annualized growth rate through the end of 2023.

Global Equities Should Outperform Bonds in 2025

Kevin Rosenbaum
Head of Global Capital Markets Research

Global equities have outperformed bonds in a little more than two-thirds of the last 50 years. We believe this high probability should translate into outperformance in 2025. This expectation is based on our view that near trend global economic growth will support continued corporate earnings growth and healthy risk appetite.

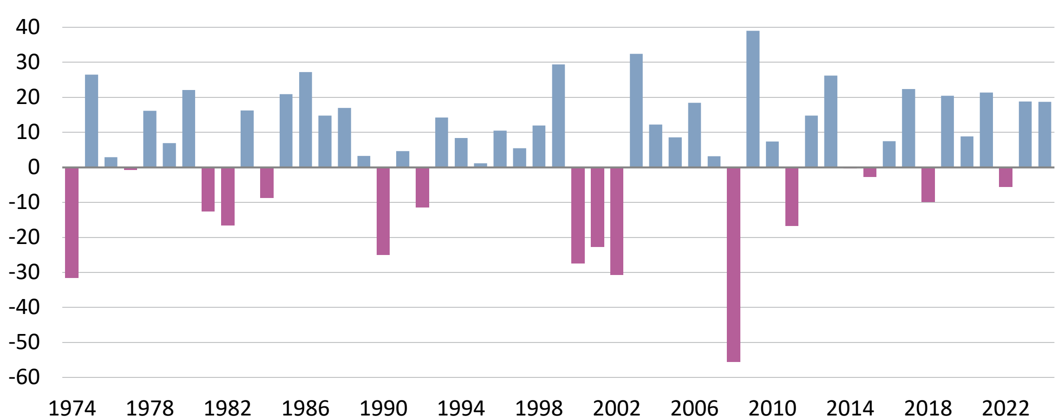
The evolution of the global economy relative to expectations has important consequences for asset prices. For instance, in 2022, global growth expectations were revised down 1.4 percentage points (ppts) to 3.0% and global inflation expectations were revised up 3.6 ppts to 7.5%. These dramatic changes led to significant interest rate increases and a global equity sell-off. Although the US election may have broadened the range of possible economic outcomes, we believe the most likely scenario is that global economic growth and key inflation rates will not deviate materially from expectations.

Near-trend global economic growth should support continued earnings growth. Currently, analysts project global earnings to grow by 12.3% in 2025, with approximately 40% of that growth coming from increased revenues and 60% from margin improvement. Earnings growth is also anticipated to improve in several markets and reflect broader participation across sectors compared to 2024. While these expectations may moderate, as is common in most years, they align with past earnings expectations, suggesting that analysts are not overly optimistic.

Our global economic expectations should also support risk appetite. Changes in investors' appetite for risky investments, such as equities, can have large implications for asset prices. Encouragingly, this appetite is also being supported by advancements in artificial intelligence (AI). While we expect AI to have a material impact on productivity growth levels by the end of the decade, its primary equity market impact in 2025 may be to maintain investor optimism, even if protectionist US policies increase global trade barriers. This optimism—alongside expectations of a more benign interest rate environment—should support equity market valuations.

GLOBAL EQUITIES HAVE TENDED TO OUTPERFORM BONDS

1974–2024 • Global Equity Returns in Excess of Bond Returns • Percentage Points • US$



Sources: Bloomberg Index Services Limited, MSCI Inc., and Thomson Reuters Datastream. MSCI data provided "as is" without any express or implied warranties.

Celia Dallas
Chief Investment Strategist

Stock/Bond Correlations Should Fall in 2025

The economic environment drives stock/bond correlations. Global inflation has decelerated over the last two years, with year-over-year core G7 inflation falling to 2.2% from its June 2022 peak of 7.8%. As key inflation rates continue their bumpy paths toward central bank target levels, and global economic growth remains near trend, correlations between stocks and bonds should decelerate from 2023–24 highs. Lower correlations mean bonds provide more protection against equity risk.

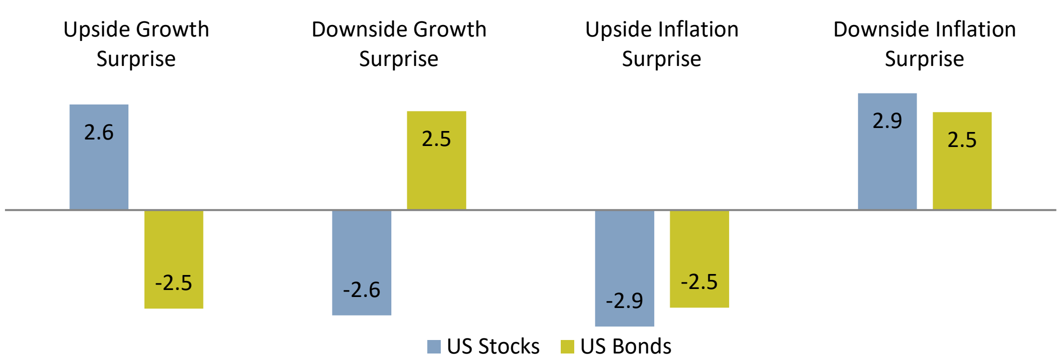
For most of the last 150 years, stock/bond return correlations have rarely been meaningfully negative based on equities and ten-year sovereign bonds. Notable exceptions include the early 1930s, late 1950s, and most of the 21st century. On a rolling 52-week basis, correlations turned significantly positive in 2022 in the United States and United Kingdom, peaking at 50% in July 2024 and 63% in June 2024, respectively. Correlations shift with macroeconomic changes. Equities tend to react positively (negatively) to good (bad) economic news, while bonds move in the opposite direction. In contrast, both stocks and bonds tend to act negatively (positively) to inflation upside (downside) surprises.

The correlation of inflation and growth expectations also influences stock/bond correlations, which tend to be highest when these expectations move in opposite directions. Such periods include when inflation is driven by supply shortages and central banks engage in procyclical monetary policy. This occurred during the 1970s stagflation period and the recent pandemic. During periods when inflation is driven by changes in demand, central banks can engage in countercyclical monetary policy, driving stock/bond correlations negative.

There remains material uncertainty around several aspects of the incoming US government's agenda, with mooted policies potentially presenting risks to inflation and growth. However, such policies are at least partially priced in, and we nonetheless expect stock/bond correlations to decline from 2023–24 highs as inflation expectations normalize toward central bank targets and growth remains near trend. Sovereign bond yields offer reasonable returns for inflation risk today, and with meaningfully positive yields, they offer upside potential should growth disappoint.

GROWTH AND INFLATION SURPRISES DRIVE NEGATIVE AND POSITIVE US CORRELATIONS, RESPECTIVELY

December 31, 1982 – September 30, 2024 • Average Annual Return in Excess of Full Period Average by Macro Factor



Sources: Federal Reserve Bank of Philadelphia, Federal Reserve Bank of St. Louis, and Thomson Reuters Datastream.

US Policy Should Drive Global Economic Uncertainty Higher in 2025

Sean Duffin
Senior Investment Director, Capital Markets Research

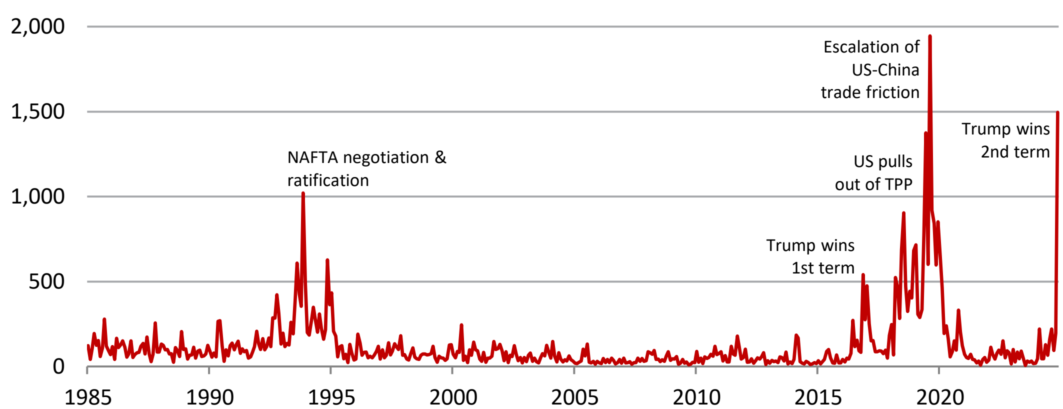
President-elect Trump is expected to employ brinkmanship in various policy areas after returning to office in January, aiming to secure deals that advance his America First agenda. He plans to begin his second term with a focus on increasing tariffs, extending and expanding tax cuts, and enforcing stricter immigration policy. While it is unclear whether these policies will be enacted as proposed, we anticipate strong rhetoric and the potential for retaliatory measures by other countries should increase global economic uncertainty.

Trade policy was a major focus during Trump's first term and will likely be one again in 2025. Previously, he initiated a series of escalating tariffs on Chinese imports, threatened tariffs on European autos, and imposed tariffs on steel and aluminum from US allies. While these tactics led to renegotiated deals in certain areas, they also strained long-standing alliances and created instability in global markets. This time around, Trump has suggested up to 20% tariff on all US imports and a 60% tariff on imports from China. If these proposals come to pass, economists estimate that they could temporarily boost inflation and detract from real US output. Moreover, it would increase the risk of retaliatory tariffs that could create more significant supply chain disruptions.

Trump's proposed immigration policy looks more aggressive than in his prior administration. It focuses on increasing deportations, restricting work visas, and changing asylum processes. These policies could create labor shortages in certain areas that rely heavily on immigrant labor, such as agriculture, construction, and hospitality. This could lead businesses and investors to become more cautious due to fears of talent shortages, potentially adding inflationary pressure.

These policies will neither be implemented overnight nor will they occur in isolation. There will be offsetting developments that may mitigate the economic and market impact of these plans. While we expect near-trend global economic growth and bumpy disinflation to continue across most major economies, the results of the US election broaden the range of possible economic outcomes in 2025.

TRADE POLICY UNCERTAINTY JUMPED DURING THE FIRST TRUMP PRESIDENCY
January 31, 1985 – November 30, 2024 • Index Level



Source: "Measuring Economic Policy Uncertainty" by Scott Baker, Nicholas Bloom, and Steven J. Davis at www.PolicyUncertainty.com.

Celia Dallas
Chief Investment Strategist

Most Major Central Banks Should Continue Easing in 2025

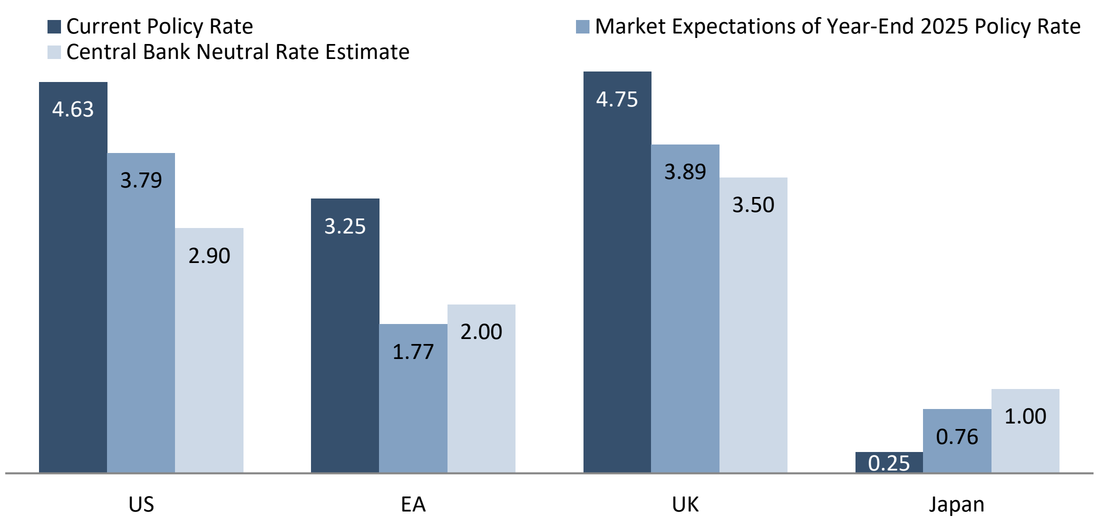
Moderating inflation and near-trend economic growth will allow most major central banks to bring policy rates toward neutral in 2025. Market expectations have fluctuated throughout the year and are now more aligned with central banks. Consequently, we expect the upside for sovereign bond performance is likely limited.

The US Federal Reserve initiated its easing cycle with a 50-basis point (bp) cut in September, responding to a labor market slowdown and reduced inflationary pressures. Similarly, the European Central Bank (ECB) and Bank of England (BOE) have cut rates, driven by weak domestic growth and decelerating, yet still elevated, inflation. Japan is an exception, facing continued inflationary pressure exacerbated by a weak currency and slow economic growth. The Bank of Japan (BOJ) has signaled its commitment to gradually increasing policy rates.

Moderating inflation in 2025, even if it remains above target rates, gives central banks the leeway to cut policy rates, increasing the likelihood of a soft landing. While central banks are not fully transparent about their policy plans, their estimates of the neutral rate, or R*, provide insight on their intentions. Indeed, the Fed's median Federal Open Market Committee (FOMC) members' long-run policy rate expectation is 2.9%, equivalent to their current R* estimate. The Fed anticipates a gradual approach to reach R*, aiming for 2026, based on their latest released estimates. The ECB and BOE have less distance to ease to reach neutral, while the BOJ needs to move in the opposite direction. Still, markets are pricing in easing of roughly 85 bps in the United States and the United Kingdom and 148 bps in the euro area.

Market expectations have converged toward those of central banks over the last year and now look reasonable based on current growth and inflation conditions. We reckon expectations will remain volatile as policy uncertainty stemming from the US presidential election results have broadened the range of potential economic outcomes.

MOST CENTRAL BANKS ARE EXPECTED TO EASE TOWARD NEUTRAL POLICY RATES IN 2025
As of November 30, 2024 • Percent (%)



Sources: Bank of England, Bank of Japan, Bloomberg L.P., Chicago Board of Trade, European Central Bank, Federal Reserve, NYSE Euronext, Osaka Exchange, and Thomson Reuters Datastream.

Bonds Should Outperform Cash in 2025

TJ Scavone
Senior Investment Director, Capital Markets Research

In 2025, bonds will likely outperform cash, driven by supportive economic conditions and attractive valuations. However, the outcome of the US presidential election could counter these tailwinds if Trump fully implements his policy proposals. Consequently, we maintain a neutral stance on high-quality bonds and duration exposure.

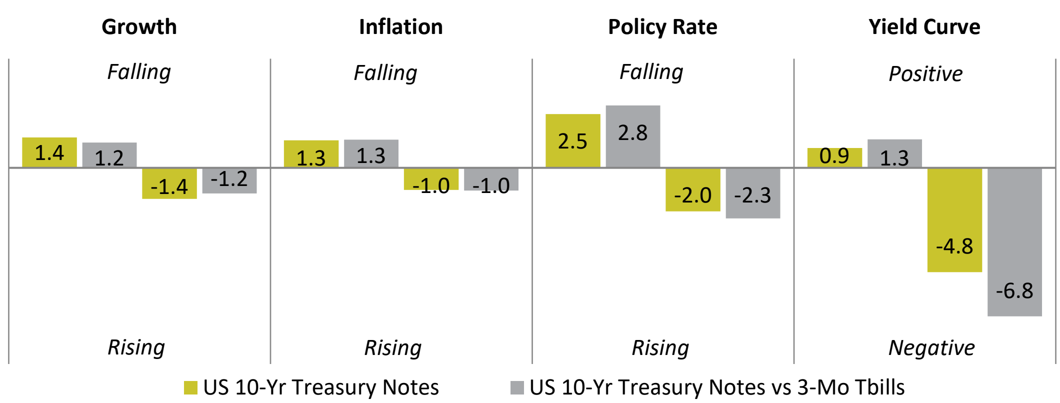
Cyclical conditions support high-quality bonds. Inflation has declined and the imbalances in the labor market have closed, while we expect economic growth to remain close to trend across developed markets. This scenario increases the likelihood of continued disinflation. As a result, we anticipate lower policy rates next year as central banks focus more on labor market weaknesses than inflation. As this happens, cash yields will likely fall below bond yields, making cash less attractive. High-quality bonds typically deliver higher returns, both in absolute terms and relative to cash, when inflation and growth slow, central banks ease monetary policy, or the yield curve slopes upward. Most of these conditions are moving into place heading into next year.

However, the US presidential election outcome could somewhat offset these factors. Trump's proposed policies on taxes, tariffs, and immigration likely pose an upside risk to bond yields if fully implemented, all else being equal. This concern contributed to ten-year US Treasury yields rising roughly 40 bps in recent months. As a result, some of this risk is now reflected in the price and yields are beginning to look somewhat elevated compared to economic fundamentals. US ten-year Treasury securities currently yield 4.2%, which is above our estimated fair value yield of 4.1%. Furthermore, while these policies could temporarily inflate consumer prices, their impact on growth is more uncertain and could detract from GDP growth next year.

Given this uncertainty, we recommend a neutral allocation to high-quality bonds. While we do not see enough evidence to support a tactical overweight at this time, we advise against reducing exposure in favor of shorter-duration assets or cash, given cyclical tailwinds and attractive valuations.

