Quarterly Market Commentary

December 2024

Overview

2024 proved a replay of 2023 as risk assets generally outperformed consensus expectations. While many central banks embarked on policy normalization, resilient growth and sticky inflation led markets to pare back expectations for monetary policy easing. Despite high interest rates and a modest rise in unemployment, U.S. real gross domestic product (GDP) is expected to near 3.0% for 2024, and year-over-year inflation eased to 2.7% in November, as tracked by the Consumer Price Index. Throughout the year, while several traditional economic indicators continued to signal economic contraction, strong consumer spending and a robust services sector powered the economy. The U.S. Treasury yield curve steepened during the year, with the two-year note falling 1 basis point (bp) and 10- and 30-year Treasury yields rising 69 bps and 75 bps, respectively. *(Figure 1)*

Change in Treasury Yields | As of December 31, 2024

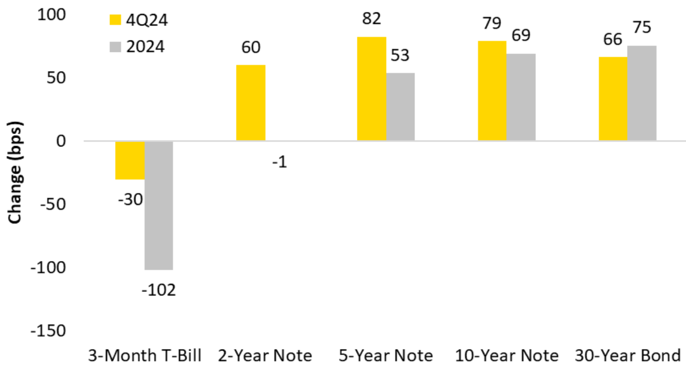


Figure 1
Source: DoubleLine, Bloomberg

The Federal Reserve made its first cut to the target federal funds rate in September since beginning its hiking cycle in March 2022, a reduction of 50 bps, which helped temper concerns about a "higher-for-longer" interest-rate regime. As the Fed continued its cutting cycle, long-end rates rose as stronger than expected employment data increased optimism about the U.S. economy. In November, after former President Donad Trump was re-elected to the White House, initial market reactions included stocks reaching all-time highs, the U.S. dollar strengthening, Treasury yields rising and credit spreads tightening. All eyes now turn to the incoming administration's policy implementation, notably a pro-growth agenda and the potential ramifications of the steps taken to deliver it. The S&P 500 Index returned 25.00% for the year, 2.39% in the fourth quarter and negative 2.39% in December. *(Figure 2)* Growth stocks continued their outperformance, as the Russell 1000 Growth Index returned 33.35% versus the Russell 1000 Value's 14.35% for the year. With intermediate and long-end Treasury yields moving higher, traditional fixed-income sectors provided less robust returns, with the Bloomberg US Aggregate Bond Index posting a negative 3.06% in the quarter and 1.25% return for 2024.

Total Return by Asset Class | As of December 31, 2024
Denominated in U.S. Dollars

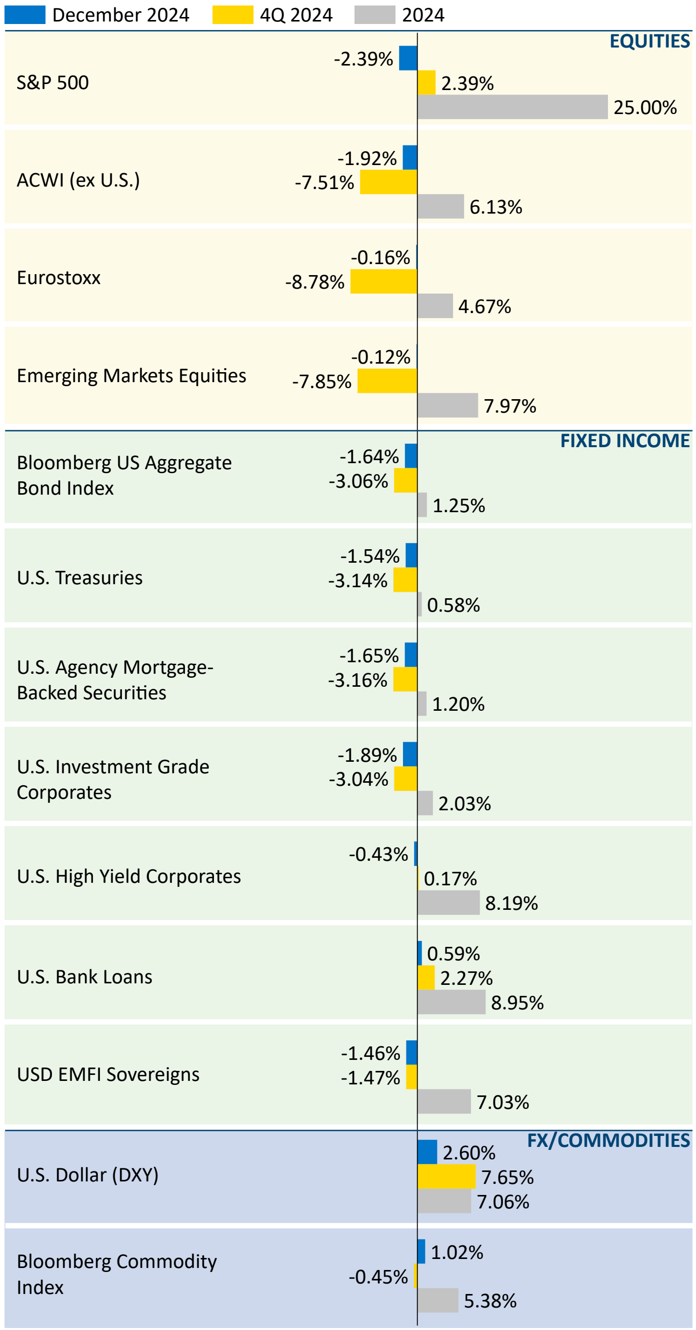


Figure 2
Source: DoubleLine, Bloomberg

Indices used in this chart: S&P 500 Index, MSCI ACWI ex U.S., Euro Stoxx 50, Emerging Markets Equities - MSCI EM Index, Bloomberg US Aggregate Bond Index, U.S. Treasuries - Bloomberg US Treasury Index, U.S. Agency MBS - Bloomberg US MBS Index, U.S. Corporate IG - Bloomberg US Credit Index, U.S. Corporate HY - Bloomberg US Corporate High Yield Index, U.S. Bank Loans - Morningstar LSTA US Leveraged Loan TR USD, USD EMFI Sovereign - Bloomberg EM USD Aggregate Sovereign Index, U.S. Dollar Index, Bloomberg Commodity Index.

The latter part of 2024 was marked by changing monetary policy as the Fed cut the federal funds rate in September after maintaining a target range of 5.25% to 5.50% since July 2023. In January 2024, market participants expected the Fed to cut the rate by 150 bps over the course of the year. Instead, the Fed only delivered 100 bps of cuts. One of those cuts occurred in December, with the Federal Open Market Committee (FOMC) lowering the rate by 25 bps. This move, while largely expected by market participants, could mark a pause for changes to the rate. During Fed Chair Jerome H. Powell's December FOMC press conference, he noted that there are challenges regarding both sides of the Fed's dual mandate when considering future changes, "We see the risks as two-sided: moving too slowly and needlessly undermine economic activity and the labor market or move too quickly and needlessly undermine our progress on inflation."

Additionally, the FOMC updated its Summary of Economic Projections (SEP), which supported a slower pace of rate cuts in 2025. The December SEP shows FOMC members' median projection of rate cuts is just two 25-bp cuts for 2025, down from four in the September SEP. The projection of fewer rate cuts was in line with market expectations as of year-end, according to the Bloomberg World Interest Rate Probability function. Chair Powell said at his press conference that the slower pace of cuts for next year "really reflects both the higher inflation readings we've had this year and the expectation that inflation will be higher." The December SEP also shows FOMC members' expectations for higher inflation, higher growth and a stronger labor market in 2025 relative to the September SEP. Looking ahead, investors will closely monitor the Fed's ability to pull off the balancing act of setting a policy rate that is restrictive enough to ease inflation to the Fed's 2% goal while not so restrictive that it boosts unemployment.

The U.S. economy added 256,000 jobs month-over-month (MoM) in December, according to the nonfarm payrolls report, exceeding a consensus estimate of 165,000 jobs. The U-3 unemployment rate declined MoM to 4.09% from 4.23%. The Job Openings and Labor Turnover Survey data for November came in stronger than expected, as job openings increased MoM to 8.1 million from 7.8 million and above a consensus estimate of 7.7 million. The ratio of the number of vacancies per unemployed job seeker remained stable at 1.1x, in line with the pre-pandemic average from 2017 to 2019, pointing to a labor market coming back into balance. The quits rate declined to 1.9%, revisiting a post-pandemic low reached in September of this year.

Other U.S. economic data was mixed. The ISM Manufacturing PMI remained in contractionary territory (a number below 50) for the ninth consecutive month in December despite a slight improvement MoM to 49.3 from 48.4. ISM Services PMI remained in expansionary territory (a number above 50) and increased more than expected MoM to 54.1 from 52.1. November retail sales data came in stronger than expected, according to Bloomberg data, as headline retail sales grew 0.7% MoM versus a consensus estimate of 0.6%. November's Conference Board Leading Economic Index print rose 0.3% MoM versus a consensus estimate of negative 0.1%. Lastly, U.S. third quarter real GDP was revised higher to a seasonally adjusted annualized rate of 3.1% quarter-over-quarter (QoQ) from a previously reported 2.8%, driven largely by an upward revision to services amid strong consumer spending.

Europe's economy grew 0.4% QoQ in the third quarter, exceeding market expectations. Growth was driven mainly by an increase in consumption, partly reflecting one-off factors that boosted tourism over the summer, and firms building up inventories. The European labor market remained resilient, with the unemployment rate at near historical lows in the fourth quarter. However, latest data suggests the economy is losing momentum, with manufacturing data still in contractionary territory and growth in the services sector slowing. Exports are also weak, with some European industries finding it challenging to remain competitive. In December, the European Central Bank cut its deposit rate by 25 bps to 3.00%, bringing the total reduction in the deposit rate to 100 bps in 2024.

