

2025 Year-Ahead US Outlook

Macro, Equities, Funds, RMBS, CMBS, and CLO Insights

Executive Summary

Initial market reactions to the outcome of the 2024 U.S. Presidential and Congressional elections broadly followed the 2016 playbook, when President-elect Trump was first elected, with equities outperforming Treasuries, curves steepening, and the term premium increasing. The main driver has been the mooted tax cuts and fiscal stimulus proposed by President-elect Trump during the election campaign.

The yield curve began disinverting and steepening in early-2024, as the Fed pivoted towards easing policy. Rapid growth in the U.S. Treasury market since 2016 may help explain why the yield curve has steepened, and the 10-year term premium has increased in 2024.

Substantial increases in the stock of U.S. Federal debt, and higher rates, have combined to deliver a rapid increase in U.S. debt service costs and begun to transform government finance. Debt service costs are close to \$1 trillion per annum – one of the largest items in current expenditure on the Federal budget. U.S. fiscal deficits may serve as a constraint on the scale of the tax cuts proposed by President-elect Trump in the election campaign, and future infrastructure spending.

Despite higher rates, U.S. equities are supported by a constructive backdrop, driven by strong fundamentals, expanding profit margins, and broader earnings contributions from the 'S&P 493' in 2025. However, this optimism is tempered by elevated valuation levels, a narrowing equity risk premium, a potential 'higher for longer' rate environment, and uncertainty around tariffs. The rest of the world trades at a substantial discount to U.S. equities, with valuations near an all-time high and the narrowest equity-to-bond yield spread in nearly two decades.

The 2025 outlook for S&P 500 earnings and revenue growth is promising, with earnings expected to grow by 14.1% and revenue by 5.6%, marking the third-best year in over a decade. Analyst estimates forecast that small-caps will outperform large-caps, with Russell 2000 earnings expected to grow by 43.7%.

Along with a strong earnings outlook, we also see a case for companies being able to effectively manage profit margins in an uncertain economic environment, supported by positive operating leverage and sales growth exceeding input costs. In anticipation of upcoming tariffs, we calculate that approximately 60.8% of S&P 500 revenues are generated domestically, while 39.2% come from international sources. Since 2020, Industrials has seen the largest number of transcripts mentioning 'supply chain' or 'reshoring,' followed by Information Technology, Consumer Staples, and Consumer Discretionary.

Attempts to determine a straightforward relationship between US government policy prescriptions, and the fund asset classes and sector they impact, fail. For example, alternative energy investments have done well under the

Authors

Tajinder Dhillon
Tajinder.Dhillon@lseg.com

Dewi John
Dewi.John@lseg.com

Luke Lu
Luke.Lu@lseg.com

Robin Marshall
Robin.Marshall@lseg.com

Irene Shi
Irene.Shi@lseg.com

We wish to thank additional contributors Loy Weng and Hank Qian on the CMBS outlook and Miles Li on the CLO outlook.



LSEG DATA & ANALYTICS

previous Trump administration, and have bombed under Biden. The reverse was the case with traditional, oil and gas-laden energy funds. Drawing on the wealth of LSEG Lipper fund data, it's clear that the relationship between policy and returns has been at best contingent over the past three administrations, argues Lipper Research, and there is no strong reason to believe that this time will be different.

Residential Mortgage-Backed Securities (RMBS) suggests a gradual recovery in the housing market, with modest increases in issuance and a slow improvement in inventory, alongside with existing home sales. Prepayment speeds are expected to pick up slightly, driven by the Fed rate cuts and the resulting media effect. While challenges such as tight housing supply and affordability issues will persist, the overall market is expected to show incremental improvement in 2025.

At the same time, we also expect to factor in the uncertain environment for the housing market, which may impact issuance, mortgage rates and existing home sales, stemming from the new administration's economic policies. These policies, including potential changes to tariffs, inflation, and the easing of construction regulations, could create additional challenges and volatility in the market. Additionally, the potential GSE reforms could introduce further market unpredictability, affecting prepayment speeds and issuance trends for both conventional and GNMA securities.

Commercial Mortgage-Backed Securities (CMBS) saw a dramatic rebound of private label CMBS issuance in 2024 and massive tightening of spreads on the back of sustained cooling of inflation and the kickoff of Fed easing cycle. CRE market sentiment improved significantly despite elevated distress in maturity refinance and office fundamental. We are bullish on CRE and CMBS market for 2025 as the Fed continues the easing cycle and the soft landing remains the base case for the economy but would be cautious on the risk of sticky inflation, new administration policies, and hotter than expected jobs data, which may cause disruption and turbulence for CRE fundamentals and financing conditions.

Collateralized Loan Obligations (CLO) had a banner year in 2024, and we see a lot of market optimism for CLOs. While the strength of the market is poised to carry over to 2025, the new year will ultimately be shaped by the economic trajectory and evolving monetary and fiscal policies. We expect credit condition to be steady or improve under the baseline scenario, which would be supportive to continued growth in CLO issuance and spread tightening. On the other hand, the stress scenario may sour investor sentiment and pressure corporate profit margin and interest coverage ratio. However, the higher-for-longer rate environment could benefit CLO demand as floating rate investments retain their appeal, mitigating the downside risk.

Contents

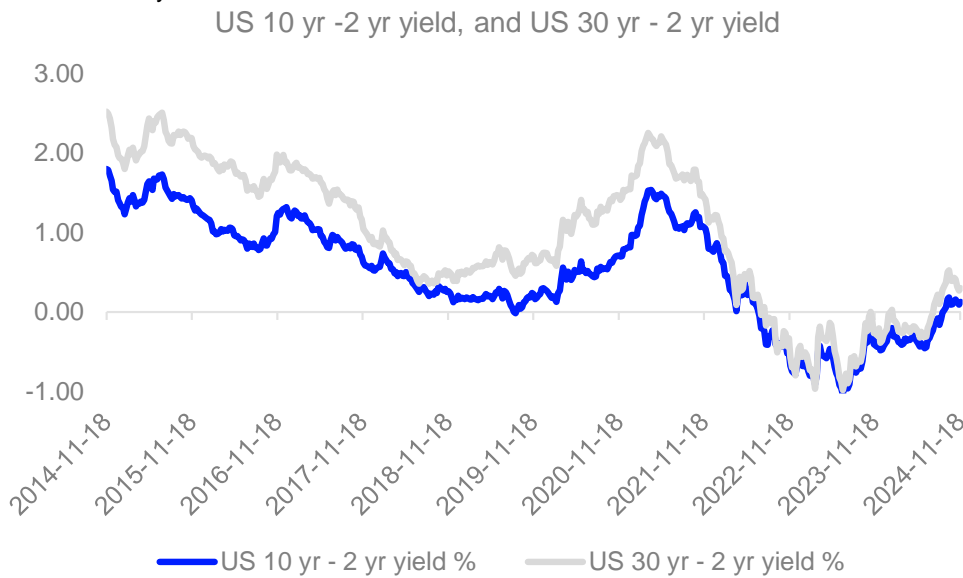
Executive Summary.....	1
Section 1 – Macro Outlook: President-elect Trump and the bond market vigilantes	4
Section 2 – Equities Outlook: Strong earnings outlook in the face of elevated valuation levels	8
Section 3 – Funds Outlook: “It’s difficult to make predictions, especially about the future”	18
Section 4 – CMBS Outlook: Resiliency and optimism despite office distress	30
Section 5 – CLO Outlook: Keep momentum going for another banner year	41

Section 1 – Macro Outlook: President-elect Trump and the bond market vigilantes¹

Initial market reactions to the outcome of the 2024 U.S. Presidential and Congressional elections broadly followed the 2016 playbook, when President-elect Trump was first elected, with equities outperforming Treasuries, curves steepening, and the term premium increasing. The main driver has been the mooted tax cuts and fiscal stimulus proposed by President-elect Trump during the election campaign. In fixed income, a steeper yield curve, higher short run inflation expectations and a rise in the term premium all immediately followed the 2016 Presidential election, after similar campaign proposals, as Exhibits 1 and 2 show, but to date, the evidence is more muted in 2024.

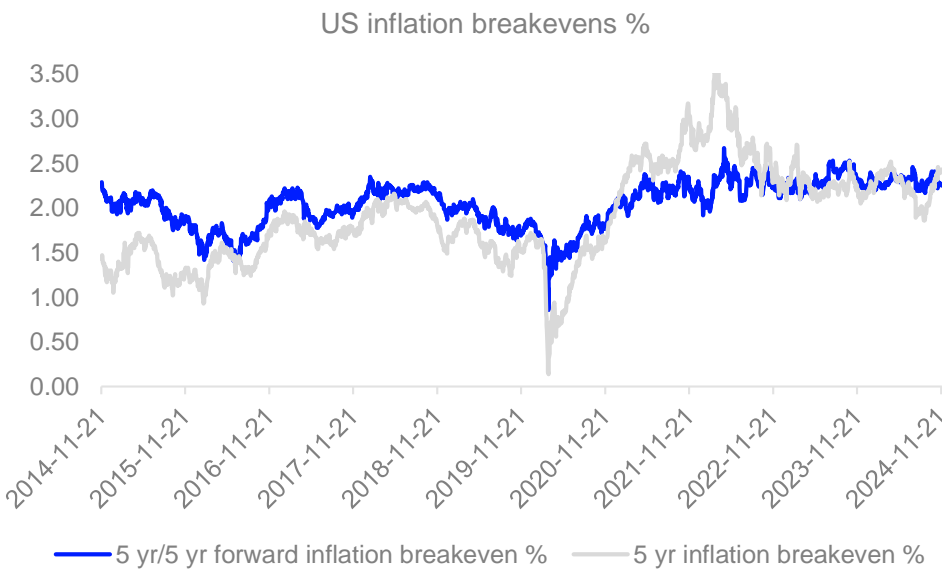
Exhibit 1 shows the U.S. yield curve began disinverting and steepening in early-2024, as the Fed pivoted towards easing policy, well in advance of the U.S. elections on November 5, and Exhibit 2 that longer run U.S. inflation expectations have yet to move decisively higher.

Exhibit 1: U.S. yield curve and U.S. elections



Source: U.S. Federal Reserve

Exhibit 2: U.S. inflation expectations



Source: U.S. Federal Reserve

¹ Please follow the link to the paper published by FTSE Russell, Global Investment Research, [President-elect Trump and the bond market vigilantes | LSEG](#)

The power of surprise, in 2016, may have driven the sharper reaction

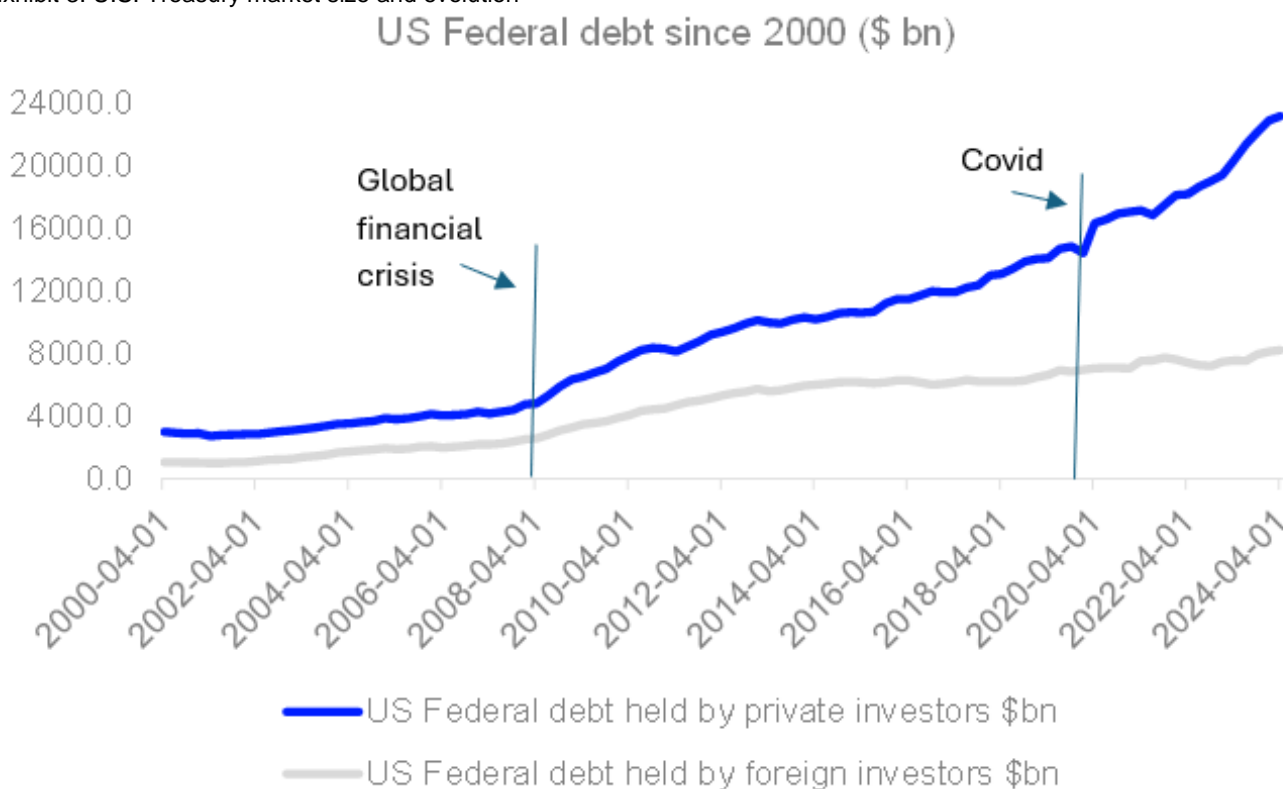
This may be because the outcome of the 2016 Presidential election was a bigger market surprise than 2024. In 2016, the betting prediction markets showed Hillary Clinton as strong favorite to win the Presidency, with an 82% chance of success versus only 18% for President-elect Trump, the eventual victor, the day before the election (on the betting platform Predictit). In contrast, in 2024, President-elect Trump was predicted to have a 58% chance of success, according to the betting prediction market Polymarket, and was a clear favorite. Also note that as the prediction market moved in favor of President-elect Trump, the yield curve did steepen in the month before the election.

Increased fiscal activism and the stock of U.S. public debt

Even if the outcome of the U.S. election was less of a market surprise in 2024, rapid growth in the U.S. Treasury market since 2016 may help explain why the yield curve has steepened, and the 10-year term premium has increased in 2024.

In Q4 2016, U.S. Federal debt held by private investors was approximately \$12 trillion, with \$6 trillion held by foreign investors, as Exhibit 3 shows. This compares with \$23.2 trillion held by private investors at the end of Q2 2024, and \$8.2 trillion held by foreign investors. The twin shocks of the Global Financial Crisis and Covid were the main drivers of this explosive growth in Federal debt, but the 2017-18 tax cuts, infrastructure programmes and the Inflation Reduction Act were other key drivers. Debt levels rose sharply under both Republican and Democrat administrations. It is true that the U.S. dollar's role as the primary global reserve currency continues, but the decline in the share of foreign investor holdings of U.S. Federal debt, shown in Exhibit 3, should also be noted (from 50% to 35%).

Exhibit 3: U.S. Treasury market size and evolution



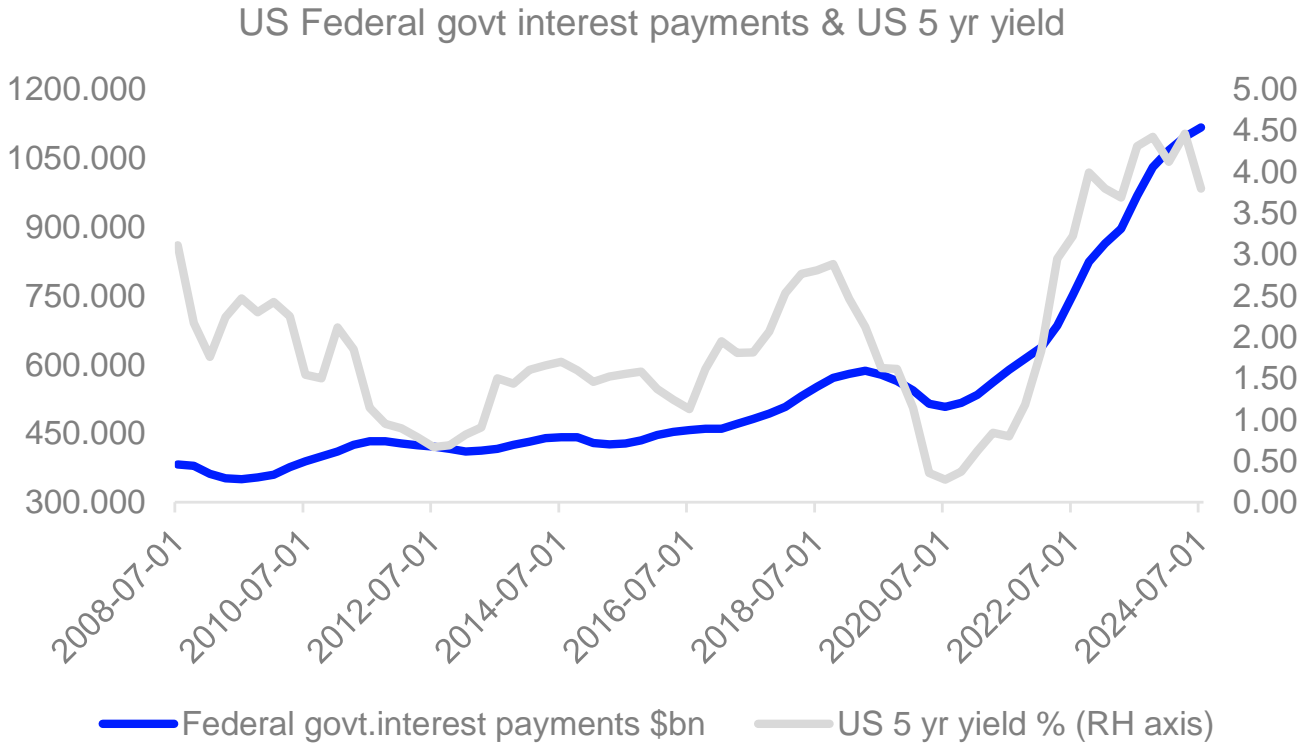
Source: U.S. Federal Reserve, Dept of Treasury.

Note: Removing Federal debt held by Federal agencies, and Federal Reserve banks, to avoid double-counting

The new U.S. debt service cost dynamics emerging....

Substantial increases in the stock of U.S. Federal debt, and higher rates, have combined to deliver a rapid increase in U.S. debt service costs and begun to transform government finance. This now means debt service costs are close to \$1 trillion per annum, and one of the largest items in current expenditure on the Federal budget. Since the average maturity of U.S. Treasury securities over the last 20 years is 64 months (Source: U.S. Department of Treasury), we looked at the evolution in debt service costs versus the yield on 5-year Treasuries, which is shown in Exhibit 4. This shows the closer correlation now evident between yield levels and current interest payments, because of the scale of the increase in Federal debt. This illustrates how the growth rate in interest payments accelerated quickly post-Covid, after the initial dip on Covid, in 2020, when zero rates returned.

Exhibit 4: U.S. Federal debt service costs & 5-year Treasury yield

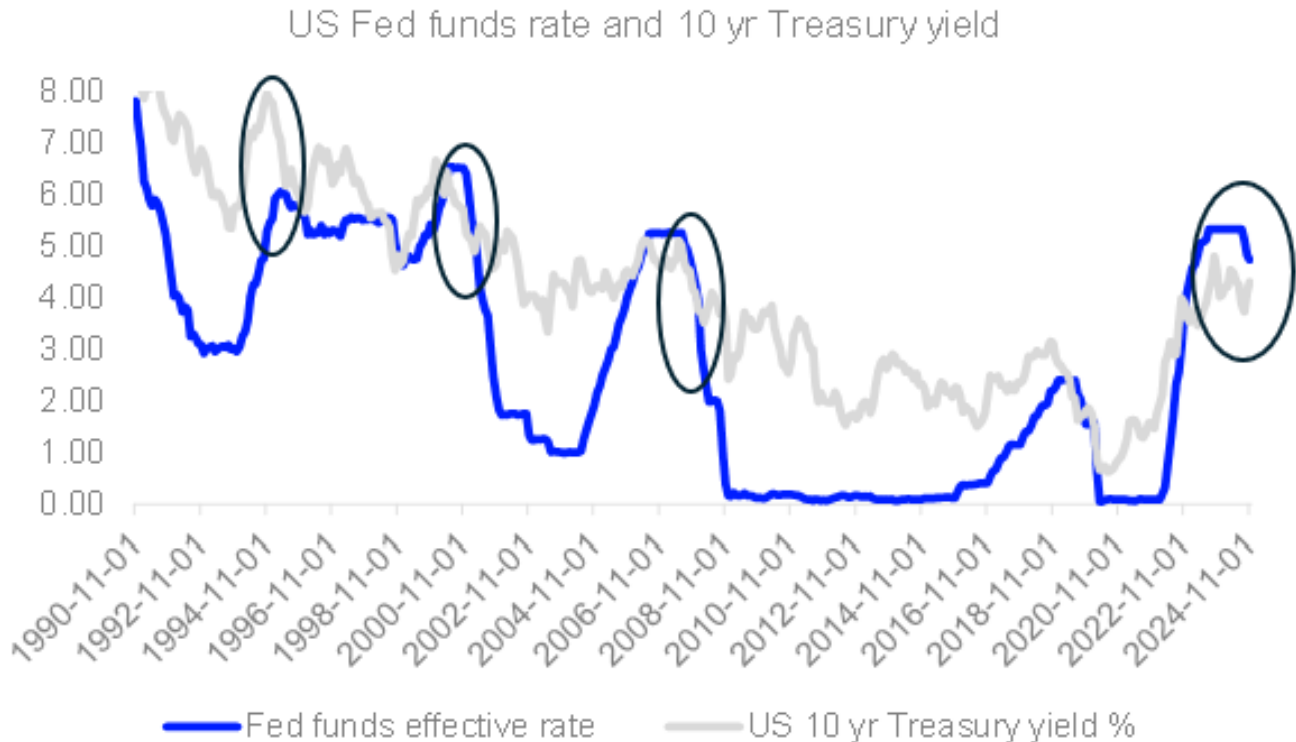


Source: US Federal Reserve economic data.

.... raise the risks from higher yields and bear steepening of the curve

Clearly, as federal debt service costs rise as a proportion of overall federal government expenditure, the adverse effects from higher yields increase. The fact the 10-year yield has increased since the Federal Reserve began easing monetary policy on September 18th is a concern, in that regard. Note that, as exhibit 5 shows, an increase in 10-year yields during the early stages of a Fed easing cycle is very unusual.

Exhibit 5: U.S. yield curve and Fed Funds Rate

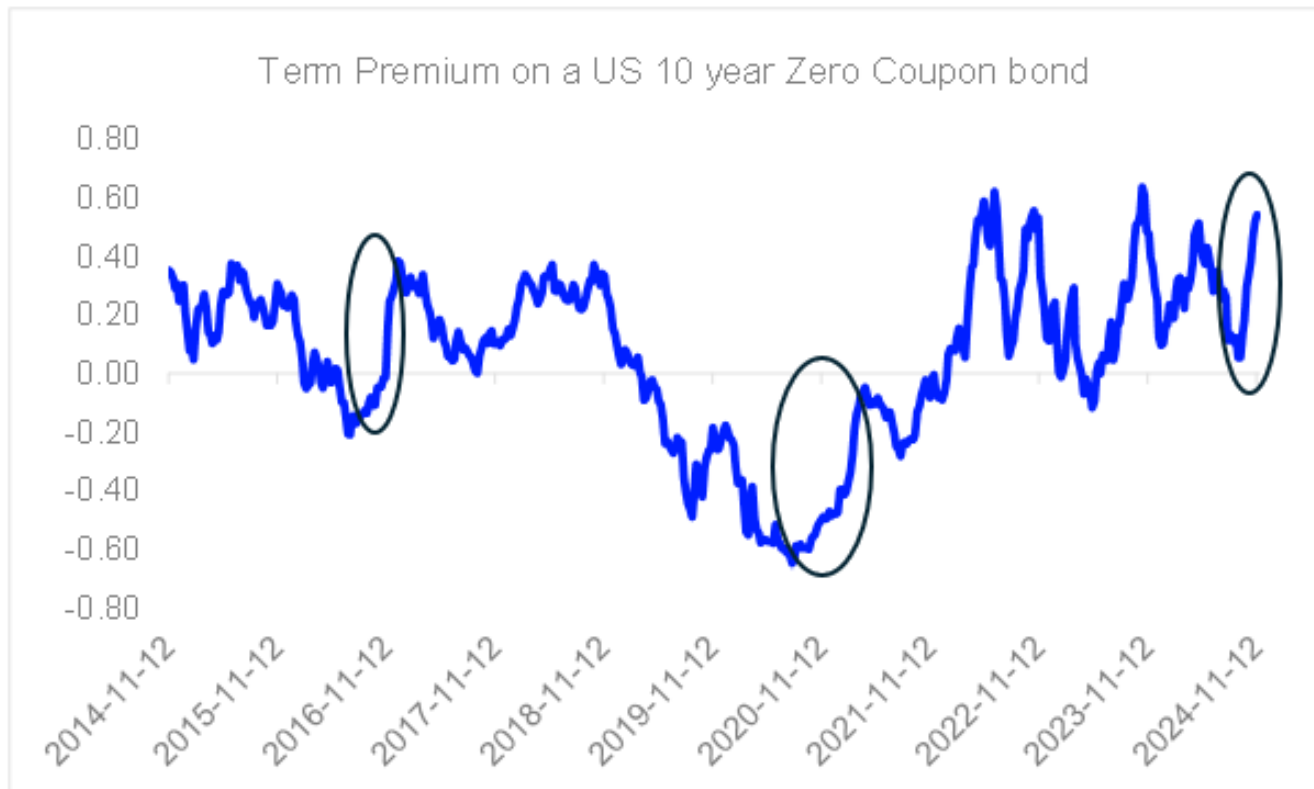


Source: US Federal Reserve economic data.

The term premium has increased and reflects the fiscal policy shift

Furthermore, if the U.S. economy has left the era of sub-1% bond yields, for the foreseeable future, and federal debt issuance accelerates further, after more fiscal stimulus, it raises the spectre of more difficult Treasury auctions as investors demand a higher term, or risk, premium. Exhibit 6 shows Fed estimates of the 10-year term premium (derived from the Kim and Wright 2005 model), which has risen sharply after the last three Presidential elections. However, note that it is now near the highs reached during the inflation shock of 2022-23.

Exhibit 6: U.S. Term premium on a 10-year zero-coupon bond



Source: U.S. Federal Reserve Board, Kim & Wright (2005)

A changing monetary/fiscal policy balance; market support vital

Another factor relevant to the U.S. term premium, and profile for rates in the medium and longer term, is the ongoing increase in U.S. budget deficits and more active role of U.S. fiscal policy, particularly since Covid. Even before the Presidential election, Congressional Budget Office (CBO) projections showed the fiscal deficit steadily increasing from the current level of 5.6% of GDP to 8.5% in 2054, even though the projections assume low levels of unemployment (Source: The Long-term budget outlook, March 2024, CBO).

Large and sustained primary deficits, which exclude interest payments, are forecast to average 0.6% of GDP until 2054, despite low levels of unemployment. These primary deficits and levels of net interest payments are the key drivers. The CBO is forecasting net interest payments will exceed the primary deficit in 2024 (3.1% versus 2.5% of GDP), and that Federal debt held by the public will reach its highest ever level of 107% of GDP in 2029.

The importance of avoiding a spike in Treasury yields

U.S. Treasury market reaction to this unstable projected path for U.S. fiscal deficits may serve as a constraint on the scale of the tax cuts proposed by President-elect Trump in the election campaign (about 3% of GDP), and future infrastructure spending. As exhibit 4 shows above, a spike in bond yields would increase net interest payments further, and combined with tariff increases, deepen the risk of a bout of stagflation and debt trap. This suggests a more measured approach to a fiscal stimulus may result, since a positive reception from the U.S. Treasury market has become a key requirement for a successful fiscal policy.

President-elect Trump's nomination of Scott Bessent, a veteran in the financial markets, as the new U.S. Treasury Secretary, may suggest awareness of the risk to his fiscal policy programme from a spike in U.S. Treasury yields, and bear steepening of the yield curve. We note that the Treasury market rallied on the nomination, and the yield curve flattened.