BONDS HAVE PERFORMED BETTER AND OUTGAIN CASH UNDER CURRENT ECONOMIC CONDITIONS

1955–2023 • Average Annual Performance Relative to Long-Term Average



Sources: Federal Reserve, Global Financial Data, Inc., Intercontinental Exchange, Inc., Thomson Reuters Datastream, US Department of Commerce - Bureau of Economic Analysis, and US Department of Labor - Bureau of Labor Statistics.

2025 OUTLOOK

TJ Scavone
Senior Investment Director, Capital Markets Research

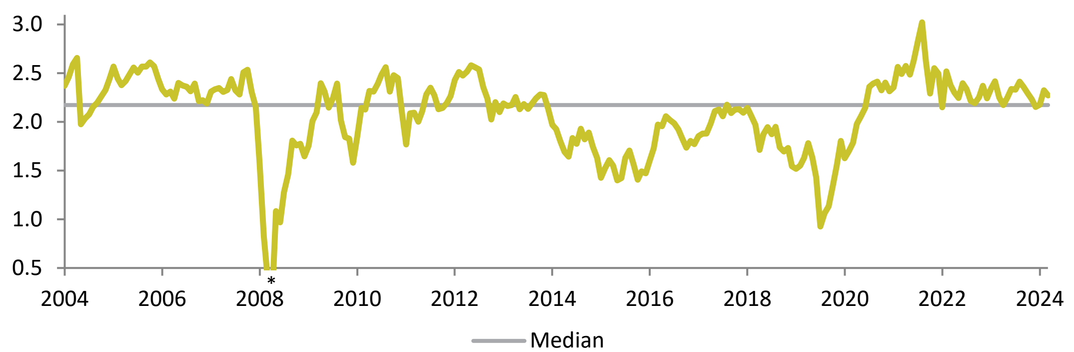
Inflation-Linked Bonds and Nominal Bonds Should Deliver Similar Returns in 2025

Inflation-linked bonds (linkers) are set to generate solid returns in 2025 due to higher real yields and favorable global economic conditions. While we expect disinflation to continue, we also anticipate breakeven inflation rates will remain rangebound.* Therefore, we believe linker and nominal bond returns will be similar next year.

The real yield on the Bloomberg World Government Inflation-Linked Bond Index reached 1.5% as of November 30, which is back within its pre-Global Financial Crisis (GFC) range. With real yields well above zero, linkers once again provide a positive real return and serve as a viable inflation hedge. In fact, linkers are among the few major asset classes we expect to deliver positive real returns in another inflation shock, according to our scenario-based return projections.

In 2025, linkers should benefit from similar cyclical tailwinds as nominals. However, linkers tend to outperform nominals when inflation expectations rise. The next year looks mixed in this regard. Inflation has fallen substantially from its post-pandemic peak, and we expect it to continue moving toward central banks' targets. This will likely cap market-based inflation expectations. Currently, ten-year breakeven inflation rates in the United States are 2.3%, which is firmly within their post-pandemic range. On the flipside, we see limited room for breakeven inflation rates to fall below their post-pandemic lows absent a recession. As such, we expect breakeven inflation rates to remain rangebound in 2025.

INFLATION EXPECTATIONS HAVE MOVED IN A TIGHT RANGE OVER THE PREVIOUS 2 YEARS
September 30, 2004 – November 30, 2024 • US 10-Yr Breakeven Inflation Rate (%)



* Capped for scale purposes. US 10-Yr Breakeven Inflation hit a low of 0.10% on 12/31/2008.

Source: Thomson Reuters Datastream.

A supply shock would likely benefit linkers, but these are hard to predict. For example, the escalation of the conflict in the Middle East has not challenged supply chains or the production of key resources like oil as some expected. Tariffs are another unknown. While they increase consumer prices, their effects are temporary and are unlikely to sustainably lift inflation expectations.

In summary, we believe linkers will generate solid returns in 2025, but we do not see a compelling case to overweight or underweight them versus nominal bonds.

* The spread between nominal and real yields.

Developed Markets Value Equities Should Outperform in 2025

Sean Duffin
Senior Investment Director, Capital Markets Research

There are several key reasons that value looks set to outperform growth in 2025. First, the euphoria surrounding the AI boom has moderated, alleviating a key tailwind that benefited growth stocks in recent years. Second, value stocks trade at attractive discounts relative to their growth counterparts. Third, central banks have recently begun cutting rates, and value stocks have often benefitted from these rate cycles.

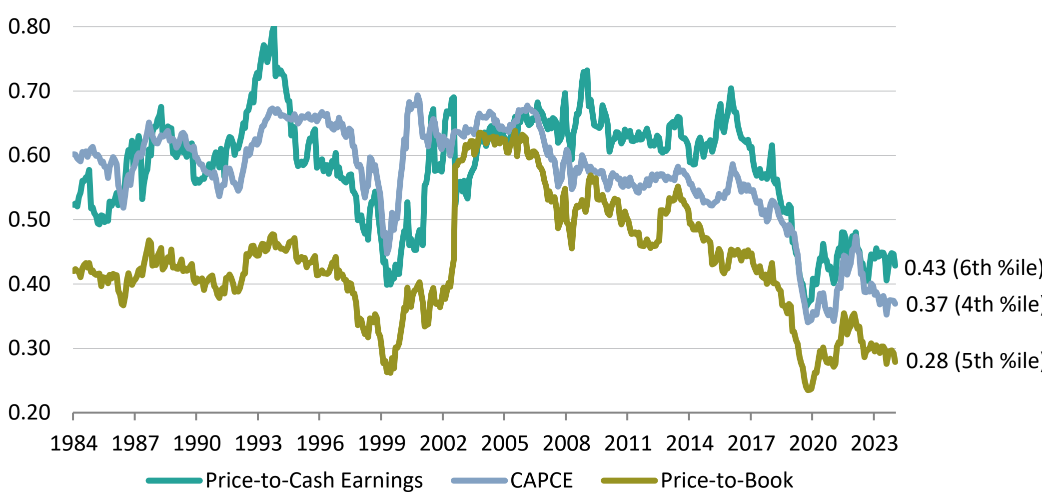
Large-cap growth stocks have surged due to rising AI stock prices in the last few years, but much of that enthusiasm appears priced in. The "Magnificent 7" stocks, central to the AI theme, now make up more than 40% of the MSCI World Growth Index. Heading into 2025, we believe that investors may recalibrate expectations for growth stocks, given concerns about sustainability and uncertain timeline for realizing returns on AI investments.

By almost any valuation metric, value stock indexes are trading at historic discounts to their growth counterparts. For example, value stocks currently trade at a 63% discount to growth stocks on a normalized price-earnings ratio basis, well above the typical 43% discount that they have averaged in the last 40 years. From these levels, value offers a margin of safety in an environment where the range of economic outcomes is wide. If the relative earnings growth advantage of growth stocks shrinks, value stocks could see considerable relative upside from valuation re-rating.

Central banks have started cutting interest rates, as inflation has moderated and economic data has softened. With policy rates starting from their highest levels in several decades, central banks have more leeway to reduce borrowing costs and keep economic growth stable. This should be supportive to cyclical sectors where value stocks are concentrated. Indeed, value stocks have historically edged growth stocks in the 12 months after the initial Fed rate cut when a recession is avoided. On the flipside, any upside risk to inflation and yields as a result of Trump's new policy proposals could also be a boon to value stocks, which outperformed growth under such circumstances in 2022 when unexpected inflation surged and the Fed was forced to hike rates.

VALUE TRADES AT A STEEP DISCOUNT TO GROWTH ACROSS VARIOUS METRICS

November 30, 1984 – November 30, 2024 • MSCI World Value vs MSCI World Growth



Sources: MSCI Inc. and Thomson Reuters Datastream. MSCI data provided "as is" without any express or implied warranties.

US Equity Returns Should Be Lower in 2025

Sehr Dsani
Senior Investment Director, Capital Markets Research

The US market's return in 2024 reflects its profitability growth. That growth was mostly driven by its roughly 30% exposure to the information technology (IT) sector, which made great strides in AI-related innovation. However, valuations and growth forecasts imply that the market is pricing in high expectations. We think this, combined with the fact that returns have rarely exceeded their solid performance in 2024, suggests US equity returns in 2025 should be more typical.

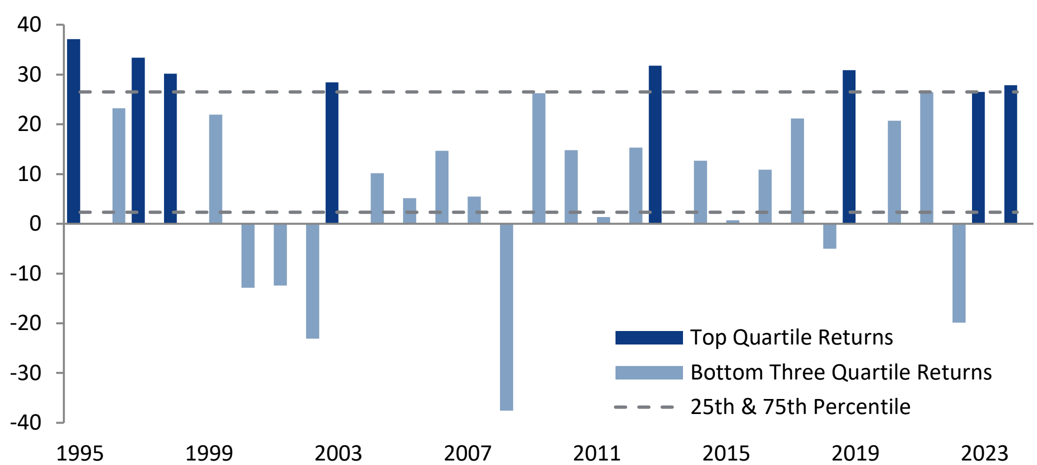
Returns for US equities in 2023 (26%) and so far in 2024 (28%) were great, ranking in the top quartile of returns since 1995. While it is rare for returns to be that high for two consecutive years, it is even more rare for it to occur three years in a row. More often, years of strong performance have been followed by middling returns.

Nonetheless, solid economic and earnings fundamentals make it reasonable to expect returns to be typical next year. Although US GDP growth (2.1%) is forecast to slow, it is still relatively attractive versus other developed markets. Additionally, expected 2025 earnings growth of 14% exceeds the rest of the world by 7 ppts. Relative profitability has notably improved since the pandemic, in part because of the US overweight to IT. This sector's high barriers to entry and highly specialized products means it benefits from higher margins than other more competitive industries.

However, valuations adequately reflect this leadership. The normalized price-to–cash earnings multiple in the United States is close to peak levels, and while neither DM ex US (76th percentile) nor emerging markets (58th percentile) are trading at inexpensive levels, they are cheaper than the United States. It is hard to argue that multiples will expand further when considering that projected earnings growth rates for the largest US sector (IT) are within the top quartile of its historical range, after an already robust 2024. Overall, it would take dramatically higher earnings and valuations in 2025 to achieve higher returns than 2024. We think that is unlikely because the market is already pricing in elevated levels.

CONSECUTIVE YEARS OF TOP QUARTILE RETURNS ARE RARE

1995–2024 • Calendar-Year Returns (%)



Sources: MSCI Inc. and Thomson Reuters Datastream. MSCI data provided "as is" without any express or implied warranties.

Relative Performance of European Equities Should Improve in 2025

Thomas O'Mahony
Senior Investment Director, Capital Markets Research

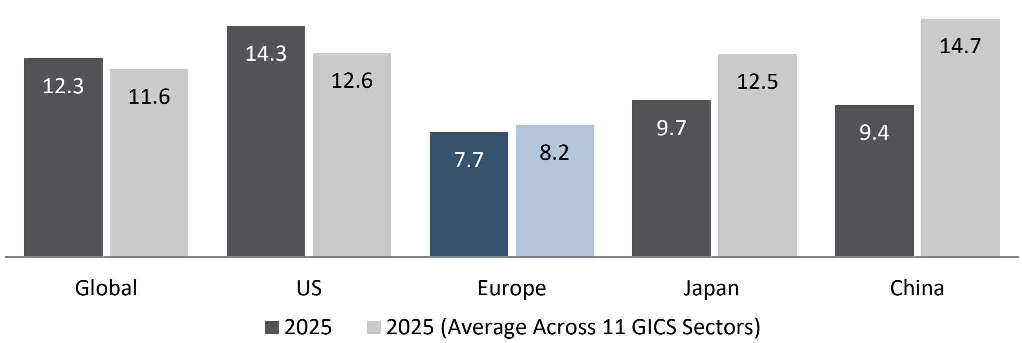
European equities have underperformed global equities by more than 16 ppts so far in 2024. This is perhaps unsurprising in light of the strong performance of tech stocks and Europe's underweight to those sectors. However, underperformance has extended beyond mere differences in exposures, as Europe underperformed across all 11 GICS sectors. Macroeconomic divergence has also been a factor behind this performance gap. On a trailing one-year basis, GDP in the euro area and United Kingdom has grown by 0.9% and 1.0%, respectively, in comparison to 2.7% in the United States.

Going into 2025, expectations for European equities are relatively depressed from a bottom-up perspective, leaving some scope for upside surprises. Analysts expect European earnings growth to lag that of global equities by 4.6 ppts in 2025, according to the consensus estimate. This is lower than 86% of relative year-ahead earnings per share (EPS) growth forecasts going back to 1987 and 3.7 ppts below the average forecast over that history. What's more, it is slightly worse than the amount by which earnings growth in Europe has trailed that of global equities so far this year. This is despite the fact that consensus expects GDP growth differentials to narrow in 2025. Currently, GDP is expected to grow by 1.2% and 1.4% in the euro area and United Kingdom, respectively, and 2.1% in the United States.

Valuations also paint a picture of negative sentiment toward European equities. Once adjusted for sectoral differences, the forward price-earnings (P/E) ratio for both Europe ex UK and the United Kingdom relative to global equities is close to 0.8. Nonetheless, despite some valuation cushion and relatively depressed EPS expectations, we refrain from taking an active overweight to the region. A primary concern is the continuing challenges faced by Germany, the largest economy in the region. Activity and sentiment indicators are deteriorating and indicating contraction, loan growth has flatlined, and fiscal policy will likely be a detractor. Adding to these cyclical headwinds is the more secular issue of increasing competition from China. Similarly, the threat of tariffs on exports to the US remains a source of uncertainty and a potential headwind, even if partially priced in. In addition, while we do not foresee a global recession in 2025, risks are more tilted toward the downside, whereupon the cyclicality of European equities may be a headwind.

CONSENSUS EXPECTS EUROPEAN EPS GROWTH TO LAG, EVEN WHEN SECTORALLY ADJUSTED

As of November 30, 2024 • FY EPS Growth Estimates by Region (%)



Sources: I/B/E/S, MSCI Inc., Standard & Poor's, and Thomson Reuters Datastream. MSCI data provided "as is" without any express or implied warranties.

Thomas O'Mahony
Senior Investment Director, Capital Markets Research

Japanese Equity Performance Should Be Similar to that of Developed Markets in 2025

Japanese equities should benefit from some supportive factors as we head into 2025. These include a corporate reform agenda, continued inflows from individuals and less stretched valuations. However, we also expect the yen to strengthen, which would be an earnings headwind. What's more, we remain sensitive to the risks of a broader economic slowdown, during which Japanese equities tend to underperform. All told, we ultimately expect their performance to be broadly in line with that of developed markets.

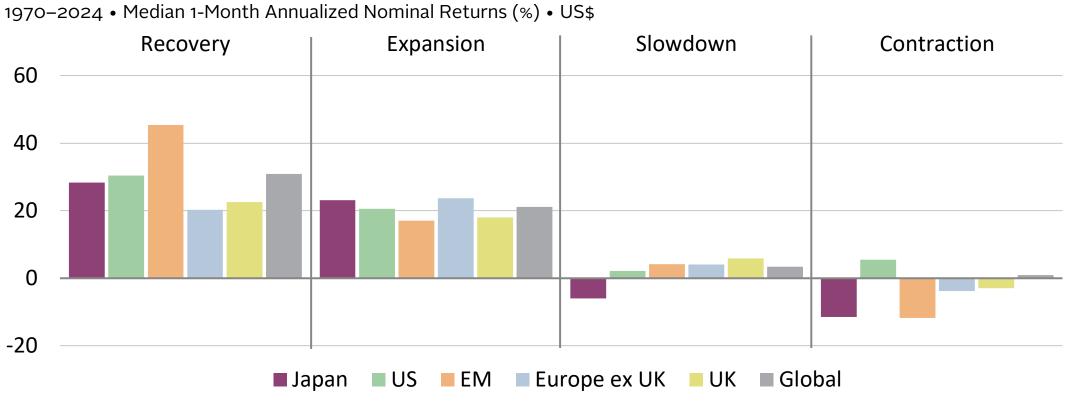
Central bank divergence should drive a recovery for the yen in the coming quarters. The BOJ has started to raise rates, and with inflation consistently above target and positive real wage growth we expect further hikes. Meanwhile, the Fed will likely cut rates further, even if the impact of the incoming administration means cuts will be more gradual. The yen's real effective exchange rate is more than 30% below its median, suggesting potential for further strengthening. This could negatively impact Japanese equities in the short term due to the earnings headwind a stronger yen represents.

Japanese equities are vulnerable to global economic slowdowns due to their cyclical exposure, particularly in industrials and consumer discretionary. We expect global growth to be close to trend but remain sensitive to downside risks, given weak activity data in China and Germany, signs of a cooling US labor market and the potential impact of tariffs. Japanese valuations, while somewhat attractive, do not sufficiently compensate for these risks. Our cyclically adjusted price-to–cash earnings (CAPCE) valuation measure shows Japanese equities trading at the 76th percentile of their own history and the 14th percentile versus global peers.