In China, the country's economic slowdown dominated rhetoric in 2024 as a post-pandemic recovery continued to disappoint, underpinned by a long-running real estate collapse. Several policy announcements throughout the year, particularly in September, appeared to convince markets that significant stimulus was on the horizon to help boost the economy, driving Chinese risk assets up through year-end. The Caixin China General Manufacturing PMI remained in expansionary territory at 50.5 in December but was down MoM from 51.5. Caixin China General Services PMI remained in expansionary territory, up MoM to 52.2 from 51.5. Consumer confidence in China remains weak, and analyst estimates are for the official 2024 GDP growth figure to fall short of the country's 5.0% target.

The Bank of Japan (BOJ) kept the short-term policy rate target unchanged at 0.25% at its December meeting. BOJ Governor Kazuo Ueda offered few clues at the meeting on how soon borrowing rates could be pushed higher, which sent the yen and Japanese bond yields tumbling. Governor Ueda reiterated the central bank's resolve to keep raising rates from their current very low levels if the economy and prices move in line with the bank's forecasts, and he cited the need to see the "sustainability of wage increases."

2024 was a year that challenged many traditional economic assumptions and models. The lagged effects of tighter monetary policy on the economy were a linchpin to many bearish or recession forecasts heading into the year. As we look to 2025, investors face a dynamic mix of factors – from evolving monetary policies and shifting geopolitical tensions to an exploding deficit in the U.S. and an incoming pro-growth agenda from the Trump administration. Risk-asset valuations, economic fundamentals, the direction of monetary policy by the Fed and implementation of President-elect Trump's policy agenda should factor prominently in outlooks for the coming year.

U.S. Government Securities

The Bloomberg US Treasury Index posted a negative 1.54% return in December, bringing fourth quarter return to negative 3.14%. Despite the loss in the last quarter, the full-year return remained positive at 0.58%.

U.S. Treasury yields continued to rise in December following a sharp increase in October and a period of consolidation in November. Longer-term rates led the upward movement in December, and the yield curve steepened significantly. After fluctuating between zero and 20 basis points (bps) in October and November, the spread between the 10-year and two-year Treasury yields decisively widened by more than 30 bps and broke above previous highs reached in late September. This shift was in response to economic data releases indicating a resilient labor market and stalled progress in disinflation. Additionally, President-elect Donald Trump's return to the White House raised concerns about potential tariffs and regulatory changes that could impact long-term growth expectations. Fiscal expansion under a Republican-led government could also add upward pressure on inflation.

U.S. Treasury Yield Curve (%)

	Sep. 30, 2024	Nov. 29, 2024	Dec. 31, 2024	Monthly Change	Quarterly Change
3 Month	4.62	4.49	4.31	-17 bps	-30 bps
2 Year	3.64	4.44	4.27	9 bps	60 bps
5 Year	3.56	4.28	4.14	33 bps	82 bps
10 Year	3.78	4.15	4.24	40 bps	79 bps
30 Year	4.12	4.09	4.27	42 bps	66 bps

Source: Bloomberg

The Federal Reserve delivered a widely anticipated cut of 25 bps at December's Federal Open Market Committee (FOMC) meeting, bringing the target federal funds rate to a range of 4.25% to 4.50%. The Fed projected two cuts in 2025 and revised the longer-run neutral interest rate to 3%. FOMC members' Summary of Economic Projections upgraded gross domestic product growth forecasts for 2024 and lowered the unemployment rate outlook, reflecting optimism about economic resilience. In addition, inflation forecasts were revised higher. The forecast revisions, as well as Fed Chair Jerome H. Powell's comments at his post-FOMC meeting press conference, reinforced the Fed's focus on inflation management. The Fed stance also represented a shift to a slower pace of monetary easing in the new year.

Agency Residential and Agency Commercial Mortgage-Backed Securities

Agency residential mortgage-backed securities (RMBS) faced headwinds in December and fourth quarter as U.S. Treasury yields continued to rise. Agency RMBS, as measured by the Bloomberg US MBS Index, returned negative 1.65% on the month and negative 3.16% on the quarter. The index returned 1.20% for the full year. The MBS index on the month underperformed the Bloomberg US Treasury Index's return of negative 1.54% and Bloomberg US Agency Commercial MBS (CMBS) Index's negative 0.82% but outperformed the Bloomberg US Credit Index's negative 1.89%.

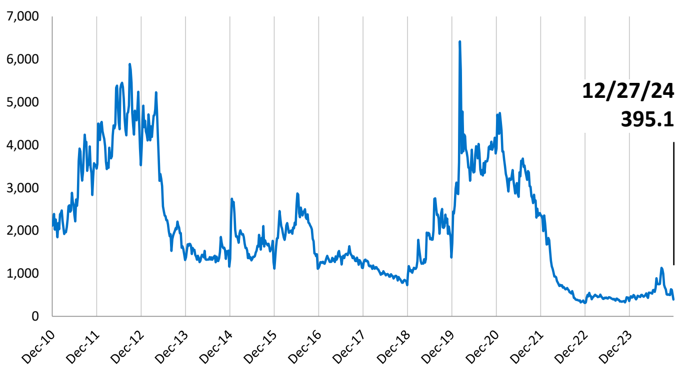
Agency RMBS spread movement was muted on the month and quarter as option-adjusted spreads (OAS), as measured by the Bloomberg US MBS Index, widened 2 basis points (bps) and 1 bp, respectively, to 43 bps. In contrast, Agency CMBS OAS, as measured by the Bloomberg US Agency CMBS Index, tightened 1 bp on the month and 5 bps on the quarter to 36 bps. Spreads for current-coupon Agency RMBS tightened 3 bps on the month but widened 6 bps on the quarter to 1.35%.

Aggregate prepayment speeds decreased on the month, impacted by a rise in mortgage rates and negative seasonal housing factors. The 30-year mortgage rate, as measured by the Freddie Mac U.S. Mortgage Market Survey 30-Year Homeowner Commitment National Index, rose 4 bps on the month and 77 bps on the quarter to 6.85%.

Gross issuance of Agency RMBS fell month-over-month (MoM) to $96.5 billion, bringing gross issuance for the quarter to $324.5 billion. Net issuance for Agency RMBS also declined to $21.4 billion MoM; quarterly net issuance was $71.1 billion. Monthly issuance of Agency CMBS increased MoM to $16.6 billion, bringing quarterly issuance to $43.9 billion. Paydowns on the Federal Reserve's MBS portfolio increased marginally MoM to $15.7 billion from $15.6 billion.

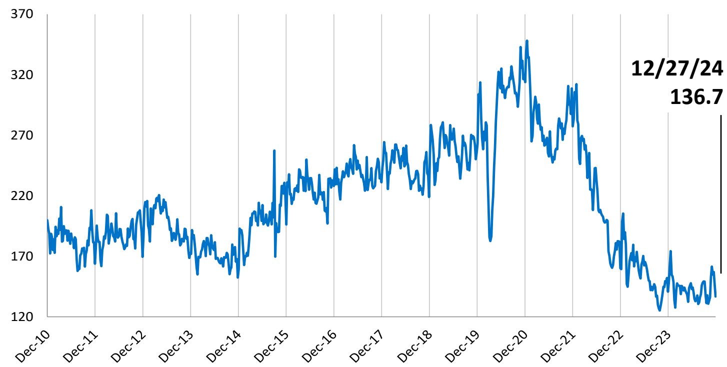
For more on mortgage market activity, please see the following page.

MBA U.S. Refinancing Index | As of December 27, 2024



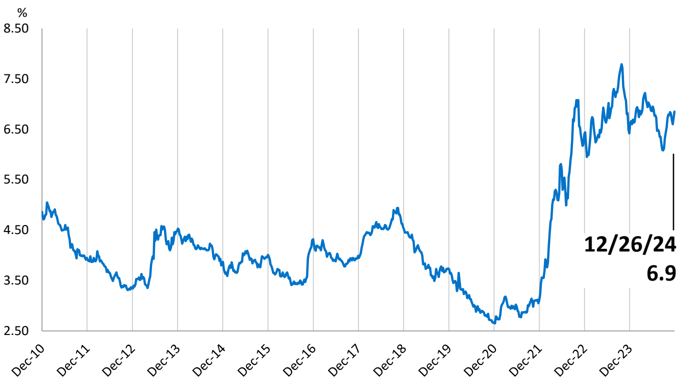
Source: Bloomberg. Base = 100 on 3/16/1990. Seasonally Adjusted

MBA Purchase Index | As of December 27, 2024



Source: Bloomberg. Base = 100 on 1/14/2011. Seasonally Adjusted

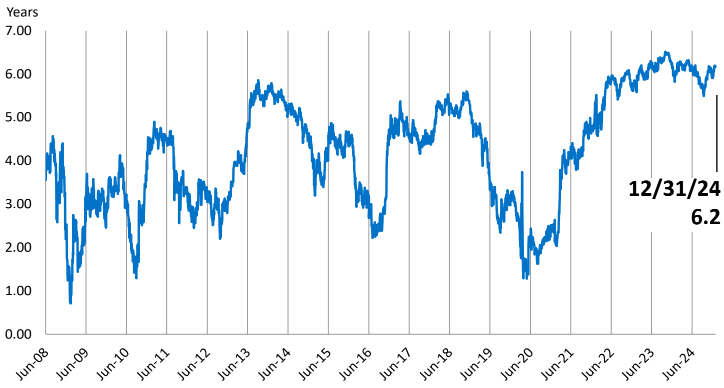
Freddie Mac Commitment Rate - 30 Year | As of December 26, 2024



Source: Bloomberg, DoubleLine

As of 1/4/2024, new methodology for gathering this data was implemented. Instead of surveying lenders, the Primary Mortgage Market Survey® results are now based on actual applications from lenders across the country submitted to Freddie Mac when a borrower applies for a mortgage.