Section 2 – Equities Outlook:

Strong earnings outlook in the face of elevated valuation levels

U.S. equities are supported by a constructive backdrop, driven by strong fundamentals, expanding profit margins, and broader earnings contributions from the 'S&P 493' in 2025. However, this optimism is tempered by elevated valuation levels, a narrowing equity risk premium, a potential 'higher for longer' interest rate environment, and uncertainty around tariffs.

Equity Valuations: U.S. Exceptionalism Priced into Markets

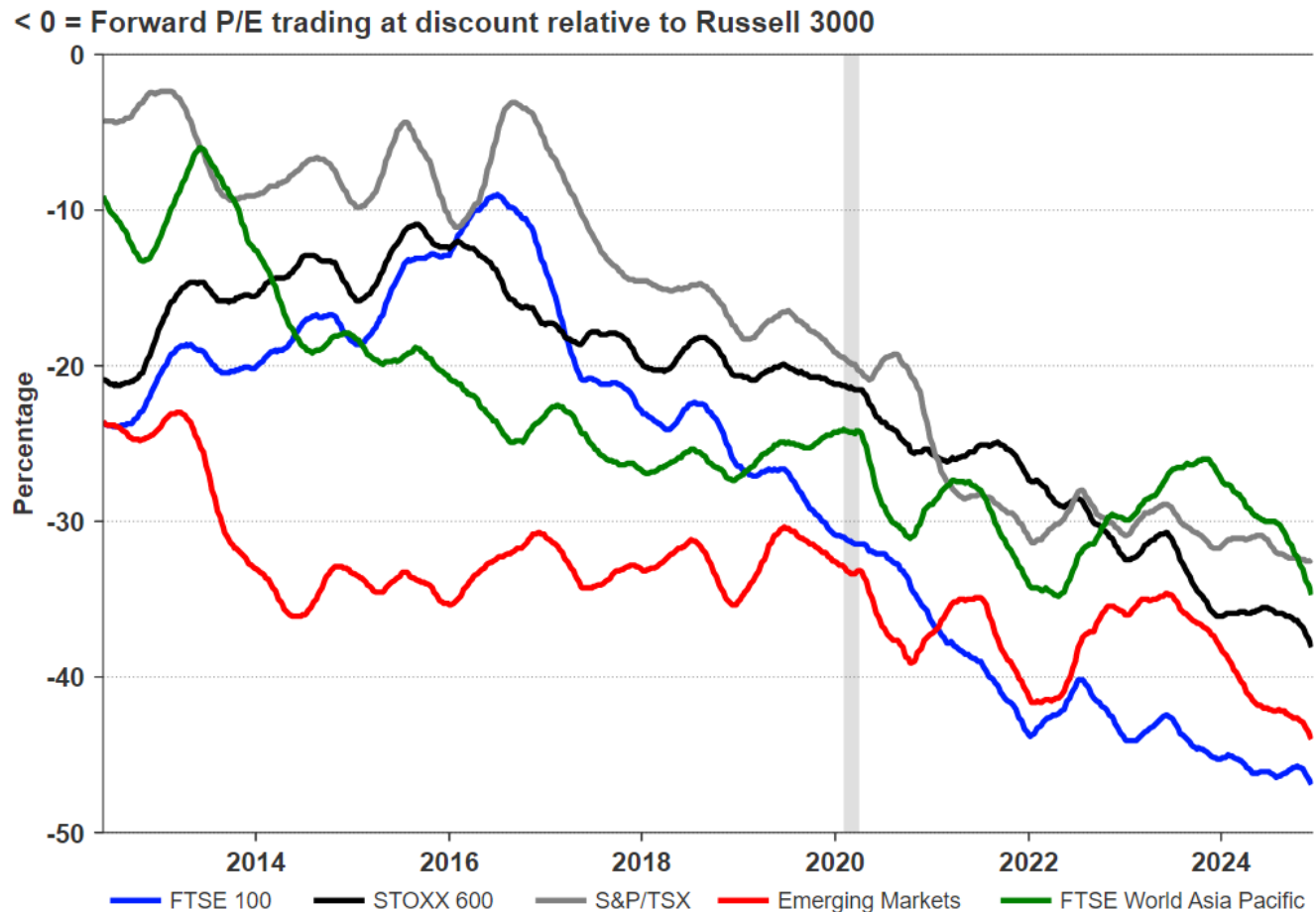
U.S. equities have continued to reach new all-time highs, with significant multiple expansion serving as a major driver of total returns in both 2023 and 2024. As per the S&P 500 Earnings Scorecard published by LSEG Proprietary Research, the forward price-to-earnings (P/E) ratio stands at 22.6x, a 23.7% premium to its 10-year average of 18.3x. This equates to an earnings yield of 4.4%, compared to a 10-year yield of 4.2%, marking the narrowest equity-to-bond yield spread in nearly two decades.

When adjusting earnings for inflation, the cyclically adjusted price-to-earnings (CAPE) ratio rises to 36.4x, exceeding its 10-year average of 30.4x. For context, the CAPE ratio ranks in the 97th percentile of observations since 1900, only seeing higher levels during the late 1990s tech bubble and the post-COVID recovery in 2021.

Small-caps, as defined by the Russell 2000, are also 'rich', with a forward four-quarter P/E of 25.9x. When excluding Health Care, a non-profitable sector, the forward P/E falls to 16.3x.

Looking globally, the rest of the world trades at a substantial discount to U.S. equities, as represented by the Russell 3000. We see an average relative discount of 30-50%, with the U.K. seeing the largest discount at 50.0% (forward P/E of 11.4x), followed by Emerging Markets (47.3%), Europe (42.0%), Asia Pacific (39.0%), and Canada (31.0%).

Exhibit 7: Global Relative Valuation vs Russell 3000



Source: LSEG Datastream

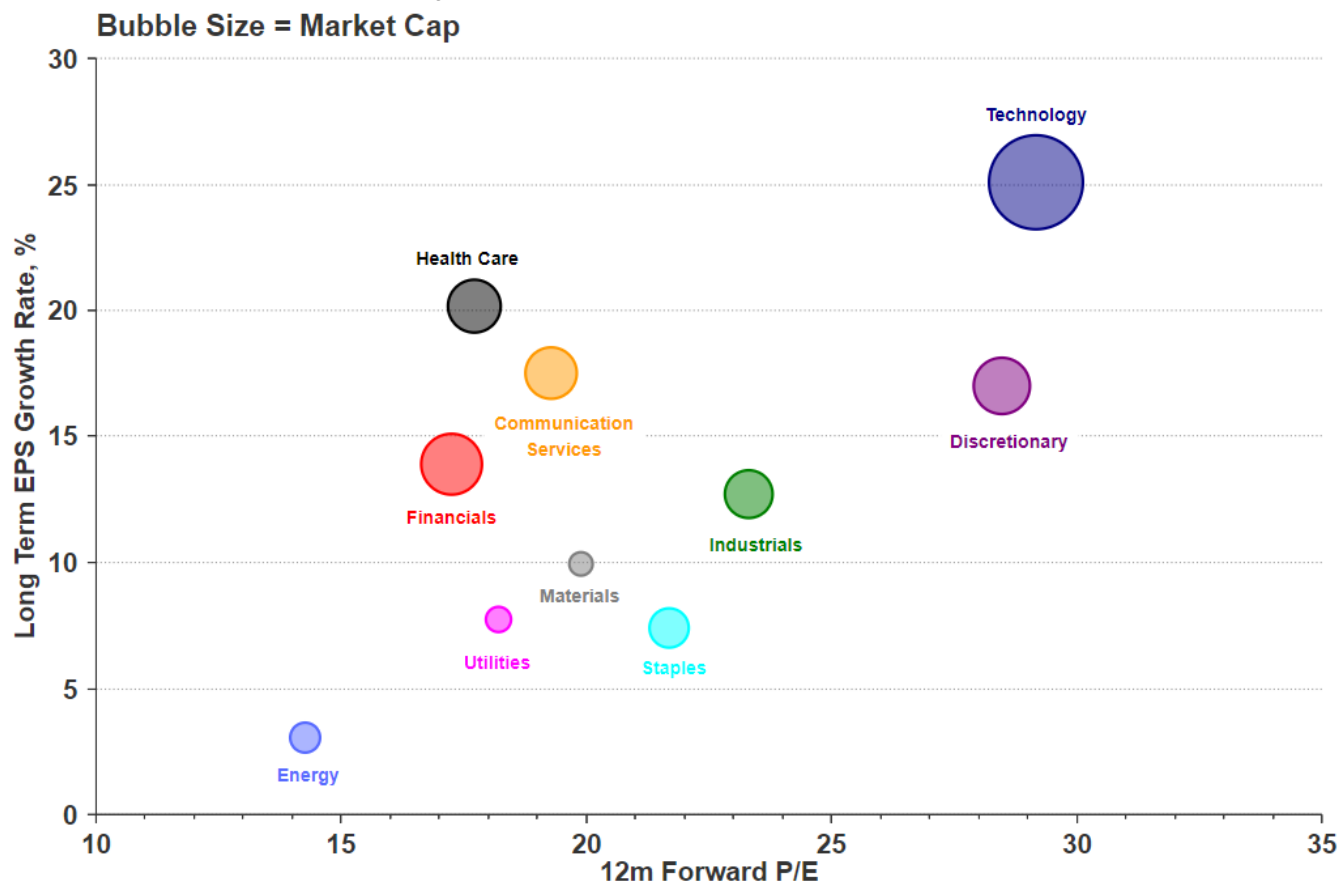
We focus on the S&P 500 in the rest of the report as our benchmark for large-cap U.S. equities and find that Information Technology is the most expensive sector, with a forward P/E of 28.5x (36.0% premium vs. 10-year average). Financials and

Industrials rank as the second and third most expensive sectors. In contrast, Energy and Real Estate are the only sectors trading below their historical averages, with Energy being the cheapest at a forward P/E of 14.9x.

Information Technology has the highest market-implied 5-year EPS CAGR of any sector in the S&P 500, at 19.9%, based on the StarMine Intrinsic Value model, significantly outpacing its forward 5-year EPS CAGR of 11.9%. This suggests that current valuations are pricing in significant earnings growth to justify their levels. The gap between market-implied and forward estimates raises questions about whether investor expectations are too optimistic, posing potential risks if actual growth aligns closer to analysts' more conservative projections.

When comparing forward P/E ratios to long-term EPS growth rate estimates (3–5-year forecasts), a clear pattern emerges: higher P/E ratios generally align with higher expected growth rates across most sectors. However, Financials, Health Care, and Communication Services stand out as attractively valued, offering higher growth rates at a lower P/E compared to sectors such as Materials, Consumer Staples, and Industrials.

Exhibit 8: S&P 500 Forward P/E vs. Long-Term EPS Growth Rate



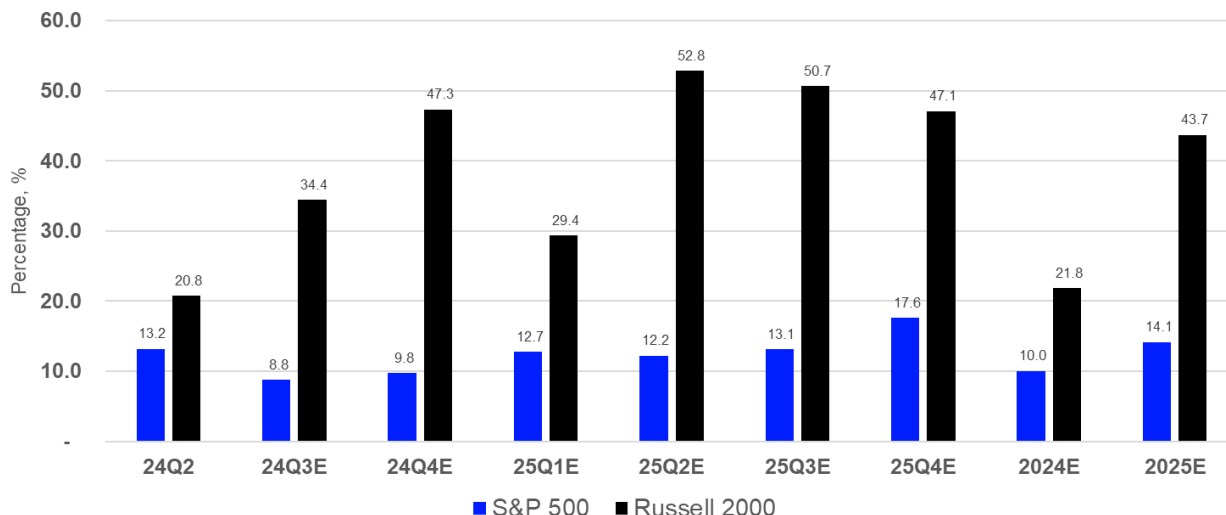
Source: LSEG Datastream

Earnings Outlook: Strong Growth Expectations for 2025

Even with elevated valuation levels, a material contraction in the forward P/E is uncommon given the outlook for earnings growth in 2025 and the expectation that earnings will deliver as projected.

Analysts suggest that small-caps will outperform large-caps in terms of earnings growth. This is partly due to the Russell 2000 exiting an earnings recession in 2024 and is benefiting from both an easier year-ago comparison and a smaller earnings base. For perspective, the S&P 500 is expected to generate 21.5 times more earnings than the Russell 2000 in 2025, with aggregate earnings of \$2.3 trillion compared to \$107 billion. Nevertheless, a strong growth outlook is needed for the Russell 2000, whose market cap as a ratio relative to the FTSE All World Index sits at 3.4% and near a 15-year low.

Exhibit 9: Blended Earnings Growth Rate Forecast

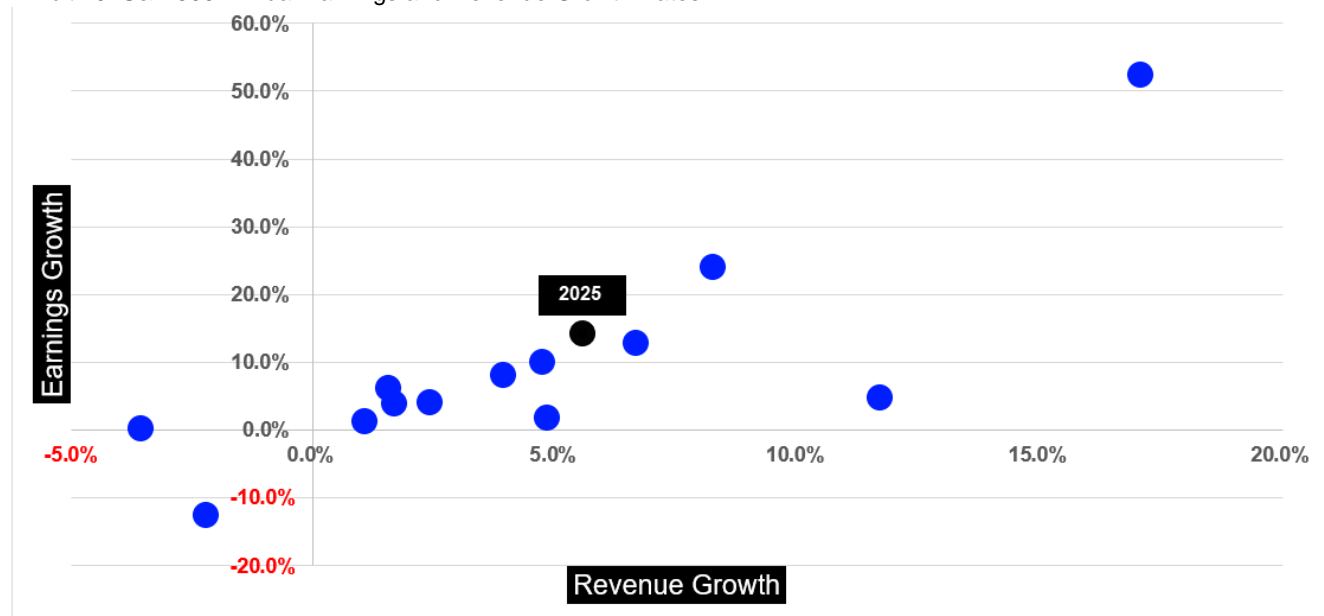


Source: LSEG I/B/E/S

From a seasonality perspective, growth estimates for the following year are typically revised during the first 6–8 months of the current calendar year before stabilizing. However, S&P 500 2025 growth estimates remained steady throughout 2024. Notably, growth rates for both the S&P 500 and Russell 2000 saw minimal revision activity in the lead-up to the November election.

The 2025 outlook for S&P 500 earnings and revenue growth is promising. Earnings are expected to grow 14.1% along with revenue growth of 5.6%. Since 2012, only two years (2018 and 2021) have seen stronger growth figures. Additionally, 2024 and 2025 are expected to deliver back-to-back years of double-digit earnings growth, a feat last achieved in 2017–2018.

Exhibit 10: S&P 500 Annual Earnings and Revenue Growth Rates



Source: LSEG I/B/E/S

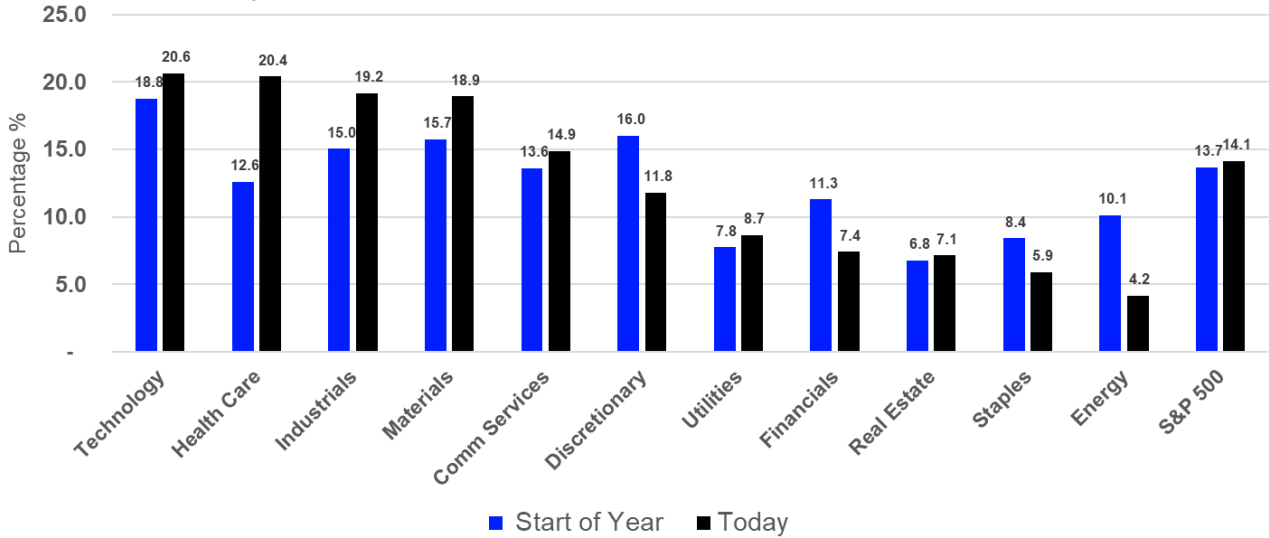
A key distinction is the greater earnings breadth expected across the S&P 500, with a larger number of companies contributing to overall earnings growth compared to 2024. Currently, positive earnings growth contributions are anticipated from every sector, led by Information Technology and Health Care, which together are projected to account for half of the index’s earnings growth. 455 out of 500 S&P 500 companies are projected to deliver positive year-over-year earnings growth in 2025, compared to only 357 in 2024.

Furthermore, the concentration of earnings growth is expected to decrease significantly, with the top 10 contributors driving only 42% of total growth (down from 80% in 2024), and just four of these being members of the Magnificent-7, which we discuss in more detail later.

The largest upward revisions to growth expectations have been in Health Care, Industrials, and Materials. Conversely, Energy, Consumer Discretionary, and Financials have experienced the most significant downward revisions.

At an Industry Group level, Pharmaceuticals, Biotechnology & Life Sciences, Semiconductors & Semiconductor Equipment, and Capital Goods have seen the largest upward revisions, while Real Estate Management & Development, Consumer Durables & Apparel, and Banks have seen the largest declines.

Exhibit 11: 2025 Earnings Growth Rate – S&P 500



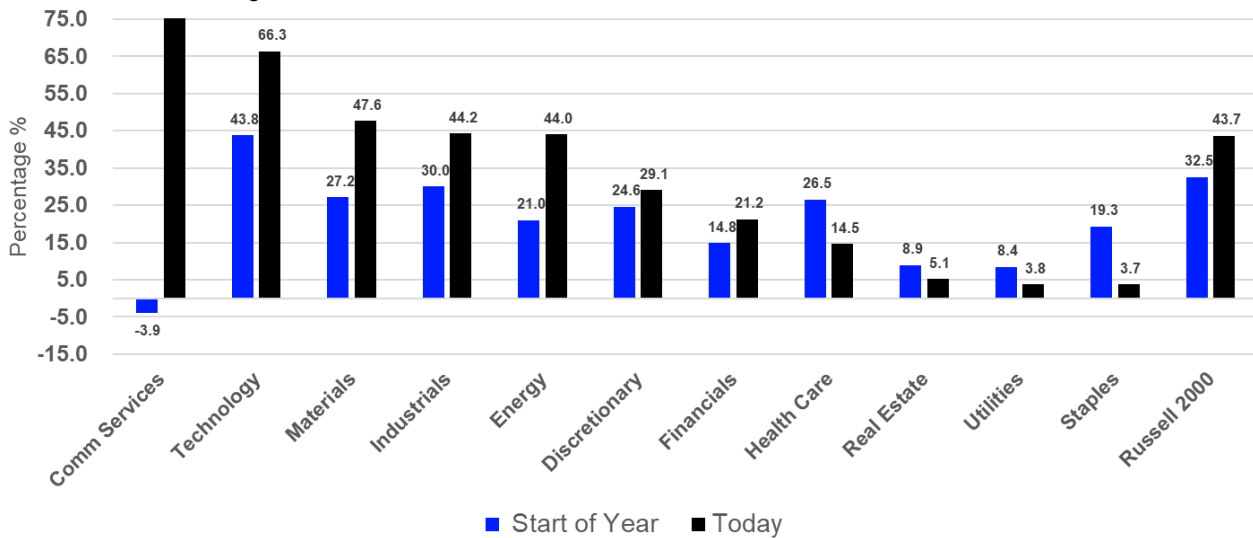
Source: LSEG I/B/E/S

The Russell 2000 is also poised for strong earnings growth in 2025 and has seen analysts revise estimates upward by 1,100 basis points to 43.7% year-over-year. Sectors with the largest upward revision include Communication Services, Energy, and Information Technology, while Consumer Staples, Health Care, and Utilities have seen the largest downward revisions.

Earnings growth contribution is broad-based, led by Financials and Industrials. Analysts anticipate that potential deregulation policies from President-Elect Trump may enhance profitability for regional banks, which make up a significant portion of the Russell 2000 Financials sector.

The Russell 2000's earnings recovery is further evidenced by a declining proportion of negative earners. According to LSEG Proprietary Research, 28.8% of Russell 2000 constituents are projected to be negative earners in 2024 (16.9% when excluding Health Care); this figure is expected to improve to 23.4% in 2025 (and 11.5% excluding Health Care).

Exhibit 12: 2025 Earnings Growth Rate – Russel 2000



Source: LSEG I/B/E/S

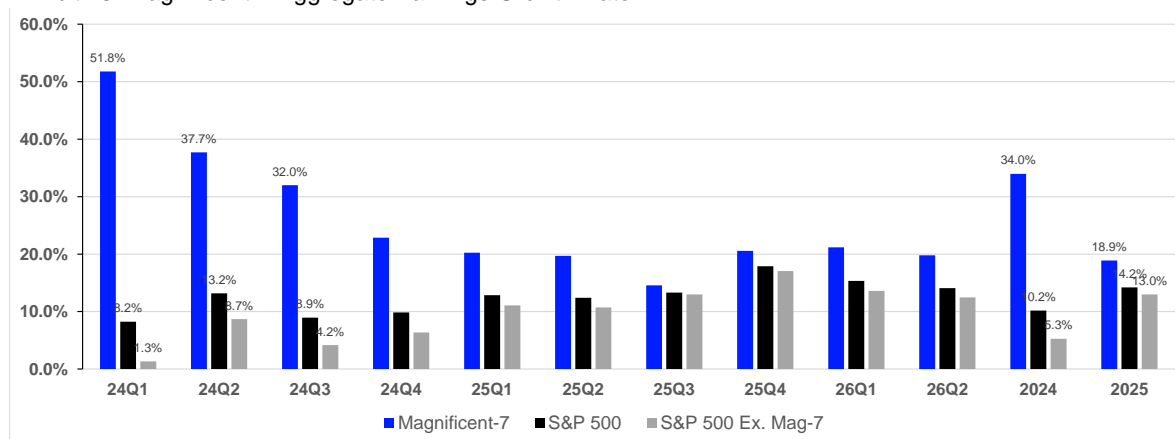
2025: A Year for the 'S&P 493' to Shine

The Magnificent 7 (Mag-7) make up about one-third of the S&P 500's total market value and have been the main contributors to earnings growth in recent quarters. In 2023, S&P 500 earnings grew by 4.1%, but when we exclude the Mag-7, growth fell to -1.3%. While the Mag-7 are still expected to post growth, we expect growth to broaden out to the rest of the index ('S&P 493') starting in 2024 Q4.

To highlight this, earnings growth in 2024 for the Mag-7 is 33.4% compared to an index growth rate of 10.0% (which declines to 5.2% when excluding the Mag-7). In 2025, earnings growth for the Mag-7 is forecasted at 18.6% compared to 14.1% for the index (declining only to 13.0% when excluding the Mag-7). Said differently, in 2024, the Mag-7 contributed approximately 57% to the S&P 500's earnings growth. This contribution is expected to decrease to about 28% in 2025, and when excluding Nvidia, it falls further to 15%.

Furthermore, Mag-7 as a group is projected to post an aggregate net profit margin of 25.1%, significantly outpacing the overall index's 13.8%. This, along with strong earnings and revenue growth can perhaps justify the valuation premium of 30.8x compared to the rest of the index. Excluding the Mag-7, the forward P/E drops to 20.2x. On a price-to-sales (P/S) basis, the Mag-7 has a forward P/S of 7.8x compared to 2.8x for the index.

Exhibit 13: Magnificent-7 Aggregate Earnings Growth Rate



Source: LSEG I/B/E/S

Margins: Room to 'Defend' and 'Protect'

While the earnings outlook remains robust, we also look at the ability for companies to protect and enhance margins to help reinforce the quality of earnings growth. The S&P 500 net profit margin is near an all-time high, forecasted at 12.3% for 2025, compared to 4.2% for the Russell 2000 (improving to 5.7% when excluding Health Care).

We see a few reasons for large caps being able to 'defend', 'protect' and even 'expand' margins into next year.

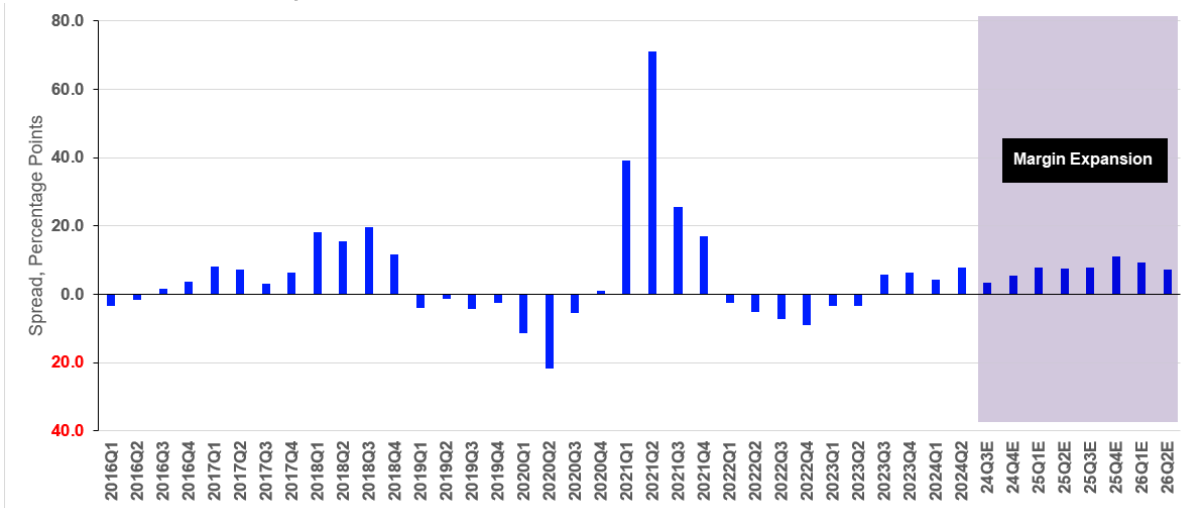
(1) Large-cap companies typically benefit from greater operational flexibility, enabling stronger operating leverage, especially when earnings growth is greater than revenue growth. Furthermore, with revenue growth projected at 5.6% next year compared to falling PPI prices, we see a favorable dynamic where forward 12-month sales growth has outpaced input costs (as measured by 1-year change in PPI Final Demand) since Q1 2023, indicating potential for profit margin expansion.