A potential ongoing tailwind for Japanese equities comes from the continued adoption of the Tokyo Stock Exchange (TSE) corporate reform agenda. This is aimed at increasing shareholder value by encouraging improvements in corporate governance and transparency, and promoting financial efficiency. An expanded tax-free Nippon Investments Savings Account scheme for Japanese individuals should also be a source of continuing inflows into domestic equities. However, these factors are not enough to warrant an overweight position. Small-cap Japanese equities may exhibit greater resilience due to lower foreign revenue exposure and potentially greater benefits from TSE reforms.

JAPANESE EQUITIES HAVE TENDED TO UNDERPERFORM DURING GLOBAL SLOWDOWNS

1970–2024 • Median 1-Month Annualized Nominal Returns (%) • US$



Sources: MSCI Inc., OECD, and Thomson Reuters Datastream. MSCI data provided "as is" without any express or implied warranties.

Stuart Brown
Investment Director, Capital Markets Research

Developed Markets Small-Cap Equities Should Outperform in 2025

DM small-cap equities have struggled to keep pace with their larger-cap brethren. 2024 was no exception, with small caps on track to underperform for a fifth time in the past six years. This has left them trading at historically discounted levels vis-à-vis mid/large caps. However, we think 2025 may mark a turning point, and recommend that investors modestly overweight broader DM small caps.

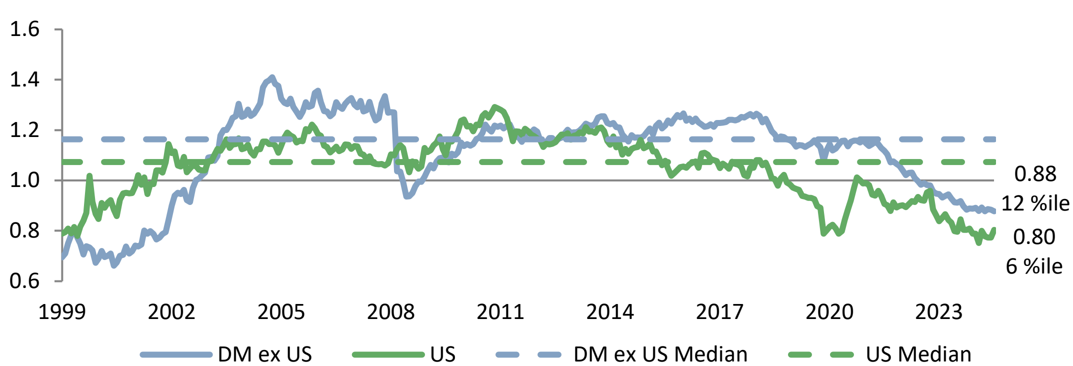
Markets are likely to favor cyclical equity market sectors as central banks continue easing policy. Small caps are among the key beneficiaries of rate cuts, being relatively overweight the industrials, real estate, materials, and consumer discretionary sectors. Indeed, some of these were the top-performing segments in the second half of 2024. This dynamic looks set to continue, particularly as we expect near trend economic growth with limited risk of recession. Such an environment should support risk appetite, boosting small caps.

Recent underperformance has created a valuation opportunity. Both US and DM ex US small caps trade at historically wide discounts to their mid-/large-cap peers. Highly valued US tech stocks are partly to blame, as high expectations from the impact of AI have left global equity indexes increasingly concentrated. Further, small-cap earnings growth is expected to exceed that of mid-/large-caps. Taken together, we think investors are well compensated for leaning into small caps at these valuation levels.

The US and DM ex US segments enjoy distinct tailwinds. In the United States, small caps stand to benefit from a potential policy shift, given Trump's preference for tax cuts and a lighter regulatory touch. Ongoing investment in manufacturing capacity favors industrials, while potential for a steeper yield curve supports financials via several channels, namely net interest margins. US small caps are overweight these two sectors. DM ex US small caps are relatively overweight Japan, where improving economic fundamentals should allow for further monetary policy normalization and support the yen. In addition, DM ex US economic growth is expected to pick up modestly after slowing in 2024.

SMALL CAPS APPEAR UNDULY DISCOUNTED VIS-À-VIS MID/LARGE CAPS AS WE EXPECT CATALYSTS FOR OUTPERFORMANCE WILL EMERGE IN 2025

May 31, 1999 – November 30, 2024 • Small-Cap vs Mid-/Large-Cap Relative CAPCE Ratio



Sources: MSCI Inc. and Thomson Reuters Datastream. MSCI data provided "as is" without any express or implied warranties.

Emerging Markets Equity Performance Should Be Similar to Developed Markets Equity in 2025

Stuart Brown
Investment Director, Capital Markets Research

EM equities are on track to trail DM peers for a fourth straight year in 2024. However, the underperformance margin is among the narrowest over that span. We see this as a fair analog for 2025, where we expect EM equity performance to broadly match that of developed markets. Indeed, many of the factors benefiting EM performance in 2025 should help DM performance as well.

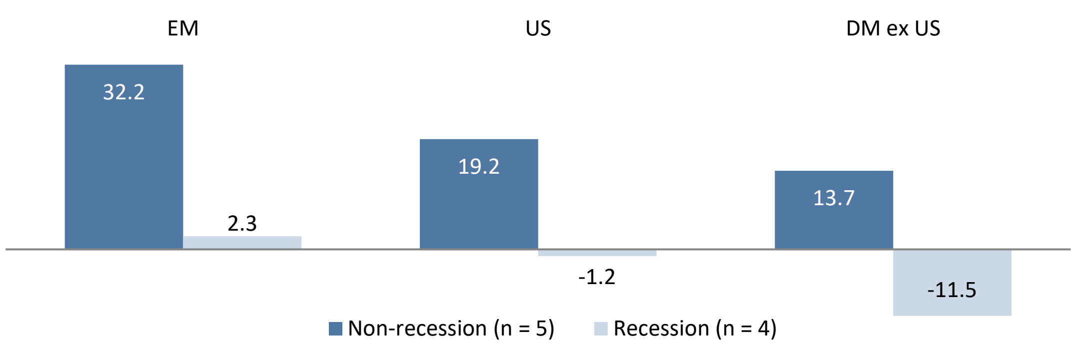
The economic outlook should support EM equities. We expect the Fed to continue cutting interest rates as the US economy expands in-line with recent trends. This setup bodes well for EM equities, which have historically delivered strong results during non-recessionary Fed rate-cutting cycles. Further, economists expect GDP growth differentials versus the United States to shift in favor of non-US countries and regions. The US election result may contribute to near-term US dollar strength, but we ultimately think the economic backdrop will induce modest weakening in 2025, providing a tailwind for EM stocks.

Broader policy easing has bolstered the earnings outlook. With the hurdle of Fed rate cuts cleared, we think EM central banks will continue their own rate-cutting cycles. Monetary easing in China and across broader emerging markets has often been a tailwind for EM corporate profits, where consensus expectations for EPS growth of around 15% appear well supported. Chinese stimulus has also lifted prospects for EM trade. Earnings among smaller Asian economies and Latin America, where China represents a significant proportion of export demand, stand to benefit the most.

Valuations may ultimately limit EM performance. Although emerging markets trades at a nearly 40% discount to developed markets, absolute valuations have climbed to among their highest levels in the past decade. These elevated levels are largely concentrated in India and Taiwan, which have been the primary drivers of EM performance in recent years. Given these two countries account for nearly 40% of EM market capitalization, the risks of underwhelming expectations are elevated. Against this backdrop, we are wary of leaning into EM equities, and suggest investors hold this allocation in line with the weight in their policy portfolio.

NON-RECESSIONARY FED RATE CUT CYCLES HAVE SUPPORTED EQUITIES

Nine Rate Cut Cycles Since 1984 • Median 12M Return Following Initial Rate Cut (%)



Sources: Federal Reserve, MSCI Inc., National Bureau of Economic Research, and Thomson Reuters Datastream. MSCI data provided "as is" without any express or implied warranties.

Aaron Costello
Head of Asia

Vivian Gan
Associate Investment Director, Capital Markets Research

Chinese Equity Prices Should Not Collapse in 2025

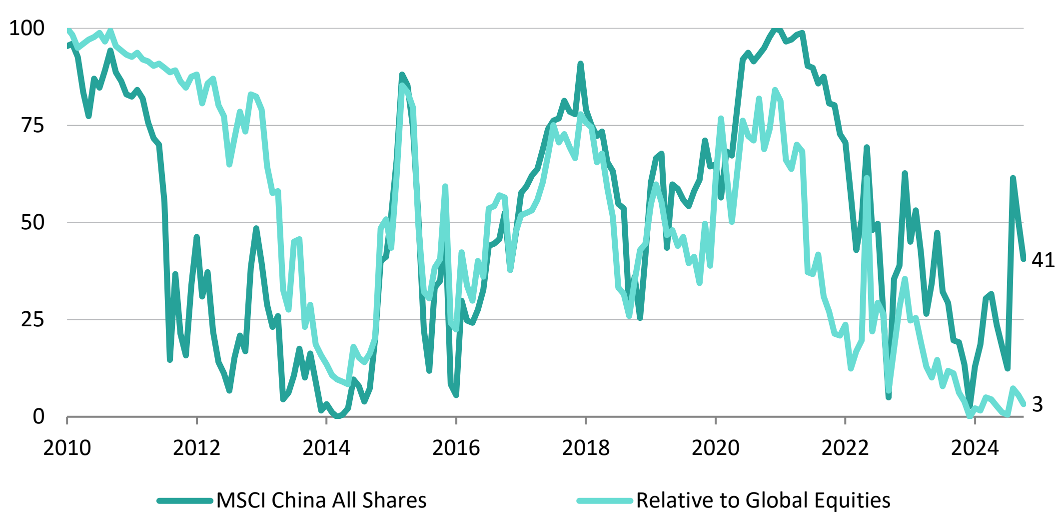
We expect the Chinese equity rally to stall but not necessarily collapse in 2025, given markets have already front run the benefits of increased fiscal and monetary stimulus. With Chinese equity valuations back to fair value, a further re-rating of the market will require China's economic data and corporate fundamentals to improve, which will take time absent further policy support.

Chinese equities rallied 35% from their September lows to their October peak* as investors frontloaded expectations of more aggressive fiscal stimulus from China. However, the rally subsequently stalled as the fiscal measures announced disappointed and the re-election of Trump raised concerns about more hawkish US policies on China.

With the recent rally, Chinese equity valuations have risen, with our preferred valuation metric for China at the 41st percentile relative to its own history. For the Chinese equity rally to resume, this will require a meaningful acceleration in China's economic growth, easing deflationary pressures, and a rebound in corporate earnings growth. Although certain Chinese economic data are starting to improve, key indicators such as housing market data and inflation data remain weak and will take time to recover. Nevertheless, downside risks to China seem contained as monetary easing and actions taken to control local government debt risks should help to prevent further stress.

Overall, given investors have priced in current policy stimulus, and Chinese equity valuations are fair, a further re-rating of the market may require China to ramp up stimulus in 2025. This may occur either in response to weaker-than-expected economic growth or further US policy actions (e.g., increased tariffs) on China. While additional stimulus is needed for a renewed rally, a market collapse is unlikely given current policies should help to stabilize the economy. Thus, we believe investors should hold China allocations in line with the weight in their policy portfolio.

CHINESE EQUITY VALUATIONS HAVE RECOVERED
February 28, 2010 – November 30, 2024 • Valuation Percentile (%)



Sources: MSCI Inc. and Thomson Reuters Datastream. MSCI data provided "as is" without any express or implied warranties.

* Data reflect net total returns of the MSCI China All Shares Index from September 11, 2024, to October 7, 2024.

Indian Equity Performance Should Moderate in 2025

Stuart Brown
Investment Director, Capital Markets Research

Indian equities have been on a tear. The market gained a staggering 13.5% annualized over the past five years, topping nearly all other countries. Still, amid a backdrop of high valuations and expectations, we expect Indian performance will moderate in 2025. Investors should hold the country in line with its weight in global equity benchmarks.

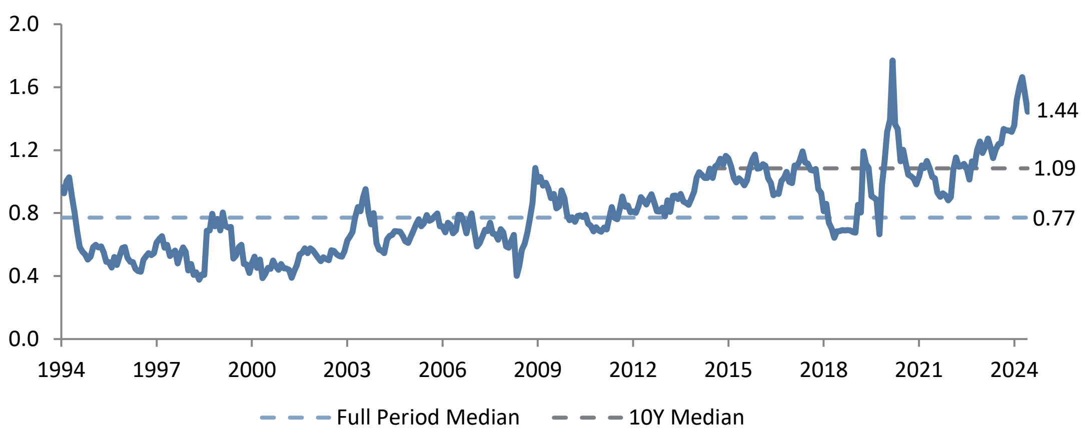
Indian equities are richly priced, reflecting high growth expectations. A composite of Indian equity valuations trade nearly 40% above their 20-year median, the highest level among large EM countries. India's forward P/E ratio of 22.8 sits near an all-time high, with small caps even more expensive. Although the 2025 earnings outlook (18%) was upgraded during 2024 and profitability recently hit a ten-year high, the 20-year average EPS growth rate was just 10%. Further, India's PEG ratio—which relates valuations to growth expectations—of 1.44 is near a ten-year high. Taken together, Indian stocks are priced for perfection and face elevated risks from even a modest earnings disappointment.

The economic outlook, which has contributed to equity market exuberance, appears stable. Growth is expected to slow modestly to 6.8%, supported by lower inflation, investment in infrastructure and industrial capacity, and a broadening of consumer strength to rural populations. A favorable monsoon season in 2024 should support 2025 consumption, while also limiting upward pressure on food prices. This should enable the Reserve Bank of India to lower rates, as food makes up a meaningful share of India's inflation basket.

India should remain resilient to external shocks. Despite potential for Chinese equities to garner increased foreign investment flows, we do not think this will come at India's expense. Domestic investors have superseded the impact of foreign flows, and Indian households in aggregate remain underinvested. Downside risks to global growth would likely be mitigated as India's economy is domestically oriented, with exports making up a relatively small share of the economy. Further, India has shored up its foreign exchange reserves, providing yet another buffer to adverse shocks, such as higher oil prices.

INDIAN EQUITIES ARE PRICED FOR PERFECTION

June 30, 1994 – November 30, 2024 • PEG Ratio



Sources: I/B/E/S, MSCI Inc., and Thomson Reuters Datastream. MSCI data provided "as is" without any express or implied warranties.

Long/Short Equity Should Deliver Above-Average Results in 2025

Stephen Mancini
Senior Investment Director, Hedge Funds

We expect most long/short equity strategies will perform better than typical, driven by a favorable macroeconomic backdrop and the potential for strong alpha generation on both the long and short sides of the portfolio.

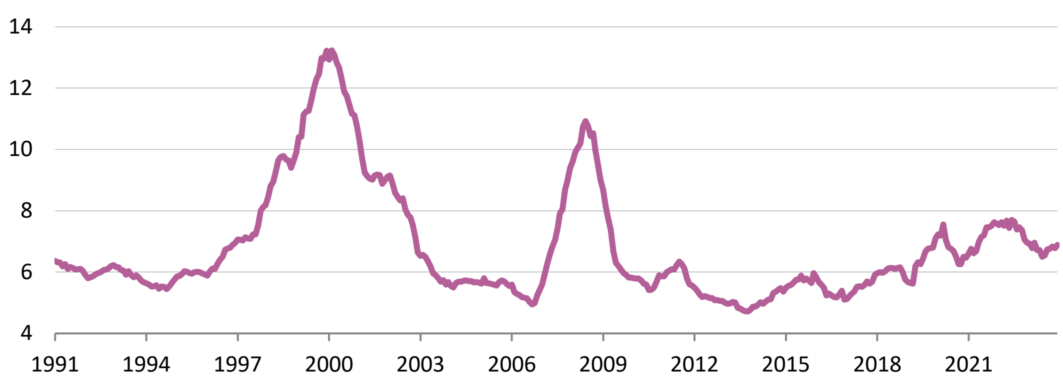
Contributing to the attractiveness of long/short equity are the ongoing challenges faced by companies reliant on capital markets for funding. Despite central banks' recent easing decisions, rates remain elevated relative to the past 15 years. This environment has created a relative scarcity of capital, making it marginally more difficult for financially challenged companies to secure the funding they need to sustain operations and growth. As a result, these companies face headwinds, providing fertile ground for attractive short opportunities. The continued tailwind from the positive short rebate many long/short funds are receiving further enhances the potential for alpha generation on the short side, as managers can capitalize on the struggles of overleveraged and underperforming firms while earning a positive carry on their collateral.