Duration of Bloomberg US MBS Bond Index | As of December 31, 2024



Source: Bloomberg. Base = 100 on 1/14/2011. Seasonally Adjusted

Conditional Prepayment Rates (CPR)												
2023-2024	January	February	March	April	May	June	July	August	September	October	November	December
Fannie Mae (FNMA)	4.3	4.7	5.4	6.0	6.5	6.1	6.6	6.6	6.4	8.1	6.2	6.0
Ginnie Mae (GNMA)	6.0	6.8	6.9	7.3	7.9	7.5	8.6	10.0	10.9	12.9	9.3	8.4
Freddie Mac (FHLMC)	4.1	4.5	5.2	5.8	6.3	6.0	6.4	6.6	6.5	8.5	6.2	5.9

Bloomberg U.S. MBS Index	10/31/2024	11/30/2024	12/31/2024	Change
Average Dollar Price ($)	88.81	89.73	87.99	-1.74
Duration (Years)	6.07	5.91	6.17	0.26

Source: eMBS, Barclays Capital
FHLMC Commitment Rate Source: Bloomberg
As of December 31, 2024

Bloomberg U.S. Index Returns (%)	10/31/2024	11/30/2024	12/31/2024
Aggregate	-2.48%	1.06%	-1.64%
MBS	-2.83%	1.33%	-1.65%
Corporate	-2.43%	1.34%	-1.94%
Treasury	-2.38%	0.78%	-1.54%

Non-Agency Residential Mortgage-Backed Securities

Performance of non-Agency residential mortgage-backed securities (RMBS) was generally negative across subsectors in December, with the exception of credit risk transfers and single-family rentals, amid a steepening of the U.S. Treasury yield curve. Performance in the fourth quarter was also generally negative due to the curve steepening.

Credit fundamentals were mixed in December versus November remittance, as prepayments decreased while mortgage rates and delinquencies increased. The Freddie Mac U.S. Mortgage Market Survey 30-Year Homeowner Commitment National Index rose 4 basis points (bps) month-over-month (MoM) and 77 bps on the quarter to close the year at 6.85%.

New issuance was down approximately $200 million MoM to $8.1 billion, according to BofA Global Research, with issuance concentrated in non-qualified mortgages (non-QMs). New issuance was down approximately $2.2 billion quarter-over-quarter to $34.3 billion, with activity also led by non-QMs.

Housing supply continued to increase, particularly on the West Coast, contributing to a 0.23% MoM decrease in home prices in October, the most recent month for which data was available for the S&P CoreLogic Case-Shiller 20-City Composite Home Price NSA Index. Prices were up 4.22% year-over-year (YoY). Existing-home sales increased 4.8% MoM in November, the most recent month for which data was available as measured by the National Association of Realtors Existing-Home Sales Report; YoY sales increased nationwide.

Non-Agency Commercial Mortgage-Backed Securities

In December, the primary non-Agency commercial mortgage-backed securities (CMBS) market was less active than in November but still priced $7.31 billion of deals via eight transactions, bringing the fourth quarter tally to $32.88 billion of deals via 43 deals. *(Figure 3)* 2024 marked $112.75 billion of deals via 157 deals, a 242% increase over 2023's dollar volume. Conduit benchmark last-cash-flow bonds rated AAA tightened 3 basis points (bps) to 0.96% on the month compared to duration-matched U.S. Treasuries. Bonds rated BBB- tightened 4 bps to 4.82% compared to duration-matched Treasuries.

Month-over-month (MoM) price movements on commercial real estate (CRE) were a mixed bag in November, the latest month for which data was available, with the industrial sector down 2.16% and central business district office up 5.04%. *(Figure 4)* The RCA U.S. All-Property Commercial Property Price Index was up 0.81% MoM but down 0.85% year-over-year (YoY). CRE transaction volume was down 4% YoY to $25.6 billion. *(Figure 5)*

Private-Label New Issuance ($ Billions)	Monthly		Quarter-to-Date	
	Deals	Volume	Deals	Volume
Conduit	3	$2.62	11	$9.42
Single Asset, Single Borrower	5	$4.39	30	$20.96
Commercial Real Estate CLO	0	–	2	$1.90
Other	0	$0.30	0	$0.60
Private-Label Total	8	$7.31	43	$32.88

Private-Label New Issuance ($ Billions)	Year-to-Date		Comparable to YTD 2023	
	Deals	Volume	Volume	% of YTD 2023
Conduit	39	$33.40	$19.75	169%
Single Asset, Single Borrower	108	$70.17	$19.55	359%
Commercial Real Estate CLO	10	$8.32	$6.06	137%
Other	0	$0.86	$1.18	73%
Private-Label Total	157	$112.75	$46.53	242%

Figure 3
Source: DoubleLine, J.P. Morgan as of December 31, 2024

Property Type	MoM Price Change (%)	YoY Price Change (%)
Apartment	-0.30%	-6.08%
Retail	2.45%	0.44%
Industrial	-2.16%	3.60%
Office - Central Business District	5.04%	-12.67%
Office - Suburban	-0.18%	-0.72%
National All-Property	0.81%	-0.85%

Figure 4
Source: Real Capital Analytics as of November 30, 2024

RCA U.S. CPPI Indexes | As of November 30, 2024

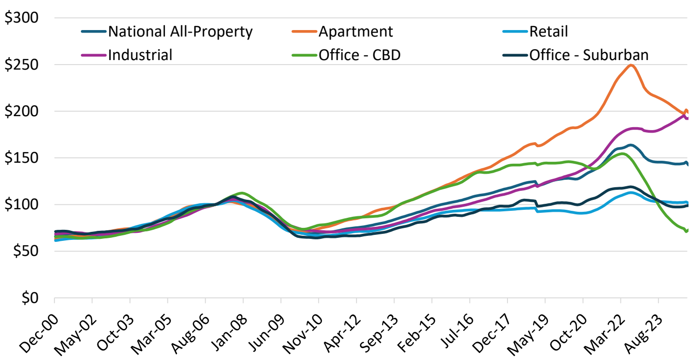


Figure 5
Source: Real Capital Analytics

30-Day-Plus Delinquency Rates | As of December 31, 2024

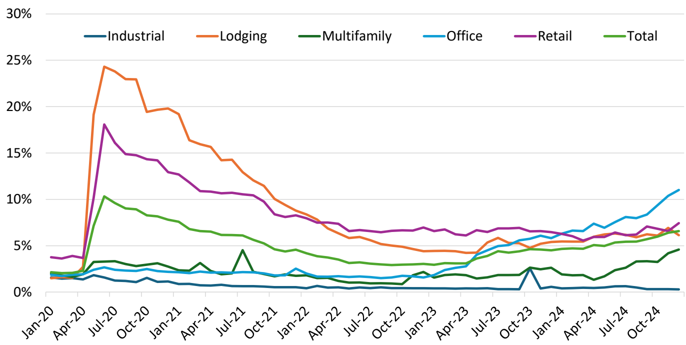


Figure 6
Source: Trepp

The 30-day-plus delinquency rate for non-Agency CMBS ticked up MoM in December to 6.57%. *(Figure 6)* The percentage of loans that were seriously delinquent (60 days or longer, in foreclosure, real estate owned or non-performing) was up 43 bps MoM to 6.31%. Delinquencies in the heavily watched office segment continued to increase, rising 63 bps to 11.01%, and retail delinquencies increased 86 bps to 7.43%. Multifamily delinquencies increased 40 bps to 4.58%. The YoY overall delinquency rate climbed to 2.06%.

Asset-Backed Securities

The asset-backed securities (ABS) market delivered a mixed bag in December but outperformed the broader fixed-income market, as the asset class was boosted by its relatively short duration in a month when longer-term interest rates rose sharply. Short-duration and high-credit-quality ABS, such as those held in the Bloomberg US ABS Index, returned negative 0.05% while more off-the-run sectors, such as those held in the ICE BofA U.S. Fixed-Rate Miscellaneous ABS Index, returned 0.08%. The broader fixed-income market, as measured by the Bloomberg US Aggregate Bond Index (the "Agg"), returned negative 1.64%. The ABS market was basically flat in the fourth quarter, with the Bloomberg index down 0.05% and the ICE BofA index up 0.04%, while the Agg was down 3.06%. On the year, the ABS indices returned 5.02% and 6.54%, respectively, while the Agg was up 1.25%.

The best-performing ABS subsector on the month was aviation securitizations, as robust investor demand drove modest spread tightening for these assets. The worst performer was franchise securitizations, as these longer-duration assets experienced duration-related price declines. The best performer on the quarter was aviation securitizations, as underlying collateral fundamental factors continued to improve, driving substantial investor demand and subsequent spread tightening. Franchise securitizations and railroad-related assets were the worst performers, impacted by their relatively long duration.

Primary market activity slowed in December, delivering $4.4 billion in new supply, but capital markets activity was healthy for the ABS market for the full year with a record issuance pace and robust investor demand. For the full year, ABS primary issuance totaled roughly $311.1 billion, up 18% year-over-year.

Investment Grade Credit

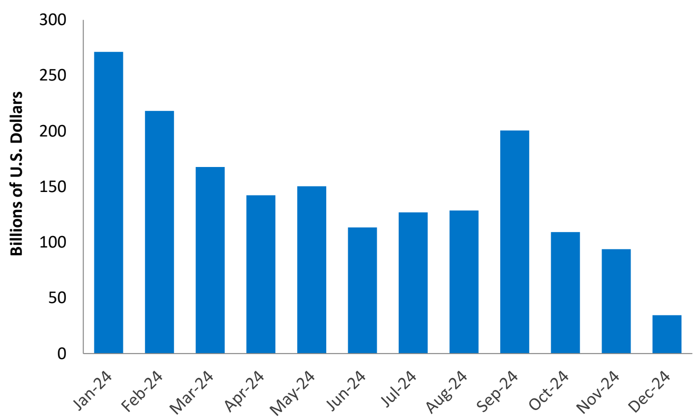
The Bloomberg US Credit Index in December gave back all of November's gains and more, falling 1.89% and closing the fourth quarter down 3.04%. The asset class returned 2.03% for the year. U.S. IG credit spreads widened slightly on the month, per the index, as investors repriced the potential impact of higher-for-longer interest rates in 2025 after the December Federal Open Market Committee meeting. Spreads widened 3 basis points (bps) to 77 bps, underperforming duration-matched U.S. Treasuries by 4 bps. Spreads tightened 7 bps on the quarter, outperforming duration-matched Treasuries by 72 bps.