(2) Based on earnings and revenue growth estimates for next year, we should see a favorable operating leverage environment for all sectors in the S&P 500, with Materials, Health Care, and Industrials seeing the greatest expected benefit.

We also see a favorable operating leverage environment for the Russell 2000, with every sector except Real Estate and Utilities contributing to margin growth. This is particularly important given that the average interest rate on short-term loans for small businesses is 8.8%, falling from a 23-year high of 10.1% in September 2024 (Source: LSEG Datastream, National Federation of Independent Business). Interest rates on small business loans are higher than the federal funds rate as lenders price in additional risk premiums including credit, collateral, liquidity, and economic conditions. We should note that the benefits of operating leverage can quickly reverse if growth slows significantly.

Using StarMine analytics, sectors including Apparel Retail, Personal Care Products, and Household Durables have seen declines in analyst sentiment since the election result according to Analyst Revision Model (ARM). This can be partially explained by concerns over tariffs, which will raise costs and pressure margins as companies decide on whether to absorb or pass on costs to consumers.

Exhibit 14: S&P 500 Earnings Growth – Revenue Growth



Source: LSEG I/B/E/S

Given the promising outlook for earnings and margins, uncertainty around trade policies and fiscal spending could create varying effects across sectors. In this sub-section, we narrow our focus on two industries: 1. Defense, and 2. Oil & Gas.

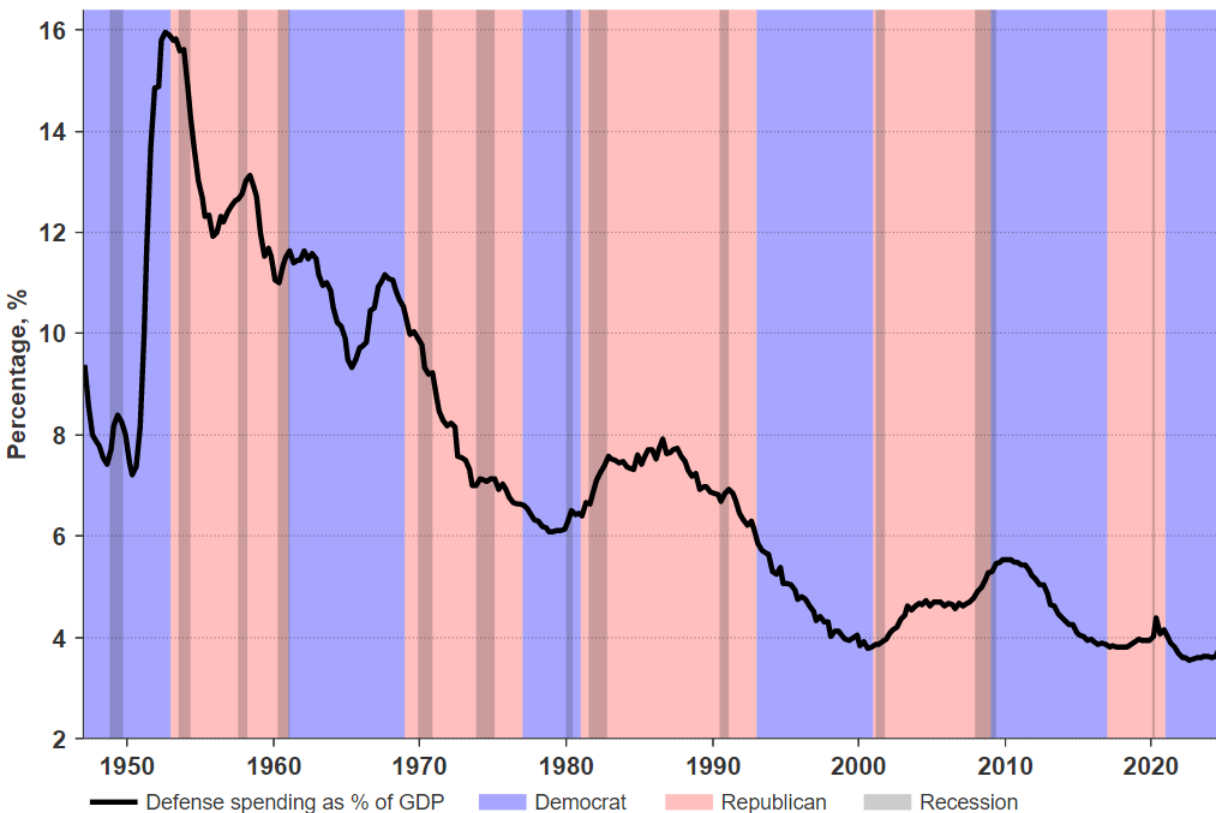
Defense: Boosting Budgets in Republican Eras

Since 1950, national defense consumption and investment have grown from \$20 billion to \$1.1 trillion as of Q3 2024, reflecting a 4.3% compounded annual growth rate over 74 years, according to LSEG Datastream (Source: Bureau of Economic Analysis). Using the Datastream charting tool, we overlay defense spending as a percentage of GDP along with political bands. As a percentage of GDP, defense spending has been in a secular decline, falling from 7.9% of GDP four decades ago to 3.7% today.

However, when looking at spending in absolute dollars, we find that defense spending accelerates significantly during Republican presidencies, doubling during the 1980s (from \$200 to \$400 billion) and again from 2001–2009.

Exhibit 15: U.S. Defense Spending as % of GDP

Proportional spending has declined over the long-term



Source: LSEG Datastream

Analysts anticipate strong growth for the S&P 500 Aerospace & Defense Industry Group, with an aggregate earnings growth rate of 77.4% and revenue growth of 9.4% in 2025. This would rank as the second highest earnings growth rate of any Industry Group. Furthermore, all constituents in this group are expected to post both positive earnings and revenue growth.

The Russell 2000 Aerospace & Defense group is set to outperform even further, with forecasted earnings growth of 358.2% and revenue growth of 8.9% in 2025, signaling broad-based recovery and strength in the sector.

One risk to the optimistic outlook for defense spending is President-elect Trump's 'America First' agenda, which suggests a possible shift in priorities that could reduce U.S. involvement in international conflicts, potentially impacting related defense expenditures.

Oil & Gas: Drill, Baby, With Care

President-elect Trump has signaled a strong pro-fossil fuel agenda with an emphasis on increased drilling. However, we note that according to LSEG Datastream, U.S. oil production reached a record 13.4 million barrels per day in October 2024, surpassing pre-pandemic levels.

Trump's 'Drill, Baby, Drill' message may not resonate as strongly anticipated as companies like Chevron announced a lower capital expenditure budget than a year-ago.

According to analyst estimates, the S&P 500 Energy sector's capital spending is projected to grow by 5.6%, compared to 6.2% in 2024. This marks a significant deceleration compared to the 81.2% capex growth seen in 2021. This slowdown raises questions about whether energy companies can or even want to expand daily production, especially in a lower oil price environment that pressures profitability and return on investment. This is weighing on analyst sentiment, as the energy sectors of both the S&P 500 and Russell 2000 have had the largest profit margin downgrades for 2025, with expectations falling by about 200 basis points, more than any other sector. Net profit margins are forecasted at 9.4% for the S&P 500 energy sector and 4.9% for the Russell 2000.

On the earnings front, we see a divergence among sub-industries. S&P 500 Energy Storage & Transportation is expected to lead in both earnings and revenue growth in 2025 at 15.8% and 17.5%, respectively. This can be explained by reduced exposure to oil price volatility given the nature of long-term contracts and the growing need for pipelines, storage, and transportation to support record production levels. Conversely, the Refining and Marketing sub-industry is projected to experience the lowest earnings and revenue growth with declines of 13.2% and 6.0%, respectively, as lower oil prices compress refining margins.

If we assume a pro-drilling agenda is realized, we can take a contrarian perspective to evaluate which companies might be adversely affected in such an environment. We utilize the FTSE Russell Green Revenues 2.0 Data Model, which highlights Energy companies with significant green revenue exposure based on their environmental benefits (i.e. Tier 1 Green revenue). Post-election, most companies with high Tier 1 Green revenue exposure saw downward revisions in analyst estimates, as reflected by declining StarMine Analyst Revision Model (ARM) scores. We can see this in the 'Change in ARM Score' column. Notably, only one company in this group maintains an ARM score above 70—a bullish signal.

To explore the Green Revenues Data Model further, visit [FTSE Russell Green Revenues Data Model](#).

Exhibit 16: Energy companies with significant green revenue exposure based on their environmental benefits

RIC	Company Common Name	TRBC Activity Name	Company Market Cap (Billions, USD)	Company Green Revenue Percentage (FY0)	Tier1 Green Revenue Percentage (FY0)	ARM Intraday Country Score	Change in ARM Score (30d)
ENPH.OQ	Enphase Energy Inc	Photovoltaic Solar Systems & Equipment	8.29	100.00	100.00	1	-15
FSLR.OQ	First Solar Inc	Photovoltaic Solar Systems & Equipment	20.06	100.00	100.00	50	20
DQ.N	Daqo New Energy Corp	Photovoltaic Solar Systems & Equipment	1.20	100.00	100.00	16	5
JKS.N	JinkoSolar Holding Co Ltd	Photovoltaic Solar Systems & Equipment	1.22	100.00	100.00	7	1
NXT.OQ	Nexttracker Inc	Photovoltaic Solar Systems & Equipment	5.30	100.00	100.00	48	10
RUN.OQ	Sunrun Inc	Photovoltaic Solar Systems & Equipment	2.18	100.00	95.15	52	-34
AMRC.N	Ameresco Inc	Renewable Energy Services	1.39	100.00	63.71	53	-5
WTTR.N	Select Water Solutions Inc	Oil Related Services	1.68	37.03	35.50	24	-13
XPRO.N	Expro Group Holdings NV	Oil Related Services and Equipment (NEC)	1.51	20.00	20.00	24	-38
OIL.N	Oceaneering International Inc	Oil Related Services and Equipment (NEC)	2.78	12.67	12.67	42	-45
SLB.N	Schlumberger NV	Oil Related Services and Equipment (NEC)	60.86	13.17	11.96	20	11
HLX.N	Helix Energy Solutions Group Inc	Oil Related Services and Equipment (NEC)	1.60	10.17	10.17	35	-61
NOV.N	Nov Inc	Oil Related Services and Equipment (NEC)	6.22	13.45	8.92	2	-5
LEU.A	Centrus Energy Corp	Uranium (NEC)	1.12	100.00	8.00	16	-48
KMI.N	Kinder Morgan Inc	Oil & Gas Transportation Services (NEC)	62.38	7.46	7.46	62	-3
HAL.N	Halliburton Co	Oil Related Services and Equipment (NEC)	26.77	8.92	5.95	13	-6
AROC.N	Archrock Inc	Oil Related Services and Equipment (NEC)	4.30	5.00	5.00	72	-22
WFRD.OQ	Weatherford International PLC	Oil Related Services and Equipment (NEC)	5.98	4.68	4.68	14	-3

Source: LSEG Workspace, LSEG StarMine, FTSE Russell Green Revenues Data Model 2.0

Revenue Exposure: Domestic vs. International?

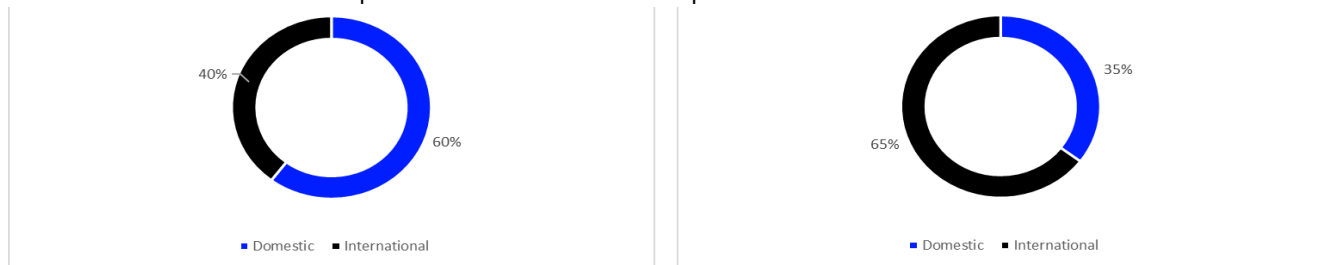
Given the uncertainty around trade policies and their impact on inflation and the U.S. dollar, we analyze how revenues are generated geographically amongst U.S. and Canadian companies, particularly in terms of domestic and international exposure.

Tariffs tend to be inflationary and may contribute to a 'higher for longer' interest rate environment. U.S.-domiciled companies with high international exposure typically see a slight drag to earnings because of a stronger dollar. Furthermore, retaliatory efforts from other countries could raise input costs and reduce competitiveness abroad.

Using the StarMine Countries of Risk Model (CoR), we calculate that approximately 60.8% of S&P 500 revenues are generated domestically, while 39.2% come from international sources (based on constituents with CoR data). Health Care, Consumer Discretionary, and Consumer Staples have the highest domestic revenue exposure, while Information Technology, Consumer Discretionary, and Industrials have the highest international exposure.

We extend our analysis to Canadian equities given the significant trading relationship. The S&P/TSX index presents a contrasting revenue exposure profile, generating only 35.3% of revenues domestically and 64.7% internationally, of which 34.5% comes from the U.S. President Elect Trump has voiced plans to put a 25% tariff on all products coming from Canada, which will impact revenues, margins, and competitiveness. Energy, Financials, and Industrials have the highest domestic revenue exposure, while also maintaining the largest international revenue exposure, particularly from U.S. markets.

Exhibit 17: S&P 500 Revenue Exposure / S&P/TSX Revenue Exposure



Source: LSEG I/B/E/S

We split the S&P 500 constituents into two buckets: a high domestic bucket (>50% of revenues generated in the U.S.) and a high international bucket (>50% of revenues generated outside the U.S.). Growth rate expectations for 2025 are comparable between the two groups, while revenue growth, is expected to be slightly more for the international bucket (6.6%) compared to the domestic bucket (5.1%).

However, we see divergences at a sector level including Information Technology, whose international bucket is forecasted to grow earnings by 23.9% versus 14.7% for domestic. Conversely, Health Care sees domestic to outperform international (30.5% vs. 11.0%). Similarly, Industrials and Communication Services see higher earnings growth in domestic, with Industrials at 23.8% versus 11.9% for international, and Communication Services at 33.6% versus 12.4%.

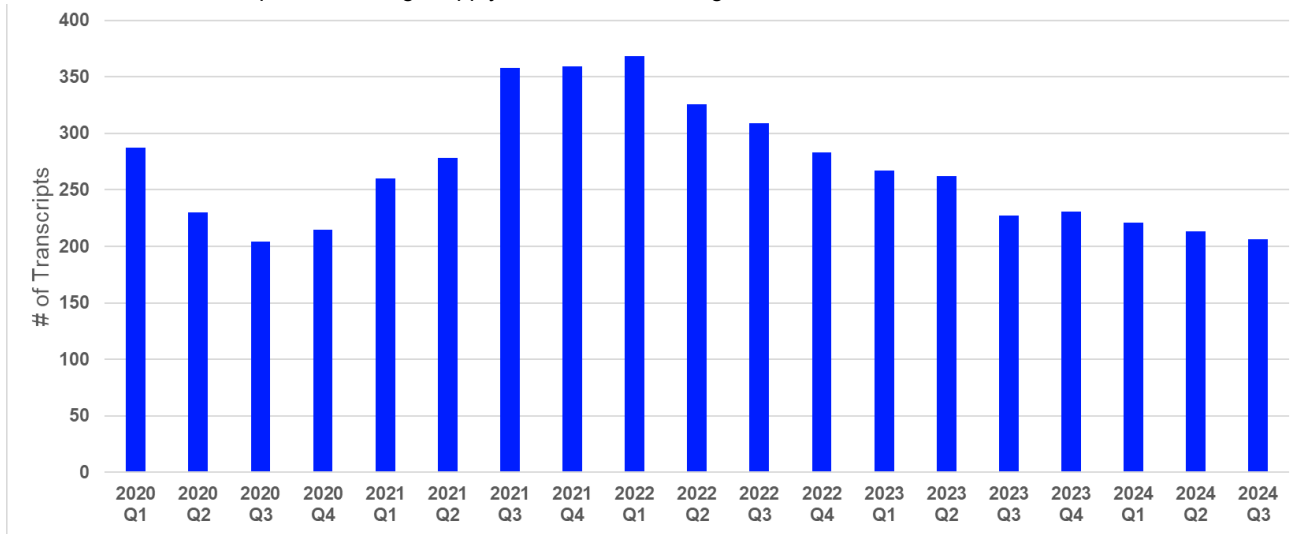
When splitting the S&P/TSX into the same buckets, the differences are more pronounced at the index level. International has an earnings growth rate of 10.0% vs. 5.5% for domestic, along with significantly stronger revenue growth (5.9% vs. -2.0%). For international earnings, this is driven by Materials, Financials, and Industrials. Revenue growth in the international bucket is similarly led by Industrials, Financials, and Materials.

Ahead a new tariff regime, we analyze transcript data from LSEG Workspace to identify which sectors and industries are most vocal on the topics of supply chains and reshoring. For this analysis, we aggregated the number of S&P 500 earnings call transcripts since 2020 that include either the term 'supply chain' or 'reshoring.' It is important to note that our analysis reflects the number of transcripts where these terms are mentioned, not the frequency of the mentions within each transcript.

Pre-pandemic, the average number of transcripts mentioning 'supply chain' or 'reshoring' was 508 per year. During the pandemic, this rose sharply, peaking in 2021 and 2022 with 1,255 and 1,286 mentions, respectively, before tapering off. However, YTD 2024 has recorded 871 mentions, significantly exceeding pre-pandemic levels, underscoring that these topics remain critical for companies as they move into 2025.



Exhibit 18: # of Transcripts Mentioning 'Supply Chain' or 'Reshoring'



Source: LSEG Workspace

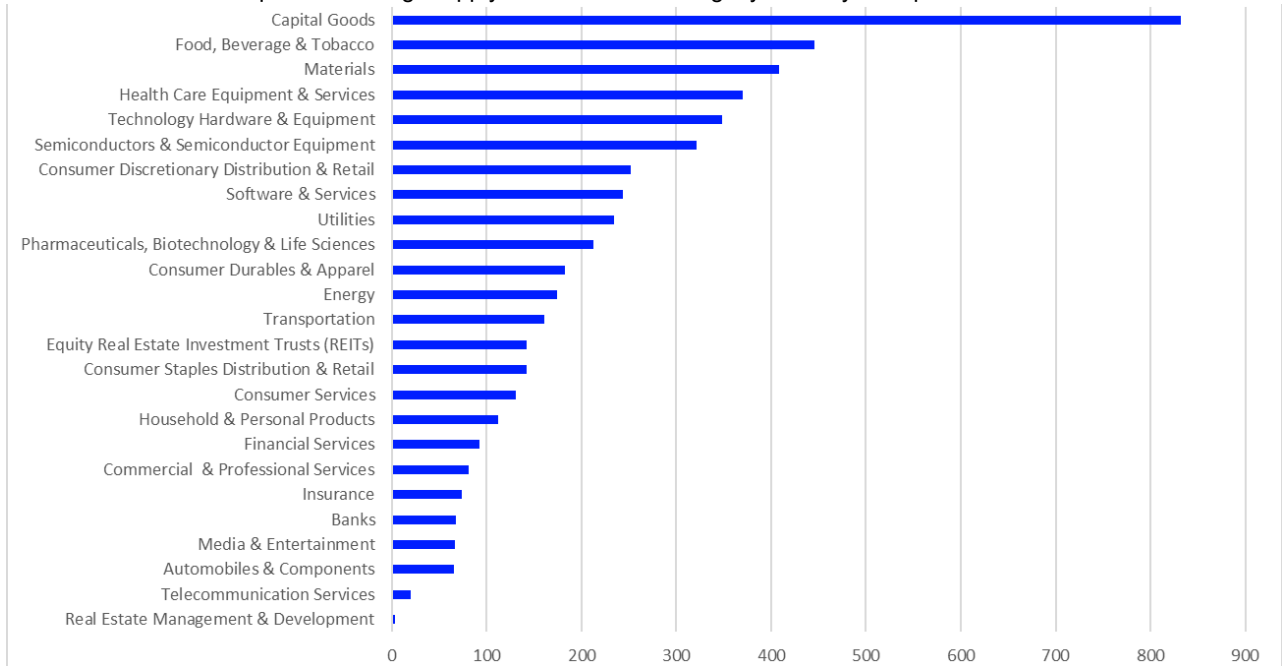
Since 2020, Industrials has seen the largest number of transcripts mentioning 'supply chain' or 'reshoring,' followed by Information Technology, Consumer Staples, and Consumer Discretionary.

We find a positive relationship between those sectors with the highest international revenue exposure in the S&P 500—Information Technology, Consumer Discretionary, and Industrials—being most vocal around supply chains and reshoring. The semiconductor sector is notably impacted by China's recent export restrictions on critical materials including Gallium and Germanium.

Sectors like Consumer Discretionary and Consumer Staples, which have higher domestic revenue exposure, continue to diversify supply chains since the pandemic. For example, Williams-Sonoma Inc highlighted in their latest earnings call that they have reduced China sourced goods from 50% to 25% over the last few years.

Drilling down for further granularity, the industry groups with the highest number of mentions are Capital Goods, Food, Beverage & Tobacco, Materials, Health Care Equipment & Services, and Technology Hardware & Equipment.

Exhibit 19: # of Transcripts Mentioning 'Supply Chain' or 'Reshoring' by Industry Group



Source: LSEG Workspace

Section 3 – Funds Outlook:

“It’s difficult to make predictions, especially about the future”

The quote above has been attributed to varied sources, from the architect of quantum mechanics, Niels Bohr, to baseball-playing idiot savant Yogi Bera. It’s a warning as to the dangers of drawing any simple causality between policy prescriptions and market outcomes, especially over the coming four years.

“History doesn’t repeat itself, but often it rhymes”

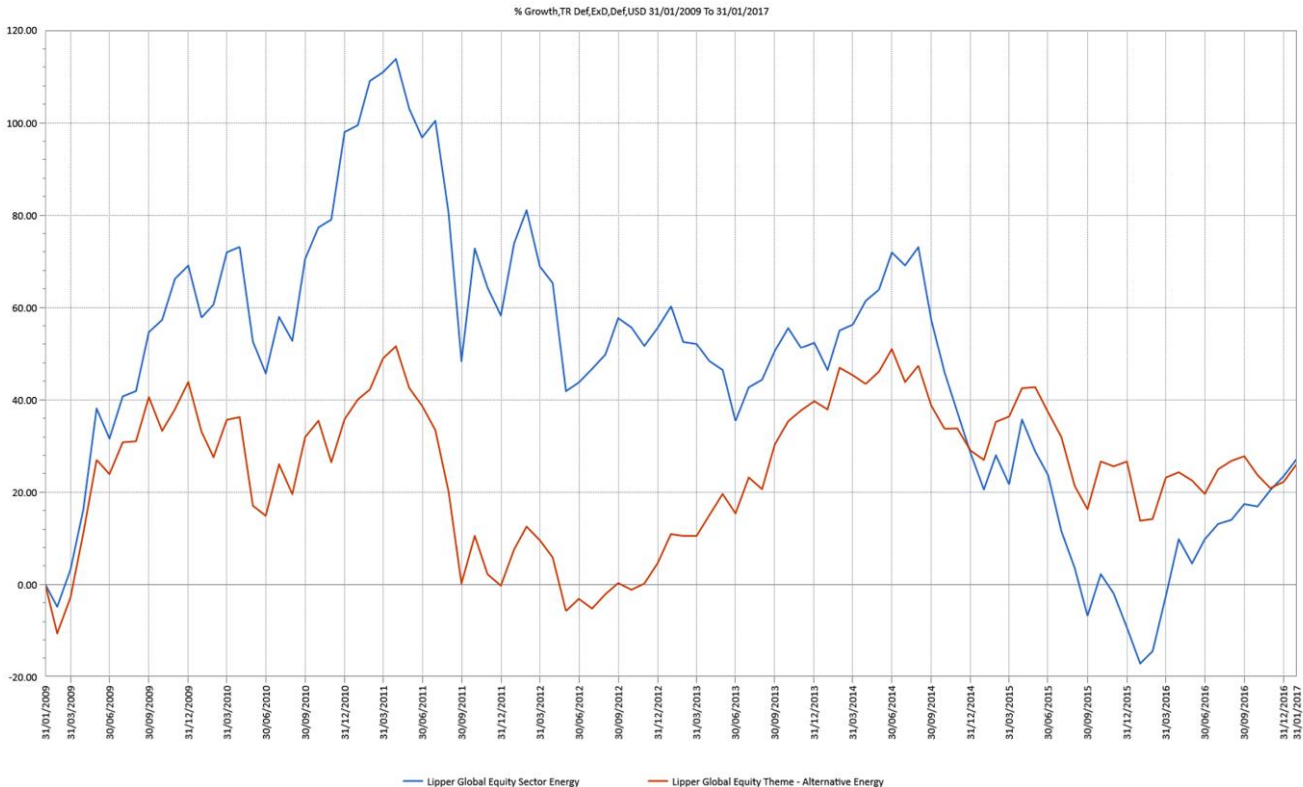
That quote is definitely from Mark Twain, and we can get an indication of the way policy decisions may shape global markets for the next four years from the way they did between 2017 and 2021. However, two very large caveats need to be made: firstly, macro conditions have changed considerably—we are no-longer in the low-rate environment that characterised administrations up to President Biden’s—and secondly, as we’ll see, the relation between policy and market returns is tenuous at best.

For example, despite President Trump’s commitment to a “vibrant” coal sector, jobs in the industry fell by about a quarter, and production by about a third under his first term. On the other hand, US oil and gas production hit record highs during President Obama’s two terms, and climbed even higher under President Biden. Similarly, despite the passing of the Inflation Reduction Act, which should be supportive of renewables, the stock prices of many expected beneficiaries continue to languish.

Equity sectors: How green was my return profile?

How has this translated into the world of collective investments over the relevant period? We compared two Lipper Global Classifications, the oil and gas-heavy Equity Sector—Energy, and the renewables-focused Equity Theme—Alternative Energy, over the administrations of Presidents Obama, Trump and Biden (the latter to end-November 2024—see Exhibit 20 - Exhibit 22).