On the long side, the market presents numerous opportunities for managers to add value by identifying companies with real earnings and strong free cash flow growth that are trading at relatively attractive valuations. While certain segments of the market may exhibit frothiness, many fundamentally sound companies remain undervalued, offering significant upside potential. Furthermore, global ex US valuations remain favorable; coupled with idiosyncratic fundamental catalysts, the global opportunity set on the long side remains robust. The ability to discern between overhyped stocks and those with genuine growth prospects is a key advantage for skilled long/short equity managers.

The combination of strong alpha potential on both the long and short sides should enable long/short funds to generate attractive long/short spreads. By maintaining a balanced and diversified portfolio, managers can mitigate market risk while capitalizing on individual security selection. This approach not only enhances the potential for outperformance but also provides a robust framework for navigating various market conditions.

DISPERSION IS TRENDING HIGHER

December 31, 1991 – November 30, 2024 • 12-Month Moving Average



Source: Standard & Poor's.

Private Investment Performance Should Continue to Heal Itself in 2025

Andrea Auerbach
Global Head of Private Investments

As we head into 2025, many of the factors that had an outsized effect on the private investment (PI) market environment in 2021–22 are retreating into the background.

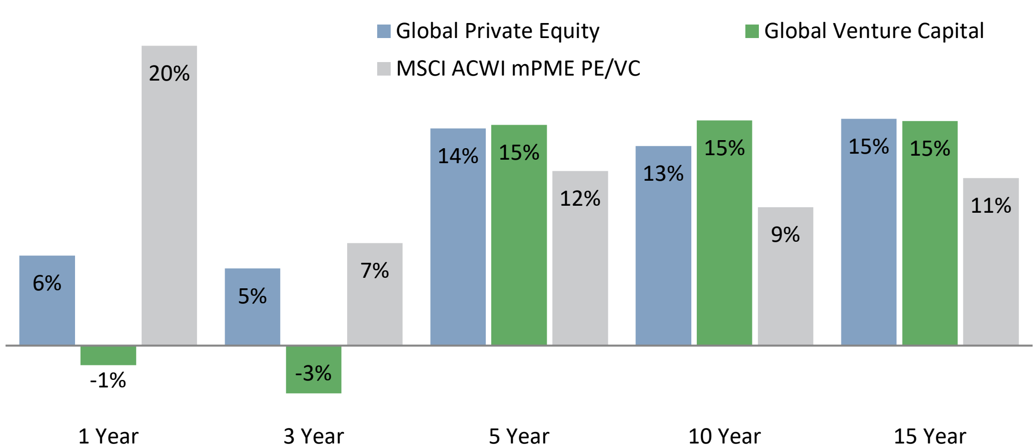
That said, overall private market performance for the next several years will reflect the effects of overinvestment that occurred in 2021 and early 2022, prior to the end of Zero Interest Rate Policy (ZIRP). Investors that committed to 2020 and 2021 vintage year funds saw them deploy half of their capital during this overinflated period. The amount of invested capital was twice the long-term annual average and deployed at a peak in valuations for both private equity and venture capital. Then interest rates climbed, debt costs increased, valuations corrected, and transaction activity slowed considerably over the subsequent years, impacting both limited partner (LP) returns and distributions. The capital overweight to this time period is impacting short-term performance, as shown in the one-year and now three-year rolling benchmark returns.

Moving into 2025, the private markets continue to tick back to their long-term trend-lines from a fundraising and capital deployment standpoint, as have valuations. While managers are working hard to deliver returns on the ZIRP-era cohort of invested capital, they are also working hard to successfully invest their remaining capital. Indeed, the capital overhang stands at its highest amount ever by our estimation, and it is being deployed into these more favorable market conditions by managers that have added or acquired dog years of experience during this market cycle. LPs that pulled back on commitments more recently will also benefit from the deployment of their program's dry powder into the current market.

ZIRP-era investments will take time to fully work their way through programs. While that is happening, investors will continue to steadily build their program exposures by vintage year, strategy, and sector among other factors to continue to make progress toward achieving the long-term returns the private markets are known to deliver.

FOCUS ON THE COMPASS, NOT THE CLOCK

As of June 30, 2024 • PE and VC Periodic Returns (%) vs MSCI ACWI mPME



Sources: Cambridge Associates LLC, MSCI Inc., and Thomson Reuters Datastream. MSCI data provided "as is" without any express or implied warranties.

Private Markets Should Continue to Propagate Public Market Options in 2025

Andrea Auerbach
Global Head of Private Investments

While it was again observably quiet in the institutional private equity (PE) markets in 2024, with muted transaction and fundraising activity plus a decades-long low in distribution yields, there was a substantial uptick in creating pathways for individual investors—retail, accredited, qualified—to access the private markets. Success in these endeavors could drive an overwhelming amount of capital into the space that could overpower current market dynamics and impact returns, particularly in the upper registers of the private markets. Long-standing private markets investors may be best served migrating their capital away from where this constituency is likely to set up shop.

Many managers have been preparing to serve this market, actively acquiring private market strategies to create a full suite of PI offerings on their platforms. In 2024, there was an increase in the launch of interval funds, private fund offerings, and private business development companies. Independent distribution platforms providing fund access to qualified purchasers and accredited investors also expanded their beachheads and increased their offerings. Not to be left out, several registered investment advisors announced acquisitions of/investments in private markets–focused advisors to add the capability to their existing platforms. These trends are expected to continue in 2025.

From a "careful what you wish for" perspective, successfully reaching these investors is not without its challenges. There is an estimated $56 trillion in US household assets alone. If just 5% of that capital is redeployed into private investments, an additional $2.8 trillion is on its way. For reference, Cambridge Associates reported a grand total of $2 trillion in net asset value across its US Private Equity and Venture Capital benchmarks as of December 2023; for the same period, Preqin reported private credit assets at $2 trillion. Increasing supply by that magnitude will impact returns for the managers investing that additional capital and amplify the demands and needs of that constituency.

It is entirely possible the individual investor—as a cohort—becomes the most important investor class, shifting expectations around manager alignment with long-standing institutional investors. Implications of this capital migration include the likelihood of more regulation, a significant increase in demand for secondaries as much of this capital needs to be invested immediately, and heightened headline risk for these platforms as these individual investors make their interests known.

Sharad Todi
Senior Investment Director, Private Equity

Buyout Transaction Activity in Japan Should Increase in 2025

The number of buyout transactions through September 30, 2024 reached 102, more than the total deal count in calendar year 2023, indicating an upward trend. Although the penetration level of private equity in Japan remains lower than in other developed markets, the country is emerging as a natural harbor for leveraged buyouts. We expect buyout transition activity should increase in 2025.

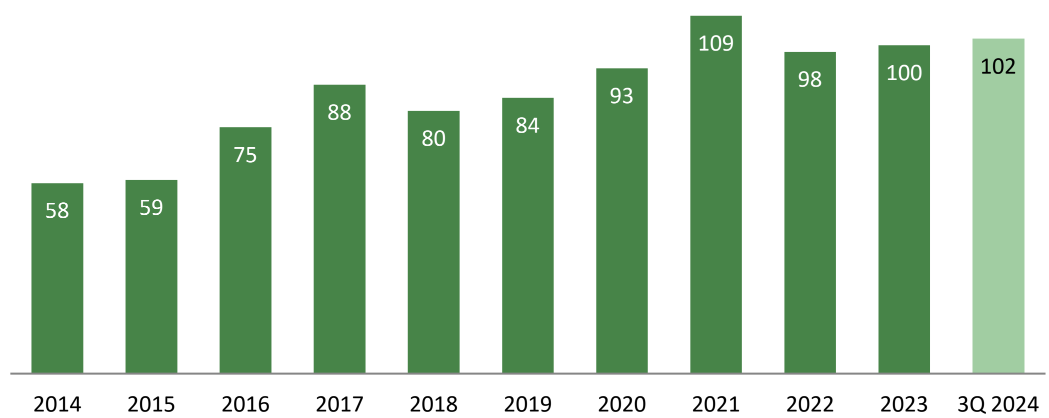
On the supply side, three primary sources of deal flow are contributing to this growth. First, several family-owned small- to medium-sized enterprises struggling to find natural successors are turning to PE firms to ensure business continuity. Second, large conglomerates in Japan are streamlining their operations by divesting non-core assets, creating opportunities for PE investors. Third, the Tokyo Stock Exchange's demand for listed companies to justify their status by improving book value and capital efficiency ratios is also increasing take-private transactions.

On the demand side, investors are drawn to Japan for several reasons. Unlike most other Asian markets, control is the norm in Japan, allowing investors to shape the company's journey more effectively. Entry multiples in Japan usually range between 6x and 10x EV/EBITDA, lower than the typical 10+ multiples seen in other buyout markets. Plenty of low-cost debt is available, with most managers able to secure financing at 40% to 60% of enterprise value at an all-in cost below 4.0%. The terms of leverage are typically investor friendly, with banks being more relationship-focused and cooperative with borrowers dealing with struggling assets. Japan's low economic growth rate drives corporates to pursue inorganic growth, making strategic buyers the preferred exit route for PE firms. Furthermore, Japan's attractiveness as an investment destination in Asia has increased as China's appeal has waned, providing large pan-Asian funds a stable market to deploy capital.

We expect these broad macro trends should persist into 2025, which will support increased PE activity levels in Japan.

DEAL ACTIVITY IN JAPAN HAS BEEN ON THE RISE

2014–24 (3Q) • Buyout Deal Count



Source: PitchBook.

Venture Capital Fundraising and Investment Activity in China Should Increase in 2025

Scolet Ma
Senior Investment Director, Private Equity

In 2024, China's USD-denominated venture capital fundraising and investment activity sank to a decade low, driven by sluggish domestic economic growth and ongoing US-China geopolitical tensions. We are likely to see fundraising and investment activities in China VC rebound in 2025 from the 2024 lows, albeit remaining at moderate levels.

More Chinese venture capital firms are expected to return to the market for fund-raising in 2025. In 2024, China VC firms came back with smaller funds, more reasonable terms, clearer investment strategies, and enhanced transparency. We expect this trend to continue in 2025. The smaller fund size is appropriate for the current market and will force VCs to be more disciplined in their investment selection.

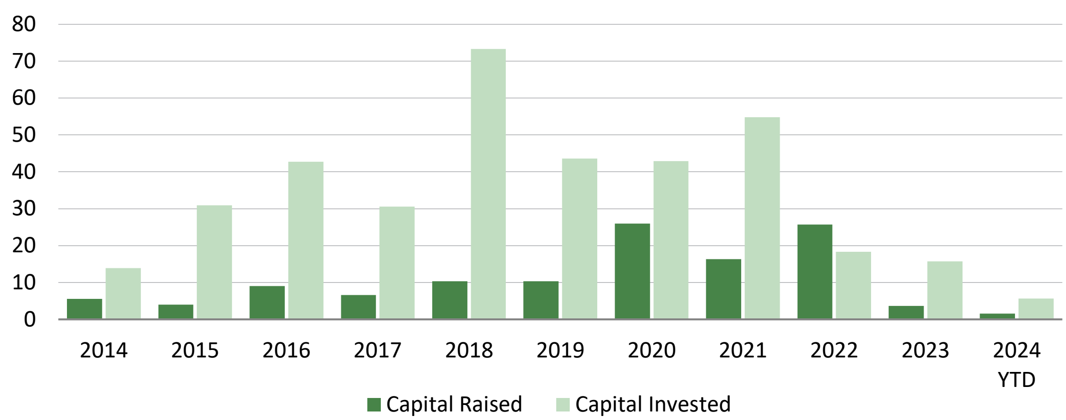
Geopolitical risks persist for US investors. US LPs are expected to continue with-drawing from China VC due to restrictive foreign investment rules. This presents an opportunity for non-US LPs to engage with high-quality managers. However, these non-US LPs are unlikely to completely fill the void left by their US counterparts, which will leave fundraising levels at a lower level than the peak of 2020–22.

China's stimulus packages are anticipated to stabilize economic sentiment, but it will take time for China's structural economic issues to resolve. The CSRC's new rules have relaxed listed Chinese companies' merger & acquisition restrictions, creating more exit opportunities for VC portfolios. They may also support more domestic listings. This reality, along with the fact that entry valuations have adjusted downward, make for a more conducive investing environment.

This supportive environment is complemented by talented, experienced founders in many sectors from a highly competitive market. China is emerging as a global innova-tion center in life sciences, as evidenced by recent global acquisitions of Chinese assets. For a host of reasons, it has also become a hub of innovation in AI, robotics, and smart manufacturing. For these reasons, VC fundraising and investment activity should increase in 2025.

USD-DENOMINATED VENTURE CAPITAL ACTIVITY IN CHINA SLOWED IN 2024

2014–24 • US Dollars (Billions)



Source: PitchBook.

Nicolas Schellenberg
Managing Director,
Private Equity

Continuation Vehicles Should Become an Even More Important Exit Path for Private Equity Sponsors in 2025

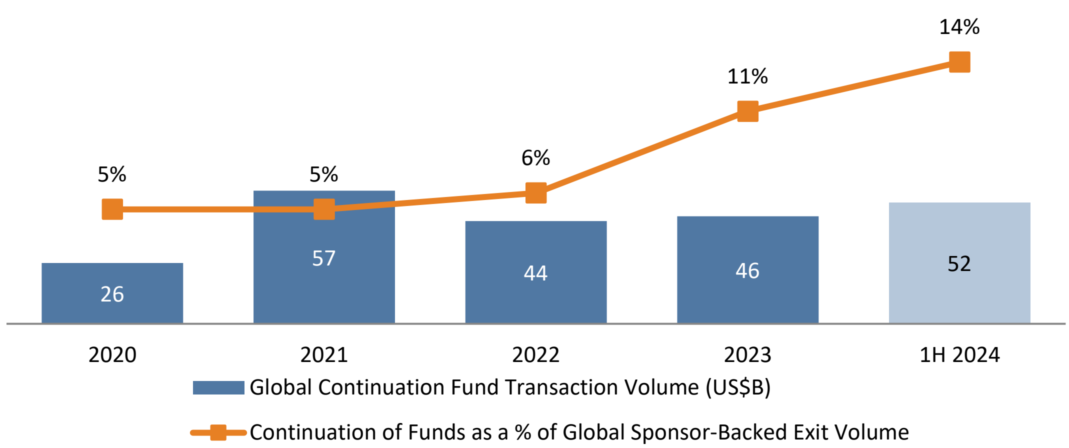
In recent years, general partners (GPs) have significantly increased their use of continuation vehicles (CVs) as an exit path for portfolio companies. This trend is partly due to reduced activity in traditional exit markets such as strategic M&A and IPOs, and the need to provide liquidity to LPs. While traditional exit paths may reopen in 2025, we anticipate CV volume will continue to grow, becoming an even more vital exit route for GPs. This growth is driven by greater investor interest and increased understanding and use of CVs by mid-market PE managers.

CVs are now a recognized exit path for PE funds. More GPs have become comfortable with them and see their benefits. Specifically, it allows managers to hold on to their best assets, while at the same time offer cash to LPs that are in need for liquidity through a process that might be less complex to run than a traditional auction process. In the mid-market, smaller assets compared to large-cap buyouts lead to smaller CVs, which are easier to syndicate.

The investor landscape for CVs is rapidly evolving. For LPs of the selling funds, CVs can pose challenges, as time periods to choose between staying invested or taking liquidity are often too tight to adequately assess the merits of a CV for their program. Secondary buyers are increasingly raising funds focused on GP-led transactions, often investing solely in CVs, some exclusively in single asset CVs. Additionally, traditional PE sponsors are developing secondary buyside strategies for CVs, viewing their primary capabilities as synergistic. These institutional fund managers are raising more and more capital from LPs that are attracted by the promise of better risk-adjusted returns and shorter holding periods.

Given the benefits CVs offer to LPs, GPs, investors, and underlying companies, we believe their importance as an exit path for PE sponsors will continue to grow, reaching a new record percentage of total sponsor-backed exit volume in 2025.

CONTINUATION VEHICLE USAGE HAS GROWN QUICKLY
2020–24



Sources: Dealogic and Jefferies.

Celia Dallas
Chief Investment Strategist

California Carbon Allowances (CCAs) Should Retrace 2024 Losses in 2025

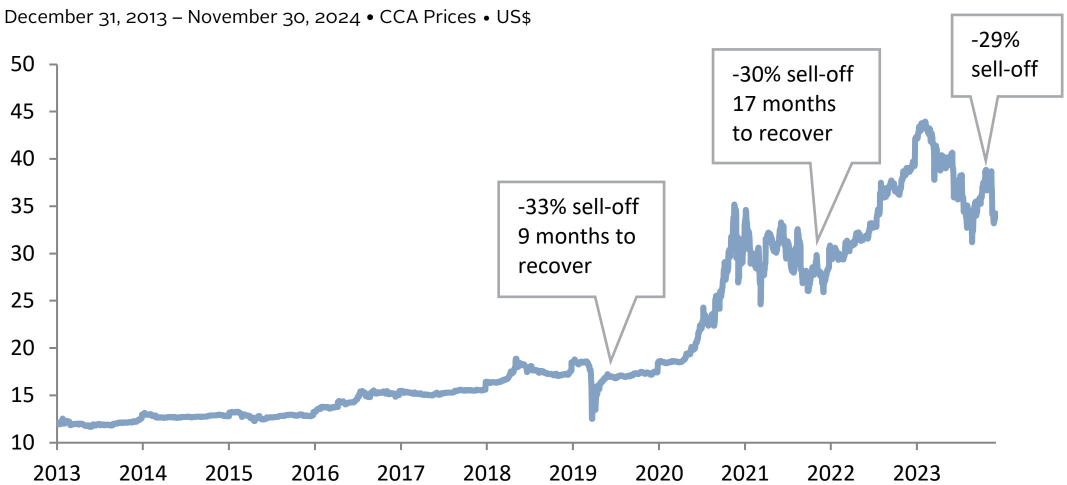
CCAs fell from their $44 high at the start of 2024 to bottom out at $31 in August after news of program changes being delayed to 2026. Once the California Air Resources Board (CARB) finalizes the timing and path of CCA supply reductions, prices should retrace losses. Investors and covered entities are likely to purchase CCAs before program tightening pushes up prices more meaningfully.