Bloomberg US Credit Index
As of December 31, 2024

	Total Return by Rating Category (%)			
	One Month	Quarter-to-Date	Year-to-Date	Last 12 Months
US IG Credit Index	-1.89	-3.04	2.03	2.03
AAA	-1.03	-2.35	1.97	1.97
AA	-2.08	-3.58	0.66	0.66
A	-1.98	-3.30	1.63	1.63
BBB	-1.90	-2.79	2.70	2.70

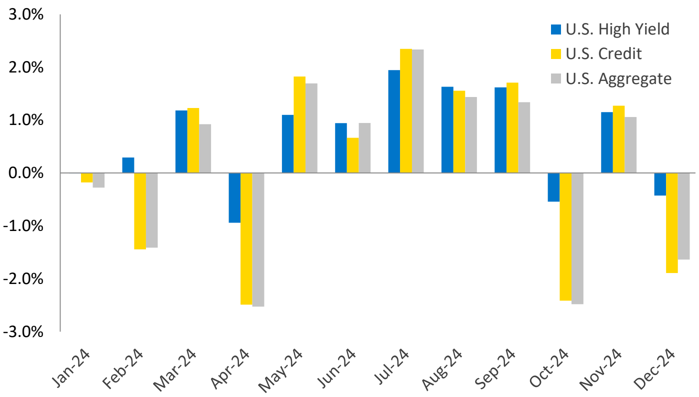
Source: Barclays Live

Total Fixed-Rate Investment Grade Supply
As of December 31, 2024



Source: Barclays Live

Performance of Select Bloomberg Indices
January 2024 through December 2024



Source: Barclays Live

Short-duration credit returned 0.19% on the month, outperforming negative 0.73% for intermediate-duration credit and negative 4.29% for long-duration credit. Short-duration credit also outperformed on the quarter, returning 0.15% versus negative 1.46% for intermediate-duration credit and negative 6.26% for long-duration credit.

The best-performing sectors on the month were finance companies, other financial and banking. The worst performers were other industrial, transportation and other utility. The best performers on the quarter were finance companies, other financial and real estate investment trusts. The worst performers were other industrial, other utility and transportation.

U.S. dollar-denominated IG new issuance was up 55% year-over-year (YoY) on a gross basis to $34.5 billion in December, according to Bloomberg, and on a net basis posted negative $12 billion versus negative $21.2 billion a year ago. On the quarter, gross issuance was $238 billion, up 1% YoY; net issuance was negative $24 billion versus $70 billion a year ago.

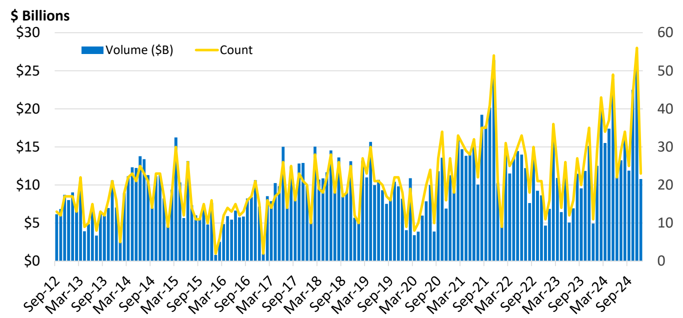
IG fund inflow was $8.2 billion on the month, down 52% YoY, according to EPFR Global as reported by J.P. Morgan, and $84.3 billion on the quarter, up 444% YoY. Total fund inflow for 2024 was $376.1 billion, up 207% YoY.

Collateralized Loan Obligations

Spreads for U.S. collateralized loan obligations (CLOs) continued to tighten across the capital stack across the year and through December amid strong demand for the asset class, with spreads ending another year at their tights. The J.P. Morgan CLO Total Return Index gained 0.57% on the month, pushing fourth quarter and annual return to 1.83% and 8.31%, respectively.

While U.S. CLO primary issuance slowed on the month, with $10.8 billion pricing across 23 deals, it still marked the third busiest December for new-issue volume. Primary supply on the quarter totaled $59.5 billion, up 44% from the previous quarter's $41.2 billion. 2024 new issuance totaled $201.95 billion via 425 deals, up 74% from 2023. The month also marked 19 reset and 51 refinancing (refi) transactions, totaling $34.1 billion in aggregate. Refi and reset volume ended the year at $83.6 billion via 212 deals and $223.4 billion via 451 deals, respectively. Collectively, gross new-issue, refi and reset volume totaled $508.9 billion for the year, a record high.

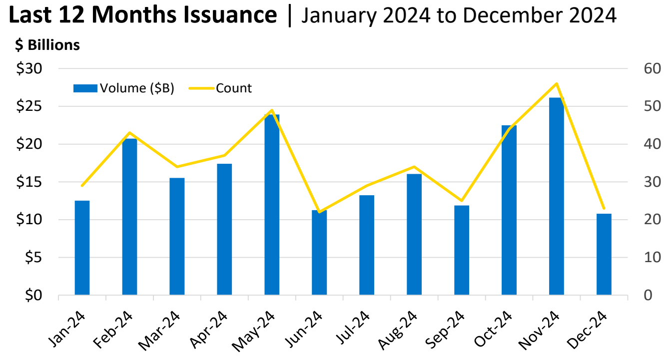
CLO New Issuance | September 2012 to December 2024



Source: LCD-CLO Global Databank

In the secondary market, the monthly supply of bids wanted in competition declined 5% to $3.75 billion in December. Investment grade (IG) trading volume fell 2% to $8.8 billion month-over-month (MoM), per Trade Reporting and Compliance Engine data, while below-IG volume rose 32% to $5.5 billion. Full-year trading volume totaled $198.1 billion, slightly behind last year's record $200.4 billion.

Last 12 Months Issuance | January 2024 to December 2024



Source: LCD-CLO Global Databank

CLO credit fundamentals showed some weakness in December as minimum overcollateralization cushions worsened alongside an uptick in defaulted assets within CLOs. The last 12-month U.S. leveraged loan default rate by principal amount ended at 0.91%, down 3 basis points (bps) MoM and 62 bps lower than where it began the year. The dual-track default rate, which includes distressed transactions, painted a different picture, ending December at 4.70%, 86 bps higher than where it began the year and the highest reading since March 2021.

Ratings-based metrics were mixed, with Moody's weighted average rating factor worsening while the number of collateral concentrations rated CCC improved. The rolling three-month ratio of downgrades to upgrades increased MoM for the fourth consecutive month to 3.00x from 2.36x, posting its highest reading since February 2023. Lastly, the frenzy of loan repricings persisted, resulting in weighted average spread tests falling 4 bps on the month.

Market-based metrics were slightly lower on the month while the Morningstar LSTA US Leveraged Loan PR USD Index was relatively flat, gaining 0.08%.

Bank Loans

The bank loan market returned 0.57% in December, per the Morningstar LSTA US Leveraged Loan TR USD Index, capping a year of consistent returns without a single negative month. Bank loans returned 2.27% in the fourth quarter, and the annual return was 8.95%. Loan prices declined slightly on the month as markets weighed the impact of potentially less-accommodative Federal Reserve policy. However, loans continued to trade at healthy levels: 62.60% of loans ended the month trading at par or above, and another 19.26% were trading between $98 and par. The bank loan market ended the quarter with a spread to maturity of 3.98% and a yield to maturity of 8.55%. The elevated carry of the asset class continues to compare favorably to other areas of fixed income.

December returns were largely uniform across the credit quality spectrum. Loans rated CCC were up 0.60% while loans rated B and BB returned 0.54%.

With only one new payment default on the month, the official default rate remained low at just 0.91% based on principal outstanding, down from 0.94% the prior month but up from 0.80% at the start of the quarter. *(Figure 7)* In a similar vein, the distressed ratio (defined as loans trading below $80), declined to 3.02%, the lowest level since July 2022 and down from 3.24% the prior month and 3.43% at the start of the quarter. *(Figure 8)*

Beneath the surface, cautionary signals remain. Including distressed exchanges, the December default rate would have been 4.70% on an issuer-count basis, as weaker companies continue to struggle in the elevated interest-rate environment. Moreover, downgrades continued to outpace upgrades. The three-month rolling downgrade-to-upgrade ratio ended the month at 3x, the highest reading since February 2023.

Distressed Ratio | January 2024 to December 2024

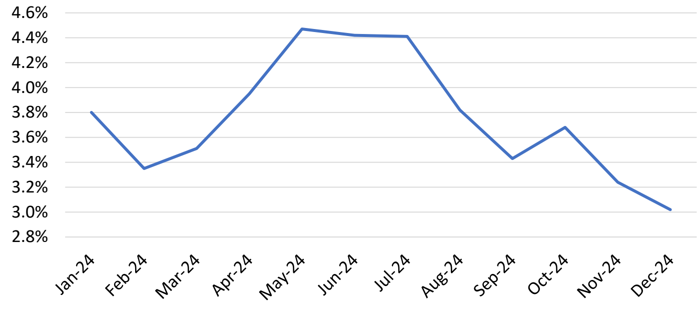


Figure 7
Source: DoubleLine, Morningstar LSTA US Liquid Leveraged Loan Index

Bank Loan Default Rate | January 2023 to December 2024

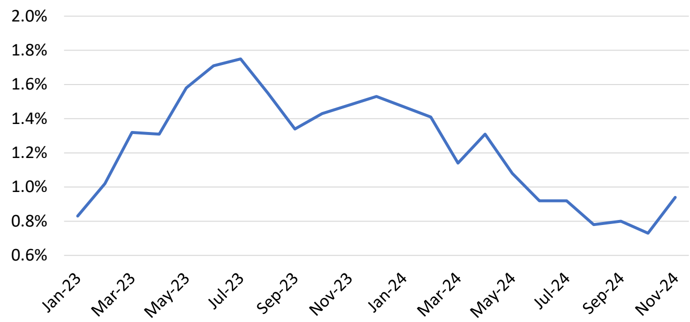


Figure 8
Source: DoubleLine, Leveraged Commentary & Data

The new-issue market was extremely active in December, particularly for repricing and refinancing transactions. Repricing volume set a monthly record of $152.9 billion; and non-refinancing new issue accounted for just 7% of the month's volume. The trends were similar in the quarter, with repricing activity of $278.8 billion accounting for 70% of all new issue relative to just $28.0 billion of mergers and acquisitions issuance. As companies tapped the primary market to extend maturities, the near-term maturity wall was pushed out. As of year-end, just 14% of the loan market was set to mature in 2027 or sooner.