Exhibit 20: Lipper Global Classification Equity Sector—Energy versus Equity Theme—Alternative Energy under Obama



Source Lipper

Exhibit 21: Lipper Global Classification Equity Sector—Energy versus Equity Theme—Alternative Energy under Trump

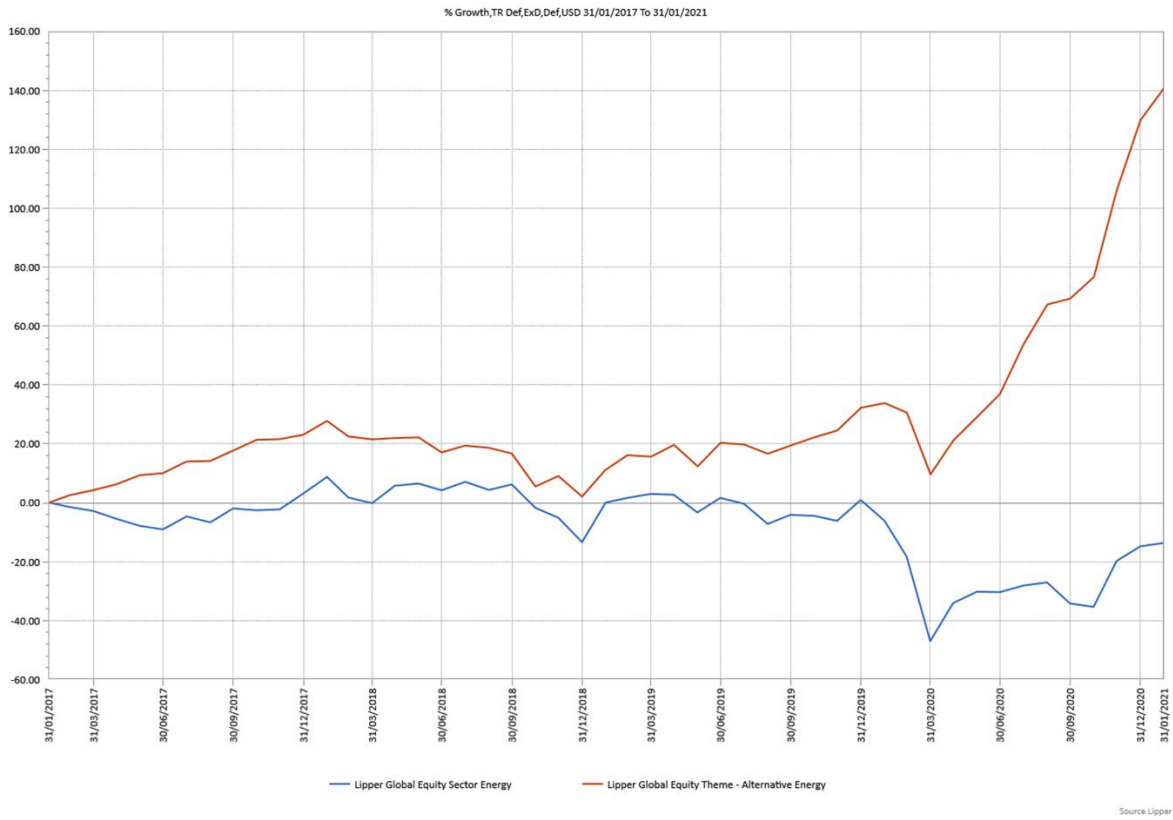
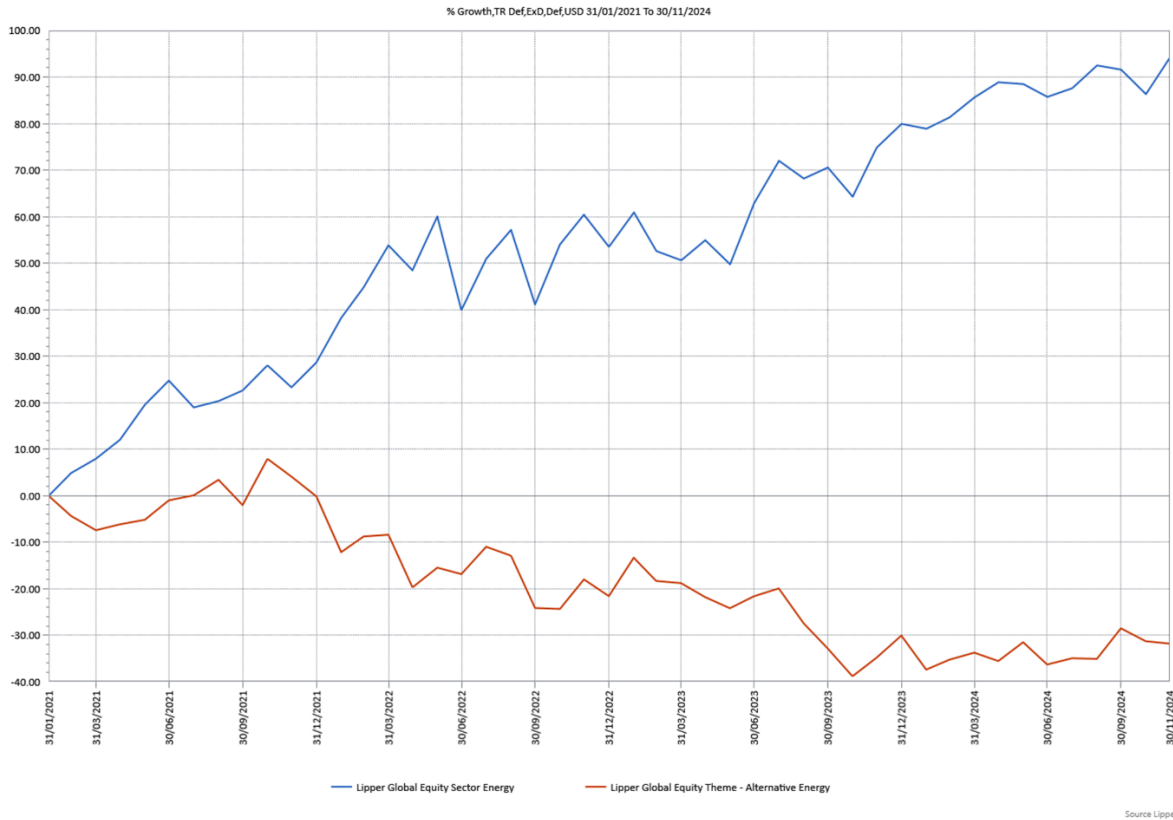


Exhibit 22: Lipper Global Classification Equity Sector—Energy versus Equity Theme—Alternative Energy under Biden



Source: LSEG Lipper

Calculated on a monthly return basis, over Obama’s two terms, the two classifications are much the same—although with a lot more volatility for Energy. You would have got 109 basis points more with ‘brown’ energy.

Things couldn’t have been more different under Trump, as Alternative Energy roared ahead, with a return of 140.85% over the four years, compared to a loss of 13.73% for Energy. Then, under Biden, the trend reversed, as Alternative Energy fell by 31.75%, as Energy returned 94.22% over the administration, till end November 2024.

The point of this isn’t to try to determine which administration has been good or bad for what sector: it’s pretty certain that the Biden administration had as little to do with the failing fortunes of alternative energy funds as the Trump one had to do with their ascendancy. Indeed, it was just coincidence that the former came into office just as alternative energy returns peaked... then plummeted. In 2020, assets snowballed from the second quarter as alternative energy ETFs rallied hard following the first quarter’s pandemic meltdown. These assets were then pummelled by a perfect storm: the return of energy following the ‘vaccine bounce’, plus the negative effects of rising rates on sector’s heavily leveraged companies.

There was more to this, though. The way in which alternative investment collectives have been constructed amplified the gradients on this rollercoaster year-long ride. For example, the index tracked by the world’s largest alternative energy ETF was initially composed of 30 stocks, mainly mid-caps. Billions flowed into this ETF over a few short months in 2020, creating obvious liquidity issues. In response, the index constituents were increased in April 2021 to more than 80 (inevitably diluting exposure to the theme), but by then the damage had been done.

Green versus Brown fund returns by administration

There is no more direct a link between policy stances and returns when we look at US-domiciled responsible versus conventional funds returns under the Trump and Biden administrations.

Exhibit 23: US-domiciled equity and bond returns, Trump versus Biden: conventional versus sustainable

Asset Type	% Growth TR Def ExD Def USD	% Growth TR Def ExD Def USD
	31/01/20 17 To 31/01/20 21	31/01/20 21 To 30/11/20 24
	Trump	Biden
Bond conventional	17.87	1.82
Bond responsible	17.85	0.02
	-0.02	-1.8
Equity conventional	62.06	37.25
Equity responsible	68.23	30.55
	6.17	-6.7

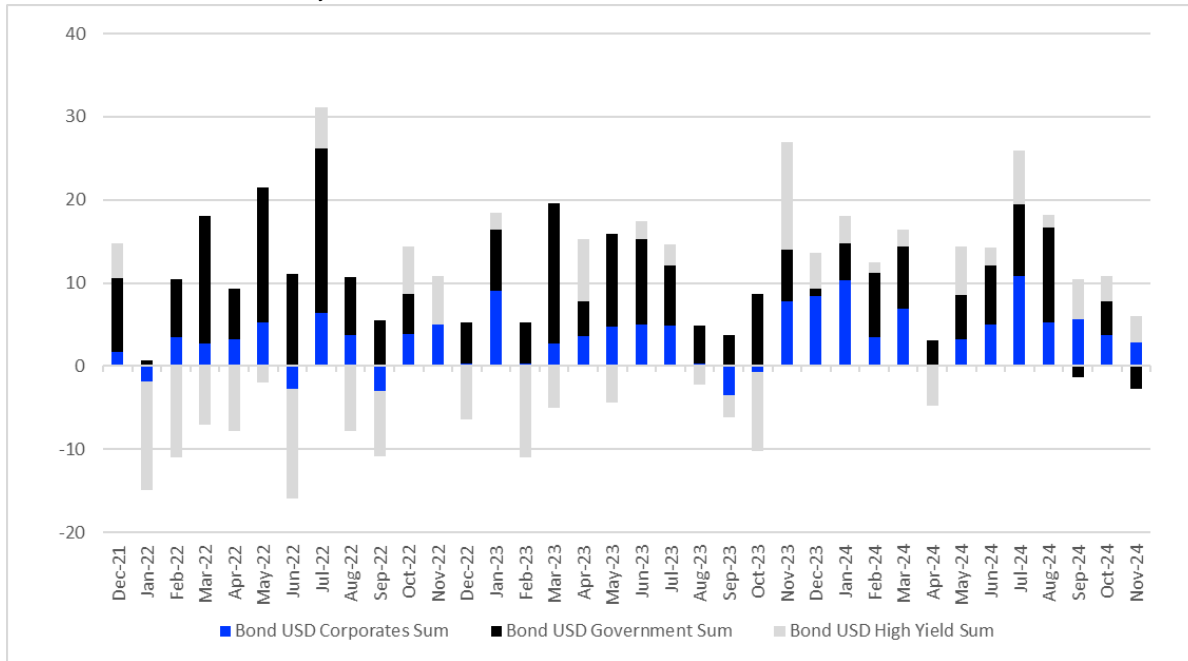
Source: LSEG Lipper

Across the fixed income piste, comparing sustainable to conventional, there’s little to call. There is more blue water separating the strategies on the equity front, however: responsible equity funds outperform by 6.17% under Trump, and underperform by 6.7% under Biden. Some of this will be attributable to the bond-like characteristics of renewables, and the consequent hit they will have taken as rates spiked. But it will certainly not be the whole—or even the main—story, given that most sustainable funds are relatively light in these assets. Rotations of market leadership by sector and style will have had a greater impact.

Policy implications for bond fund flows

President Trump’s declared policies will likely be inflationary, thus strengthening USD as this would force Fed to keep rates higher. That already seems to be affecting investor sentiment. This report earlier refers to the “unusual” and “worrying” nature of bear steepening at this phase of Fed easing cycle. Lower demand for Treasuries and inflationary pressures could lead to higher yields on USD debt, and we may already be seeing this feed through, as November saw the largest redemptions in Bond USD Government mutual funds and ETFs since 2020, of \$2.74bn (Exhibit 24).

Exhibit 24: Bond USD monthly flows over 24 months



Source: LSEG Lipper

A stronger dollar has historically had a dampening effect on world trade, and an obvious casualty would be hard currency emerging market debt. That is, of course, even before one factors in the effects of tariffs.

But—to finish on another, quintessentially laconic, quote—this is all in the terrain of ‘If’, whether one wishes to take Kipling’s or the Spartan’s version. It’s far from clear whether such policies are set in stone, or bargaining gambits—and, if the latter, what the end game looks like.

Based on recent history, with particular regard to equities, it would be unwise to draw direct links between high-level policy and financial market outcomes, as many of the key levers are largely not under the control of central governments.

Section 4 – Agency RMBS Outlook:

Key factors shaping the 2025 outlook

Summary

The 2025 outlook suggests a gradual recovery in the housing market, with modest increases in issuance and a slow improvement in inventory, alongside with existing home sales. Prepayment speeds are expected to pick up slightly, driven by the Fed rate cuts and the resulting media effect. While challenges such as tight housing supply and affordability issues will persist, the overall market is expected to show incremental improvement in 2025.

At the same time, we also expect to factor in the uncertain environment for the housing market, which may impact issuance, mortgage rates and existing home sales, stemming from the new administration's economic policies. These policies, including potential changes to tariffs, inflation, and the easing of construction regulations, could create additional challenges and volatility in the market. Additionally, the potential GSE reforms could introduce further market unpredictability, affecting prepayment speeds and issuance trends for both conventional and GNMA securities.

Regulatory Impact of the New Administration

The new administration could introduce further complexity to the RMBS landscape. On one hand, Trump has pledged to address the current housing challenges facing the United States, advocating for the relaxation of regulations and permit requirements on construction, utilizing federal land for housing projects, and proposing measures to reduce mortgage rates in an effort to enhance housing availability and affordability. On the other hand, investors anticipate that a Trump presidency could lead to higher inflation and an increased government deficit, driven by his policies on higher tariffs and tax cuts. Such inflationary pressures could prompt the Federal Reserve to adopt a more cautious stance on future rate cuts, potentially resulting in higher borrowing costs for homebuyers.

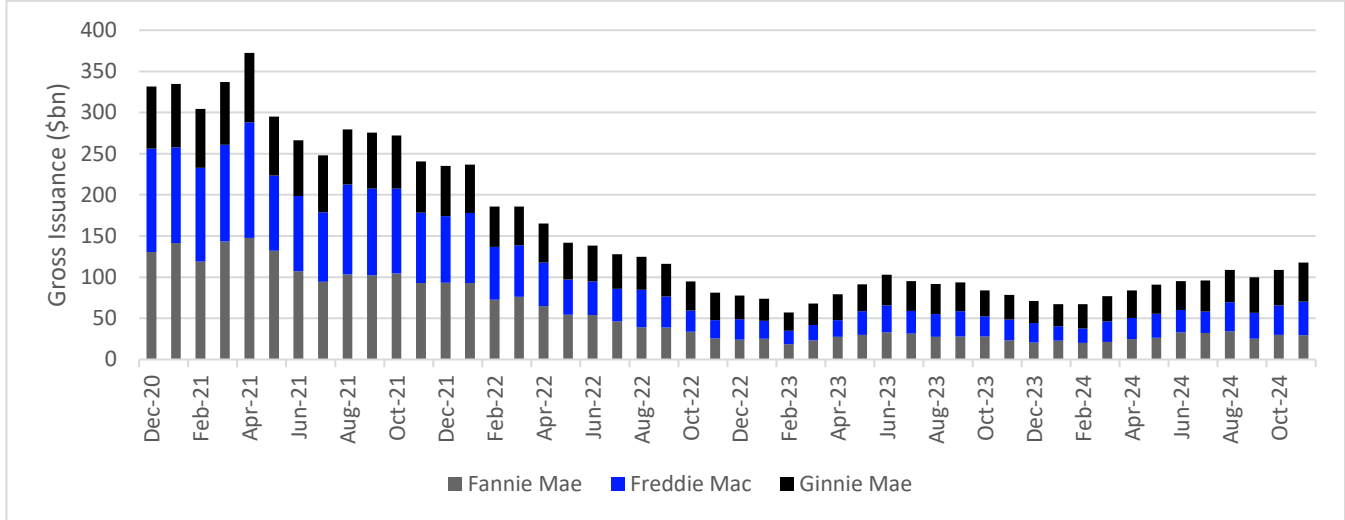
With the Republican control of both the White House and Congress, mortgage industry participants are growing increasingly anxious about the possibility of significant reforms to the government-sponsored enterprises (GSEs) and whether it will happen in 2025. Since the financial crisis of 2008, Fannie Mae and Freddie Mac have been under government conservatorship, with the Treasury Department overseeing their operations. Over the years, some proposed reforms call for ending the conservatorship and fully recapitalizing the GSEs, allowing them to operate independently once again with sufficient capital to cover potential losses. Ending the conservatorship and recapitalizing the GSEs would help restore their independence and stabilize their operations. However, this could also lead to more taxpayer exposure if the GSEs face future financial difficulties. In our view, exiting conservatorship alone won't result in a significant change in mortgage eligibility, mortgage rate spreads and prepayment behavior of RMBS securities. Investors may still be willing to buy MBS from the GSEs even without a government guarantee, provided they have strong underwriting standards and adequate capital backing. Conversely, initiatives aimed at stimulating housing demand or improving economic conditions could increase the supply of mortgages and create more opportunities for RMBS issuance.

In addition, with a proposed compliance date of July 1, 2025, the Basel III Endgame FRTB rule could impact the housing market by tightening credit availability, increasing borrowing costs, and reducing investor demand for mortgage-backed securities. These factors may result in higher mortgage rates, making it more difficult for potential homebuyers, especially marginal borrowers, to afford homes. The combined effect could lead to slower home sales and reduced housing affordability, particularly in more price-sensitive segments of the market. However, under the Trump administration, the implementation of the Basel III Endgame FRTB rule may be halted, potentially preventing the impact on the housing market mentioned above.

Issuance

In 2024, overall gross issuance remains low historically for the first half of the year, closely mirroring the levels seen in 2023. However, issuance began to pick up modestly in the latter half of 2024, driven primarily by tempered mortgage rates and a slowly growing inventory.

Exhibit 25: Agency RMBS Gross Issuance by Month

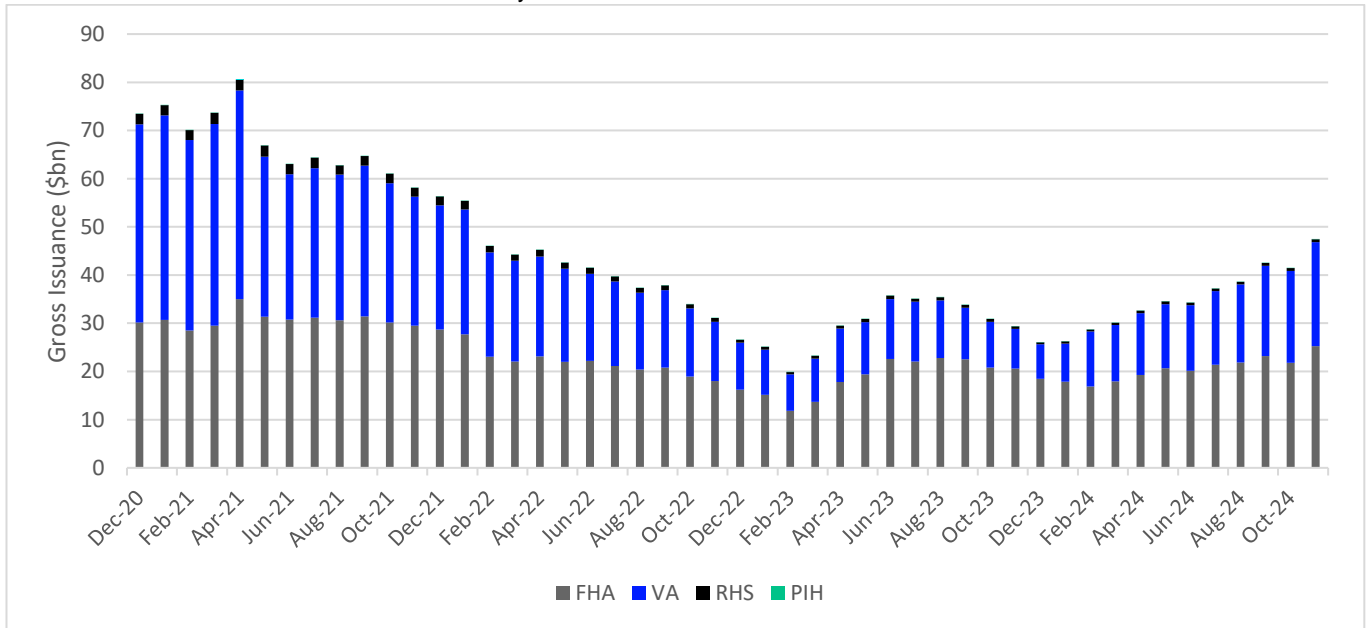


Source: eMBS

For GNMA, issuance from the Federal Housing Administration (FHA) and Veterans Affairs (VA) continues to account for the majority of total GNMA issuance. We observe that VA shares are gradually increasing from the low levels seen in 2023, driven by the growing number of eligible veterans and favorable loan terms. This trend reflects a recovery in the VA market and an increasing reliance on these programs. Meanwhile, FHA-backed loans will likely remain a significant portion of GNMA issuance, particularly for first-time homebuyers and those with lower credit scores.

Rural Housing Service (RHS) and Public and Indian Housing (PIH) continue to represent only a fractional share of the total GNMA issuance. These programs, while important for serving specific populations, such as rural communities and Native-American communities, have remained relatively small in comparison to the FHA and VA in terms of overall issuance volume.

Exhibit 26: Ginnie Mae RMBS Gross Issuance by Guarantor



Source: eMBS

Assuming the economy experiences moderate growth, mortgage rates stabilize or decline slightly, and GSEs continue to play a major role despite potential changes to conservatorship, we expect agency RMBS issuance in 2025 to be relatively stable, with modest growth or a slight decline from previous years. We might see \$1.1 trillion to \$1.3 trillion in total issuance, driven by continued demand for GSE-backed securities and relatively low prepayment speeds.

Existing Home Sales remain at a 14-year low, reflecting high mortgage rates...

October existing home sales, reported by National Association of Realtors on November 21, increased 3.4% from the prior month and advanced 2.9% from a year ago to a seasonally adjusted annual rate of 3.96 million. The inventory of unsold homes edged higher by 0.7% from the prior month and 19.1% from a year ago to 1.37 million, equivalent to 4.2 months of the monthly sales pace, up from 3.6 months from a year ago. The median existing-home sales price ascended 4.0% from a year ago to \$407,200.

...and the housing inventory of 1.4mn homes is still very low

With current high mortgage rates and elevated home prices, it is not surprising home sales have dropped to the lowest level in 14 years. Higher inflation has also contributed due to the squeeze on buyers' disposable income. Meanwhile on the supply side, although there were 1.37 million homes for sale in October, the most since October 2020, this is still much lower than five years ago when there was a 1.83 million housing inventory in August 2019. In fact, historical data shows the average inventory before 2024 all the way back to 1982 was 2.25 million. The low inventory could also be a result of the "lock-in effect" from high mortgage rates, since homeowners have no incentive to move house, by re-financing low coupon existing mortgages at higher rates, reducing home sales further.

Exhibit 27: Existing Home Sales and Inventory by Month

	10/24	09/24	08/24	07/24	06/24	05/24	04/24	03/24	02/24	01/24	12/23	11/23	10/23
Existing Home Sales (M)	3.96	3.83	3.88	3.96	3.90	4.11	4.14	4.22	4.38	4.00	3.88	3.91	3.85
Inventory (# of homes) (M)	1.37	1.36	1.37	1.34	1.32	1.28	1.20	1.11	1.06	1.01	0.99	1.13	1.15
Inventory (# of months)	4.2	4.3	4.2	4.1	4.1	3.7	3.5	3.2	2.9	3.0	3.1	3.5	3.6
Median Sales Price (\$K)	407.2	406.7	414.2	421.4	426.9	417.2	406.6	392.9	383.8	378.6	381.4	387.8	391.6

Source: National Association of Realtors

The low inventory of existing homes has been a persistent challenge in recent years, and this trend is likely to continue in 2025. A lack of new home construction, low levels of available homes for sale, and homeowners reluctant to sell due to low mortgage rates (which lock them into their current properties) will likely keep inventory tight. With fewer homes available for sale, existing home sales could be constrained despite demand.

Assuming stable economic growth, a moderate decline in mortgage rates, and continued inventory constraints, existing home sales in 2025 could total approximately 4.5 million to 5 million units. This reflects a gradual recovery in the housing market after the higher rates of 2023-2024, but still constrained by affordability issues and tight supply.

The 2025 outlook for existing home sales suggests a modest recovery in activity, with the potential for a gradual rebound as housing affordability improves and economic conditions stabilize. In particular, GSE reforms could play a pivotal role in enhancing access to homeownership and driving further demand in the market. If policy changes in 2025, such as reforming the GSEs or introducing affordability programs, are implemented, they could help improve mortgage availability and affordability, thereby contributing to the recovery of existing home sales.

House Price Indices reflect tight supply...

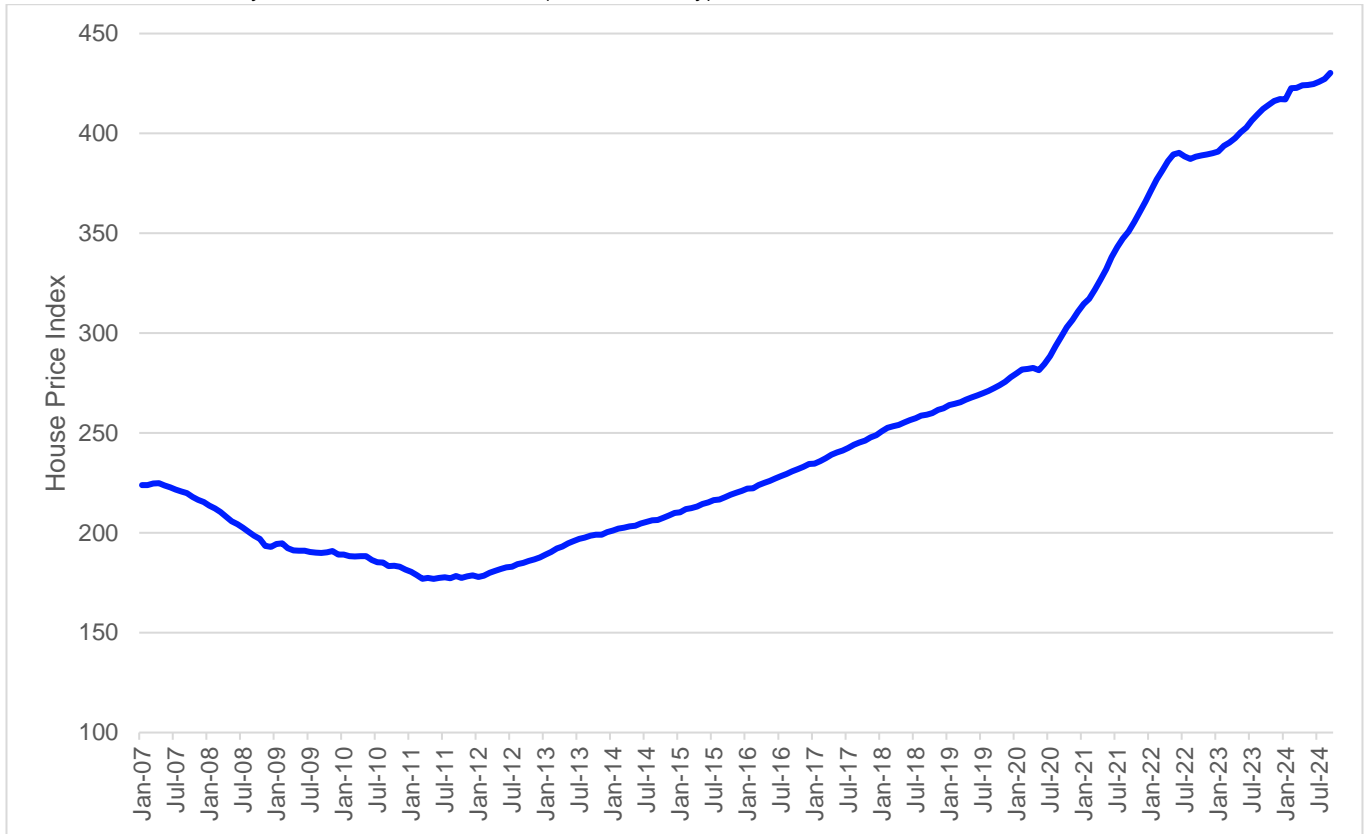
On November 26, house prices reported a 0.7% increase in September from the prior month, and a 4.2% increase from a year ago. The house price index was at the all-time high level in August of 430 points, and a 50% increase from 280 points in January 2020.

In the latest Fannie Mae HPI forecast, the quarterly YoY change for Q4 2024 is 5.8, and the annual HPI change for 2025 is 3.6. And in our model version 24.1 and version 97, Yield Book assumes annualized HPA of 5% for Q3-Q4 2024, 3% for 2025, 0% for 2026, and 3% after.