Companies covered under California's cap and trade program must purchase CCAs. Each allowance permits emission of one metric ton of carbon dioxide equivalent. Such programs initially provide excess allowance supply to give covered entities time to reduce emissions. Consequently, carbon prices were relatively flat in the program's early years. CCA prices began rising as supply/demand balance improved. Following recovery from the COVID-related demand shock, CCA prices have been trending upward, especially as expectations grew that CARB would tighten supply to meet environmental targets. Prices fell in 2022 amid concerns that CCA demand would fall after California extended the Diablo Canyon nuclear plant's life. However, these concerns faded as expectations for program tightening emerged in 2023.

We anticipate that final clarity on the program's tightening path and timing of supply reductions will enable the market to recover lost ground in 2025. CARB proposed two potential supply reductions paths, resulting in a 10% to 14% annual decline in allowances, up from the current 4% annual decline, from 2026 to 2030. Even the slower decline path would see a 180 million reduction in CCAs between 2026 and 2030, equivalent to more than 50% of the current inventory surplus. Such a cut would push the program into a cumulative deficit as early as 2030, requiring covered entities to purchase CCAs held in reserve at prices indexed to increase at 5% plus inflation annually. The first tier of reserved allowances is expected to price at $86 in 2030 based on current inflation expectations. As details are finalized, CCA prices should recover in 2025, with significant upside potential into 2030 as the program moves into deficit.

CCAS HAVE RECOVERED RAPIDLY FROM PREVIOUS SELL-OFFS

December 31, 2013 – November 30, 2024 • CCA Prices • US$



Source: Bloomberg L.P.

Liqian Ma
Head of Sustainable and Impact Investing Research

Impact Flows Should Favor Strategies With Faster Distributions and Commercial Validation in 2025

Investors will enter 2025 marked by slower exits and distributions. While "patience is a virtue" still applies, private market investors focused on sustainability and impact also need to balance interim liquidity considerations and demonstrate validating proof points to achieve long-term success. Therefore, flows in 2025 should favor strategies that orient toward faster distributions. Managers that have both the intention and the skill to urgently drive commercial progress and liquidity for investors should benefit. Fortunately, an emerging set of tools should help investors achieve these goals even in a muted exit environment.

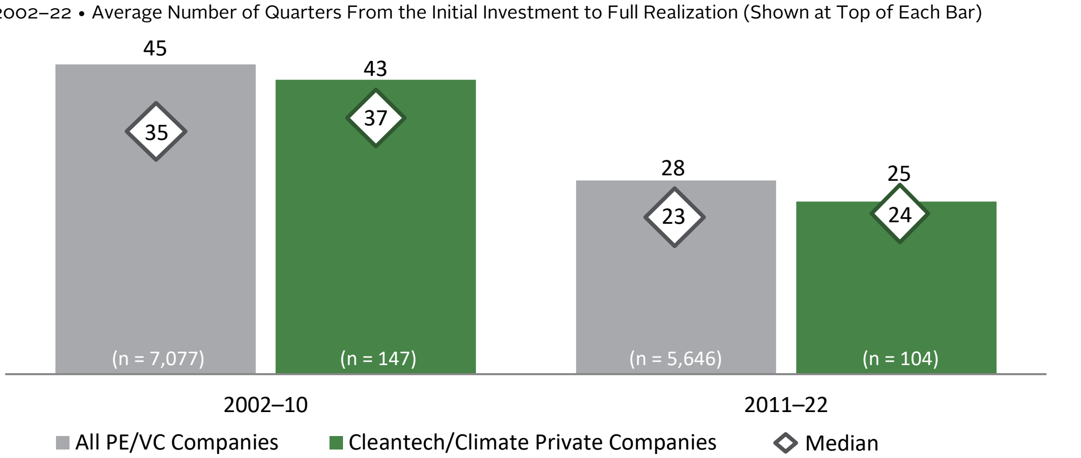
Impact strategies in areas such as climate tech and sustainable real assets can take years to prove out and generate liquidity. While climate-oriented strategies have seen hold periods comparable to those of the broader PE/VC market, the current environment is particularly challenging: follow-on capital is scarce and exit conditions remain subdued. As a result, allocators will likely prioritize new commitments to growth-stage, buyout, credit, and real assets strategies with inherently quicker-to-validate-and-exit models. Allocators will also increasingly hold all managers accountable for distributions in a more reasonable timeframe.

How can this be achieved? First, in the manager diligence and selection process, allocators will increasingly focus on managers' competence in positioning companies for early validation and eventual exit. Some managers develop a differentiated understanding of what makes companies attractive to both strategic and financial acquirers, then position their portfolios accordingly. Others might sell shares as part of a follow-on or pre-IPO round or monetize parts of businesses, while developing others for upside optionality and impact. Finally, more impact managers are prudently using non-dilutive sources of financing and blended finance* to reduce both the cost basis and risk of an investment. With the right strategies, managers, and toolkits, sustainable investors can effectively shorten distribution cycles in 2025 to navigate a challenging liquidity environment.

* Blended finance is the use of concessional or catalytic capital to "crowd-in" private capital investment, while optimizing returns and impact. By leveraging concessional funding from philanthropic, governmental, and other sources, blended finance structures are able to "readjust" the risk/return profile of an investment strategy, making terms favorable for institutional investors.

HOLD PERIODS FOR PRIVATE CLEANTECH/CLIMATE COMPANIES ARE IN LINE WITH MARKET

2002–22 • Average Number of Quarters From the Initial Investment to Full Realization (Shown at Top of Each Bar)



Source: Cambridge Associates LLC.

Jasmine Richards
Head of Diverse Manager Investing

Carolina Gómez
Investment Director, Diverse Manager Investing

Headwinds for Private Diverse Manager Allocations Moderate in 2025

Until 2022, PE/VC firms experienced significant growth in fundraising due to low interest rates and increased risk appetite. Underrepresented fund managers also benefited, with diverse fund managers raising a decade high amount in 2021. However, fundraising declined sharply in 2023 and continued to decline in 2024. In 2025, ebullient markets may offer some relief, but the sizeable overhang of emerging funds could lead to consolidation or shutdowns.

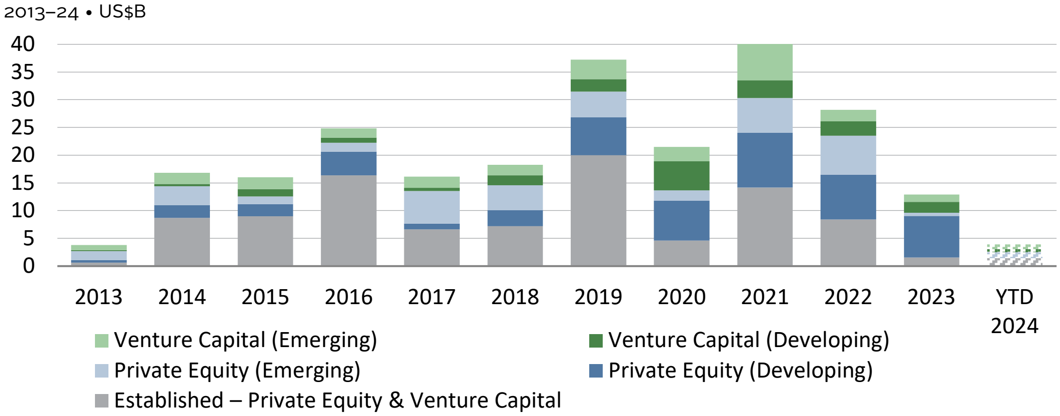
Investments with diverse managers require both willingness and ability. Recent years have seen a decline in commitments, often attributed to decreased willingness. However, in a recent survey, more than half of LP respondents expressed that, despite recent US legislative resistance to DEI programs, these initiatives remain essential and will continue to be implemented and supported across their organizational portfolios. The pullback is more attributable to reduced ability. As US capital markets open, asset owners' ability to commit to new funds should improve.

While investments in diverse funds are expected to increase, we do not anticipate the record levels seen in 2019–22. From 2019–22, diverse managers raised $127 billion across 198 PE and VC funds, with growth accelerating in 2020 after George Floyd's murder, according to our data. Initiatives focused on increasing representation of women and people of color often favored new firms. Emerging managers (Funds I or II) accounted for 27% of capital, 51% of funds. Developing managers (Funds III and IV) represented 36% of capital, 31% of funds. By September 2024, these funds were about 75% called and may need to return to market in 2025, posing fundraising challenges. Established managers might withstand slower fundraising, but emerging and developing firms may face financial instability, leading to more consolidations or closures.

With $28 billion across 45 emerging and developing diverse-owned funds potentially returning to market, manager selection will be challenging for LPs with limited budgets. Fundraising momentum will become a key evaluation factor. Early commitments will be crucial in a slow fundraising market. LPs can use creative commitment structuring to support emerging diverse fund managers while mitigating risks from fundraising challenges.

NEW MANAGERS HAVE DRIVEN PEAK COMMITMENTS IN RECENT YEARS

2013–24 • US$B



Source: Cambridge Associates LLC.

Liquid Credit Returns Should Be Lower in 2025

Wade O'Brien
Managing Director, Capital Markets Research

Following solid gains in 2024, US liquid credit returns will be lower in 2025, given lower credit spreads and expected Fed easing. The flipside is that credit fundamentals remain sound and there are pockets where investors can find attractive risk-adjusted returns.

US high-yield bonds returned roughly 9% year-to-date through November 30 and US investment-grade credit bonds generated around 4%. Returns were boosted by falling credit spreads; through November 30 US high-yield and investment-grade index spreads had fallen by 58 bps and 21 bps, respectively. The decline in Treasury yields further benefited returns, with respective yields at 7.14% and 5.05%.

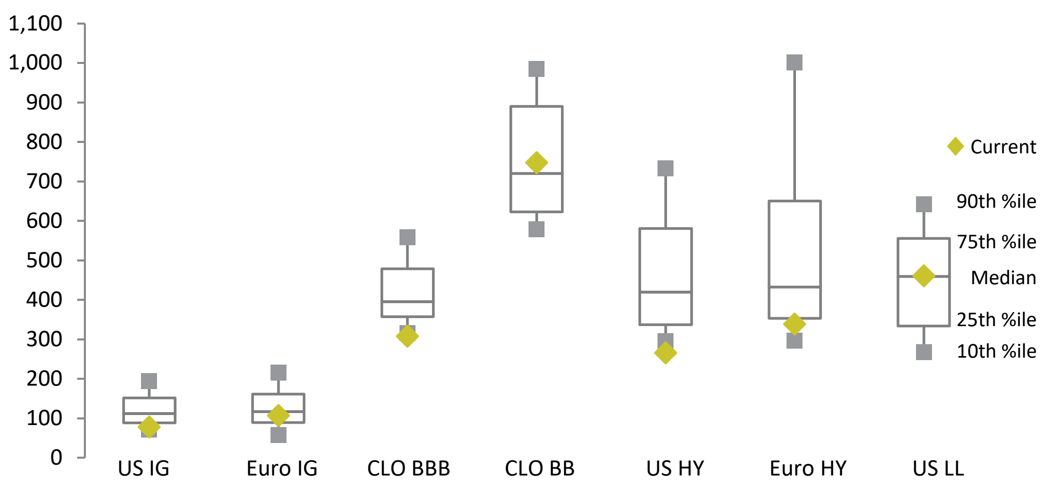
Even if investors in 2025 receive coupon-like returns, this would still be higher than recent averages, given the low interest rate environment that prevailed prior to the pandemic. For example, the ten-year AACR on US high-yield bonds was just 5.1% as of November 30. Returns next year could receive a lift if spreads compress further or if the Fed cuts rates faster than expected, though we would note spreads look expensive on a historical basis and in recent weeks the amount of expected Fed easing in 2025 has been pared back.

Either way, returns should be supported by improving fundamentals. Earnings growth was inflecting upward for both high-yield and investment-grade borrowers as 2024 drew to a close, and borrowers with floating rate debt should continue to see interest coverage ratios improve given falling short-term rates.

Looking across liquid credit markets, we are neutral between fixed and floating rate. Additional rate cuts could boost values for the former, but the latter will serve as a hedge against inflationary pressures. Across all types of liquid credit, we do not think it is an opportune time to stretch for yields, as spreads for most assets are in the bottom quartile, or even decile, of historical readings. While being mindful of duration, collateralized loan obligation debt offers a spread pickup with little give up in terms of credit quality or liquidity.

SPREADS LOOK EXPENSIVE FOR MANY CREDIT ASSETS

As of November 30, 2024 • Basis Points (bps)



Sources: Bloomberg Index Services Limited, Credit Suisse, and J.P. Morgan Securities, Inc.

Joseph Tolen
Senior Investment Director, Credit Investments

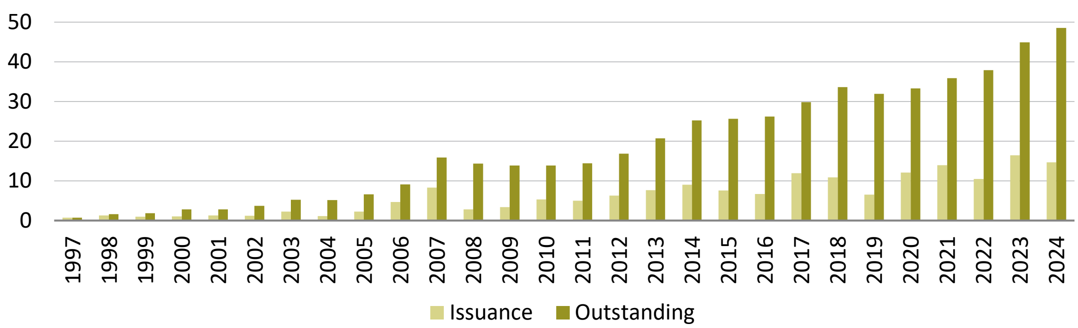
Insurance-Linked Securities Should Deliver Attractive Returns in 2025

The insurance-linked securities (ILS) market continues to be attractive and should deliver strong returns in 2025. The demand for additional catastrophe coverage from insurance companies has kept the market firm, providing sufficient cushion for reinsurers and ILS managers to absorb risk. This is evidenced by managers achieving impressive returns in both 2023 and 2024 despite a notable rise in severe storms in the US Midwest, multiple significant hurricanes making landfall, and flooding in Europe. The sustained hard insurance market, combined with the uncorrelated nature and diversification benefits of investing in ILS, make 2025 an attractive opportunity for investors.

Several factors have supported the insurance market, which has improved ILS pricing and resulted in more favorable terms and conditions for investors. Premium increases following Hurricane Ian and balance sheet losses on the back of a particularly challenging year for traditional assets in 2022 created a capital shortage for reinsurers, limiting their ability to provide coverage for insurance companies. Conversely, demand for protection from insurance companies has sharply increased due to high rates of inflation in recent years and the need for broader coverage, largely related to climate change.

DEMAND FOR COVERAGE AT ALL-TIME HIGHS, EVIDENCED BY CATASTROPHE BONDS OUTSTANDING

1997–2024 • US$B



Source: Artemis.bm Deal Directory.

The supply/demand imbalance is set to continue into 2025. Additional supply will be available from reinsurers and ILS managers following two strong years of performance, but this is expected to be offset by continued demand for coverage from insurance companies, particularly on the back of hurricanes Helene and Milton. These factors will keep the insurance market firm, leading to more attractive pricing for investors and giving them additional cushion to absorb losses, even if 2025 sees higher-than-average catastrophe events.

When considering opportunities, terms and conditions will be crucial to performance success. We favor managers that are meticulous in portfolio construction and appropriately invest in line with their stated risk/return profiles regarding attachment points and where they sit in the capital stack, perils, trigger mechanisms, geographies, and so on. Doing so will help mitigate exposure to risks associated with climate change, put investors in the best position to absorb losses from events, and help maximize returns.