High Yield

Risk assets lost some of their appeal in December as the Federal Reserve took a more-hawkish policy stance in response to sticky inflation data. The Bloomberg US Corporate High Yield (HY) Index returned negative 0.43%, with yields increasing 34 basis points (bps) to 7.49% and spreads widening 21 bps to 2.87%, per the index. The index finished up 0.17% for the fourth quarter and 8.19% on the year.

Bloomberg US Corporate High Yield Index
As of December 31, 2024

	Total Return by Rating Category (%)			
	One Month	Quarter-to-Date	Year-to-Date	Last 12 Months
US High Yield Index	-0.43	0.17	8.19	8.19
BB	-0.65	-0.49	6.30	6.30
B	-0.31	0.31	7.38	7.38
CCC	0.09	2.26	15.09	15.09

Source: Bloomberg, DoubleLine

The HY 12-month, par-weighted default rate increased only 2 bps to 36 bps in December, according to J.P. Morgan, but it still marked the first rise since March. The rate was down from 2.08% at the start of 2024 and 0.94% at the start of the quarter. For comparison, the 25-year average is 3.00%. When including distressed exchanges, the default rate increased 32 bps to 1.47%, compared to 2.85% and 1.64% at the start of the year and quarter, respectively. The 25-year default average including distressed exchanges is 3.40%.

Monthly upgrade volume ($29.6 billion) outpaced downgrade volume ($12.8 billion) once again in December, according to J.P. Morgan. The ratio declined to 1.4x in the fourth quarter after a 0.9x, 2.4x and 2.6x ratio, respectively, in the first three quarters. The ratio closed at 1.6x for the year. By number, December upgrades (15) matched downgrades (15). The ratio was 0.9x in the fourth quarter compared to a 0.9x, 1.5x and 1.7x ratio, respectively, in the first three quarters. The ratio was 1.2x for the year.

The HY market priced 17 bonds for $11.5 billion in December, according to J.P. Morgan, bringing the 2024 total to $288.8 billion, compared to $176.1 billion in 2023. Refinancing remained the predominant use of proceeds, accounting for 75% in 2024 compared to 63% in 2023.

December posted a monthly outflow ($3.7 billion) for just the second time in 2024, according to Lipper as reported by J.P. Morgan, ending a seven-month run of inflow through November. Inflow totaled $16.4 billion for the year compared to an outflow of $7.0 billion in 2023.

Commodities

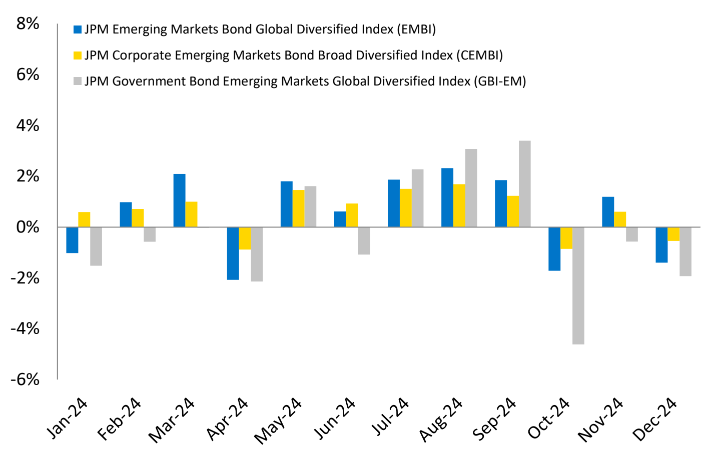
The broad commodity market rallied in December, with the Bloomberg Commodity (BCOM) Index up 0.63% and the S&P GSCI up 2.88%. It was a split picture in the fourth quarter, with the BCOM down 1.57% and energy sector-heavy S&P GSCI up 2.64%, while the indices on the year returned 0.12% and 3.79%, respectively.

The best-performing sector on the month, as measured by the S&P GSCI, was energy (+5.55%), with Brent crude (+4.36%), WTI crude (+5.96%) and natural gas (14.90%) rallying. Industrial metals declined 3.26%, dragged down by lead (-6.70%) and copper (-3.16%). The agriculture sector increased 2.60%, with cocoa jumping 23.87% and sugar slumping 8.63%. Precious metals (-1.88%) experienced a sell-off, with silver (-6.00%) and gold (-1.49%) in the red. On the quarter, energy was up 6.29%, industrial metals fell 8.52%, agriculture grew 0.53%, and precious metals dipped 2.19%.

Emerging Markets Fixed Income

Emerging markets (EM) sovereign and corporate bonds posted negative returns in December and fourth quarter, but both asset classes ended 2024 with relatively robust full-year returns. The J.P. Morgan Emerging Markets Bond Index Global Diversified (EMBI GD), which tracks sovereign bonds, returned negative 1.40% on the month, negative 1.94% on the quarter and 6.54% on the year. The J.P. Morgan Corporate Emerging Markets Bond Index Broad Diversified (CEMBI BD), which tracks corporate bonds, returned negative 0.54%, negative 0.80% and 7.63%, respectively. The credit spread for the EMBI GD tightened 11 basis points (bps) on the month and 36 bps on the quarter. The credit spread for the CEMBI BD tightened 9 bps and 22 bps, respectively.

J.P. Morgan Emerging Markets Bond Index Performance
January 31, 2024 to December 31, 2024



Source: J.P. Morgan

Performance across all regions was negative on the month and quarter in the EMBI GD. Europe had the least negative return on the month while Africa had the least negative return on the quarter. Asia was the worst-performing region on the month; the Middle East was the worst performer on the quarter. In the CEMBI BD, all regions were negative on the month and quarter except for Europe, which was slightly positive on the quarter. Europe was the best-performing region on the month and quarter. Asia was the worst performer on the month; Latin America was the worst performer on the quarter. The high yield subindex outperformed the investment grade subindex in both indices in both periods.

Risk appetite as we head into 2025 will likely be driven by expectations around central banks' monetary policy in developed markets, which seem largely economic-data dependent. Other factors to watch include China's stimulus measures, inflation surprises and geopolitical risks such as China-Taiwan tension, the Israel-Hamas war, the Russia-Ukraine war and U.S. policy in the wake of the November elections.

International Sovereign

Global government bonds, as measured by the FTSE World Government Bond Index, returned negative 2.29% in December and negative 5.44% in the fourth quarter, impacted by rising global government bond yields and foreign currency depreciation against the U.S. dollar. Full-year return was negative 2.87%.

The dollar, as measured by the U.S. Dollar Index, strengthened sharply against G-10 peers over the month and quarter amid a repricing in U.S. interest-rate markets for a slower Federal Reserve easing cycle. U.S. Treasury yields pushed higher on the month as U.S. economic data continued to surprise to the upside and markets began to focus on possible inflationary impacts from potential trade and fiscal policies of the incoming Trump administration. U.S. interest rates and the dollar were boosted further in December after the Fed delivered a cut to the federal funds rate and signaled fewer than expected cuts in the new year.

The euro weakened against the dollar over the month and quarter. The European Central Bank (ECB) continued its easing cycle across the quarter, cutting the key policy rate 25 basis points in October and December, bringing it to 3.00% at year-end. ECB policymakers pared back their growth forecasts for 2025 and signaled a likelihood of further easing as data continued to show economic activity remained sluggish across the eurozone. The aggressive trade posture of the incoming U.S. presidential administration also added to concerns about potential adverse impacts on the European economy.

The Japanese yen weakened against the dollar over the month and quarter as the Bank of Japan (BOJ) continued to hold interest rates steady while U.S. rates moved higher, underpinning a widening rate differential. Despite reiterating a commitment to normalize monetary policy, BOJ Governor Kazuo Ueda said policymakers were seeking greater clarity on wage growth in Japan and the potential policies of the incoming U.S. administration before committing to its next interest-rate increase.

Infrastructure

Infrastructure assets experienced negative returns in December but outperformed on a relative basis the broader fixed-income market, as measured by the Bloomberg US Aggregate Bond Index (the "Agg") return of negative 1.64%, in a month when longer-term interest rates rose sharply. Infrastructure assets also outperformed in the fourth quarter, with the Agg down 3.06%, but they experienced negative returns in a period when U.S. Treasury yields rose across the curve. On the year, infrastructure assets outperformed the Agg's return of 1.25%.

The best-performing infrastructure subsectors on the month were telecom and railroad asset-backed securities, as these assets experienced modest spread tightening. The worst performers were the longest-duration sectors, namely electric utilities and industrial corporate bonds, as they were more sensitive to the increase in interest rates. The best performers on the quarter were aviation and telecom asset-backed securities, boosted by investor demand and subsequent material spread tightening. The worst performers were electric utilities and industrial corporate bonds due to their long-duration exposures in a period of rising interest rates.

U.S. Equities

The broad U.S. equity market in December gave back some of its hefty year-to-date gains but ended positive in the fourth quarter after a post-election rally, contributing to strong full-year returns. The S&P 500 Index declined 2.39% on the month, the Dow Jones Industrial Average declined 5.13%, and the Nasdaq Composite Index increased 0.56%. On the quarter, the indices were up 2.39%, 0.93% and 6.36%, respectively, and finished the year up 25.00%, 14.99% and 29.60%. In December, the Russell 1000 Growth Index (+0.88%) outperformed the Russell 1000 Value Index (-6.84%) and the Russell 2000 Index (-8.26%), which tracks small-capitalization stocks.

Only one sector experienced a positive return on the month, consumer discretionary (+1.14%), while the second best performer was technology (-0.33%). The worst-performing sectors during the month were materials (-10.78%) and energy (-9.52%). The best performers on the quarter were communications (+7.34%) and financials (+7.09%); the worst performers were materials (-12.29%) and healthcare (-10.30%).