...though some reasons to expect higher home sales in 2025

Overall, we observe gradual progress towards improved conditions for higher home sales. Buyers now have more inventory options, mortgage rates are lower compared to a year ago, and while the job market remains relatively strong, there are growing concerns about the impact of AI and automation on employment, as highlighted by the new administration. Additionally, potential job cuts in government agencies could add further uncertainty to the labor market. These factors may influence consumer confidence in the housing market. Nonetheless, the current trends still contribute to a cautiously optimistic outlook for housing.

Exhibit 28: U.S. Monthly FHFA House Price Index (Purchase Only)



Source: Federal Housing Finance Agency

Mortgage Rates

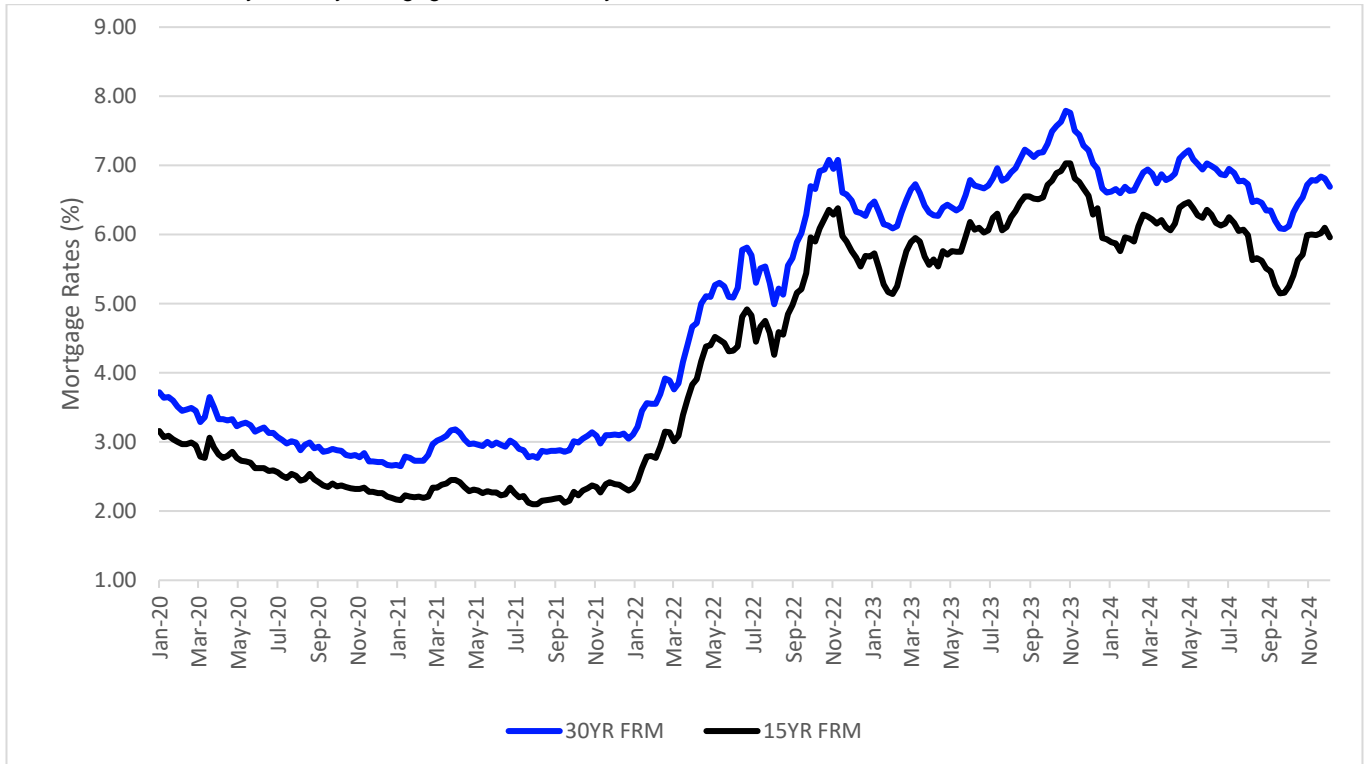
In 2024, mortgage rates have experienced a modest decline, yet they continue to remain at relatively high levels compared to historical averages.

In September, the Federal Reserve implemented its first reduction in the benchmark interest rate in four years, decreasing the overnight borrowing rate by 50 basis points. Following that, the Federal Open Market Committee (FOMC) again reduced the benchmark overnight borrowing rate by 25 basis points again in November, bringing the target rate to a range of 4.5% to 4.75%. The slow pace of mortgage rate reduction suggests that while there may be some relief, the high rates are likely to persist in the near term.

The yield curve for Treasury securities is normalizing after being inverted for much of the past two years. The spread between the 2-year and 10-year Treasury yields has reverted to a more typical slope, with 2-year yields now falling below those of the 10-year Treasuries. While 3-month Treasury bill yields remain elevated, signaling a persistent inversion, it is less pronounced than it was previously. The differences between 3-month and 30-year maturities are now marginal, indicating that the yield curve has largely flattened.

While we anticipate mortgage rates to decline over the long term in response to the Federal Reserve's rate cuts, our expectation for 2025 is that the timing and extent of these changes will remain contingent upon broader economic factors such as supply-demand, market expectations, inflation, and the overall pace of economic recovery.

Exhibit 29: U.S. Weekly Primary Mortgage Market Survey



Source: Freddie Mac

Prepayment

For both conventional and GNMA securities, the actual prepayment speeds picked up slightly in 2024 compared to 2023 after seasonality adjustment, particularly in the second half of the year. This increase can be attributed to several factors, including the tempered mortgage rates and the gradual improvement in housing inventory. As conditions became more favorable for refinancing, more homeowners took advantage of the opportunity, leading to a modest rise in prepayment activity.

Exhibit 30: U.S. Weekly Primary Mortgage Market Survey

	RPB(\$B)	11/24	10/24	09/24	08/24	07/24	06/24	05/24	04/24	03/24	02/24	01/24	12/23
FNMA 30	2,898.9	6.3	8.4	6.4	6.6	6.5	6.0	6.4	5.9	5.3	4.6	4.2	4.3
FNMA 15	346.5	6.4	7.4	6.4	7.2	7.1	6.8	7.3	6.6	6.1	5.4	5.4	5.3
FHLMC 30	2,496.8	6.3	8.8	6.6	6.6	6.4	6.0	6.3	5.8	5.2	4.4	4.0	4.0
FHLMC 15	281.6	6.6	7.9	6.5	7.3	7.2	6.7	7.2	6.7	6.3	5.4	5.3	5.4
GNMAII 30M	1,844.2	9.3	13.2	11.0	10.1	8.6	7.5	7.9	7.2	6.8	6.7	6.0	4.9
GNMAII 30C	473.3	9.1	11.7	10.5	9.5	8.2	7.0	7.7	7.3	7.0	6.7	6.0	5.4
GNMAII 15M	14.6	9.6	10.5	9.6	10.6	10.2	8.9	10.7	10.0	9.3	8.6	8.4	8.4
GNMA 30	45.5	5.7	6.5	6.0	6.4	6.6	6.7	6.4	5.9	5.4	5.3	5.7	6.1

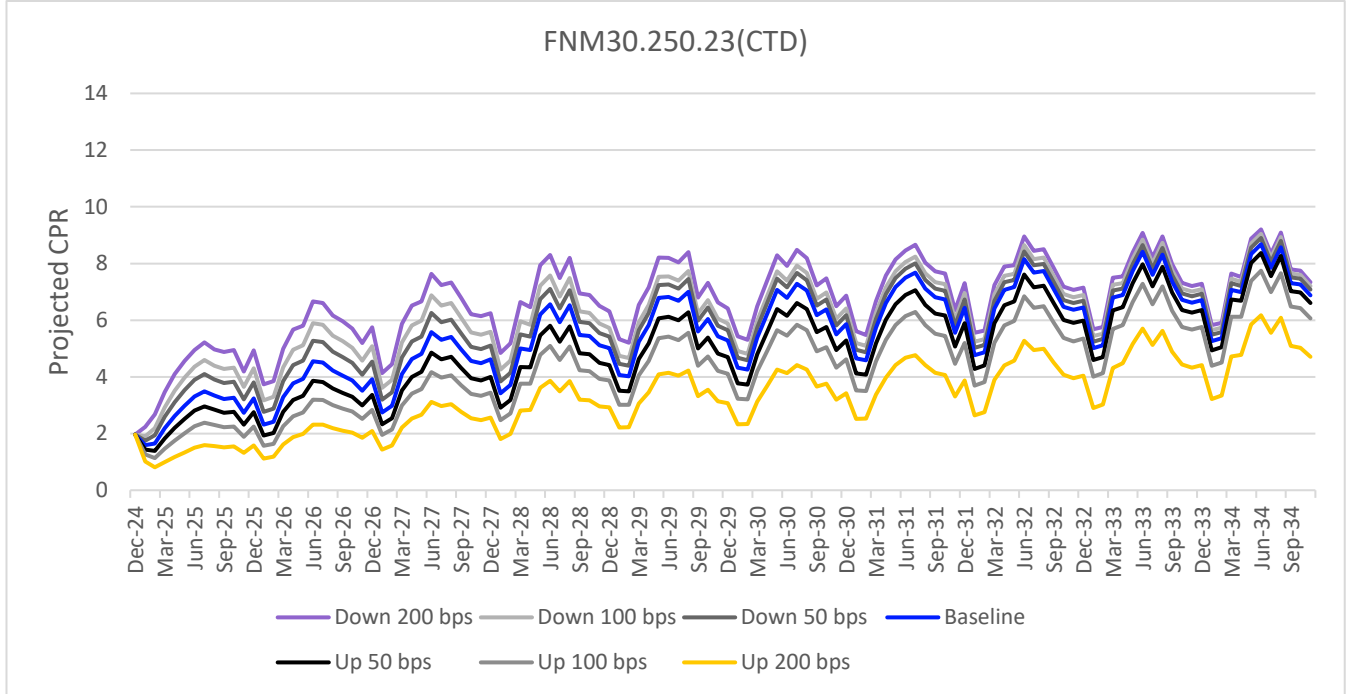
Source: eMBS

For OTM prepayment speeds, we think that turnover speed will remain at its lowest point over the past decade. This is due to a combination of factors, including the ongoing lock-in effect, where homeowners are reluctant to sell or refinance due to higher mortgage rates, as well as limited housing inventory. However, homeowners might have wanted to sell but postponed doing so due to various factors, such as unfavorable market conditions or rising mortgage rates. These sales are expected to gradually be released into the market once conditions improve, causing a potential increase in housing turnover or activity in the next year. Considering all these factors, we project the turnover speed to be around 3.8 CPR for the baseline scenario. This reflects a slight increase from current levels, while still remaining at low levels compared to historical norms.

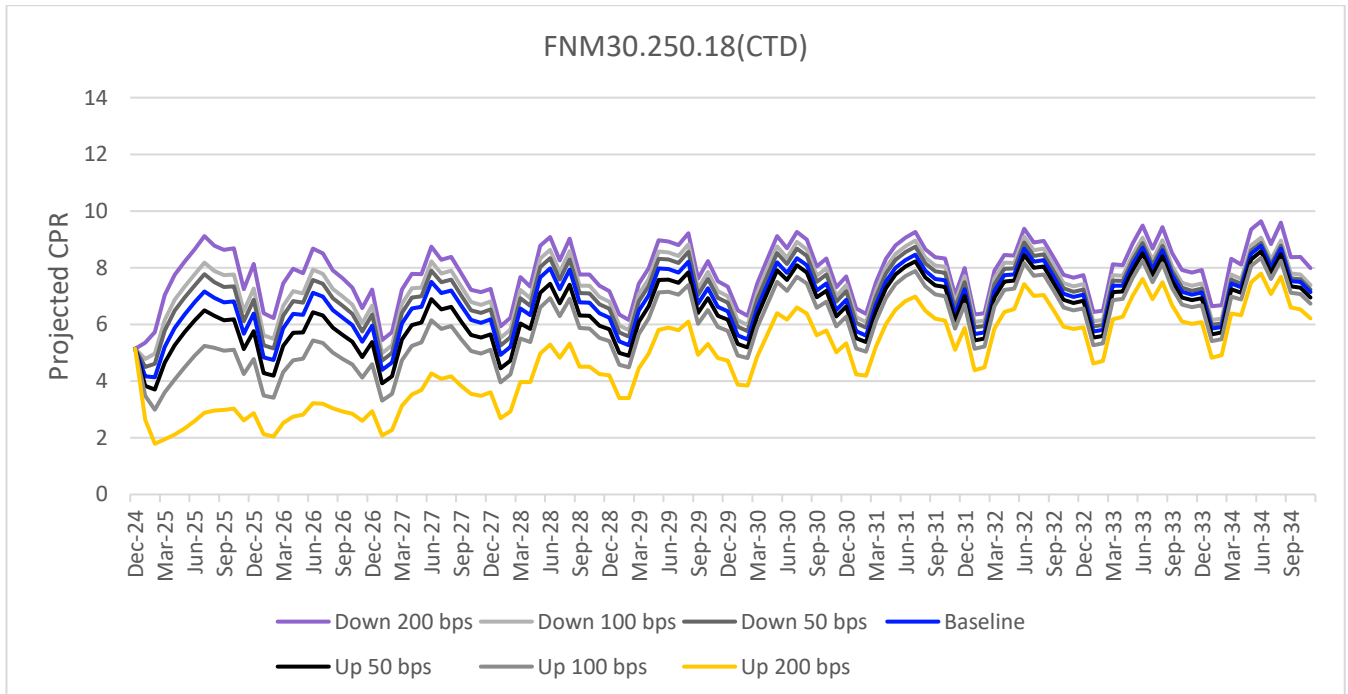
Exhibit 31 illustrates the projections for different rate scenarios for the deeply OTM Fannie Mae 30-year CTD cohort originated in 2023 and 2018 with a 2.5 coupon. CTD cohort consists of all TBA cheapest-to-deliver pools.

In the scenario where the rate curve declines by 200 basis points, the overall projected prepayment speed increases by approximately 1.5 CPR for the next 12 months, primarily driven by an uptick in turnover speed, followed by cashout and curtailment activities. Conversely, with the rate curve rising by 200 basis points, the projected turnover speed approaches the model's assumed turnover floor, indicating a limit to the potential decrease in prepayments under higher rate conditions.

Exhibit 31: Yield Book Prepayment Projections for Different Rate Scenarios (OTM Cohort)



Source: Yield Book



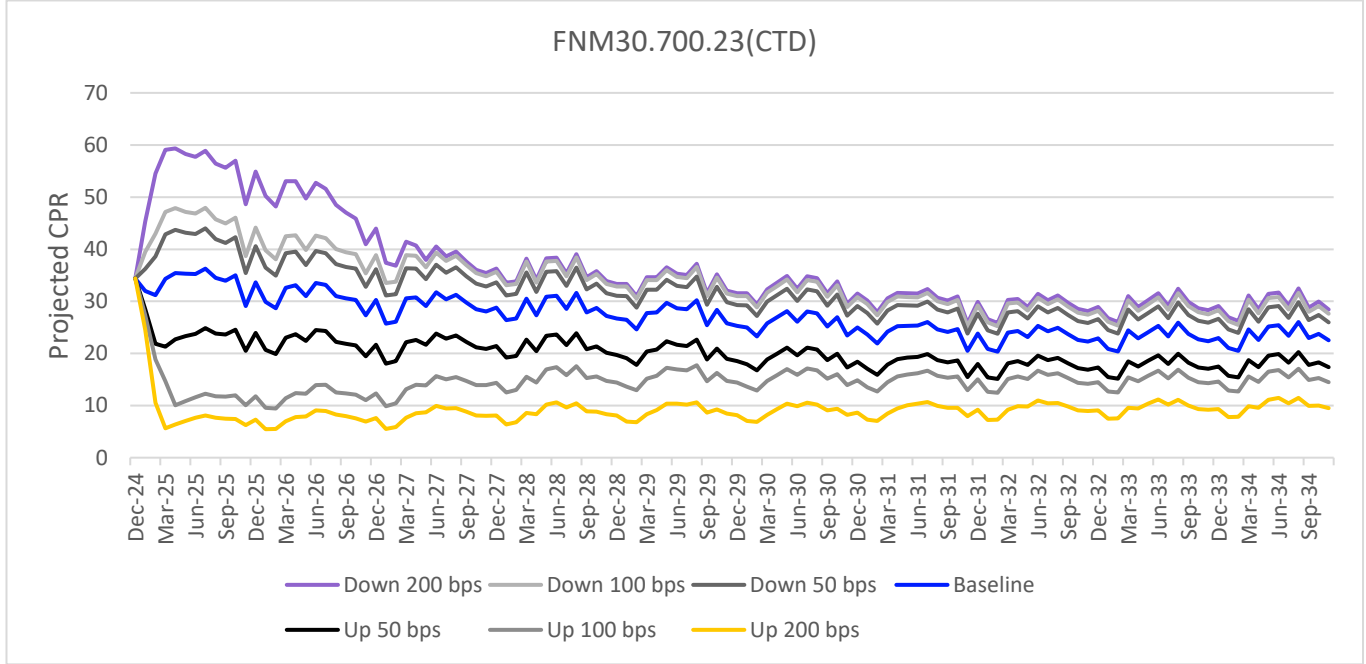
Source: Yield Book

For ITM prepayment speeds, we anticipate that Fed rate cuts will likely magnify the media effect, driving greater attention and potentially leading to a modest uptick in prepayment speeds as borrowers respond to changing rates and refinancing incentives. This effect may be more pronounced in certain vintages such as 2023-2024 cohorts, depending on the level of interest rate reductions.

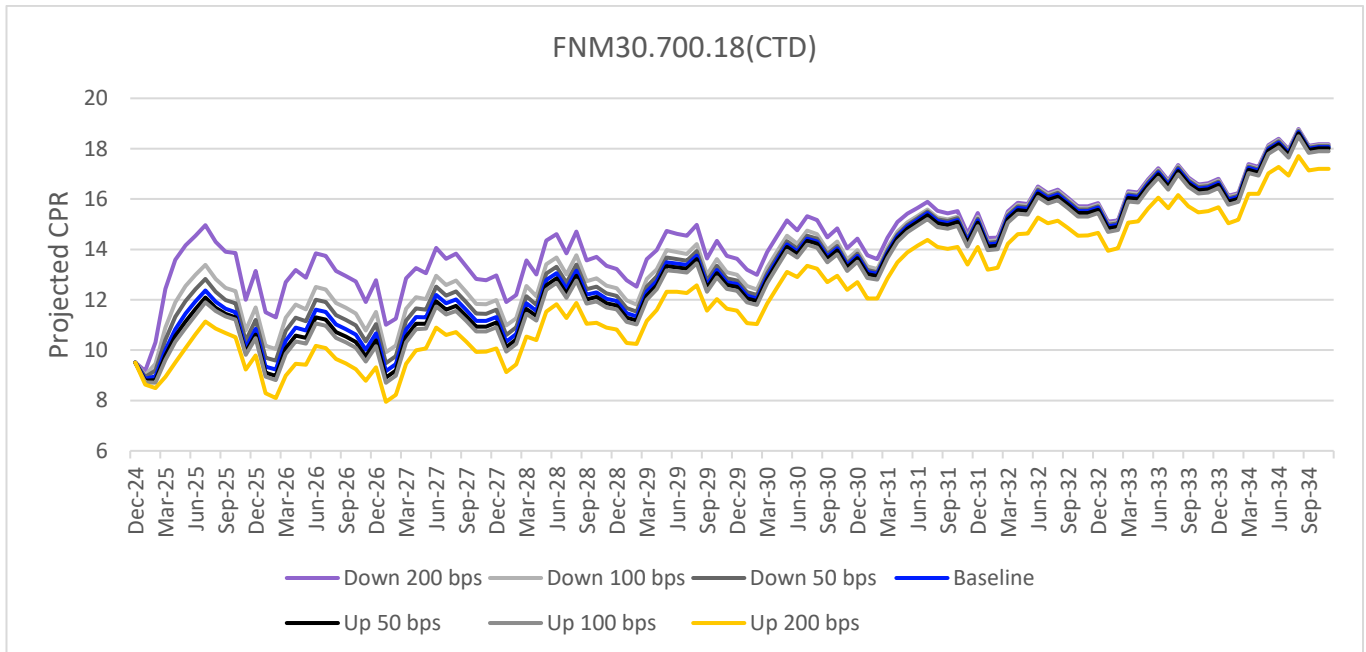
For older vintages, however, the trending-up speeds of the 2018 CTD cohort are mainly driven by curtailment speeds, as borrowers typically increase curtailments as the loan ages. Refinance speed is unlikely to pick up significantly, as it has already been somewhat burned out due to the old vintage and the historically low mortgage rates during the COVID-19 period.

Exhibit 32 presents the projections for different rate scenarios for the deeply ITM Fannie Mae 30-year CTD cohort originated in 2023 and 2018 with a 7.0 coupon. In both directions, where the rate curve moves up or down by 50 and 200 basis points, the projected prepayment speeds show a higher sensitivity to rate changes. In these cases, the increase in prepayment speeds is primarily driven by refinance activity, as borrowers respond more directly to changes in mortgage rates.

Exhibit 32: Yield Book Prepayment Projections for Different Rate Scenarios (ITM Cohort)



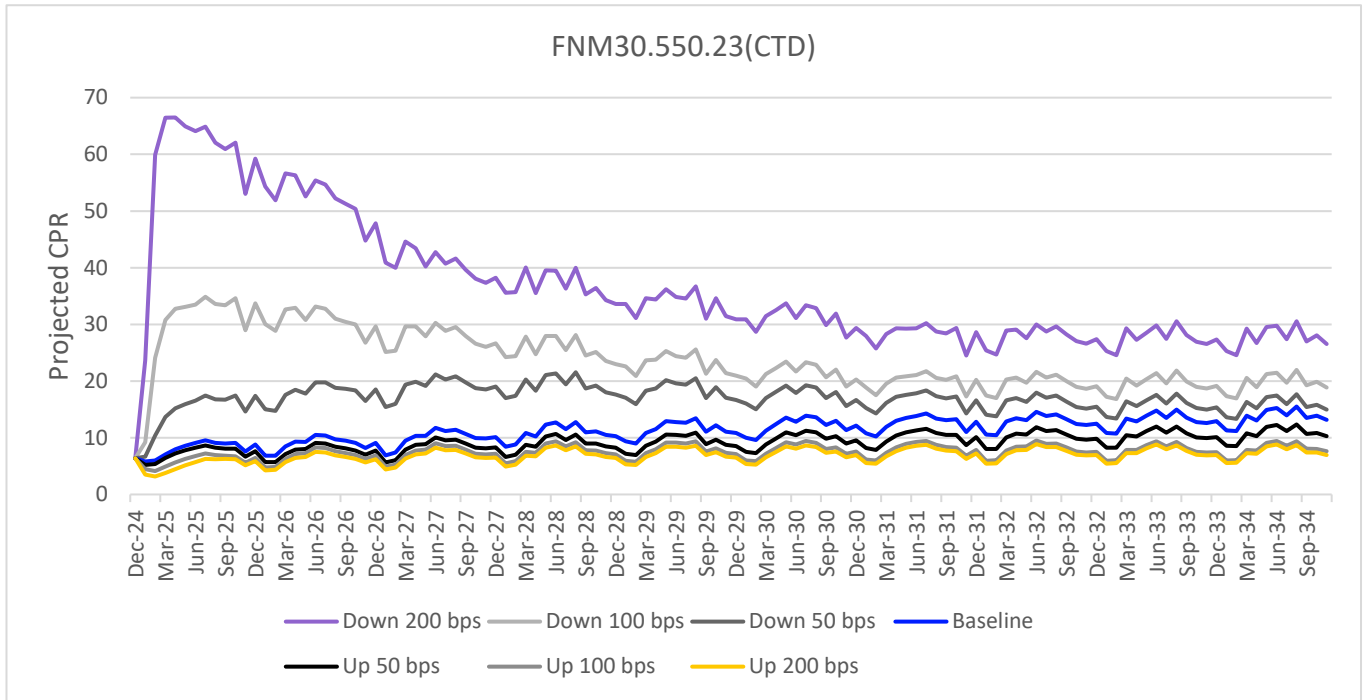
Source: Yield Book



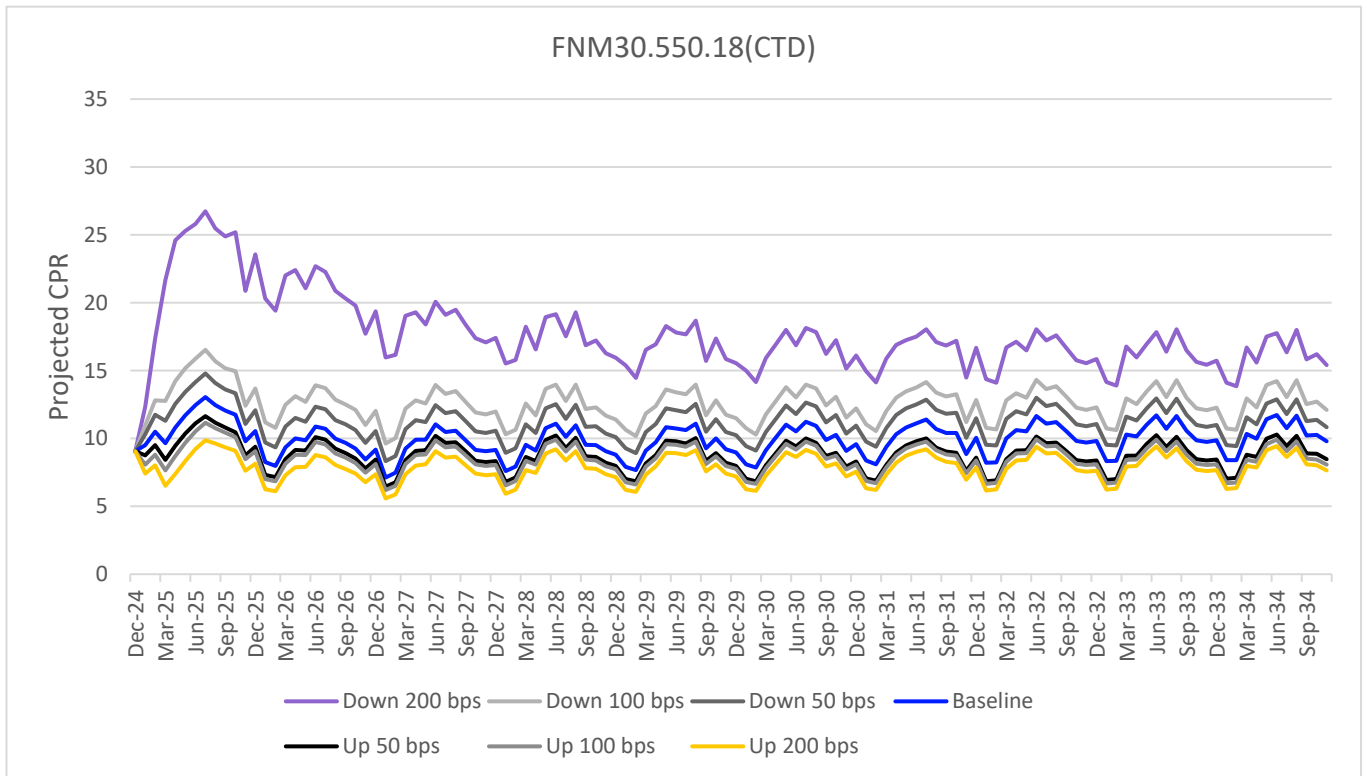
Source: Yield Book

Exhibit 33 shows the projections for different rate scenarios for the ATM Fannie Mae 30-year CTD cohort originated in 2023 and 2018 with a 5.5 coupon. When interest rates drop, prepayment rates spike significantly for both new and old vintages for ATM.

Exhibit 33: Yield Book Prepayment Projections for Different Rate Scenarios (ATM Cohort)



Source: Yield Book



Source: Yield Book

Section 4 – CMBS Outlook:

Resiliency and optimism despite office distress

Non-Agency CMBS Executive Summary

We are bullish on CRE and CMBS market for 2025 as the Federal Reserve continues the easing cycle and the soft landing remains the base case for the economy. On the other hand, we can't underestimate the risk of sticky inflation, new administration policies, and a stronger than expected labor market, which may derail rate cuts and cause disruption and turbulence for 2025, hurting CRE fundamentals and financing conditions.