Thomas O'Mahony
Senior Investment Director, Capital Markets Research

Currencies Should Become a Tailwind for Emerging Markets Local Bonds in 2025

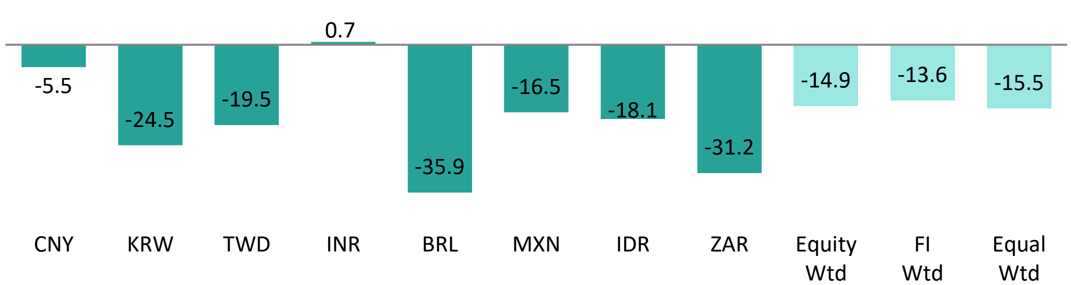
The currency component of EM local currency bond performance has frequently been the dominant driver of the asset class. This is perhaps unsurprising when one considers it has exhibited nearly twice the volatility of the local currency performance. In four out of the past five calendar years, including 2024, the currency return has been a detractor from the total return for a USD-based investor, which is of course explained to a large extent by the strong performance of the dollar over this time period. While the currency return may not exceed the fixed income return in 2025, we think it is likely to cease being a headwind and ultimately become a tailwind.

The J.P. Morgan GBI-EM Global Diversified Index currently yields 6.30%. This is at the 34th percentile of its history, so in terms of return drivers, it looks as though the carry of the index will be somewhat below average in 2025. Despite this more moderate yield, there is still scope for the index to deliver some price appreciation next year. Inflation in emerging markets has remained contained after the post-COVID spike. Therefore, with real yields still somewhat elevated, there is scope for EM central banks to ease rates should growth conditions necessitate. Further, if DM bonds yields decline, EM bonds yields, which typically trade with a beta to those of developed markets, should also move somewhat lower.

Our EMD-weighted currency index has declined in recent months, now sitting 14% below its median real valuation versus the dollar. We anticipate this valuation gap will narrow somewhat next year. First, from the USD perspective, the currency remains richly valued against substantially all peers. Though we remain sensitive to the risk of further dollar appreciation given, in particular, the spectre of tariffs being placed on trade with the US, we expect the dollar to eventually weaken as the Fed continues to ease policy, narrowing interest rate differentials. Furthermore, the growth differential between emerging and developed markets looks set to widen as we move into 2025, which may support the risk appetite for EM assets. Any additional policy easing from China would reinforce such a dynamic. Naturally, there are risks to this view, such as a material slowdown in global growth or a pickup in global inflation. However, our expectations are for a more favorable environment for EM currencies in 2025.

REAL VALUATIONS OF EM CURRENCIES REMAIN DEPRESSED

January 31, 1994 – November 30, 2024 • Percent from Median (%) • EM Real Exchange Rate vs USD



Sources: Directorate-General of Budget, Accounting and Statistics, Executive Yuan, Taiwan, INE - National Institute of Statistics, Chile, International Monetary Fund, J.P. Morgan Securities, Inc., MSCI Inc., National Bureau of Statistics of China, Refinitiv, Thomson Reuters Datastream, and the US Department of Labor - Bureau of Labor Statistics. MSCI data provided "as is" without any express or implied warranties.

Direct Lending Returns Should Decline in 2025

Wade O'Brien
Managing Director, Capital Markets Research

Direct lending funds are on track to generate strong returns in 2024, returning 9% year-to-date through September 30. Returns should decline in 2025 as central banks continue cutting benchmark rates and competition among lenders lowers credit spreads. Still, spreads will remain above those available in public credit, and rising deal volumes will create more opportunity for investors to put capital to work.

Benchmark yields have moved lower after the Fed's recent rate cuts and are expected to continue declining over the course of 2025. Direct lending spreads are also falling and are now around SOFR+ 525 compared to around 370 bps for broadly syndicated loans (BSLs). Spreads should continue to decline in 2025, given competition from the BSL market for larger deals and as direct lending funds are eager to deploy more than $250 billion in dry powder.

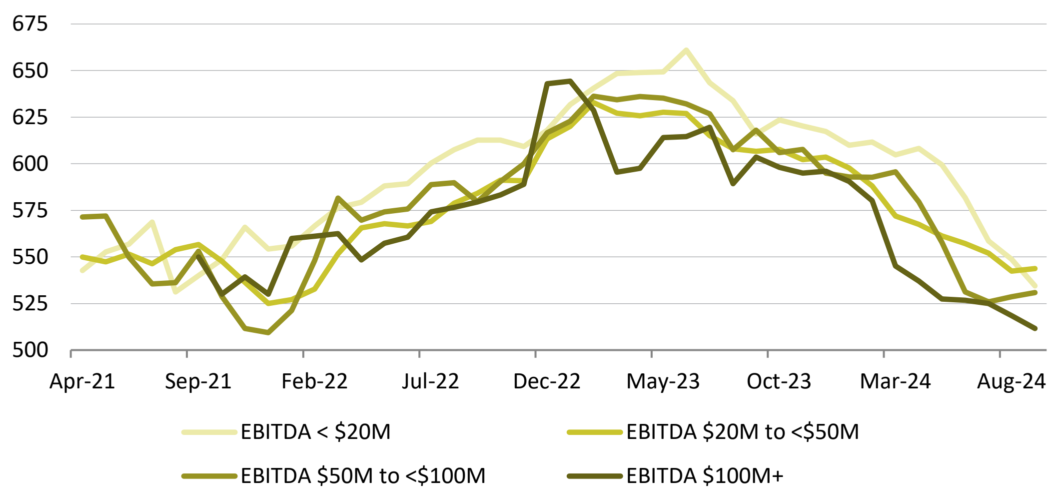
There is some good news for investors. Credit fundamentals, which have been under pressure for some borrowers, should improve in 2025 as rates decline. This will be especially helpful for smaller firms, which have seen slower revenue growth than larger peers. Default rates on private loans should start to recede as debt servicing ability improves.

Deal volumes have picked up in recent quarters and this trend should continue in 2025. Low interest rates are improving deal economics for PE sponsors, which in some cases are under pressure from investors to deploy capital. Greater supply could serve to offset some of the downward pressure on spreads from growing competition among lenders.

Weighing these dynamics, investors in private lending funds should continue to earn higher returns in 2025 than available from public equivalents and should see more capital put to work. Lower middle-market funds may suffer from less spread compression than large peers, which tend to face competition from BSLs, though investors should carefully screen managers as not all small companies will see fundamentals improve.

DIRECT LENDING SPREADS HAVE STEADILY DECLINED

April 30, 2021 – September 30, 2024 • Private Credit Spreads by EBITDA (bps)



Source: KBRA DLD Private Data.

Liability Management Transactions Should Accelerate in 2025

Frank Fama
Head of Global Credit Investment Group

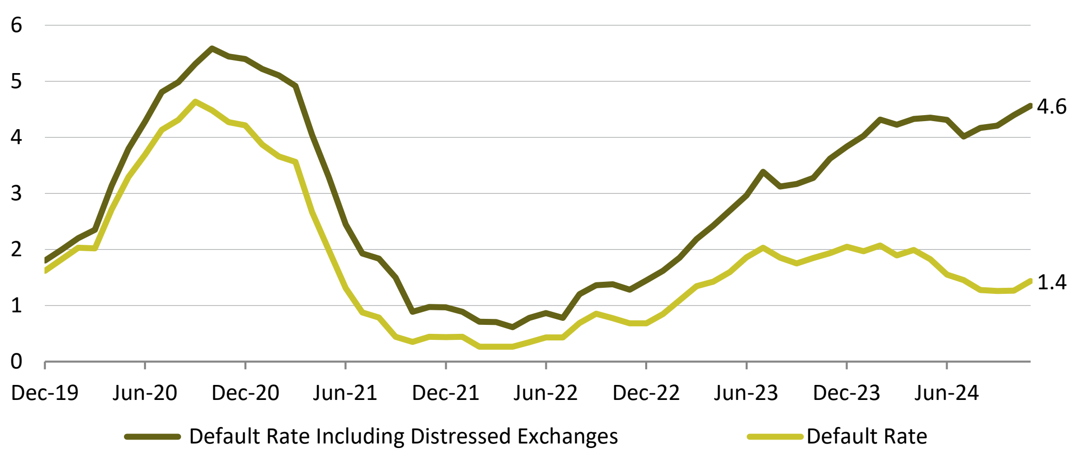
With the Fed transitioning to a rate-cutting cycle and inflation trending to target, recession fears have largely abated. However, with the dearth of M&A activity and weak IPO market, PE sponsors are finding it difficult to exit investments. Sponsors are faced with an aging portfolio and a number of problems. Many of these leveraged buyouts (LBOs) were financed in the broadly syndicated loan market in 2021 before the rate increase cycle and after the disruption of COVID-19. Lenders agreed to provide high leverage due to elevated valuations and low interest rates, and credit protection provisions were extremely weak. Now PE sponsors have overleveraged companies with maturing debt in need of a recapitalization solution and companies in need of growth capital to take advantage of attractive opportunities.

Credit opportunities managers will work with sponsors to take advantage of the excesses of the BSL market to structure investments that may prime existing lenders and lend new money at mid-teens rates. Known as liability management, the transactions can take different forms, but they all take advantage of provisions in the credit agreement that allow for the creation of new debt, to the detriment of existing lenders. Skilled managers are able to accumulate a position at a discount and structure and lead a transaction that results in at par or near par recovery for their debt and create a new debt security that is senior and secured by the most valuable collateral. Executing the strategy well requires active management and strong industry relationships. At first, sponsors viewed the transactions as excessively aggressive, but they are coming to view the solution as effective in managing their stressed LBOs and activity is expected to accelerate in 2025.

PE managers are holding investments longer, which is creating pressure to continue supporting companies, either because the company has too much debt or the company needs growth capital. Credit opportunities managers will partner with PE managers to take advantage of weak creditor protections in loan documents to provide capital that is senior and at higher yields relative to the existing BSL lenders.

DEFAULT RATES REMAIN LOW, BUT DISTRESSED EXCHANGES (INCLUDING LIABILITY MANAGEMENT TRANSACTIONS) HAVE BEEN INCREASING

December 31, 2019 – November 30, 2024 • Trailing 12 Months (%)



Source: Pitchbook.

Adam Perez
Managing Director, Credit Investments

US Specialty Finance Transaction Volumes Should Increase in 2025

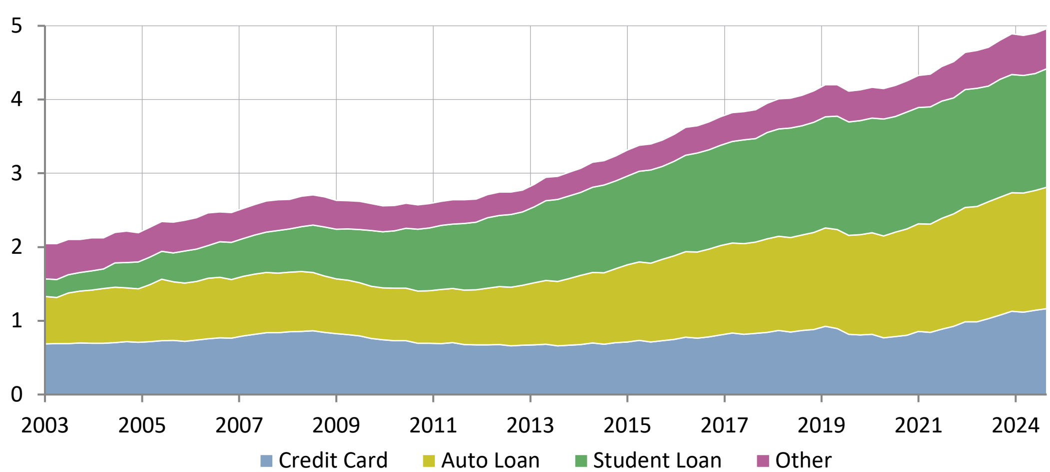
With US consumer non-housing debt at nearly $5 trillion and growing, the opportunity set for specialty finance managers to fund non-bank lenders is expanding. In addition, specialty finance funds are poised to engage in larger significant risk transfer (SRT) transactions with banks, driven by the need for banks to align their balance sheets with the Basel III Endgame requirements. These factors will increase US specialty finance deal volumes in 2025.

Declining policy rates and avoiding a global recession in 2025 should entice US consumer borrowing further next year. As traditional banks face regulatory constraints and capital requirements, non-bank lenders are stepping in to fill the gap. This shift is creating a robust pipeline of investment opportunities for specialty finance funds, which can provide the necessary capital to these non-bank entities and benefit from a sustained demand for alternative lending transactions.

Moreover, the Basel III Endgame, the latest set of rules from the Basel Committee on Banking Supervision, which aims to fortify the management of risk within the banking sector, is pushing banks to offload riskier assets from their balance sheets. Like specialty finance lending, SRT is another element in the trend of reduction in bank balance sheet risk. This regulatory environment is conducive to the growth of SRT transactions, a mechanism whereby a third party agrees to assume certain credit risks from a bank, deleveraging the bank's balance sheet and thus providing the bank with regulatory relief. US bank regulator proposals for alignment with the Basel III Endgame portend higher capital charges and are an important factor contributing to the growth of these deals in the United States. In addition, our expectation that policy rates will fall will likely reduce net interest margins, putting further pressure on banks as they seek profitability to right size balance sheets through SRTs. As banks strive to align with these rules, SRT deal volume will increase in 2025.

US NON-HOUSING DEBT CONTINUED TO GROW IN 2024

First Quarter 2003 – Third Quarter 2024 • US$T



Sources: Federal Reserve Bank of New York and Thomson Reuters Datastream.

Sehr Dsani
Senior Investment Director, Capital Markets Research

Infrastructure Equities Should Perform Similar to Developed Markets Equities in 2025

Infrastructure* earnings growth accelerated in recent years to above usual levels, partly due to the end of COVID-19 lockdowns, supportive regulation, and AI development. As a result, some sub-sectors enjoyed strong performance, but overall, returns have lagged those of DM equities since 2020. Going forward, as we balance infrastructure's lower earnings growth relative to DM equities against its defensive attributes and reasonable valuation, we think it will likely perform in line with DM equities.

Infrastructure equities offer defensive qualities, such as steady dividends that are backstopped by stable inflation-protected income. Recently, their dividends have become more attractive as interest rates have declined—with dividend yields nearly twice those of DM equities. We think these attributes will help retain interest in the sector.

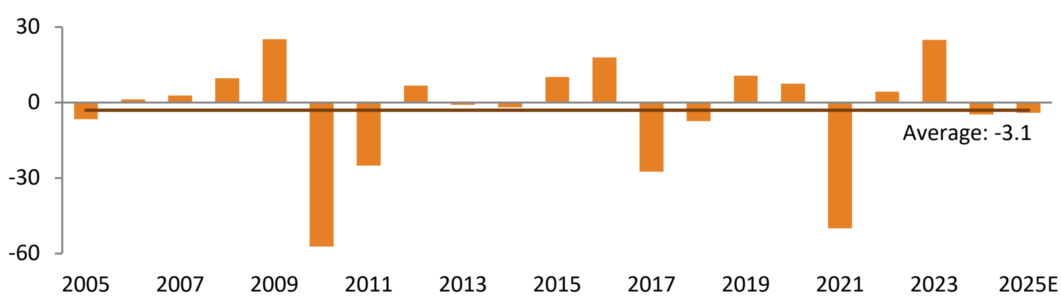
However, infrastructure earnings are expected to grow at a healthy cadence of mid-single digits in 2025 versus strong double-digit growth in 2022 and 2023. Meanwhile, valuations sit at the 66th percentile of data from the past 20 years. Conversely, DM equities are meaningfully more expensive, but growth of 7.2% is accelerating and handily outpacing that of infrastructure.

Supportive regulations for energy transition and strong demand for digital and power infrastructure to fuel AI development have propelled growth. Sub-sectors directly related to these tailwinds are overweight in infrastructure and trade at rich valuations, such as electric utilities (77th percentile). Globally, new legislations have been introduced to inject investment into infrastructure and shorten permitting timelines to incentivize new projects. Although, the recent change in US administration could result in some of these legislations being repealed. Additionally, AI data storage needs are significant and have driven power and digital infrastructure demand higher, creating growth opportunities for utility companies. While we think these tailwinds largely remain, since growth rates are forecast to normalize in 2025, expensive valuations in these key sub-sectors pose a risk to performance.

We think AI-related stocks within both infrastructure and DM equities will likely take a breather in 2025 after rallying at a torrid pace. This—alongside the dynamics of income generation, growth, and valuation levels—should result in similar performances between infrastructure and DM equities.

INFRASTRUCTURE EARNINGS GROWTH EXPECTED TO LAG DEVELOPED MARKETS

December 31, 2005 – December 31, 2025 • Earnings Growth of Infrastructure in Excess of DM • Percentage Points



Sources: MSCI Inc. and Thomson Reuters Datastream. MSCI data provided "as is" without any express or implied warranties.

* As expressed by the MSCI World Core Infrastructure Index.

Wade O'Brien
Managing Director, Capital Markets Research

US REIT Performance Should Lag Broader Equity Markets in 2025

Despite a strong third quarter rebound as the long-awaited Fed easing cycle began, US equity REITs are on track to again trail broader US equity benchmarks in 2024. We expect this underperformance to continue next year. Earnings growth trails that of broader indexes, valuations are uncompelling, and the delayed impacts of the previous hiking cycle are still being felt.

Fundamentals look reasonable for US equity REITs, with average occupancy rates of around 94% across categories, slightly above long-term averages. While sectors like office continue to show elevated vacancy, demand for others like data centers and warehouses is more robust. Despite high occupancy, REIT earnings may barely rise in 2024. And even with expected improvement in 2025, the sector's 4% earnings growth may trail earnings growth in major US equity indexes.