Global Equities

Global equities declined in December, as measured by the MSCI All Country World Index (ACWI), and posted negative returns for the fourth quarter. U.S. equities, as measured by the S&P 500 Index, performed in line with the MSCI ACWI during the month but managed positive returns during the quarter, driven by strong returns in November supported by optimism stemming from President-elect Donald Trump's return to the White House. The S&P 500 Equal Weight Index and small-capitalization U.S. equities, as tracked by the Russell 2000 Index, underperformed the S&P 500 on the month and quarter. The Nasdaq Composite Index outperformed the S&P 500 on the month and quarter, supported by positive performance in the information technology sector. On the year, it was a strong year for equities, led by the U.S. market.

European equities broadly experienced negative returns during the month and quarter, with the STOXX Europe 600 Index down in all three months during the quarter. The region faced headwinds from slowing growth and increased geopolitical risks. United Kingdom, Spanish and German equities were lower on the month. Asian equities showed mixed performance during the month, with Chinese, Hong Kong and Taiwanese equities producing positive returns. Japanese and South Korean equities declined. During the quarter, most Asian regions were lower. Emerging markets equities, as measured by the MSCI Emerging Markets Index, also generated negative returns during the month and quarter.

Global and U.S. Equities (%)	December 2024	4Q2024	2024
MSCI All Country World Index	-2.34	-0.89	18.03
S&P 500 Index	-2.39	2.39	25.00
S&P 500 Equal Weight Index	-6.28	-1.89	12.98
Nasdaq Composite Index	0.56	6.36	29.60
Dow Jones Industrial Average	-5.13	0.93	14.99
Russell 2000 Index	-8.26	0.33	11.53

Eurozone (%)	December 2024	4Q2024	2024
Stoxx Europe 600 (Eurozone)	-2.50	-9.52	2.54
DAX (Germany)	-0.23	-3.94	11.65
CAC 40 (France)	0.03	-10.09	-5.61
FTSE MIB (Italy)	0.64	-5.43	11.73
IBEX 35 (Spain)	-2.28	-8.35	12.26
FTSE 100 Index (U.K.)	-2.88	-6.76	7.49

Asia (%)	December 2024	4Q2024	2024
Nikkei 225 (Japan)	-0.50	-4.09	8.68
Shanghai Stock Exchange Composite (China)	0.14	-3.14	13.02
Hang Seng Index (Hong Kong)	3.45	-4.86	23.58
KOSPI (South Korea)	-7.42	-17.35	-19.93
TAIEX (Taiwan)	2.72	0.24	22.79
AORD (Australia)	-8.07	-11.51	1.96

Emerging Markets (%)	December 2024	4Q2024	2024
MSCI Emerging Markets Index	-0.12	-7.85	7.97
Ibovespa (Brazil)	-6.46	-19.63	-29.55
MSCI India Index	-2.75	-10.62	12.47

Source for the above market chart data: Bloomberg

DoubleLine®

Agency – Refers to mortgage-backed securities (MBS) whose principal and interest are guaranteed by a U.S. government agency such as Fannie Mae (FNMA) or Freddie Mac (FHLMC).

Australia All Ordinaries (AORD) Index – This index tracks the share prices of the 500 largest companies listed on the Australian Securities Exchange (ASX). The market capitalization of the AORD companies amounts to more than 95% of the value of all shares listed on the ASX.

Basis Points (bps) – Basis points (or basis point (bp)) refer to a common unit of measure for interest rates and other percentages in finance. One basis point is equal to 1/100th of 1%, or 0.01% or 0.0001, and is used to denote the percentage change in a financial instrument. The relationship between percentage changes and basis points can be summarized as: 1% change = 100 basis points; 0.01% = 1 basis point.

Below Investment Grade/Non-Investment Grade – Term indicating a security is rated below investment grade (IG). These securities are seen as having higher default risk or being prone to other adverse credit events. They typically pay higher yields than higher-quality bonds in order to make them attractive. They are less likely than IG bonds to pay back 100 cents on the dollar.

Bid Wanted in Competition (BWIC) – Formal request for bids on a package of securities that is submitted by an institutional investor to a number of securities dealers. The dealers are being invited to submit bids on the listed securities.

Bloomberg Commodity (BCOM) Index – This index is calculated on an excess return basis and reflects the price movements of commodity futures. It rebalances annually, weighted two-thirds by trading volume and one-third by world production, and weight caps are applied at the commodity, sector and group levels for diversification. The roll period typically occurs from the sixth to 10th business day based on the roll schedule.

Bloomberg Emerging Markets (EM) USD Aggregate Sovereign Index – This index tracks fixed- and floating-rate, U.S. dollar-denominated debt issued by EM governments. Country eligibility and classification as an emerging market is rules based and reviewed annually using World Bank income group and International Monetary Fund country classifications.

Bloomberg US Agency Commercial Mortgage-Backed Securities (CMBS) Index – This index measures the U.S. market of Agency conduit and fusion CMBS deals.

Bloomberg US Aggregate Bond Index – This index (the "Agg") represents securities that are SEC registered, taxable and U.S. dollar denominated. It covers the U.S. investment grade, fixed-rate bond market, with components for government and corporate securities, mortgage pass-through securities and asset-backed securities. These major sectors are subdivided into more specific indices that are calculated and reported on a regular basis.

Bloomberg US Asset-Backed Securities (ABS) Index – This index is the ABS component of the Bloomberg US Aggregate Bond Index, a flagship measure of the U.S. investment grade, fixed-rate bond market. The ABS index has three subsectors: credit and credit cards, autos and utility.

Bloomberg US Corporate High Yield (HY) Index – This index measures the U.S. dollar-denominated, HY, fixed-rate corporate bond market. Securities are classified as HY if the respective middle ratings of Moody's, Fitch and S&P are Ba1, BB+ or BB+ or below. The Bloomberg US HY Long Bond Index, including bonds with maturities of 10 years or greater, and the Bloomberg US HY Intermediate Bond Index, including bonds with maturities of 1 to 9.999 years, are subindices of the Bloomberg US Corporate HY Bond Index.

Bloomberg US Corporate Index – This index measures the investment grade, fixed-rate taxable corporate bond market. It includes U.S. dollar-denominated securities publicly issued by U.S. and non-U.S. industrial, utility and financial issuers.

Bloomberg US Credit Index – This index measures the investment grade, U.S. dollar-denominated fixed-rate, taxable corporate and government-related bond markets. It is composed of the Bloomberg US Corporate Index and a noncorporate component that includes foreign agencies, sovereigns, supranationals and local authorities.

Bloomberg US Mortgage-Backed Securities (MBS) Index – This index measures the performance of investment grade, fixed-rate mortgage-backed pass-through securities of the government-sponsored enterprises (GSEs): Federal Home Loan Mortgage Corp. (Freddie Mac), Federal National Mortgage Association (Fannie Mae) and Government National Mortgage Association (Ginnie Mae).

Bloomberg US Treasury Index – This index measures U.S. dollar-denominated, fixed-rate nominal debt issued by the U.S. Treasury with a remaining maturity of one year or more. Treasury bills are excluded by the maturity constraint but are part of a separate Short Treasury Index.

Bloomberg World Interest Rate Probability (WIRP) – Statistical function developed by Bloomberg that uses fed funds futures and options to assess the probability of future Federal Open Market Committee (FOMC) decisions. It seeks to calculate the chances of a rate hike at each of the FOMC meetings using futures trading data.

Brent Crude Oil – Major trading classification of sweet light crude oil that serves as a benchmark price for purchases of oil worldwide. Brent is known as a light, sweet oil because it contains 0.24% sulfur, making it "sweet," and has a low density, making it "light."

Caixin China General Manufacturing Purchasing Managers' Index – This index, published monthly by S&P Global, is compiled from responses to questionnaires sent to purchasing managers on a panel of over 500 private and state-owned manufacturers. The panel is stratified by detailed sector and company workforce size as measured by contribution to gross domestic product. A reading above 50 indicates an expansion of the sector, a reading below 50 represents a contraction, and 50 indicates no change.

Caixin China General Services Purchasing Managers' Index – This index, published monthly by S&P Global, is compiled from responses to questionnaires sent to purchasing managers on a panel of over 400 private and state-owned services companies. The panel is stratified by detailed sector and company workforce size as measured by contribution to gross domestic product. A reading above 50 indicates an expansion of the sector, a reading below 50 represents a contraction, and 50 indicates no change.

Collateralized Loan Obligation (CLO) – Single security backed by a pool of debt.

Conditional Prepayment Rate (CPR) – Metric (also known as "Constant Prepayment Rate") that indicates a loan prepayment rate at which the outstanding principal of a pool of loans, such as mortgage-backed securities, is paid off. The higher the CPR, the more prepayments are anticipated and thus the lower the duration of the note. This is called "prepayment risk."

Conduit Loans – Type of loans, also known as commercial mortgage-backed securities (CMBS) loans, that are commercial real estate loans pooled together with similar commercial mortgages and sold on the secondary market. On the secondary market, conduit loans are divided into tranches based on risk, return and loan maturity.

Conference Board Leading Economic Index (LEI) – This index tracks a group of composite indices (manufacturers' orders, initial unemployment insurance claims, etc.) as a means of gauging the strength of a particular industry or the economy.

Consumer Price Index (CPI) – This index, compiled by the U.S. Bureau of Labor Statistics, examines the weighted average of the prices of a basket of consumer goods and services, such as transportation, food and medical care. It is calculated by averaging price changes for each item in the basket. Changes in the CPI are used to assess price changes associated with the cost of living. The CPI is one of the most frequently used statistics for identifying periods of inflation or deflation.

Cotation Assistee en Continu (CAC) 40 – This stock market index tracks the 40 largest French stocks on the Euronext Paris based on market capitalization, trading activity, size of balance sheet and liquidity.

Credit Risk Transfer (CRT) – Pioneered by Freddie Mac in 2013, CRT programs structure mortgage credit risk into securities and (re)insurance offerings, transferring credit risk exposure from U.S. taxpayers to private capital.