We are projecting \$130 billion total CMBS issuance (conduit, SASB, and CRE CLO combined) in 2025 under baseline scenario vs. \$100 billion under stressed scenario, compared to 2024's estimated \$113 billion issuance.

While overall CRE fundamentals have been stabilizing or recovering, class B/C office buildings with less amenities, regional malls, Sunbelt multifamily, and low coupon maturing loans with falling occupancy are likely to lead CMBS delinquency rates higher to 7% (baseline) and 11% (stressed) in 2025, compared to 5.74% now.

We expect maturity performance for conduit CMBS loans to stabilize in 2025 in the baseline scenario, as rate cuts lessen refinancing stress. We also expect SASB maturity performance to continue to improve.

We anticipate CMBS disposition volume to pick up in 2025 as price discovery and transparency start to improve, albeit at the expense of loss severities which may continue to rise as distressed sale accounts for a bigger portion of dispositions. We don't expect CRE property price to bottom out until late 2025 or 2026 even though the pace of decline may continue to slow down in 2025.

We see new issue CMBS spreads continue to tighten with conduit LCF AAA spreads narrowing to 80 bps for 5-year deals and to 70 bps for 10-year deals, and BBB spreads to touch 300 bps, under the baseline scenario.

Agency CMBS Executive Summary

Agency CMBS loan issuance continued to decline in 2024, with a total annual issuance of \$88 billion, down by 22% YoY, due to elevated interest rates, lack of property valuation clarity, multifamily fundamental concerns, and tightening of underwriting by agencies.

We expect 2025 agency CMBS loan issuances to rise 15% YoY to \$101 billion (vs. \$88 billion in 2024) on a pickup of refinancing and acquisition activities, with \$9 billion for GNPL (vs. \$7 billion in 2024), \$48 billion for DUS (vs. \$42 billion in 2024), and \$44 billion for Freddie MF (vs. \$38 billion in 2024) in our baseline scenario but fall by 10% to \$79 billion in the stressed scenario.

Agency CMBS spreads tightened in 2024 and are biased to tighten further in 2025 under the baseline scenario, depending on the issuance volume and agency RMBS basis. Deregulation may encourage bank participation and increase demand for agency CMBS.

We expect credit performance to remain stable for agency CMBS loans in 2025, with GNPL delinquencies to fall further below 1% under baseline scenario.

Agency CMBS prepayment activities were muted in 2024 due to high interest rates and lower property valuation. Heading into 2025, we anticipate a modest increase in prepayment speeds as Fed easing continues and multifamily price stabilizes.

Non-Agency CMBS Report Details

Macro-economic Backdrop and Impact of New Administration Policies

Year 2024 saw a dramatic rebound of private label CMBS issuance, and a massive tightening of spreads on the back of lower inflation and the start of the Fed's easing cycle. CRE market sentiment improved significantly from 2023 and remained positive throughout the year, despite elevated distress in maturity refinance and office fundamentals.

As we approach year end and one-month post-election, the obvious question is how the incoming administration's policies will impact the economy and the CRE market? Import tariffs and potential trade wars are a key policy concern among investors on inflation and economic growth. In addition, tax cuts may pressure fiscal deficits and debt financing, and deportation of undocumented migrants could cause labor shortages in some sectors. These factors raise inflation risks.

On the other hand, reducing government spending through the new Department of Government Efficiency (DOGE) could counterbalance the impact on demand and inflation, and deregulation can potentially ease capital constraints for banks, boosting CRE and CMBS demand. Whether all those policies will be enacted, and if so, how soon and to what extent remains unclear. For example, it might be difficult for immigration policies to match the proposals made in President-elect Trump's election campaign, due to legal and logistical limits to executive action. As of now, while investors are wary of those policy proposals, they see continued economic growth under the "pro-business" new administration, with equity indices setting a series of record highs since the election.

The current positive momentum may carry over to next year as employment and consumer spending stay strong, and we would expect CRE fundamentals to remain resilient as peak distress might be behind us. CRE transaction and financing volume will likely pick up as acquisition and refinance activities rise. That said, delinquencies are poised to continue climbing and more pain will come through distressed sales and loan dispositions.

To assess the outlook for 2025, we once again seek to link the major CMBS themes to the rate path and economic condition, where two possible scenarios are in focus: 1. A baseline scenario which assumes the Fed continues to cut rates next year, albeit at a slower pace, amid benign inflation data and healthy economic growth, consistent with a soft landing narrative; 2. A stressed scenario where inflation rekindles, whether triggered by the incoming administration's policies or due to an overheated job market, and the Fed is forced to pause on easing or even reverse course, causing market uncertainty and rates higher for longer.

Overall, we are bullish on CRE and the CMBS market for 2025 as the Fed continues the easing cycle and a soft landing remains the base case for the economy. On the other hand, we note the significant tail risk of sticky inflation, resulting from excess demand, tax cuts and tariff increases, and higher wage inflation. This may derail rate cuts and cause disruption and turbulence for 2025, hurting CRE fundamentals and financing conditions

Issuance

In review, 2024 non-Agency CMBS issuance was up sharply from 2023's subdued level and we estimate that the full year 2024 total issuance volume (Conduit, SASB, CRE CLO combined) could reach \$113 billion, which will be 140% higher than 2023 (\$47 billion).

SASB securitization is by far the highlight of CMBS issuance in 2024 (which more than tripled to \$69 billion vs. \$21 billion last year), driven by a heavy SASB maturity schedule in 2024 and surging M&A/LBO activities (in particular, by Blackstone which contributed more than a third of 2024 SASB issuance). Lodging and industrial combined accounts for 61% of the SASB issuance.

Interest rates, though still elevated in 2024, retreated notably from 2023 highs, as inflation consistently fell towards Fed's target level. Rate cuts expectation and Fed's final delivery of them fueled market optimism throughout the year. Lower interest rates helped ease refinancing difficulties. Rate volatility also abated, facilitating loan closings. Rate cap costs for floating rate loans also declined from last year, lending much needed help to the refinancing of many SASB loans.

Looking ahead to 2025, we expect loan availability to improve as both refinance and acquisition volume pick up, and the active issuance trend to continue amidst a benign macro-economic backdrop. \$50 billion of conduit CMBS loans are maturing in 2025, of which roughly \$30 billion could be refinanced based on the realized refinancing success rate of 68% for those maturing in 2024. To the extent acquisition picks up meaningfully, there could be as much as \$10 billion in acquisition loans to be securitized through conduit CMBS. Besides, there are loans under modification and extension which may succeed in getting refinanced next year as their property cash flows turn around. Hence, we are projecting a total of \$45 billion conduit CMBS issuance for 2025 under the baseline scenario, with a potentially higher portion of 10-year deals than 2024 even though 5-year deals will likely continue to dominate. In contrast, the pace of conduit CMBS new issuance could be tempered with our forecast of \$30 billion for 2025, \$5 billion below 2024.

We expect SASB deal flows to remain robust in 2025 as dynamics driving the SASB issuance persists. Our SASB issuance forecast for 2025 is \$70 billion, roughly flat to 2024 level, in the baseline scenario, vs. \$60 billion in the stress scenario.

CRE CLO issuance picked up modestly in 2024 amid elevated rates and challenging transitional property fundamental. We expect the situation to improve in 2025 under the baseline scenario as SOFR rate declines, leading to annual CRE CLO issuance of \$15 billion, compared to \$10 billion in the stressed scenario.

Overall, we are forecasting \$130 billion of total non-agency CMBS issuance for 2025 under the baseline scenario (15% higher than 2024), vs. \$100 billion total under the stressed scenario.

Exhibit 34: Non-Agency CMBS Issuance Forecast

	2023 (\$bn)	2024 YTD Nov (\$bn)	2024 FY est. (\$bn)	2025 proj. (\$bn) - baseline	2025 proj. (\$bn) - stress
Conduit	19.75	30.33	35.00	45	30
SASB	20.55	65.22	69.00	70	60
CRE CLO	6.67	8.68	9.00	15	10
Total	46.97	104.22	113.00	130	100

Source: LSEG Yield Book (December 2024)

CRE Fundamentals

The Office sector continues to make headlines with rising vacancies and defaults due to reduced office demand, amid the structural shift to remote working². Many office buildings, especially older, second-tier ones with high vacancy rates, are struggling to attract tenants. The most viable solution so far seems to be conversion to apartments given the housing shortage, although converting office space to residential use can be expensive and complex and doesn't work for all office buildings. While back to office mandates have been rising, it hasn't gained enough traction to move the needle for office demand. Not many companies have followed Amazon in announcing a full time return to office.

The new administration likely will make efforts to bring federal workers back to the office. However, the spending cut goal of the Department of Government Efficiency would mean a reduction in the federal workforce and the federal office space footprint, so the net impact on the office market, especially the Washington DC market, could still be negative. When will we see the light at the end of the tunnel for office? We expect more loans to default, and distressed selling of office buildings to rise, in the next two years, which may crystallize property valuations and help the market find a bottom.

Retail space is supported by resilient consumer spending, and strong retail sales, in the face of elevated inflation. The neighborhood and community shopping centers remain solid, and the shopping mall sector is recovering, with a number of visits in line with, or higher than, pre-COVID. And there has been very little new supply in the sector in recent years. Retail is also one of the few real estate investments with positive leverage, where the cap rate is actually higher than borrowing cost. Overall, retail fundamental has seen signs of stabilization in 2024 with some even arguing that the sector has already hit bottom.

However, we would point out that lower quality regional malls continue to underperform with declining occupancy and rent, and some urban shopping centers are suffering from shoplifting and crime problems in many metropolitan areas. So caution is required on this sector as more store closures occur, e.g., the wave of casual dining restaurant chain bankruptcies and closures lately. The other looming concern is reduced consumer spending, and retail sales, in response to sharply higher prices of imported goods should tariff increases be enacted next year.

Multifamily properties retain their reputation as one of the most stable property sectors on the back of a resilient economy and labor market. Investor appetite for multifamily collateral remains strong. That said, vacancy has risen given increased supply although absorption seems to be picking up. Rent growth has also slowed down, to flat or slightly negative nationwide, with the Sun Belt metros seeing the most weakness and largest rent drop due to oversupply (vs. major urban markets such as New York, Los Angeles, and Boston which see relatively stable demand). In addition, higher operating expenses including rapidly rising insurance premium, property tax, and maintenance/tenant improvement cost pose big challenges for NOI growth.

Multifamily delinquency and special servicing have been on the rise this year with special servicing rate doubled in 2024 (from 3.10% in December 2023 to 6.34% in November 2024), highlighting the refinancing challenges of many low-coupon multifamily loans. Looking forward, another fundamental concern is that increased housing supply and lower mortgage rates, if they do happen, may potentially tip the balance of buy vs. rent and reduce multifamily demand.

Hotel enjoyed the strongest recovery post-pandemic among all property sectors. Business travel has picked up along with leisure. ADR and RevPAR has surpassed 2019 levels though occupancy still lags. In general, lower-tiered properties have underperformed in occupancy and room rates in 2024 relative to upscale properties. And we continue to see strength in larger, coastal MSAs like New York City, DC, Boston, and Seattle, and warm weather destinations including Las Vegas, Hawaii and Southern California. Overall, hotel fundamentals are expected to remain stable, but may weaken if employment and consumer spending soften, as this remains a sector very vulnerable to an economic downturn.

Industrial remains the best performing property type with lowest delinquency and special service rate, though we are seeing an uptick in vacancy rates and continued slowdown in rent growth, due to elevated construction and new supply. On the other hand, demand for data centers is still robust.

In summary, while the overall CRE fundamentals have been stabilizing or recovering, class B/C office buildings with less amenities, regional malls, Sunbelt multifamily, and low coupon maturing loans with falling occupancy are likely to lead the increase in delinquency rates in 2025. Elevated expenses due to inflation will continue to pressure property cash flows and

² See [More trouble in the office – can the Fed save the CMBS maturity wall? | LSEG](#), August 2024.

margins. Rate cuts may ease refinance stress of CRE to a certain degree, but are unlikely to solve the structural issues for office and retail and they may continue to underperform the other property sectors.

In 2024, the CMBS (conduit and SASB combined) delinquency rate climbed to 5.74% from 4.30% in December 2023, driven by a huge spike in office delinquency to 10.03% (vs. 5.70% in December 2023). However, property sectors other than office have stayed relatively stable. Multifamily and lodging delinquencies rose modestly, up by 110 bps and 74 bps respectively. Meanwhile, industrial and retail delinquencies dropped by 25 bps and 19 bps, respectively.

We believe maturity pipeline distress next year will continue to fuel delinquency growth and we are looking for CMBS delinquencies to reach 7% overall (14% for office) in the baseline scenario and 11% overall (17% for office) in the stressed scenario, compared to 5.74% overall (10.03% for office) currently.

CRE CLO delinquencies jumped in 2024 to 6.22% from 3.81% year-end 2023, despite the fact that managers continued active buyout of delinquent loans. The credit problems for this sector will likely persist in 2025 with elevated debt service cost, slow rent growth and rising expenses, especially for those maturing loans originated with low coupons and peak market values. We are forecasting an 8% delinquency rate in the baseline scenario and 10% in the stressed scenario for CRE CLO in 2025.

Exhibit 35: Non-Agency CMBS 30 day+ Delinquency Rate Forecast

		Dec 2023	Nov 2024	2025 proj. - baseline	2025 proj. - stress
Conduit and SASB combined	Industrial	0.54%	0.29%	1%	3%
	Lodging	5.16%	5.90%	6%	8%
	Multifamily	2.58%	3.68%	5%	7%
	Office	5.70%	10.03%	14%	17%
	Retail	6.09%	5.90%	7%	10%
	Overall	4.30%	5.74%	7%	11%
CRE CLO		3.81%	6.22%	8%	10%

Source: LSEG Yield Book (December 2024)

Maturity Performance and Loan Disposition

Maturity performance continued to worsen in 2024 for conduit CMBS loans maturing in 2024, which had a 68.1% success rate of refinance, down from 72.1% in 2023, while conduit office maturity loans had 44.2% of refinance rate vs. 56.4% in 2023. On the other hand, the SASB maturity performance improved YoY with a 12.5% refinance rate for 2024 compared to 2.6% for 2023, and a 2.8% delinquency rate for 2024 compared to 5.8% for 2023. SASB office maturity loans in particular outperformed in 2024 with an 11.8% refinance rate (vs. 3.2% in 2023) and 6.1% delinquency (vs. 18.8% in 2023). Meanwhile, CRE CLO maturity performance also improved modestly YoY.

For 2025, we expect maturity performance for conduit loans to stabilize in the baseline scenario, as rate cuts lessen refinancing stress. We also expect SASB maturity performance to continue to improve as most sponsors remain committed to their properties and special servicers become more accommodative in granting extensions. Overall, we think the maturity risk for CMBS in 2025 will likely decrease as loan borrowers see a better chance of recovery and become more willing to infuse capital to get refinance done if necessary. However, in the stressed case scenario, we would again expect maturity performance across all CMBS deal types to be under significant pressure as rates back up meaningfully.

Exhibit 36: Non-Agency CMBS Maturity Performance

Deal Type/Year	2023			2024 YTD		
	paid off %	dlq %	extension %	paid off %	dlq %	extension %
Conduit	72.10%	16.70%	11.20%	68.10%	20.50%	11.40%
Conduit Office	54.60%	34.90%	10.50%	44.20%	44.90%	10.90%
SASB	2.60%	5.80%	91.50%	12.50%	2.80%	84.70%
SASB Office	3.20%	18.80%	78.00%	11.80%	6.10%	82.10%
CRE CLO	35.20%	4.70%	60.20%	36.30%	6.20%	57.50%

Source: LSEG Yield Book (December 2024)

It takes time for property liquidation and distressed sales to go through the due processes. This is why it's so important to gain better clarity in property valuations, to enable more transactions to happen. Unfortunately, liquidation stayed slow in 2024 with an average monthly disposition volume of \$220 million, lower than 2023 level of \$243 million. This is likely due to the fact that

cap rates, even though trending higher, remained murky as sales activities remained sparse. Meanwhile, the average loss severity of 2024 CMBS loan dispositions rose to 63% from 58% in 2023.

Looking forward to 2025, we are seeing increased bifurcation of loan resolution outcomes. While modifications and extensions will likely remain elevated as rate cuts provide hope for recovery and future successful refinance, it will become clear to special servicers that many troubled loans simply cannot be turned around given the severity of impairment in property cashflow and valuation. We anticipate CMBS disposition volume to pick up in 2025 as price discovery and transparency start to improve, albeit at the expense of loss severities which may continue to rise as distressed sale accounts for a bigger portion of dispositions. We don't expect CRE property price to bottom out until late 2025 or 2026 even though the pace of decline may continue to slow down in 2025.

Exhibit 37: Non-Agency CMBS Loan Disposition

	2023	2024 YTD
Monthly Avg Disposition Volume (\$mm)	242.53	220.17
Avg Loss Severity	58%	63%

Source: LSEG Yield Book (December 2024)

Spreads and Investment Outlook

Spreads tightened substantially in 2024, and the credit curve saw significant curve flattening in 2024 with new issue conduit AAA spreads coming in by more than 50 bps and BBB spreads narrowing by over 350 bps, driven by market optimism and strong investor demand for deals with higher quality loans and smaller office exposure (down to 15% from 20% in 2023). Meanwhile, investors have started to price in less draconian CRE prospects and dial back the tail loss expectation, benefiting the perceived risk/reward profile of the subordinate tranches.

Should the baseline scenario unfold as expected, i.e., Fed continues the easing cycle and rate volatility subsides further next year, we may see continued compression of new issue CMBS spreads towards the post-GFC lows. We are forecasting conduit LCF AAA spreads to narrow to 80 bps for 5-year deals and to 70 bps for 10-year deals, and BBB spreads to touch 300 bps. Conversely in the stress scenario, conduit LCF AAA spreads may widen to 120 bps for 5-year deals and to 110 bps for 10-year deals, and BBB spreads to widen out to 600 bps.

Spreads of existing CMBS securitizations can be a different story as each deal has its own collateral composition and idiosyncratic risk. Broadly speaking, seasoned CMBS deals, especially those prior to 2022, may have higher office exposure, more low-coupon loans, and underwriting with low cap rates, while the newer vintage deals, especially 2023 and 2024 deals, are more likely to provide better protection to the debt securities with lower downgrade and principal loss risk, as they come with more conservative underwriting and lower exposure to office. However, credit analysis should always be completed on a case by case basis, and require investors to conduct careful due diligence of collateral quality, credit enhancement, and maturity default risk, especially if they focus on investment in lower part of the capital structure. While we expect broad CMBS spreads rally next year in the baseline scenario, weaker deals with high office exposure and maturity risk may continue to lag.

We would expect the 10-year new issue conduit bonds to be well bid as investors seek long duration papers which is in short supply (relative to 5-year bonds) under the baseline scenario. However, they may underperform shorter duration fixed rate securities or SASB floaters if Treasury yields back up in the stress scenario. In addition, we think floating rate papers such as SASB floaters and CRE CLO AAAs may see more demand and do better than fixed rate conduit and SASB papers if rates stay flat or go higher in 2025. Lastly, we also see CRE CLO AAAs to be cheap relative to BSL CLO AAAs.

Exhibit 38: Conduit CMBS New Issue Spreads Forecast

Year	LCF AAA spreads (bps)		BBB spreads (bps)
	5-yr deals	10-yr deals	
2023 year-end	153	143	712
2024 current	98	90	359
2025 proj. (baseline)	80	70	300
2025 proj. (stress)	120	110	600

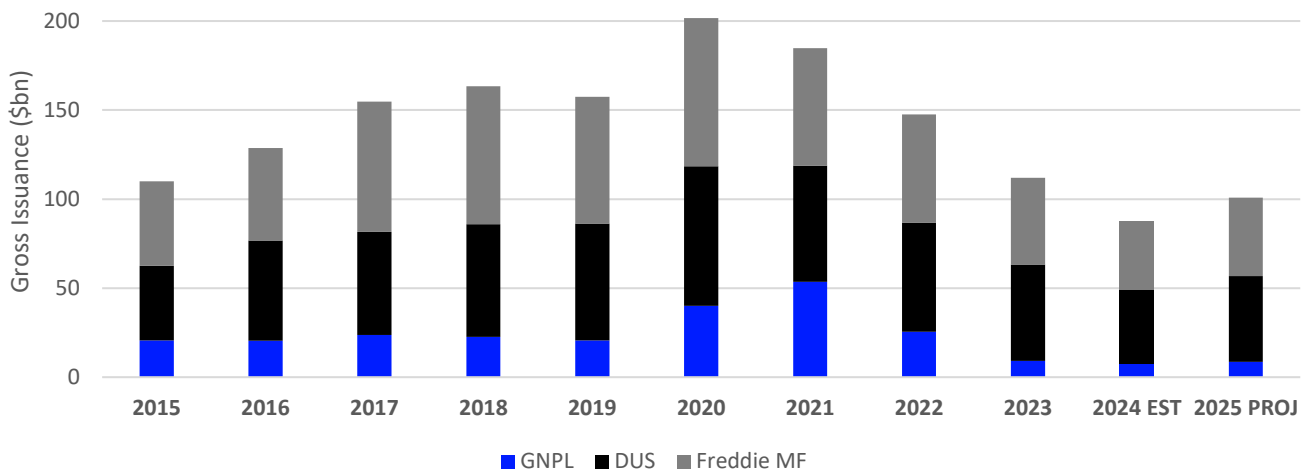
Source: LSEG Yield Book (December 2024)

Agency CMBS Report Details

Loan Issuance

The agency CMBS loan issuances from the three agencies continued to decline in 2024, with a total annual issuance of \$88 billion (Including an estimate for December), down by 22% YoY, with GNPL down by 19% to \$7 billion, DUS lower by 22% YoY to \$42 billion, and Freddie MF (Freddie MF includes Freddie K, SB, Q and Multi-PC) down by 22% YoY to \$38 billion. The subdued issuance is mainly attributed to the lower refinancing and acquisition activities amid elevated interest rates. For example, many GNPL and DUS borrowers had already refinanced to the historically low rate during the pandemic and new borrowers were hesitant to lock in high coupon rate in today’s environment. Issuance was also hindered by lack of property valuation clarity, multifamily fundamental concerns, and tightening of underwriting by agencies.

Exhibit 39: Agency CMBS Gross Loan Issuance by Year



Source: GNMA, FNMA, FLHMC, LSEG Yield Book (December 2023)

Entering 2025, we are expecting the economic strength to continue into the new year with higher demand for multifamily assets. Property transactions will likely pick up, leading to higher acquisition fundings. Refinancing may also rise as Fed continues to cut rates. We see total agency CMBS loan issuance to rise 15% to a total of \$101 billion next year (vs. estimated total of \$88 billion in 2024), with \$9 billion for GNPL (vs. estimated \$7 billion in 2024), \$48 billion for Fannie DUS (vs. estimated \$42 billion in 2024), and \$44 billion for Freddie Mac multifamily (vs. estimated \$38 billion in 2024), in our baseline scenario. Conversely, if the stress scenario unfolds, we expect the total issuance to drop 10% YOY to about \$79 billion.

Post election, one looming concern is the possible exit of the GSE conservatorship for Fannie Mae and Freddie Mac under the new administration and how it will impact the agency CMBS market in terms of financing caps, borrowing costs, underwriting, and product coverage. It remains to be seen whether the exit will happen anytime soon depending on the political landscape and administration priorities.

Market Spreads

Agency CMBS spreads tightened in 2024 amid positive market sentiment, strong demand, and limited supply. The market spreads for Freddie K and DUS securities all tightened YTD with DUS 10.9.5 TBA compressing by 12 bps to 52 bps, DUS SARM coming in by 10 bps to 60 bps, K A2 contracting by 13 bps to 52 bps, and K AS narrowing by 12 bps to 58 bps, following a similar trend of agency RMBS spreads with FNMA Current Coupon ZV spreads tighter by 19 bps to 142 bps from January to November.

While the issuance volume may pick up modestly next year, we think the spreads tightening trend may continue as the momentum of the strong market rally carries over to 2025. Agency CBS spreads may have a chance to tighten another 10-15 bps to the extent agency RMBS spreads narrows further. The lighter regulation for banks as part of the new administration policies can be another tailwind for spreads as it will likely spur more bank purchase of agency CMBS. Whereas under the stress scenario where rates back up and economy growth stalls, we won’t be surprised to see spreads widen 15-20 bps as investor demand pulls back on market distress.

Exhibit 40: Market Spreads for DUS and K bonds

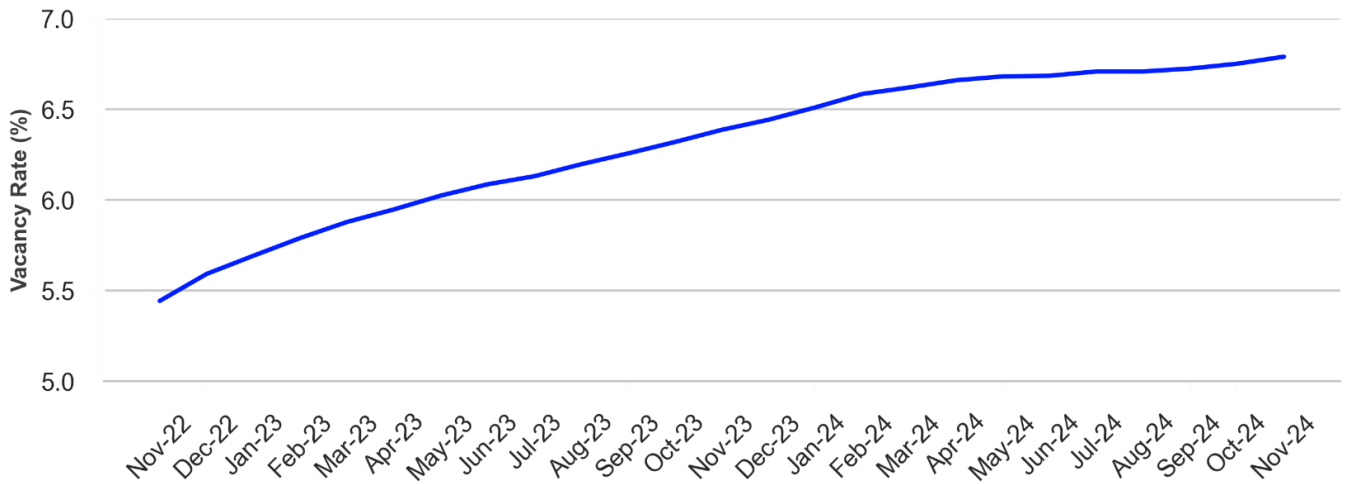
Bond	Dec 23	Jan 24	Feb 24	Mar 24	Apr 24	May 24	Jun 24	Jul 24	Aug 24	Sep 24	Oct 24	Nov 24
DUS 10/9.5 TBA	66	64	62	58	56	52	54	53	55	58	56	52
DUS SARM	73	70	67	60	58	60	60	63	64	64	62	60
Freddie K A2	60	60	57	54	54	48	49	51	51	48	49	47
Freddie K AS	70	70	62	55	52	54	55	58	60	59	59	58

Source: CMA, LSEG Yield Book (December 2024)

Multifamily Fundamentals

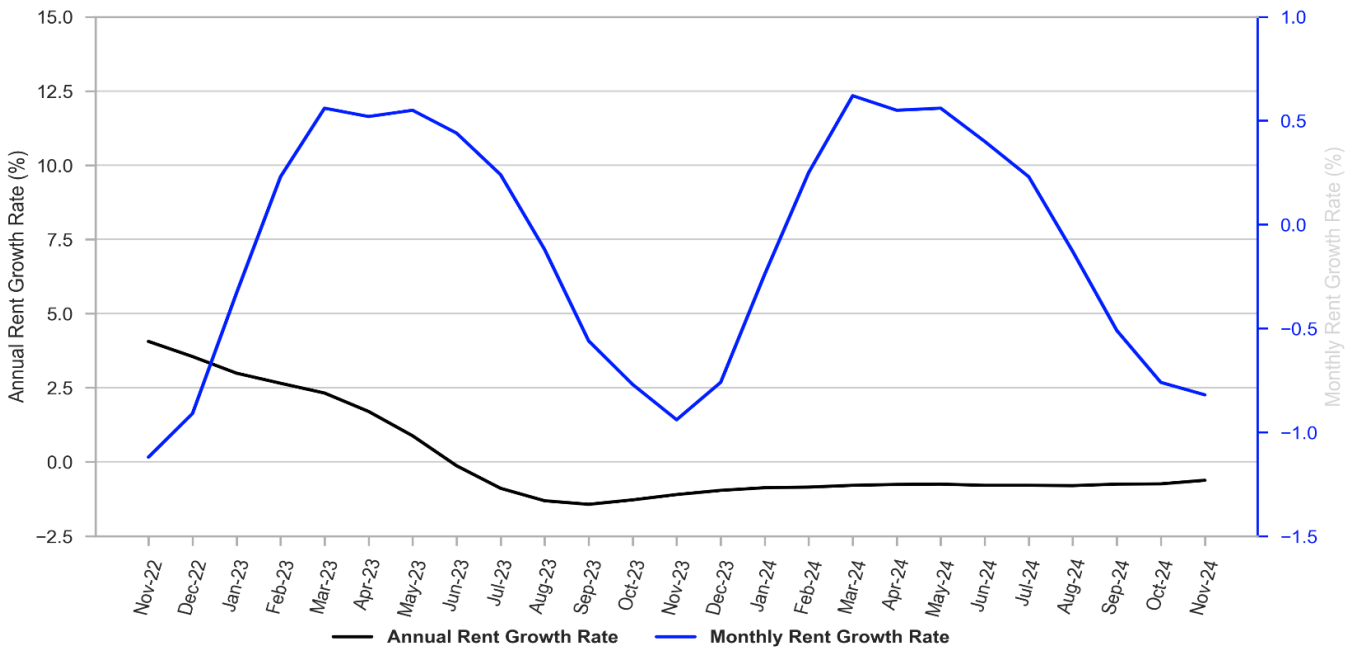
While multifamily fundamentals have been largely resilient in 2024, the sector faces a lot of challenges. New construction supply has been on the rise, driving the national vacancy rate higher to 6.8% from 6.5% at the beginning of the year. Rent growth has also been under pressure at -0.7% YoY. However, we look for more balanced multifamily supply and absorption in 2025, and we expect the occupancy and rent to stabilize or improve for most geographic locations except some Sunbelt metros which may continue to suffer from oversupply.