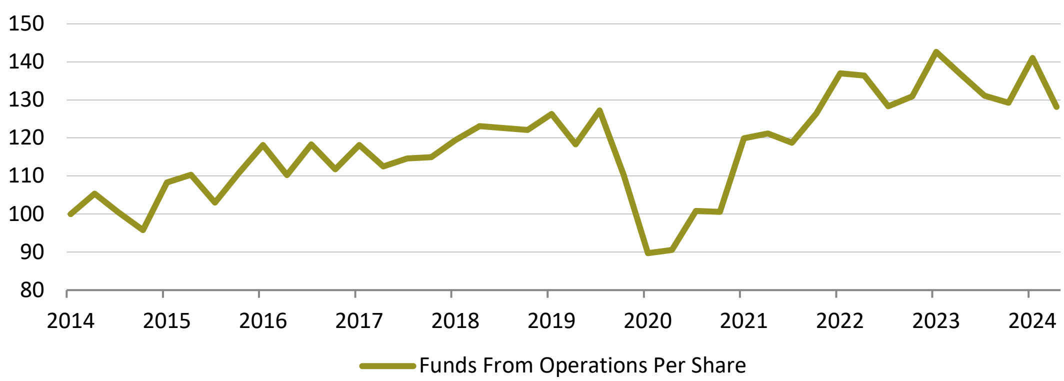
Valuations seem unlikely to provide a tailwind in 2025. Metrics like price to funds from operations (P/FFO) look in line with historical averages but low transaction volumes raise questions about asset values. Many investors buy REITs for their income potential, and REIT yields are well below those of credit assets like BBB-rated corporate bonds as opposed to offering their traditional premium.

REITs have historically done well during rate-cutting cycles, which both flatter their dividend yield and lower the cost of their leverage. Recent outperformance can be viewed through this lens. However, many REITs have outstanding debt that was issued at low yields well before the 2022–23 hiking cycle, which insulated earnings in recent years. Notwithstanding additional expected easing, issuers may still face higher borrowing costs to refinance this debt.

Investors looking to allocate to real estate next year may find better opportunities in private funds, which offer the opportunity to get access to operators that can add value via development and management expertise and offer tailored exposure to secular themes like digital infrastructure and the growth of senior housing. As with public markets, of course, valuations need to be taken into consideration.

RECENT CASH FLOW GROWTH HAS BEEN WEAK

June 30, 2014 – September 30, 2024 • Cumulative Wealth • June 30, 2014 = US$100



Source: National Association of Real Estate Investment Trusts.

Marc Cardillo
Head of Global Real Assets

US Private Real Estate Funds Raised in 2025 Should Deliver Above-Average Returns

The past few years have been challenging for commercial real estate (CRE), driven by higher interest rates and a constrained lending environment. Sentiment toward CRE has been weighed down by a steady barrage of negative headlines highlighting distressed property owners. However, we believe CRE values are near a bottom and the large pool of distressed owners will create an attractive investment environment for new CRE commitments in 2025.

Distressed CRE in the United States stood at $94 billion as of the end of second quarter 2024, and is expected to continue rising, with much of that made up of properties purchased and financed when interest rates were at record lows. Despite this dynamic, CRE values appear near a bottom, having declined 19.6% since their third quarter 2022 peak. Listed real estate, which is typically a leading indicator to private CRE in both downturns and recoveries, troughed in October 2023 and is up 38.9% from that point through November 2024.

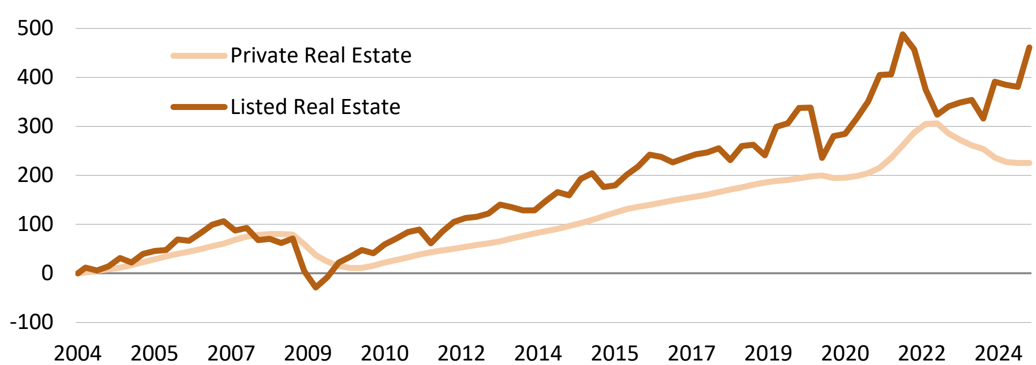
Two additional data points suggest CRE values are near a bottom. Lending markets have continued to improve throughout 2024, marked by higher advance rates and narrowing spreads. Improvement in debt markets was reflected in stable year-over year levels of transaction activity following significant declines in 2022 and 2023. Higher transaction volumes reflect buyers and sellers having a similar view of value, which is also consistent with a bottoming process. Finally, the recent cut in interest rates has further improved sentiment and the view that the market is near a bottom.

Notably, CRE fundamentals have remained largely resilient even during the period of Fed tightening, with office a notable exception. The residential, industrial, and self-storage sectors have seen significant new supply delivered in 2024. However, new constructions starts have declined meaningfully in response to higher financing costs. The retail sector has remained strong with minimal new supply added since the pandemic.

The combination of distressed deal flow, improving debt markets, and solid CRE fundamentals should create a favorable investment environment for CRE funds raised in 2025.

PRIVATE REAL ESTATE TENDS TO FOLLOW LISTED REAL ESTATE

December 31, 2003 – September 30, 2024 • Cumulative Return • Percent (%)



Sources: FTSE International Limited and National Council of Real Estate Investment Fiduciaries.

The US Dollar Rally Should Cool in 2025

Aaron Costello
Head of Asia

Vivian Gan
Associate Investment Director, Capital Markets Research

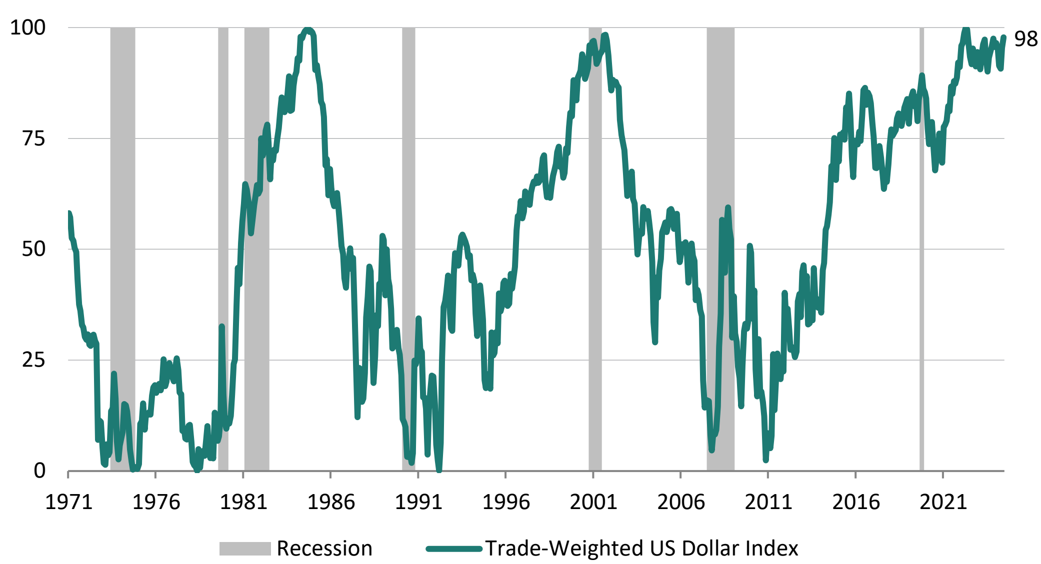
We expect the US dollar to continue to strengthen in early 2025 but weaken modestly in late 2025 due to moderating US economic growth, Fed rate cuts, and lingering overvaluations. However, the dollar may be volatile, given uncertainty over US fiscal, trade, and monetary policies, as well as the dollar's tendency to rally amid periods of market stress.

Indeed, the US dollar has rallied 4.9% over October and November, with the market viewing Trump's trade and fiscal policies as potentially boosting US growth and inflation. As a result, markets have pared back Fed rate cut expectations, which have boosted US bonds yields and supported the dollar's recent rally. At the same time, markets are also expecting that the Trump administration will increase tariffs on US imports, which would put downward pressure on other currencies and support the dollar.

Despite the above, the US dollar could still weaken in 2025 if US growth slows while growth in DM ex US accelerates as implied by consensus forecasts.* While tariffs may place downward pressure on growth outside the US, a slowing US economy would still see Fed rate cuts, therefore reducing support for the dollar. Furthermore, should China's stimulus gain traction and China reflation take hold, EM growth should pick up, and the US dollar may weaken against EM currencies.

Overall, valuations for the US dollar remain very elevated, which imply the currency should face downward pressure in the medium term. To the extent that markets have priced in a reflationary backdrop, continued dollar strength will require further upside growth surprises in the US, which may not occur. Therefore, while the US dollar may continue to appreciate in the near term, we still expect the currency to lose steam in 2025 as US growth trends lower and as the Fed continues to ease policy.

REAL EXCHANGE RATE VALUATIONS FOR THE US DOLLAR ARE STRETCHED
June 30, 1971 – November 30, 2024 • Percentile (%)



Sources: Federal Reserve, MSCI Inc., National Bureau of Economic Research, National Sources, OECD, and Thomson Reuters Datastream. MSCI data provided "as is" without any express or implied warranties.

* Please refer to the Economic Outlook Map.

Gold Returns Should Moderate in 2025

Sehr Dsani
Senior Investment Director, Capital Markets Research

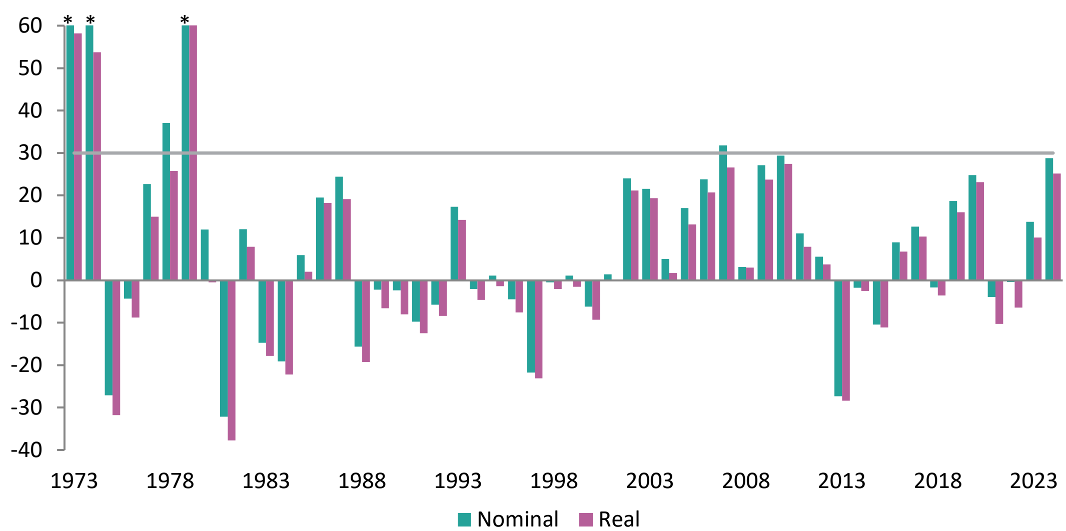
Gold prices are at their highest levels in more than 50 years. In 2024, prices surged nearly 30%, ranking as one of the top returns in history. Several factors supported the rally, including its function as a store of value and its appeal as a safe-haven asset during geopolitical unrest and market uncertainty. We think some of these drivers will likely remain in 2025. However, we doubt returns in 2025 will be as lofty as in 2024.

Investors often turn to gold as a store of value to protect against declining yields. However, with monetary easing widely telegraphed, many investors have already positioned for lower yields, making it unlikely to be a significant source of new gold demand in 2025. Similarly, our expectation that key inflation rates will continue to moderate back to central bank targets, albeit in bumpy fashions, may also reduce investor demand. This is also true for central banks, many of whom increased their gold reserves materially in recent years.

Investors also flock to gold in uncertain times. This has occurred around recessions; for instance, gold prices rose as the GFC began, up 45% year-over-year by early 2008. Geopolitical unrest can also drive gold higher, as occurred on 9/11, when prices were up 6%. However, it is rare for prices to remain elevated. Still, geopolitical risk may remain high, given the many existing conflicts, weak relations between the West and China, and the potential for protectionist US policies. But, to some extent, these factors are embedded in prices. With gold prices at all-time highs, we think gold is likely to lag its impressive 2024 return.

GOLD RETURNS RARELY EXCEED 30% IN CONSECUTIVE YEARS

1973–2024 (YTD) • Annual Gold Price Returns in Nominal and Real Terms (%)



* Y-axis capped for scaling purposes.

Sources: Intercontinental Exchange, Inc. and Thomson Reuters Datastream.

Joseph Marenda
Head of Hedge Fund Research and Digital Assets Investing

Emerging Markets Crypto Use Should Support Positive Crypto Returns in 2025

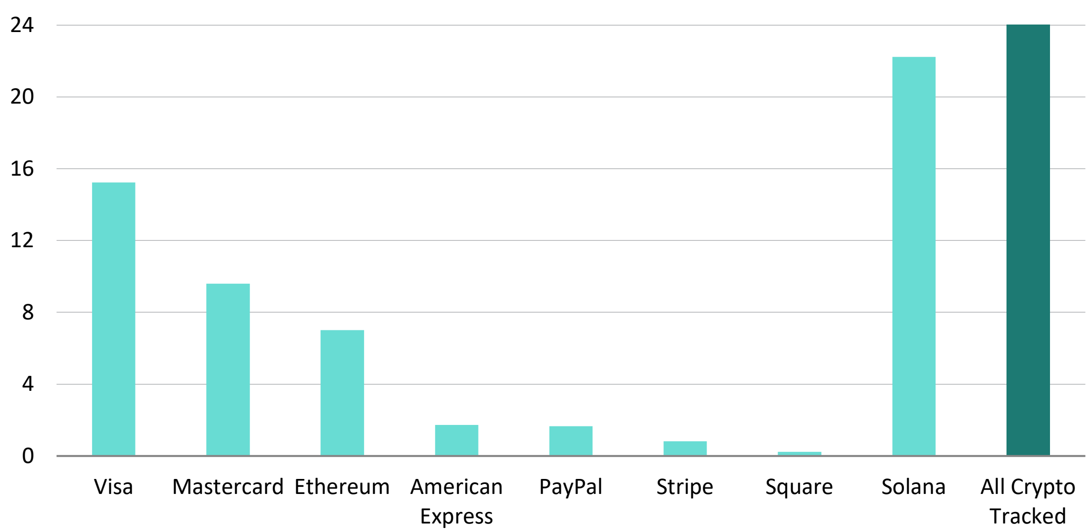
Crypto and blockchain usage hit an all-time high in 2024, driven by 617 million crypto owners globally and 220 million active crypto addresses. The five-year compound annual growth rate for crypto ownership is 99%. What is driving adoption and usage? Many factors, but in 2024 stablecoins found product market fit, particularly in EM countries. Stablecoin use in the crypto economy and real world will be a major driver of the crypto market in 2025.

Invented about ten years ago, stablecoins are digital equivalents of US dollars (or any currency, but 99% of stablecoins are USD backed) that exist on a blockchain. When a user buys a $1 stablecoin, the issuer typically buys $1 of US government debt. In 2018, the market capitalization of stablecoins ranged from $1 billion to $3 billion. Today, stablecoin issuers cumulatively are the 19th largest holder of US debt at $120 billion, more than Germany's holdings. The growth occurred as stablecoins were increasingly adopted by non-crypto users in EM countries.

Stablecoins have many uses outside of crypto transactions, including as a means of savings, cross-border payments, remittances, and corporate cash management, regardless of country. Emerging markets, in particular, use stablecoins for these activities. With a growing userbase across emerging markets, blockchain protocols and crypto companies are developing USD-based investment products and financial services that will be available globally. This growing pool of USD stablecoins will help drive investment opportunities for crypto VCs, traditional investment managers, and traded blockchain tokens in 2025—making "digital dollars" the dominant use case for blockchain in 2025 and laying the groundwork for global financial systems innovations in 2025 and beyond.

STABLECOIN TRANSACTION AND TRANSFER VOLUME IS SIMILAR TO VISA AND MASTERCARD COMBINED

As of September 30, 2024 • Trailing 12-Month Platform Transaction Volume • US$T



Source: VanEck.

FIGURE NOTES

Global Equities Have Tended to Outperform Bonds
Data are presented on an annual basis. Global equity returns are represented by the MSCI World Index (Gross) from 1974–87 and the MSCI All Country World Index (Gross) from 1988–2024. Bond returns are represented by the Bloomberg US Treasury Index. Data for 2024 are as of November 30.