Deutscher Aktien Index (DAX) – This blue-chip stock market index comprises the 40 major German companies trading on the Frankfurt Stock Exchange.

Dow Jones Industrial Average (DJIA) – This index tracks 30 large publicly owned companies trading on the New York Stock Exchange and the Nasdaq. It is price-weighted, unlike stock indices, which use market capitalization. Furthermore, the DJIA does not use a weighted arithmetic mean.

Duration – A commonly used measure of the potential volatility of the price of debt securities in response to a change in interest rates prior to maturity. Securities with longer duration generally have more volatile prices than securities of comparable quality with shorter duration.

Euro Stoxx 50 Index – This index of 50 eurozone stocks provides a blue-chip representation of supersector leaders in the eurozone.

Fannie Mae (FNMA) – The Federal National Mortgage Association (Fannie Mae) is a government-sponsored enterprise (GSE) chartered by Congress in 1938 during the Depression to stimulate home ownership and provide liquidity to the mortgage market. Its purpose is to help moderate- to low-income borrowers obtain financing for a home.

Federal Funds Rate – Target interest rate, set by the Federal Reserve at its Federal Open Market Committee (FOMC) meetings, at which commercial banks borrow and lend their excess reserves to each other overnight. The Fed sets a target federal funds rate eight times a year, based on prevailing economic conditions.

Federal Open Market Committee (FOMC) – Branch of the Federal Reserve System that determines the direction of monetary policy specifically by directing open market operations. The FOMC comprises the seven board governors and five (out of 12) Federal Reserve Bank presidents.

Freddie Mac (FHLMC) – The Federal Home Loan Mortgage Corp. (Freddie Mac) is a stockholder-owned, government-sponsored enterprise (GSE) chartered by Congress in 1970 to keep money flowing to mortgage lenders in support of homeownership and rental housing for middle-income Americans. Freddie Mac purchases, guarantees and securitizes mortgages to form mortgage-backed securities (MBS).

Freddie Mac U.S. Mortgage Market Survey 30-Year Homeowner Commitment National Index – This index tracks the 30-year fixed-rate mortgages component of the Freddie Mac Primary Mortgage Market Survey (PMMS), which tracks the most-popular 30- and 15-year fixed-rate mortgages, and 5-1 hybrid amortizing adjustable-rate mortgage products among a mix of lender types.

FTSE Milano Indice di Borsa (FTSE MIB) – This benchmark index for the Borsa Italian, the Italian stock exchange, comprises the 40 largest and most-liquid stocks on the exchange.

FTSE 100 Index – This index tracks the 100 companies with the highest market capitalization on the London Stock Exchange.

FTSE World Government Bond Index (FTSE WGBI) – This broad index measures the performance of fixed-rate, local-currency, investment grade sovereign bonds. It is a widely used benchmark that comprises sovereign debt from more than 20 countries that is denominated in a variety of currencies.

G-10 (Group of Ten) – The G-10 comprises 11 industrialized nations that meet on an annual basis, or more frequently as needed, to consult each other, debate and cooperate on international financial matters. The member countries are: Belgium, Canada, France, Germany, Italy, Japan, the Netherlands, Sweden, Switzerland, the United Kingdom and the United States.

Ginnie Mae (GNMA) – The Government National Mortgage Association (Ginnie Mae) is a federal government corporation that guarantees the timely payment of principal and interest on mortgage-backed securities (MBS) issued by approved lenders. Ginnie Mae's guarantee allows mortgage lenders to obtain a better price for MBS in the capital markets.

Hang Seng Index – This free-float-capitalization-weighted index tracks a selection of companies on the Stock Exchange of Hong Kong. The index has four subindices: finance, utilities, properties, finance, and commerce and industry.

High Yield (HY) – Bonds that pay higher interest rates because they have lower credit ratings than investment grade (IG) bonds. HY bonds are more likely to default, so they must pay a higher yield than IG bonds to compensate investors.

Ibovespa Index – This gross return index is weighted by trade volume and comprises the most-liquid stocks on Brazil's Sao Paulo Stock, Commodities and Futures Exchange (known as "B3").

ICE BofA U.S. Fixed-Rate Miscellaneous Asset-Backed Securities (ABS) Index – A subset of the ICE BofA U.S. Fixed-Rate ABS Index, including all ABS collateralized by anything other than auto loans, home equity loans, manufactured housing, credit card receivables and utility assets. The ICE BofA U.S. Fixed-Rate ABS Index tracks the performance of U.S. dollar-denominated, investment grade (IG), asset-backed securities publicly issued in the U.S. domestic market. Qualifying securities must have an IG rating based on an average of Moody's, S&P and Fitch.

Indice Bursatil Espanol (IBEX) – This official index of the Spanish Continuous Market comprises the 35 most-liquid stocks traded on the market.

Investment Grade (IG) – Rating that signifies a municipal or corporate bond presents a relatively low risk of default. Bonds below this designation are considered to have a high risk of default and are commonly referred to as high yield (HY) or "junk bonds." The higher the bond rating the more likely the bond will return 100 cents on the U.S. dollar.

ISM Manufacturing PMI – This index (which used to be called the ISM Manufacturing Purchasing Managers Index) is compiled by the Institute for Supply Management and tracks the economic health of the manufacturing sector. The index is based on five major indicators: new orders, inventory levels, production, supplier deliveries and employment environment. A reading above 50 indicates an expansion of the sector, a reading below 50 represents a contraction, and 50 indicates no change.

ISM Services PMI – This index (which used to be called the ISM Non-Manufacturing Purchasing Managers Index) is compiled by the Institute for Supply Management and tracks the economic health of the services (formerly nonmanufacturing) sector. A reading above 50 indicates an expansion of the sector, a reading below 50 represents a contraction, and 50 indicates no change.

Job Openings and Labor Turnover Survey (JOLTS) – Conducted by the U.S. Bureau of Labor Statistics, JOLTS involves the monthly collection, processing and dissemination of job openings and labor turnover data. The data, collected from sampled establishments on a voluntary basis, includes employment, job openings, hires, quits, layoffs, discharges and other separations. The number of unfilled jobs – used to calculate the job openings rate – is an important measure of the unmet demand for labor, providing a more complete picture of the U.S. labor market than by looking solely at the unemployment rate.

J.P. Morgan Collateralized Loan Obligation (CLO) Total Return Index – This index is a total return subindex of the J.P. Morgan Collateralized Loan Obligation Index (CLOIE), which is a market value-weighted index consisting of U.S. dollar-denominated CLOs.

J.P. Morgan Corporate Emerging Markets Bond Index Broad Diversified (CEMBI BD) – This index is a uniquely weighted version of the CEMBI, which is a market capitalization-weighted index consisting of U.S. dollar-denominated emerging markets corporate bonds. It limits the weights of index countries with larger debt stocks by only including specified portions of those countries' eligible current face amounts of debt outstanding.

J.P. Morgan Emerging Markets Bond Index Global Diversified (EMBI GD) – This index is a uniquely weighted version of the EMBI, which tracks emerging markets (EM) bonds and comprises sovereign debt and EM corporate bonds. It limits the weights of index countries with larger debt stocks by only including specified portions of those countries' eligible current face amounts of debt outstanding.

J.P. Morgan Government Bond Index Emerging Markets (GBI-EM) – This index is the first comprehensive global emerging markets index and consists of regularly traded, liquid, fixed-rate, domestic currency government bonds to which international investors can gain exposure.

Jumbo Loan – Type of financing, also known as a jumbo mortgage, that exceeds the limits set by the Federal Housing Finance Agency (FHFA). Unlike conventional mortgages, a jumbo loan is not eligible to be purchased, guaranteed or securitized by the government agencies Fannie Mae or Freddie Mac. Designed to finance luxury properties and homes in highly competitive local real estate markets, jumbo mortgages come with unique underwriting requirements and tax implications.

Korea Composite Stock Price Index (KOSPI) – This index comprises all common stocks traded on the stock market division of the Korea Exchange. It is the representative stock market index in South Korea, like the S&P 500 Index in the U.S.

Last Cash Flow (LCF) – Last revenue stream paid to a bond over a given period.

Leveraged Commentary & Data (LCD) – A unit of S&P Global Market Intelligence, LCD provides in-depth coverage of the leveraged loan market through real-time news, analysis, commentary and proprietary loan data.

Morningstar LSTA US Leveraged Loan Index – This market capitalization-weighted index tracks the U.S. leveraged loan market.

Morningstar LSTA US Leveraged Loan PR USD Index – This index (formerly the S&P/LSTA Leveraged Loan Price Index) tracks the prices of institutional weighted loans based on market weightings, spreads and interest payments.

Morningstar LSTA US Leveraged Loan TR USD Index – This index (formerly the S&P/LSTA Leveraged Loan Index) tracks the market-weighted performance of institutional weighted loans based on market weightings, spreads and interest payments.

Mortgage Bankers Association (MBA) Purchase Index – This index, a component of the MBA's Weekly Application Survey, includes all mortgage applications for purchases of single-family homes. The index covers the entire market, including all products, and conventional and government loans.

Mortgage Bankers Association (MBA) Refinance Index – This index, a component of the MBA's Weekly Application Survey, tracks the number of mortgage refinance applications. The index is used to help predict mortgage activity and loan prepayments based on the number of mortgage refinance applications submitted.

MSCI All Country World Index (MSCI ACWI) – This market capitalization-weighted index is designed to provide a broad measure of stock performance throughout the world. It comprises stocks from 23 developed countries and 24 emerging markets.

MSCI All Country World Index (MSCI ACWI) ex U.S. – This market capitalization-weighted index is designed to provide a broad measure of stock performance throughout the world. It comprises stocks from 22 of 23 developed countries and 24 emerging markets.

MSCI Emerging Markets Index (MSCI EMI) – This index captures large- and midcapitalization representation across 24 emerging markets countries. With 1,440 constituents, the index covers approximately 85% of the free-float-adjusted market cap in each country.

MSCI India Index – This index measures the performance of the mid- and large-capitalization segments of the Indian market. With 131 constituents, the index covers approximately 85% of the Indian equity universe.