Exhibit 41: Multifamily Vacancy Rate



Source: Apartment List, LSEG Yield Book (December 2024)

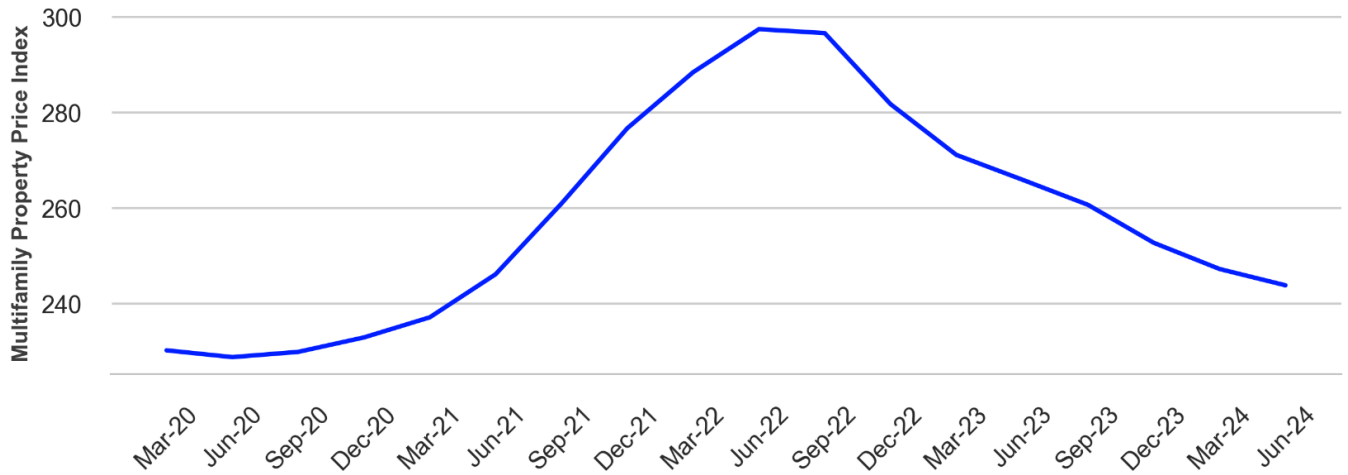
Exhibit 42: Multifamily Rent Growth Rate



Source: Apartment List, LSEG Yield Book (December 2024)

The multifamily property price has been on the decline after peaking in Q2 2022. It fell 8.3% YoY as of 24Q2, although the rate of decline has been slowing in recent quarters. We expect the property price to bottom out in late 2025 or 2026 should Fed easing and soft-landing scenario play out.

Exhibit 43: Multifamily Property Price Index



Source: FHLMC, LSEG Yield Book (December 2024)

Credit Performance

Credit performance for agency CMBS was steady in 2024.

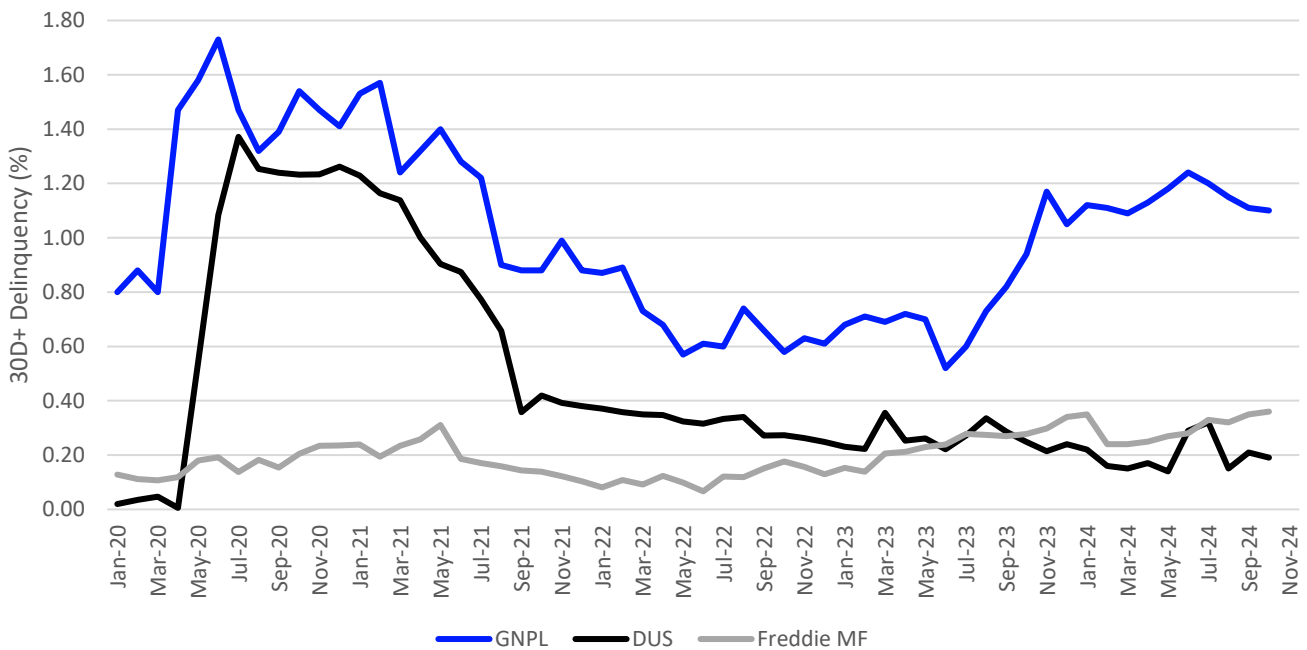
After peaking in June at 1.24%, the GNPL delinquency rate has been falling back to 1.10% in October, driven by improvement in senior housing which saw delinquency dropping from the peak of 4.26% in July to 3.7% in October. Senior housing is benefiting from growing demand on favorable demographic trend as baby boomers age. Excluding senior housing, GNPL delinquency is low at 45 bps.

Separately, the DUS delinquency rate has been stable around 20 bps this year, and Freddie MF delinquency ticked up to 36 bps in October.

On the other hand, agency multifamily floating rate loans have been underperforming in the last two years, with delinquency rates hitting 3% and 1.2% for DUS and Freddie MF floaters, respectively, possibly due to elevated debt service burden on high interest rates, although floating rate loans only account for a small portion of total outstanding balance (7% of DUS and 21% of Freddie MF),

Looking ahead, we think the credit outlook for agency CMBS loans will remain stable as Fed rate cuts help maturity refinancing and property cash flows start to stabilize.

Exhibit 44: Agency CMBSW 30D+ Delinquency Rates



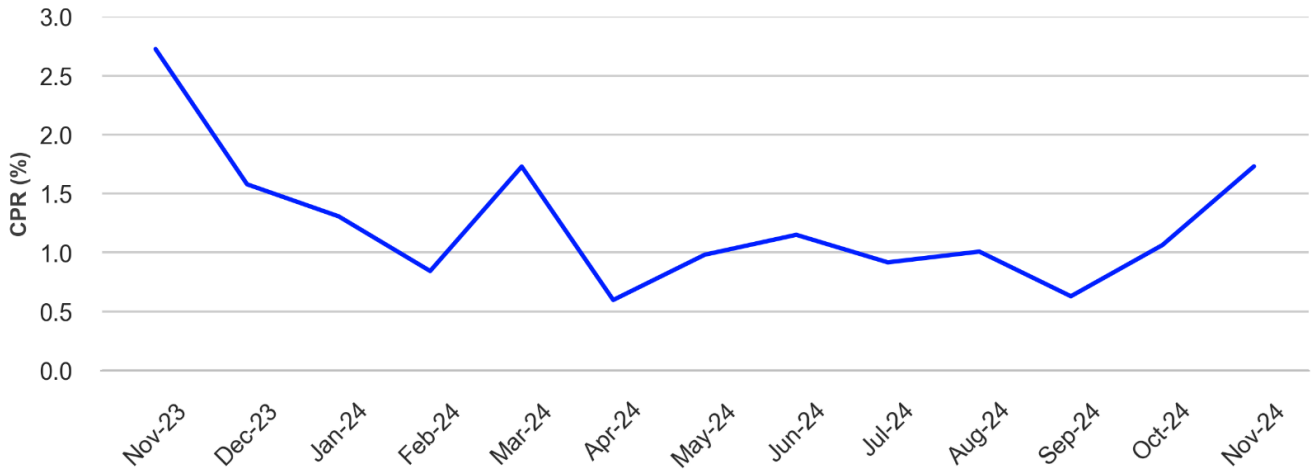
Source: GNMA, FNMA, FHLMC, LSEG Yield Book (December 2024)

Prepayments

Agency CMBS loan prepayments have been muted in 2024, due to high interest rates, lower property valuation, and call protection.

The prepayment speeds for GNPL have been in low single digits, as most loans are out of money for refinance (83% of the outstanding GNPLs have <4% coupon rate, vs. the prevailing project loan rate of 5-7%) and the property valuation has been down for many loans underwritten pre-2022. As rates decline and property valuation stabilizes, we expect the prepayment speeds to pick up in 2025 in the baseline scenario, with the pre-2014 vintage prepayment possibly reaching double digit CPRs as seasoned loans exit the prepayment penalty periods.

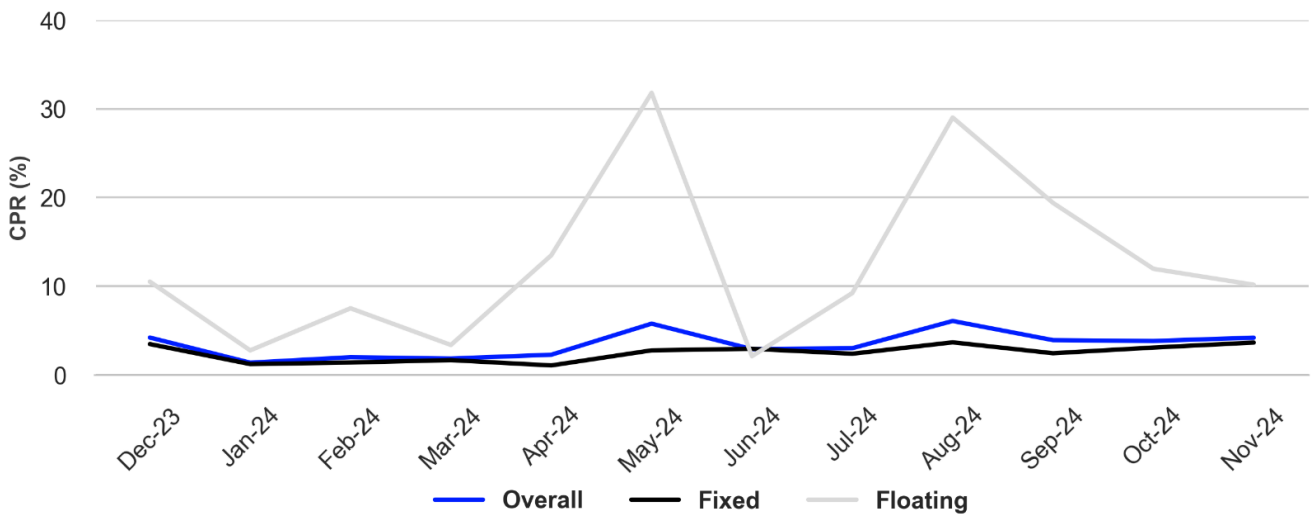
Exhibit 45: GNPL Actual Prepay Speeds



Source: GNMA, LSEG Yield Book (December 2024)

Prepayment speeds for fixed DUS loans (93% of total) stayed mostly below 5 CPR as loans are deep within the yield maintenance period. We expect the prepayment speeds for fixed rate loans to remain at similar levels in 2025, barring an early rebound of multifamily property price. Meanwhile, FNMA stopped purchasing floaters since November 2023 on credit concerns, leaving the already small population of DUS floaters on limbo. We expect the prepayment speeds for the remaining floaters continue to be choppy in 2025, within the range between 5 and 30 CPR.

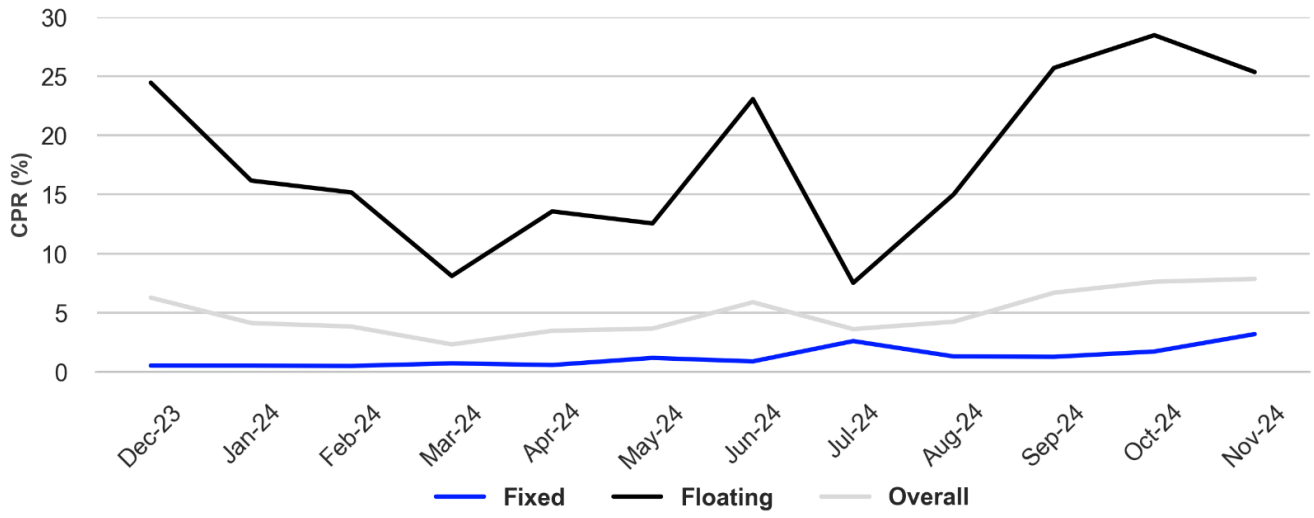
Exhibit 46: DUS Actual Prepay Speeds by Coupon Type



Source: FNMA, LSEG Yield Book (December 2024)

As to Freddie K loans, 78% are paying fixed rates with the rest paying floating rates. The prepayment speeds for K fixed rate loans are low and expected to remain low next year due to strong call protection. Floating rate loan speeds have been rising from below 10 CPR in July to 30 CPR in October, partly driven by the expiration of rate caps. We would expect the floating rate K speeds to remain in the same range of 10-30 CPR in 2025.

Exhibit 47: Freddie K Actual Prepay Speeds by Coupon Type



Source: FHLMC, LSEG Yield Book (December 2024).

Section 5 – CLO Outlook:

Keep momentum going for another banner year

Summary

Entering year-end 2024, we see a lot of market optimism for a banner year for CLOs. While the strength of the market is poised to carry over to 2025, the new year will ultimately be shaped by the economic trajectory and evolving monetary and fiscal policies. We expect credit conditions to be steady or improve under the baseline scenario, which would be supportive to continued growth in CLO issuance and spread tightening. On the other hand, the stressed scenario may sour investor sentiment and pressure corporate profit margins and interest coverage ratios. However, the higher-for-longer rate environment could benefit CLO demand as floating rate investments retain their appeal, mitigating the downside risk.

Issuance will be driven by improved loan supply from rising M&A and LBO activities and boosted demand from banks/insurers/ETFs. We forecast 2025 CLO new issuance to achieve another record at \$215 billion total with BSL issuance of \$160 billion and PC issuance of \$50 billion, under the baseline scenario, vs. a total of \$170 billion (\$130 billion BSL and \$35 billion PC) under the stress scenario, while refi/reset volume may drop on lower deal par out of RP.

The actual credit distress for CLO assets has been moderating in 2024 with both CCC exposure and default rates declining, as the downgrade wave subsided, and economic growth and lower inflation have alleviated corporate financial stress. In the baseline scenario, we forecast the CLO CCC% to drop to 5% and the TTM default rate to drop to 2% in 2025 on the recovery in credit fundamentals, vs. 8% and 3% respectively in the stressed scenario. We also see loss recovery ticking up to 50+%.

CLO and manager performance stayed resilient with a solid OC buildup and equity return in 2024. We forecast a rise to 3.7% Junior OC cushion and 17-18% equity cash-on-cash distribution in the baseline scenario for 2025, compared to 3.1% and 13-14% respectively in the stressed scenario. Managers have struggled to build par in 2024 but there could be some relief for the par burn situation in 2025.

We expect modest spread tightening in the baseline scenario with BSL CLO new issue AAA spreads narrowing to 120 bps (roughly post-GFC tight) and BB spreads to 500 bps. Under our stressed scenario, we would look for AAA and BB spreads to widen to 165 bps and 750 bps respectively. CLO relative value remains compelling vs. alternative assets.

Macro Scenarios

Entering year end 2024, we see a lot of market optimism on a banner year for CLOs. While the strength of the market is poised to carry over to 2025, the new year will ultimately be shaped by the economic trajectory and evolving monetary and fiscal policies with two possible scenarios in focus: 1. A baseline scenario which assumes the Fed continues rate cuts next year, albeit at a slower pace, amid benign inflation data and healthy economic growth, consistent with a soft landing narrative; 2. A stress scenario where inflation rekindles, whether triggered by the incoming administration's policies or due to sticky inflation and a tight labor market, forcing the Fed to pause easing, or even reverse course, causing market uncertainty and distress.

Overall, we expect credit conditions to be steady or improve under the baseline scenario, which would be supportive for continued growth in CLO issuance and spread tightening. On the other hand, the stressed scenario may sour investor sentiment and pressure corporate profit margins and interest coverage ratios. However, the higher-for-longer rate environment could benefit CLO demand as floating rate investments retain their appeal, mitigating the downside risk. This highlights the resilience of CLOs under varying macro and interest rate backdrops.

Issuance

The US CLO market set a record in 2024 with new issuance YTD totaling \$186 billion at the end of November, 69% higher YoY and surpassing the previous annual high of \$183 billion in 2021. BSL volume increased by 75% YoY to \$145 billion, while Private Credit (PC) increased by 44% to \$35 billion and static deals doubled to \$5 billion. We estimate the 2024 total new issuance volume (including December) to reach at least \$190 billion.

In retrospect, the CLO market vastly outperformed investors' expectations a year ago, despite constrained loan supply, challenging arbitrage, and rate volatility. The sharp increase of issuance has been driven by liability spread compression and strong demand from all fronts. Surging amortization from deals out of reinvestment period created a need to recycle the cash for CLO securities. CLO liquidations accelerated as equity holders were driven to liquidate seasoned deals to capitalize on the loan price rally and equity NAV, propelling new issuance as managers look to maintain AUM. In addition, CLO ETFs, with total AUM now exceeding \$20 billion, has rapidly grown to be a solid buyer base. Increased capital for 3rd party equity also facilitated deal flows.

Looking ahead, we see positive momentum continuing into 2025 with most driving factors remain intact. Additional tailwinds include improved loan supply from rising M&A, and LBO activities, and a boost to investor demand from regulatory easing.

In terms of loan supply, we expect M&A and LBO transactions to pick up after being muted through much of 2024 amid elevated borrowing costs. An increasing portion of loan issuance has come via new money lately since the Fed began easing policy in

September, which stimulated a rebound of M&A transactions, and we expect this trend to continue as SOFR declines with rate cuts and the demand for loan assets persists.

CLO demand will likely see support from three investor bases:

1. U.S. banks may benefit from potential bank deregulation under the new administration, which would relax capital requirement and free up capital for CLO investment. Banks also increasingly favor low duration and price stability in investments which are exactly what CLOs provide.
2. NAIC will likely finalize its new capital approach by the end of next year, with less impact than initially feared and may actually drive greater insurer participation at the upper end of the stack for AAA/AA/A securities.
3. Meanwhile, CLO ETFs may establish themselves as a “game changer” and expand further in 2025.

The PC sector is another bright growth spot for the CLO market as direct lending flourishes, to supplement the public market with flexibility and capital access, as CLOs prove to be a cheap funding source for PC lending.

Overall, we forecast 2025 CLO new issuance to establish another record with \$215 billion in total, including BSL issuance of \$160 billion and PC issuance of \$50 billion, under the baseline scenario. Alternatively, we expect a total of \$170 billion (\$130 billion BSL and \$35 billion PC) in the stressed scenario.

Exhibit 48: 2025 CLO Issuance Forecast

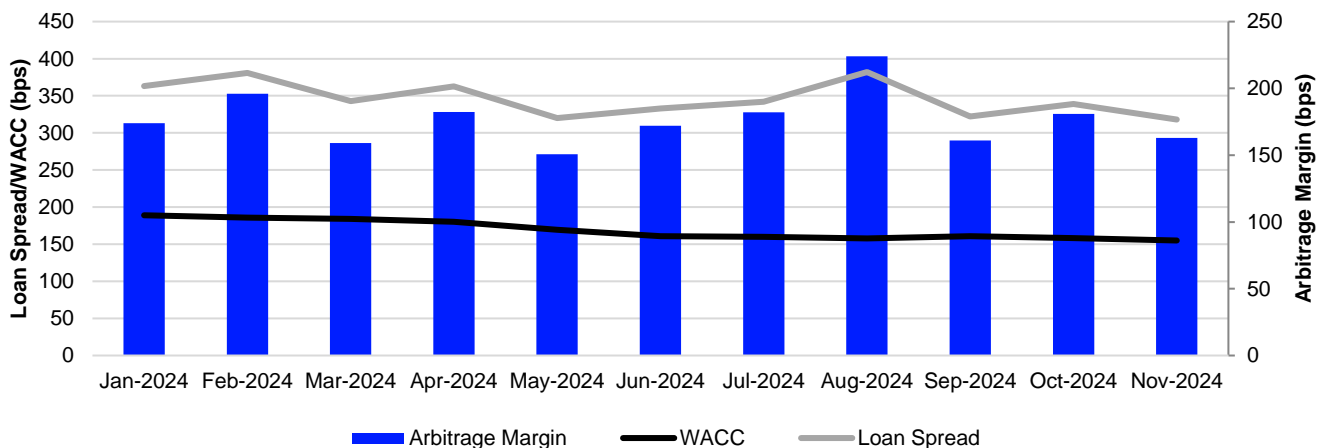
Year	BSL (\$bn)	Private Credit (\$bn)	Static (\$bn)	Total (\$bn)
2021	156	20	7	183
2022	106	12	12	130
2023	86	26	3	115
Est. 2024	150	35	5	190
Proj. 2025 (Baseline)	160	50	5	215
Proj. 2025 (Stress)	130	35	5	170

Source: Yield Book, LSEG LPC (December 2024)

We would caution that the risks for the issuance forecast may include uncertain loan supply which does not necessarily pick up as expected, arbitrage remaining challenging, amidst loan shortages and lack of discount in pricing, and a slowdown in economic growth caused by tariff wars and federal spending cuts.

On inspection of the arbitrage dynamics, while WACC has been declining in 2024 with CLO liability spread tightening, loan spreads have also trended down, resulting in an 11 bps decrease YTD in the arbitrage margin as of November 2024. To the extent loan demand outpaces supply in 2025, the margin can compress further, presenting a headwind for CLO deal flow.

Exhibit 49: Loan Spread, WACC and Arbitrage Margin for New Issue CLOs



Source: Yield Book, LSEG LPC (December 2024)

Driven by the high percentage of deals exiting the reinvestment period and massive spread compression, 2024 CLO refinance and reset volume has reached a record \$227 billion YTD (and estimated full year of \$240 billion). Looking ahead, we see \$377 billion of CLOs to be out of Reinvestment Period (RP) by the end of 2025, down from the \$403 billion by the end of 2024 as we saw at the end of 2023. As a result, the refinance/reset wave is likely to slow down modestly entering next year.

Among these deals, there is \$109 billion in the money for refinance with an AAA spread greater than or equal to 145 bps (10 bps higher than the current new issue AAA spread level), and \$203 billion prime for reset with a deal WACC greater than 175 bps (20 bps higher than the current new issue WACC level), with a total combined (Refinance and reset candidates overlap in

many cases) \$215 billion potentially fit for refinance or reset, which would be our forecast under the baseline scenario. This would be down roughly 10% from the 2024 record level. In contrast, we project a 30% decline to \$168 billion under the stress scenario where spreads and WACC are expected to widen.

Exhibit 50: 2025 CLO Refinance/Reset Forecast

	Par (\$bn)
2024 Refi/Reset (estimate)	240
Out of RP by end of 2025	377
Refi/Reset Candidate	215
2025 Refi/Reset Forecast (Baseline Scenario)	215
2025 Refi/Reset Forecast (Stress Scenario)	168

Source: LSEG LPC, Trepp, Yield Book (November 2024)

Credit Review

Credit distress for CLO assets has been moderating in 2024 with both CCC exposure and the default rate declining, as the downgrade wave subsided, and economic growth and lower inflation alleviated corporate financial stress.

Looking at rating actions in 2024, we see a total of 103 credits in the CLO pool were downgraded by Moody's to Caa or below, vs. 190 downgrades in 2023. Downgrades to B3 totaled 164, 23% lower than 2023. Similarly, 75 credits were downgraded to CCC or below by S&P, a significant decrease from 130 in 2023. Downgrades to B- reached 79, 34% lower than 2023. The downgrade/upgrade ratio also showed signs of improvement lately, dropping from 1.59 in 2Q24 to 1.44 in 3Q24.

As a result of lower downgrades, Caa/CCC exposure in CLO holdings decreased with the S&P CCC% declining to 6.14% in November from 7.87% in January. Reduced CCC concentration is also driven by active selling of CCC loans by CLO managers to maintain credit profile and portfolio clean-up for resets. Entering 2025, we expect the downgrade activities to fall further as credit fundamentals recover.