Growth and Inflation Surprises Drive Negative and Positive US Correlations, Respectively
US Stocks are represented by the MSCI US Index, net of dividend withholding tax. US Bonds represented by the Datastream 10-yr US Treasury Benchmark Index. Growth Surprise is the average of the Chicago Fed Nation Activity Index and the difference between realized IP growth and Survey of Professional Forecasters forecast from a year prior. Inflation Surprise is the average of the year-over-year inflation rate and difference between realized inflation and Survey of Professional Forecasters forecast a year earlier. "Upside" and "Downside" are classified by comparing the growth and inflation indicator values to its full sample median. Analysis based on quarterly data compared to one year earlier.

Trade Policy Uncertainty Jumped During the First Trump Presidency
The Trade Policy Uncertainty Index reflects the frequency of articles in American newspapers that discuss policy-related economic uncertainty and contain one or more references to trade policy.

Most Central Banks Are Expected to Ease Toward Neutral Policy Rates in 2025
The "Market Expectations of Year-End 2025 Policy Rate" reflect the market-implied policy rates based on futures pricing. Feds funds target range is 4.50%–4.75% and the mid-point of 4.63% is used for the current policy rate.

Bonds Have Performed Better and Outgain Cash Under Current Economic Conditions
Data are annual. Economic conditions are positive for bonds when growth, inflation, and the policy rate are falling, and the yield curve is positive. Economic conditions are negative for bonds when growth, inflation, and the policy rate are rising, and the yield curve is negative. Growth and inflation conditions are defined by the change in the annual rate of growth, policy rate conditions are defined by the year-over-year difference in the policy rate at year-end, and yield curve conditions are defined by the spread between US ten-year and three-month yields and whether they are positive or negative.

Value Trades at a Steep Discount to Growth Across Various Metrics
The cyclically adjusted price-to–cash earnings (CAPCE) ratio is calculated by dividing the inflation-adjusted index price by trailing ten-year average inflation-adjusted cash earnings. Cash earnings are defined as net income from continuing operations plus depreciation and amortization expense. MSCI does not publish cash earnings for banks and insurance companies and therefore excludes these two industry groups from index-level cash earnings.

Consecutive Years of Top Quartile Returns Are Rare
Returns are based on the MSCI US Index, net of dividend withholding tax. Return data for 2024 are through November 30.

Consensus Expects European EPS Growth to Lag, Even When Sectorally Adjusted
Japan FY EPS data represents earnings growth from March through the next 12-month period. Regions are represented by the following indexes: MSCI ACWI (Global), S&P 500 (US), MSCI Europe (Europe), MSCI Japan (Japan), and MSCI China (China).

Japanese Equities Have Tended to Underperform During Global Slowdowns
Japanese equities are represented by the MSCI Japan Index, US Equities are represented by the MSCI US Index, EM equities are represented by the MSCI Emerging Markets Index (data begin in 1988), Europe ex UK equities are represented by the MSCI Europe ex UK Index, UK equities are represented by the MSCI UK Index, and Global equities are represented by the MSCI World Index prior to 1988 and the MSCI ACWI Index thereafter. Data for 2024 are through October.

Small Caps Appear Unduly Discounted Vis-à-vis Mid/Large Caps as we Expect Catalysts for Outperformance Will Emerge in 2025
CAPCE ratio based on trailing five-year average real cash EPS.

Non-Recessionary Fed Rate Cut Cycles Have Supported Equities
EM returns are represented by the MSCI Emerging Markets Index, US returns are represented by the MSCI US Index, and DM ex US returns are represented by the MSCI World ex US Index. Recessions are defined by NBER cycle peak-to-trough dates. EM data begin December 1987 and exclude the first non-recessionary rate cut cycle in 1984. For the non-recessionary rate cut cycle in 1987, the EM return calculated is for nine months due to limited data availability. Total return data are gross of dividend withholding taxes.

Chinese Equity Valuations Have Recovered
Valuation percentile reflects the average of three valuation metrics: ROE-adjusted P/E, five-year CAPCE, and P/FE. Global Equities are represented by the MSCI All Country World Index (ACWI).

Indian Equities Are Priced for Perfection
PEG ratio calculated as the forward 12-month P/E ratio divided by the consensus long-term (five-year) average earnings growth expectation.

Dispersion Is Trending Higher
Dispersion is calculated as the weighted cross-sectional standard deviation of the performance of stocks within the index during one month.

Focus on the Compass, Not the Clock
Pooled private investment periodic returns are net of fees, expenses, and carried interest. Private equity includes buyouts and growth equity. Modified Public Market Equivalent (mPME) replicates private investment performance under public market conditions. The public index's shares are purchased and sold according to the private fund cash flow schedule, with distributions calculated in the same proportion as the private fund, and mPME NAV is a function of mPME cash flows and public index returns. MSCI All Country World Index (ACWI) returns are net of dividend withholding tax. Past performance is not a reliable indicator of future results. All financial investments involve risk. Depending on the type of investment, losses can be unlimited.

Deal Activity in Japan Has Been on the Rise
Data for 2024 are through September 30. Data retrieved on November 22, 2024, and may revise.

USD-Denominated Venture Capital Activity in China Slowed in 2024
Fundraising data reflect capital raised by USD-denominated, China-based VC funds. Deal activity data reflect all VC investments made in China that are denominated in US dollars, including investments made by global/regional funds, as well as China-based funds. Data for 2024 are as of September 30.

Continuation Vehicle Usage Has Grown Quickly
Sponsor-backed exit volume includes M&A and IPO proceeds, plus estimated continuation fund volume. Percentage represents continuation fund transaction volume (numerator) over sponsor-backed exit deal volume (denominator). Expected annual volume for 2024 is based on first half 2024. Global continuation transaction volume for 2024 is based on first half actual and second half projection.

CCAs Have Recovered Rapidly From Previous Sell-Offs
Data are daily.

Hold Periods for Private Cleantech/Climate Companies Are in Line With Market
Number of companies from the initial investment to complete realization are indicated in parentheses.

New Managers Have Driven Peak Commitments in Recent Years
Private equity includes buyout and growth private equity. An emerging fund is defined as the first or second fund, a developing fund is the third or fourth fund, and an established fund is the fifth fund and beyond. Manager data include US and non-US managers. Data for 2024 are through September 30. Historical data are subject to revisions.

Spreads Look Expensive for Many Credit Assets
Asset classes represented by: Bloomberg US Corporate Investment Grade Bond Index (US IG), Bloomberg Pan-European Aggregate Corporate Bond Index (Euro IG), J.P. Morgan CLOIE BBB Index (CLO BBB), J.P. Morgan CLOIE BB Index (CLO BB), Bloomberg US Corporate High Yield Bond Index (US HY), Bloomberg Pan-European High Yield Index (Euro HY), and Credit Suisse Leveraged Loan Index (US LL). Observation periods begin June 30, 1989, for US IG, January 31, 1992, for US LL, January 31, 1994, for US HY, August 31, 2000, for Euro HY & Euro IG, and December 31, 2011, for CLO BBB & CLO BB.

Demand for Coverage at All-Time Highs, Evidenced by Catastrophe Bonds Outstanding
Data for 2024 are through November 30.

Direct Lending Spreads Have Steadily Declined
Three-month rolling averages for first lien term loans. Spreads are to the Secured Overnight Financing Rate (SOFR). EBITDA $100M+ data begin September 30, 2021.

Default Rates Remain Low, But Distressed Exchanges (Including Liability Management Transactions) Have Been Increasing
The Default Rate is calculated by dividing the number of issuers that defaulted in the last 12 months by the total number of issuers.

Infrastructure Earnings Growth Expected to Lag Developed Markets
Data for 2024 reflect year-over-year growth through November 30 and 2025 estimates reflect differences in 12-month forward EPS growth forecasts.

Recent Cash Flow Growth Has Been Weak
Funds from operations per share pertain to all equity REITs. Data are quarterly.

Private Real Estate Tends to Follow Listed Real Estate
Return data are quarterly. "Private Real Estate" is represented by the NCREIF Fund Index - Open-End Diversified Core Equity (Net) and "Listed Real Estate" is represented by the FTSE® NAREIT All Equity REITs Index.

Real Exchange Rate Valuations for the US Dollar Are Stretched
Trade weights for the US dollar are based on the following: Euro (41.4%), Canadian dollar (27.5%), Japanese yen (11.0%), British pound (10.0%), Swiss franc (6.1%), the Australian dollar (2.7%), and Swedish krona (1.2%). Totals may not sum due to rounding. 2024 inflation data for Australia are through September 30, Eurozone are through November 30, and all others are through October 31.

Gold Returns Rarely Exceeded 30% in Consecutive Years
Real prices are inflation-adjusted. Inflation data are through October 31, 2024. Returns for 2024 are through November 30.

Stablecoin Transaction and Transfer Volume Is Similar to Visa and Mastercard Combined
Data are aggregated.

INDEX DESCRIPTIONS

Bloomberg Pan-European Aggregate Corporate Index
The Bloomberg Pan-European Aggregate Bond Index is a broad-based flagship benchmark that measures fixed-rate, investment-grade securities in the following European currencies: Swiss Franc, Czech Koruna, Danish Krone, Euro, British Pound, Hungarian Forint, Norwegian Krone, Polish Zloty, Romanian Leu, Russian Ruble, and Swedish Krona. The principal asset classes are treasuries, government-related, corporate, and securitized, which include Pfandbriefe, other covered bonds and asset-backed securities. Inclusion is based on currency denomination of a bond and not country of risk of the issuer. The Pan-European Aggregate is a component of other flagship indexes, such as the multi-currency Global Aggregate Index.

Bloomberg Pan-European High Yield Index
The Bloomberg Pan-European High Yield Index measures the market of non–investment-grade, fixed-rate corporate bonds denominated in the following currencies: euro, pound sterling, Danish krone, Norwegian krone, Swedish krona, and Swiss franc. Inclusion is based on the currency of issue, and not the domicile of the issuer.

Bloomberg US Corporate High Yield Bond Index
The Bloomberg US Corporate High Yield Index measures the US corporate market of non-investment grade, fixed-rate corporate bonds. Securities are classified as high yield if the middle rating of Moody's, Fitch, and S&P is Ba1/BB+/BB+ or below.

Bloomberg US Corporate Investment Grade Bond Index
The Bloomberg US Corporate Investment Grade Bond Index measures the investment-grade, fixed-rate, taxable corporate bond market. It includes USD-denominated securities publicly issued by US and non-US industrial, utility, and financial issuers.

Bloomberg World Government Inflation-Linked Bond (WGILB) Index
The Bloomberg World Government Inflation-Linked Bond (WGILB) Index measures the performance of investment-grade, government inflation-linked debt from 12 different developed market countries. Investability is a key criterion for inclusion of markets in this index, and it is designed to include only those markets in which a global government linker fund is likely and able to invest. Markets tracked by the index include Australia, Canada, Denmark, France, Germany, Italy, Japan, New Zealand, Spain, Sweden, the United Kingdom, and the United States. The index was launched on October 31, 1997, with history backfilled to December 31, 1996.

Credit Suisse Leveraged Loan Index
The Credit Suisse Leveraged Loan Index tracks the investable market of the USD–denominated leveraged loan market. It consists of issues rated "5B" or lower, meaning that the highest rated issues included in this index are Moody's/S&P ratings of Baa1/BB+ or Ba1/BBB+. All loans are funded term loans with a tenor of at least one year and are made by issuers domiciled in developed countries.

FTSE® NAREIT All Equity REITs Index
The FTSE® NAREITAll Equity REITs Index is a free float–adjusted, market capitalization–weighted index of US equity REITs. Constituents of the index include all tax-qualified REITs with more than 50% of total assets in qualifying real estate assets other than mortgages secured by real property.

J.P. Morgan Collateralized Loan Obligation Index (CLOIE)
CLOIE offers total returns and analytics based on observable pricings of a representative pool of bonds following a stated methodology and is published daily. The index holistically captures the USD-denominated CLO market, representing more than 3,000 instruments at a total par value of US$236.1 billion. Market participants can track securitized loan market valuations. CLOIE tracks floating-rate CLO securities in 2004–present vintages. Additional sub-indices are divided by ratings AAA through BB, and further divided between pre- and post-crisis vintages. CLO 2.0, or post-crisis vintages, consists of deals issued in 2010 and later. CLOIE uses a market value–weighted methodology.

J.P. Morgan GBI-EM Global Diversified Index
The J.P. Morgan GBI-EM Global Diversified Index is a comprehensive global, local, emerging markets index that consists of regularly traded, liquid, fixed-rate, domestic currency government bonds and includes only the countries that give access to their capital market to foreign investors (excludes China and India). The index is market capitalization–weighted, with a cap of 10% to any one country. The index is not available for direct investment; therefore, its performance does not reflect a reduction for fees or expenses incurred in managing a portfolio. The securities in the index may be substantially different from those in the fund.

MSCI All Country World Index (ACWI)
The MSCI ACWI captures large- and mid-cap representation across 23 developed markets (DM) and 24 emerging markets (EM) countries. With 2,947 constituents, the index covers approximately 85% of the global investable equity opportunity set. DM countries include: Australia, Austria, Belgium, Canada, Denmark, Finland, France, Germany, Hong Kong, Ireland, Israel, Italy, Japan, the Netherlands, New Zealand, Norway, Portugal, Singapore, Spain, Sweden, Switzerland, the United Kingdom, and the United States. EM countries include: Brazil, Chile, China, Colombia, Czech Republic, Egypt, Greece, Hungary, India, Indonesia, Korea, Kuwait, Malaysia, Mexico, Peru, the Philippines, Poland, Qatar, Saudi Arabia, South Africa, Taiwan, Thailand, Turkey, and the United Arab Emirates.

MSCI China Index
The MSCI China Index captures large- and mid-cap representation across China A shares, H shares, B shares, Red-chips, P-chips, and foreign listings (e.g., ADRs). With 598 constituents, the index covers about 85% of this China equity universe. Currently, the index includes Large Cap A and Mid Cap A shares represented at 20% of their free float–adjusted market capitalization.

MSCI China All Shares Index
The MSCI China All Shares Index captures large- and mid-cap representation across China A shares, B shares, H shares, Red-chips, P-chips, and foreign listings (e.g., ADRs). The index aims to reflect the opportunity set of China share classes listed in Hong Kong, Shanghai, Shenzhen, and outside of China. It is based on the concept of the integrated MSCI China equity universe with China A-shares included.

MSCI Emerging Markets Index
The MSCI Emerging Markets Index captures large- and mid-cap representation across 24 EM countries. With 1,278 constituents, the index covers approximately 85% of the free float–adjusted market capitalization in each country.

MSCI Europe Index
The MSCI Europe Index captures large- and mid-cap representation across 15 DM countries in Europe. DM countries in Europe include: Austria, Belgium, Denmark, Finland, France, Germany, Ireland, Italy, the Netherlands, Norway, Portugal, Spain, Sweden, Switzerland, and the United Kingdom. With 428 constituents, the index covers approximately 85% of the free float–adjusted market capitalization across the European DM equity universe.

MSCI Europe ex UK Index
The MSCI Europe ex UK Index captures large- and mid-cap representation across 14 DM countries in Europe. DM countries in Europe (excluding the United Kingdom) include: Austria, Belgium, Denmark, Finland, France, Germany, Ireland, Italy, the Netherlands, Norway, Portugal, Spain, Sweden, and Switzerland. With 337 constituents, the index covers approximately 85% of the free float–adjusted market capitalization across European developed markets excluding the United Kingdom.

MSCI Japan Index
The MSCI Japan Index is designed to measure the performance of the large- and mid-cap segments of the Japanese market. With 235 constituents, the index covers approximately 85% of the free float–adjusted market capitalization in Japan.

MSCI UK Index
The MSCI UK Index is designed to measure the performance of the large- and mid-cap segments of the UK market. The index covers approximately 85% of the free float–adjusted market capitalization in the United Kingdom.

MSCI US Index
The MSCI US Index is designed to measure the performance of the large- and mid-cap segments of the US market. With 626 constituents, the index covers approximately 85% of the free float-adjusted market capitalization in the United States.

MSCI World Index
The MSCI World Index represents a free float–adjusted, market capitalization–weighted index that is designed to measure the equity market performance of developed markets. It includes 23 DM country indexes.

MSCI World ex US Index
The MSCI World ex US Index captures large- and mid-cap representation across 22 of 23 DM countries—excluding the United States. The index covers approximately 85% of the free float–adjusted market capitalization in each country.

MSCI World Core Infrastructure Index
The MSCI World Core Infrastructure Index captures large and mid-cap securities across the 23 DM countries. The Index is designed to represent the performance of listed companies within the developed markets that are engaged in core industrial infrastructure activities.

MSCI World Growth Index
The MSCI World Growth Index captures large- and mid-cap securities exhibiting overall growth style characteristics across 23 DM countries. The growth investment style characteristics for index construction are defined using five variables: long-term forward EPS growth rate, short-term forward EPS growth rate, current internal growth rate and long-term historical EPS growth trend and long-term historical sales per share growth trend.

NCREIF Fund Index - Open-End Diversified Core Equity (NFI-ODCE)
The NFI-ODCE is a capitalization-weighted, gross of fee, time-weighted return index. NCREIF began calculating the NFI-ODCE in 2006 with data back to 1977. Supplemental data are also provided, such as equal-weight and net of fee returns, for informational purposes and additional analysis.

S&P 500 Index
The S&P 500 Index includes 500 leading companies and covers approximately 80% of available market capitalization.

US Dollar Index (DXY)
The US Dollar Index measures the value of the US dollar relative to a basket of top six currencies: CAD, CHF, EUR, GBP, JPY, and SEK.