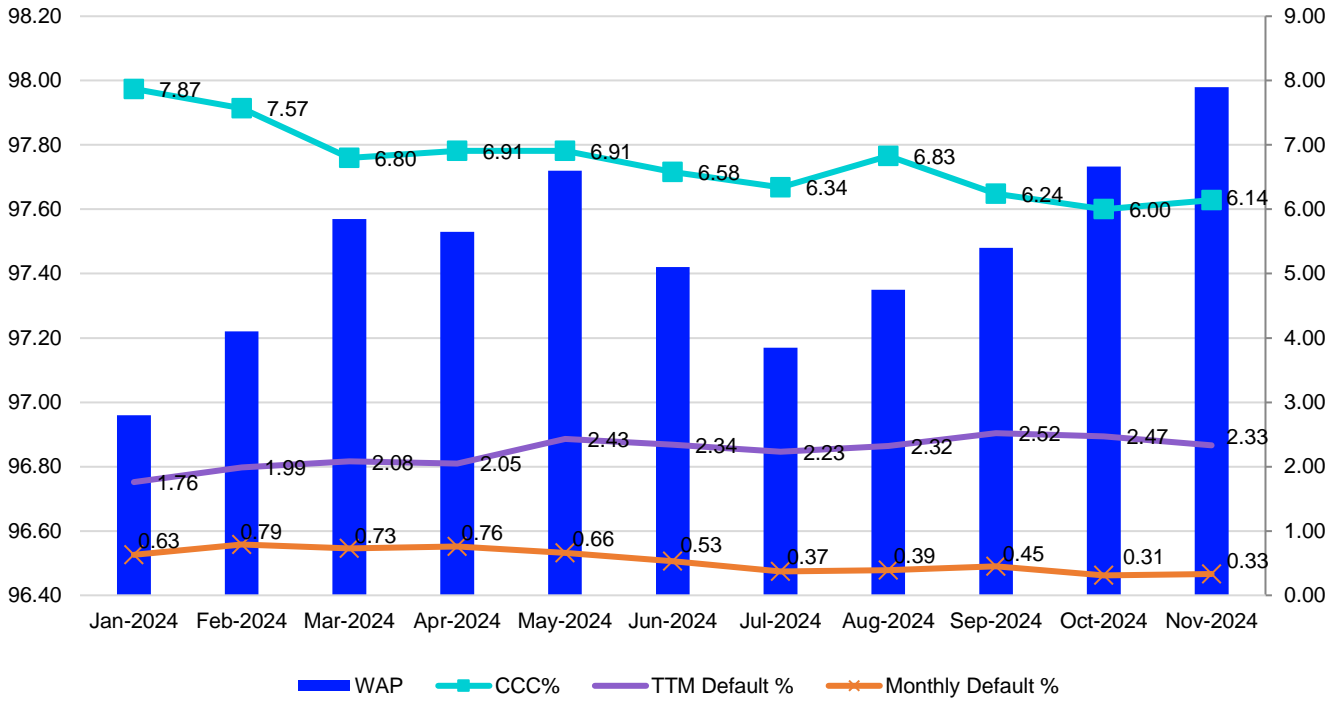
Meanwhile, monthly default rate for CLO collateral slid down to 33 bps in November from 63 bps in January, although TTM default rate for CLO loans rose from 1.76% in January to 2.33% in November (vs. 5.21% in November for the leveraged loan universe per Fitch, reflecting the effect of active management of CLO managers). Loan restructuring continued to account for majority of the default events, as it allows borrowers more leeway for workout without the need to file bankruptcy.

Following broader market movement, CLO loan prices rose in the first few months of 2024 but declined in early summer before rallying in the second half of the year as the outlook for rate cuts strengthened, with CLO loan prices averaging 97.98 at the end of November, up from 96.96 in January 2024. High loan prices with large % of par plus were a main theme of loan market this year, which led to enormous refinancing volume.

The average bid for defaulted loans, which serves as a proxy for loss recovery, has risen slightly this year, averaging 48.13% for first lien loans in November 2024, compared to 45.75% a year ago. The lower-than-normal loss recovery can be attributed to weaker documentation and the growing trend of liability management exercises (LMEs), including strategies such as double-dip transactions, priming, and other restructuring tactics. However, lenders have become more proactive in protecting their interests against LMEs, and we expect the loss recovery rate to tick up to 50+% in 2025.

Driven by the recent wave of loan repricing and refinancing, the prepayment speeds of CLO underlying collateral jumped in 2024, with an average 52.52 CPR for the year vs. 25.84 CPR in 2023. However, we see a slowdown of prepayment speeds in 2025 as many loans in the money have already been repriced and CCC selling will likely taper off.

Exhibit 51: Weighted Average Price, CCC %, TTM Default % of CLO Collateral in 2024



Source: LSEG LPC, Trepp, Yield Book (December 2024)

Looking into 2025, one of the wild cards for credit risk is the proposed policies of the incoming new administration even though the actual implementation may take time. While corporate tax cuts could boost EBITDA, tariff hikes and labour deportation may potentially wage and consumer price inflation and delay Fed easing, hurting economic growth.

The healthcare industry, particularly pharmaceutical and vaccine companies, may face increased regulatory scrutiny, and sustainability-focused sectors could be negatively affected by shifting policy priorities. Additionally, farming, construction, hotel, gaming, leisure, and service industries may be impacted by labor shortages caused by mass deportation of undocumented migrants. Tariffs may also reduce consumer spending and press the retail sector which relies on imports.

On the other hand, sectors such as oil and gas, domestic manufacturing, and the traditional automotive industry are likely to benefit from new policies. The financial sector may see gains from deregulation driven by a Republican-controlled Congress.

Policy impacts aside, we would expect leveraged loan credit conditions to remain stable or improve in 2025 on the back of continued Fed easing (even at a slower pace). Rate cuts would reduce coverage ratio strain for borrowers with cash flow concern as they gain increased flexibility and capacity to refinance their debt or extend maturities. With downgrades slowing and lower-rated borrowers finding better capital accessibility including private credit, the pressure from heightened CCC concentration in CLOs is likely to ease. Additionally, defaults in CLO assets are expected to stay relatively low, supported by the active management and risk mitigation effort of CLO managers, even though restructuring may remain active for troubled CCC loans.

In the baseline scenario, we forecast the CLO CCC% to drop to 5% in 2025, and the TTM CLO default rate to drop to 2%, while we see CCC% to reach 8% and the CLO default rate to climb to 3% in the stress scenario.

Exhibit 52: 2025 Forecast of CCC% and Default Rate

	S&P CCC%	TTM Default %
2024 Current	6.14%	2.33%
2025 Forecast (baseline)	5.00%	2.00%
2025 Forecast (stress)	8.00%	3.00%

Source: Trepp, LSEG Yield Book (December 2024)

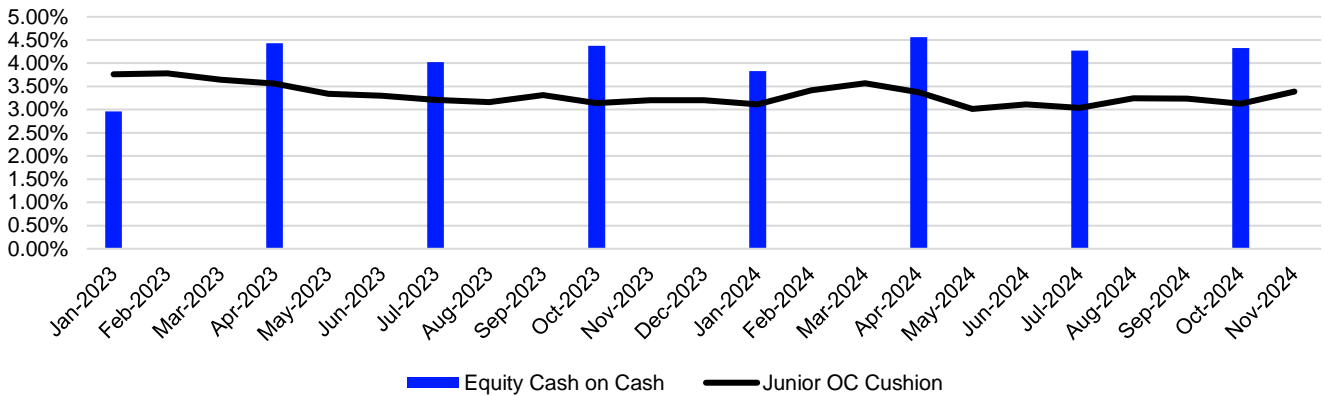
CLO and Manager Performance

In 2024, CLO and manager performance stayed resilient with solid OC buildup and equity return despite elevated downgrades and defaults.

Following a dismal deterioration in the previous year, the Junior OC cushion stabilized in 2024 and recovered to 3.39% as of November. Meanwhile, the failure rate of Junior OC tests fell to 6.96% in November, down 59 bps YTD. Deals within RP significantly outperformed with a Junior OC cushion of 4.39% and OC failures of 2.25% as of November, vs. 1.19% and 20.42% respectively for deals out of RP. With a slowdown in asset downgrades and a decline in defaults, we expect the OC cushion and OC test performance to remain strong in 2025.

Benefiting from a surge of refinancings and resets which improves equity economics, equity cash-on-cash return (for BSL deals within RP) continued to shine in 2024, reaching a total of 16.99%, compared to 15.80% in 2023.

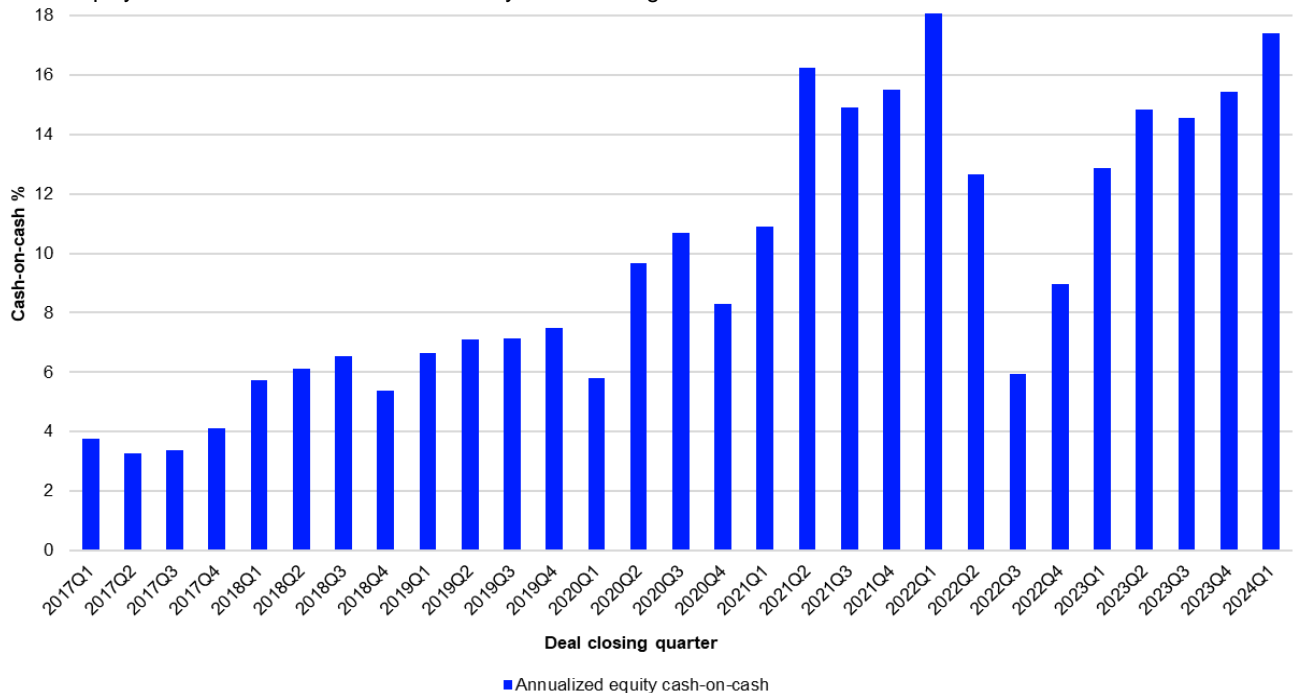
Exhibit 53: CLO Junior OC Cushion and Equity Cash-on-Cash Return



Source: LSEG LPC, Trepp, LSEG Yield Book (December 2024)

Deals of more recent vintages, in particularly those which closed when loan prices were discounted and liability spreads were tight, saw stronger cash-on-cash returns. In the exhibit below, we summarize the annualized cash-on-cash return (annualized cash-on-cash return is calculated by the cumulative equity cash-on-cash ratio divided by the deal life (years)) or different closing quarter buckets, with deals closed in 2022 Q2, 2024 Q1, and 2021 Q2 leading the cash return.

Exhibit 54: Equity Annualized Cash-on-Cash Ratio by Deal Closing Quarter



Source: Trepp, LSEG Yield Book (December 2024)

Downgrades of CLO debt tranches remained rare, among which the majority occurred in deals out of RP with low deal factors, reflecting the benefit of CLO structural protection mechanisms. Across the CLO universe, the overall downgrade rate YTD 2024

stands at 0.22% for S&P and Moody's combined, with 97% of downgrades affecting deals outside RP. Looking ahead to 2025, we expect CLO resilience to persist and downgrades of CLO notes to remain modest.

In 2024, CLO managers focused on maintaining healthy collateral by actively trading out of distressed assets, amidst heightened downgrade activities. On the other hand, managers have struggled with par build amid rich loan pricing, anemic OID level, intensified CCC selling, and low loss recovery. HY bond exposure in CLO collateral pools has started to decline lately with bond prices rising to the 90-dollar region. CLO deals on average suffered a cumulative notional par burn of 57bps YTD at the end of November (the second worst since 2020). With default and downgrade activities slowing down and loan prices stabilizing amid higher supply, we are expecting some relief for the par burn situation in 2025.

Exhibit 55: Par Build for CLOs within RP

Year	Annual Par Build (bps)
2020	-120
2021	119
2022	32
2023	-34
2024	-57

Source: Trepp, LSEG Yield Book (December 2024)

In our baseline scenario with a CCC% of 5% and a TTM default rate of 2.0%, the Junior OC cushion would probably maintain or improve modestly from the current level of 3.4% to 3.7%. In the meantime, the equity cash-on-cash yield, according to our latest calculated profit margin, will likely stay around 4.25-4.5% in 1Q25, with distribution of later quarters rising to 4.5-4.75% area, driven by declining default and downgrade activities. Overall, the full-year 2025 equity distribution is expected to be around 17-18%, slightly higher than this year.

Under our stress scenario with 8% CCC and 3.0% TTM default rate, the Junior OC cushion could drop to 3.1%. We expect more deals to fail junior OC test with equity cash distribution diverted to senior tranche paydown. The quarterly equity payment might weaken to 3.0-3.5% in certain periods but still sums up to 13-14% for the full year.

Exhibit 56: 2025 CLO Junior OC Cushion and Equity Cash-on-Cash Forecast

Scenario	Junior OC Cushion	Equity Cash on Cash
Current Level	3.4%	16.99%
Baseline Scenario	3.7%	17-18%
Stress Scenario	3.1%	13-14%

Source: Trepp, LSEG Yield Book (December 2024)

Spread and Investment Outlook

With amortization and deal calls/liquidations running high, the net supply of CLO has been nearly zero in 2024, which, combined with increased risk appetite and rate cut optimism, has driven spread tightening through the year with BSL AAA spreads narrowing 39 bps YoY to SOFR + 135 bps and PC AAA spreads coming in by 94 bps to 153 bps.

In 2025, we expect the net supply of CLOs to rise modestly but remain low, which should keep spreads tight. Assuming continued rate cuts, a better credit outlook, and a demand pickup from banks/insurers/ETFs should help drive more spread compression in the coming year although the size of compression may be limited. On the negative side, we would be cautious on the risk of sticky, above target, inflation and the potential impact of new policies, which may bring negativity to market sentiment and credit fundamentals. However, rate volatility and elevated rates can also sustain demand for floating rate structures, like CLOs. Another possible scenario, which we have not highlighted, due to its lower probability, is aggressive rate cuts by Fed in the face of an unexpected economic downturn, which could be adverse to CLOs as investor demand pivots to fixed rate products, with more duration, and away from CLOs.

Returning to the baseline scenario, we expect BSL CLO new issue AAA spreads to tighten modestly to 120 bps over SOFR (roughly post-GFC tight) and the BB spreads to tighten to 500 bps. Under our stressed scenario, we would look for AAA spreads to widen to 165 bps over SOFR, and BB spreads to widen to 750 bps.

Exhibit 57: 2025 BSL CLO New Issue Spreads Forecast

Year	BSL AAA spread (bps)	BSL BB spread (bps)
2021	112	662
2022	241	829
2023	176	771
2024 (as of November)	135	583
Proj. 2025 (baseline)	120	500
Proj. 2024 (stress)	165	750

Source: LSEG Yield Book (December 2024)

We are constructive overall on the CLO investment outlook as it remains one of the few scalable floating rate asset classes within the fixed income universe, offering good carry and insulation from rate volatility. CLO AAAs have consistently outperformed alternative AAA assets and are cheap relative to IG on a historical basis, even after the 2024 tightening.

CLO mezzanine also has compelling relative value with high loss adjusted returns, sound structural protection, and low downgrade risk. At the lower end of the capital stack, CLO BBs still offer attractive yields (double digit in many cases) at current levels with a low probability of principal loss, particularly for those with robust credit enhancement and high collateral quality and may continue to outperform leveraged loans and HY.

For deals post or about to exit reinvestment with high WACC, discount BBB or lower-rated notes can see significant upside in case deal resets, and they get paid in full.

We prefer newer vintage equities with low funding cost and high margin with deals closing when loan prices were discounted.

As manager tiering tightened this year (26 bps on new issue AAA spread dispersion in November 2024 vs. 41 bps in January) on growing investor confidence, we think it might make sense to stay with top tier managers on new issuance investment.

Timing wise over the course of 2025, we think market will likely remain strong in the first quarter or first half as the positive momentum extends to the new year on a stable backdrop, while investors should monitor rate path and political landscape carefully in the second half of the year as turbulence and volatility could emerge depending on the inflation data and policy enactment.

About FTSE Russell

FTSE Russell is a leading global provider of index and benchmark solutions, spanning diverse asset classes and investment objectives. As a trusted investment partner, we help investors make better-informed investment decisions, manage risk, and seize opportunities. Market participants look to us for our expertise in developing and managing global index solutions across asset classes. Asset owners, asset managers, ETF providers and investment banks choose FTSE Russell solutions to benchmark their investment performance and create investment funds, ETFs, structured products, and index-based derivatives.

Our clients use our solutions for asset allocation, investment strategy analysis and risk management, and value us for our robust governance process and operational integrity. For over 35 years we have been at the forefront of driving change for the investor, always innovating to shape the next generation of benchmarks and investment solutions that open up new opportunities for the global investment community.

About Yield Book

Yield Book is a trusted and authoritative source for fixed income analytics that enables market makers and institutional investors to perform complex analysis of their portfolios, benchmarks, trading decisions, historical performance, and risk. Yield Book products offer analytical insight into an extensive range of financial products in the fixed income space including governments, agencies, corporates, high yield, emerging markets, mortgages, ABS, CMBS, CMOs, CLOs, and derivatives. The platform utilizes dedicated centralized servers that help ensure reliable, prompt data delivery. Yield Book forms part of London Stock Exchange Group (LSEG)'s Data & Analytics division.

To learn more about FTSE Russell, visit lseg.com/ftse-russell; email info@ftserussell.com

To learn more about Yield Book, contact us at sales@yieldbook.com or visit our website: yieldbook.com

Americas

+1 646 989 2200

EMEA

+44 20 7334 8963

Asia-Pacific

Tokyo +81 3 6441 1015

APAC +886 2 8729 5130

© 2025 London Stock Exchange Group plc and its applicable group undertakings ("LSEG"). LSEG includes (1) FTSE International Limited ("FTSE"), (2) Frank Russell Company ("Russell"), (3) FTSE Global Debt Capital Markets Inc. and FTSE Global Debt Capital Markets Limited (together, "FTSE Canada"), (4) FTSE Fixed Income Europe Limited ("FTSE FI Europe"), (5) FTSE Fixed Income LLC ("FTSE FI"), (6) FTSE (Beijing) Consulting Limited ("WOFI") (7) Refinitiv Benchmark Services (UK) Limited ("RBSL"), (8) Refinitiv Limited ("RL") and (9) Beyond Ratings S.A.S. ("BR"). All rights reserved.

FTSE Russell® is a trading name of FTSE, Russell, FTSE Canada, FTSE FI, FTSE FI Europe, WOFI, RBSL, RL, and BR. "FTSE®", "Russell®", "FTSE Russell®", "FTSE4Good®", "ICB®", "Refinitiv", "Beyond Ratings®", "WMR™", "FR™" and all other trademarks and service marks used herein (whether registered or unregistered) are trademarks and/or service marks owned or licensed by the applicable member of LSEG or their respective licensors and are owned, or used under licence, by FTSE, Russell, FTSE Canada, FTSE FI, FTSE FI Europe, WOFI, RBSL, RL or BR. FTSE International Limited is authorised and regulated by the Financial Conduct Authority as a benchmark administrator. Refinitiv Benchmark Services (UK) Limited is authorised and regulated by the Financial Conduct Authority as a benchmark administrator.

"The Yield Book®" is a trademark and/or service mark owned or licensed by The Yield Book Inc., and all other trademarks and service marks used herein (whether registered or unregistered) are trademarks and/or service marks owned or licensed by the applicable member of the LSE Group or their respective licensors. Microsoft and Excel are trademarks of the Microsoft group of companies.

All information is provided for information purposes only. All information and data contained in this publication is obtained by LSEG, from sources believed by it to be accurate and reliable. Because of the possibility of human and mechanical inaccuracy as well as other factors, however, such information and data is provided "as is" without warranty of any kind. No member of LSEG nor their respective directors, officers, employees, partners or licensors make any claim, prediction, warranty or representation whatsoever, expressly or impliedly, either as to the accuracy, timeliness, completeness, merchantability of any information or LSEG Products, or of results to be obtained from the use of LSEG products, including but not limited to indices, rates, data and analytics, or the fitness or suitability of the LSEG products for any particular purpose to which they might be put. The user of the information assumes the entire risk of any use it may make or permit to be made of the information.

No responsibility or liability can be accepted by any member of LSEG nor their respective directors, officers, employees, partners or licensors for (a) any loss or damage in whole or in part caused by, resulting from, or relating to any inaccuracy (negligent or otherwise) or other circumstance involved in procuring, collecting, compiling, interpreting, analysing, editing, transcribing, transmitting, communicating or delivering any such information or data or from use of this document or links to this document or (b) any direct, indirect, special, consequential or incidental damages whatsoever, even if any member of LSEG is advised in advance of the possibility of such damages, resulting from the use of, or inability to use, such information.

No member of LSEG nor their respective directors, officers, employees, partners or licensors provide investment advice and nothing in this document should be taken as constituting financial or investment advice. No member of LSEG nor their respective directors, officers, employees, partners or licensors make any representation regarding the advisability of investing in any asset or whether such investment creates any legal or compliance risks for the investor. A decision to invest in any such asset should not be made in reliance on any information herein. Indices and rates cannot be invested in directly. Inclusion of an asset in an index or rate is not a recommendation to buy, sell or hold that asset nor confirmation that any particular investor may lawfully buy, sell or hold the asset or an index or rate containing the asset. The general information contained in this publication should not be acted upon without obtaining specific legal, tax, and investment advice from a licensed professional.

Past performance is no guarantee of future results. Charts and graphs are provided for illustrative purposes only. Index and/or rate returns shown may not represent the results of the actual trading of investable assets. Certain returns shown may reflect back-tested performance. All performance presented prior to the index or rate inception date is back-tested performance. Back-tested performance is not actual performance but is hypothetical. The back-test calculations are based on the same methodology that was in effect when the index or rate was officially launched. However, back-tested data may reflect the application of the index or rate methodology with the benefit of hindsight, and the historic calculations of an index or rate may change from month to month based on revisions to the underlying economic data used in the calculation of the index or rate.

This document may contain forward-looking assessments. These are based upon a number of assumptions concerning future conditions that ultimately may prove to be inaccurate. Such forward-looking assessments are subject to risks and uncertainties and may be affected by various factors that may cause actual results to differ materially. No member of the LSE Group nor their licensors assume any duty to and do not undertake to update forward-looking assessments.

No part of this information may be reproduced, stored in a retrieval system or transmitted in any form or by any means, electronic, mechanical, photocopying, recording or otherwise, without prior written permission of the applicable member of the LSE Group. Use and distribution of the LSE Group data requires a licence from Yield Book and/or their respective licensors.

TO THE EXTENT THAT ANY INDICATIVE PRICING INFORMATION IS PROVIDED HEREUNDER (THE "VALUATION") AS PART OF THE DATA AND/OR MODELS, SUCH VALUATION IS BEING PROVIDED AT CUSTOMER'S REQUEST FOR CUSTOMER'S INFORMATION PURPOSES ONLY AND IS NOT INTENDED AS AN OFFER OR SOLICITATION FOR PURCHASE OR SALE OF A SECURITY OR A CONTRACTUAL OBLIGATION (COLLECTIVELY, THE "FINANCIAL INSTRUMENTS"), INCLUDING THE FINANCIAL INSTRUMENTS SPECIFIED HEREIN. ANY VALUATION IS ONLY AN ESTIMATE AS OF THE DATE PROVIDED AND THE ACTUAL MARKET PRICE OF THE FINANCIAL INSTRUMENTS CAN BE DETERMINED ONLY WHEN AND IF EXECUTED IN THE MARKET; CONSEQUENTLY, ANY VALUATION MAY NOT REFLECT LEVELS AT WHICH:(A) ACTUAL TRANSACTIONS MAY OCCUR OR HAVE OCCURRED OR (B) COLLATERAL CALLS MAY BE MADE. THERE MAY BE NO OR MAY NOT HAVE BEEN ANY SECONDARY TRADING MARKET FOR ANY SUCH FINANCIAL INSTRUMENTS. ANY VALUATION MAY INCORPORATE INFORMATION FROM THE MOST ACTIVE MARKETS TO WHICH A SOURCE HAS ACCESS AND, CONSEQUENTLY, MAY NOT REPRESENT AN ESTIMATE OF THE VALUE OF THE PARTICULAR FINANCIAL INSTRUMENT IN THE MOST ACTIVE MARKET TO WHICH OTHERS MAY HAVE ACCESS.

Any Valuation is only an estimate of LSE Group or third-party data providers as to the general value of the specified Financial Instruments, as of the dates indicated, and are subject to change at any time without notice. Each Valuation is only one view as to the estimated general value of a particular Financial Instrument at a particular point in time.

Any Valuation may take into account a number of factors including, but not limited to, any one or more of the following: (a) general interest rate and market conditions; (b) macroeconomic and/or deal-specific credit fundamentals; (c) valuations of other financial instruments which may be comparable in terms of rating, structure, maturity and/or covenant protection; (d) investor opinions about the respective deal parties; (e) size of the transaction; (f) cash flow projections, which in turn are based on assumptions about certain parameters that include, but are not limited to, default, recovery, prepayment and reinvestment rates; (g) administrator reports, asset manager estimates, broker quotations and/or trustee reports, and (h) comparable trades, where observable. LSE Group's view of these factors and assumptions may differ from other parties, and part of the valuation process may include the use of proprietary models. Any Valuation is based upon information derived from sources believed to be reliable; however, LSE Group have not independently verified such information. In addition, reports may be available only periodically and with a delay and accordingly, where any Valuation relies upon the most recently available information in such reports for a transaction, any Valuation may be based on information that may not be current as of the valuation date.

LSE Group is not acting as your advisor, agent or fiduciary in providing any Valuation to you. To the extent permitted by law, LSE Group expressly disclaim any responsibility for or liability (including, without limitation liability for any direct, punitive, incidental or consequential loss or damage, any act of negligence or breach of any warranty) relating to: (a) the accuracy of any models, market data input into such models or estimates used in deriving any Valuation, (b) any errors or omissions in computing or disseminating any Valuation, (c) any changes in market factors or conditions or any circumstances beyond LSE Group's control, and (d) any uses to which such Valuation is put. You are responsible for your own independent verification and should consult with your own auditors and other advisors with respect to any Valuation and before deciding the uses to which any Valuation may be put. Specifically, LSE Group does not assert that any Valuation is appropriate for the purposes of valuing particular Financial Instruments in your financial statements in accordance with the requirements of your local accounting framework (for example FASB Statement No. 157 "Fair Value Measurements" under US GAAP or International Accounting Standard No. 39 "Financial Instruments: Recognition and Measurement"). LSE Group and any third-party data provider may make a market in or engage in transactions in the Financial Instruments referred to herein. Any Valuation may be affected by those parties' own transactions and own quotations.