Nasdaq Composite Index – This index ("the Nasdaq") comprises the more than 3,400 common stocks and similar securities (e.g., American depository receipts (ADRs), tracking stocks, limited-partnership interests) listed on the Nasdaq exchange. The index, which includes U.S. and non-U.S. companies, is highly followed in the U.S. as an indicator of the stock performance of technology companies and growth companies.

National Association of Realtors Existing-Home Sales Report – This report tracks sales and prices of existing single-family homes for the nation overall, and gives breakdowns for the West, Midwest, South and Northeast regions of the country. These figures include condos and co-ops in addition to single-family homes.

Neutral Rate – Also known as the federal funds terminal rate, it is the rate that is consistent with full employment, capacity utilization and stable prices.

Nikkei 225 Index – This price-weighted index ("the Nikkei") comprises Japan's top 225 blue-chip companies on the Tokyo Stock Exchange. The Nikkei is equivalent to the Dow Jones Industrial Average Index in the U.S.

Non-Performing Loan (NPL) – Loan in which the borrower is in default due to the fact that they have not made the scheduled payments for a specified period. Although the exact elements of non-performing status can vary depending on the specific loan's terms, "no payment" is usually defined as zero payments of either principal or interest.

Non-Qualified Mortgage (Non-QM) – Any home loan that doesn't comply with the Consumer Financial Protection Bureau's existing rules on qualified mortgages (QM). Usually this type of alternative mortgage loan accommodates people who are not able to prove they are capable of making the mortgage payments. Just because it is a non-QM mortgage loan does not necessarily mean high risk or subprime mortgage risk, and in many cases these non-QM mortgage loans require a high FICO score but simply do not check all the boxes associated with a QM loan. Non-QM loans for mortgages are protected by the lender against any type of lawsuit should the borrower become unable to afford the loan.

Option-Adjusted Spread (OAS) – Measurement of the spread of a fixed-income security rate and the risk-free rate of return, which is then adjusted to take into account an embedded option. Typically, an analyst uses U.S. Treasury yields for the risk-free rate. The spread is added to the fixed-income security price to make the risk-free bond price the same as the bond.

Par – Short for "par value," par can refer to bonds, preferred stock, common stock or currencies, with different meanings depending on the context. Par most commonly refers to bonds, in which case, it means the face value, or value at which the bond will be redeemed at maturity.

Prime – Classification of borrowers, rates or holdings in the lending market that are considered to be of high quality. This classification often refers to loans made to high-quality "prime" borrowers that are offered "prime" or relatively low interest rates.

Private Label – Refers to debt-issued securities that are not issued by the government-sponsored enterprises (GSEs). "Agency" refers to debt-issued securities that are issued by the GSEs.

Quits Rate – Number of quits during the entire month as a percentage of employment. This metric is tracked in the U.S. Bureau of Labor Statistics' monthly Job Opening and Labor Turnover Survey (JOLTS). A trending increase is a sign of an expanding job market while a trending decrease is a sign of a tightening job market.

RCA Commercial Property Price Index (CPPI) – This index describes various nonresidential property types for the U.S. (10 monthly series from 2000). It is a periodic same-property, round-trip investment, price-change index of the U.S. commercial investment property market. The dataset contains 20 monthly indicators.

RCA U.S. All-Property Commercial Property Price Index (CPPI) – This index is a component of the suite of price indices that comprise the RCA CPPI.

Real Estate Owned (REO) – Property owned by a lender, such as a bank, that has not been successfully sold at a foreclosure auction. A lender – often a bank or quasi-governmental entity such as Fannie Mae or Freddie Mac – takes ownership of a foreclosed property when it fails to sell at the amount sought to cover the loan.

Russell 1000 Growth (RLG) Index – This index measures the performance of the large-capitalization growth segment of the U.S. equity universe. It includes Russell 1000 Index companies with higher price-to-book ratios and higher forecasted growth values. Growth stocks are shares in a company that are anticipated to grow at a rate significantly above the average growth for the market.

Russell 1000 Value (RLV) Index – This index measures the performance of the large-capitalization value segment of the U.S. equity universe. It includes Russell 1000 Index companies with lower price-to-book ratios and lower expected growth values. Value stocks are shares of a company that appear to trade at a lower price relative to the company's fundamentals.

Russell 2000 Index – This market capitalization-weighted index comprises 2,000 small-cap U.S. companies and is considered a bellwether index for small-cap investing.

S&P CoreLogic Case-Shiller 20-City Composite Home Price Not Seasonally Adjusted (NSA) Index – This index measures the value of residential real estate in 20 major U.S. metropolitan areas: Atlanta; Boston; Charlotte; Chicago; Cleveland; Dallas; Denver; Detroit; Las Vegas; Los Angeles; Miami; Minneapolis; New York City; Phoenix; Portland, Oregon; San Diego; San Francisco; Seattle; Tampa; and Washington, D.C.

S&P 500 Equal Weight Index (EWI) – This index is the equal-weight version of the widely used S&P 500 Index. The S&P 500 EWI includes the same constituents as the capitalization-weighted parent index, but each company in the S&P 500 EWI is allocated a fixed weight, or 0.2% of the index, at each quarterly rebalance.

S&P 500 Index – This unmanaged capitalization-weighted index of the stocks of the 500 largest publicly traded U.S. companies is designed to measure performance of the broad domestic economy through changes in the aggregate market value of the 500 stocks, which represent all major industries.

S&P GSCI – This index (formerly the Goldman Sachs Commodity Index) measures investment in the commodity markets and commodity market performance over time.

Secured Overnight Financing Rate (SOFR) – Benchmark interest rate for U.S. dollar-denominated derivatives and loans that replaced the London Interbank Offered Rate (LIBOR). Interest rate swaps on more than $80 trillion in notional debt switched to the SOFR in October 2020. This transition is expected to increase long-term liquidity but also result in substantial short-term trading volatility in derivatives.

Shanghai Stock Exchange Composite Index – This capitalization-weighted index, developed in December 1990 with a base value of 100, tracks the daily performance of all A shares and B shares listed on the Shanghai Stock Exchange.

Spread – Difference between yields on differing debt instruments, calculated by deducting the yield of one instrument from another. The higher the yield spread, the greater the difference between the yields offered by each instrument. The spread can be measured between debt instruments of differing maturities, credit ratings or risk.

Spread to Maturity (STM) – Measure of return from a floating-rate note relative to that from its index or reference rate, such as the Secured Overnight Financing Rate (SOFR), calculated by discounting future cash flows on a bond basis.

Stoxx Europe 600 Index – This index has a fixed number of 600 components representing large, mid- and small-capitalization companies among 17 European countries, covering approximately 90% of the free-float market cap of the European stock market (not limited to the eurozone).

TAIEX Index – This index tracks companies traded on the Taiwan Stock Exchange. The index covers all listed stocks excluding preferred, full-delivery and newly listed stocks, which are listed for less than one calendar month.

Trade Reporting and Compliance Engine (TRACE) – Financial Industry Regulatory Authority (FINRA)-developed vehicle that facilitates the mandatory reporting of over-the-counter secondary market transactions in eligible fixed-income securities.

U-3 Unemployment Rate – Officially recognized rate of unemployment, compiled and released monthly by the U.S. Bureau of Labor Statistics, measuring the number of unemployed people as a percentage of the labor force.

U.S. Dollar Index (DXY) – A weighted geometric mean of the U.S. dollar's value relative to a basket of six major foreign currencies: the euro, Japanese yen, British pound, Canadian dollar, Swedish krona and Swiss franc.

Weighted Average Rating Factor (WARF) – Used by credit rating companies to indicate the credit quality of a portfolio. This measure aggregates the credit ratings of a portfolio's assets into a single rating.

Weighted Average Spread (WAS) – Par-weighted average spread (generally above SOFR) of the performing floating-rate securities in a portfolio (typically loans).

West Texas Intermediate (WTI) Crude Oil– Specific grade of crude oil and one of the main three benchmarks, along with Brent and Dubai Crude, in oil pricing. WTI is known as a light sweet oil because it contains 0.24% sulfur, making it "sweet," and has a low density, making it "light." It is the underlying commodity of the New York Mercantile Exchange's (NYMEX) oil futures contract and is considered a high-quality oil that is easily refined.

Yield to Maturity (YTM) – The total return anticipated on a bond if the bond is held until it matures. Yield to maturity is considered a long-term bond yield but is expressed as an annual rate.

You cannot invest directly in an index.

Important Information Regarding This Material

Issue selection processes and tools illustrated throughout this presentation are samples and may be modified periodically. These are not the only tools used by the investment teams, are extremely sophisticated, may not always produce the intended results and are not intended for use by non-professionals.

Yield to maturity (YTM) does not represent return. YTM provides a summary measurement of an investment's cash flows, including principal received at maturity based on a given price. Actual yields may fluctuate due to a number of factors such as the holding period, changes in reinvestment rates as cash flows are received and redeployed, receipt of timely income and principal payments. DoubleLine views YTM as a characteristic of a portfolio of holdings often used, along with other risk measures such as duration and spread, to determine the relative attractiveness of an investment.

DoubleLine has no obligation to provide revised assessments in the event of changed circumstances. While we have gathered this information from sources believed to be reliable, DoubleLine cannot guarantee the accuracy of the information provided. Securities discussed are not recommendations and are presented as examples of issue selection or portfolio management processes. They have been picked for comparison or illustration purposes only. No security presented within is either offered for sale or purchase. DoubleLine reserves the right to change its investment perspective and outlook without notice as market conditions dictate or as additional information becomes available. This material may include statements that constitute "forward-looking statements" under the U.S. securities laws. Forward-looking statements include, among other things, projections, estimates, and information about possible or future results related to a client's account, or market or regulatory developments.

Important Information Regarding Risk Factors

Investment strategies may not achieve the desired results due to implementation lag, other timing factors, portfolio management decision-making, economic or market conditions or other unanticipated factors. The views and forecasts expressed in this material are as of the date indicated, are subject to change without notice, may not come to pass and do not represent a recommendation or offer of any particular security, strategy, or investment. All investments involve risks. Please request a copy of DoubleLine's Form ADV Part 2A to review the material risks involved in DoubleLine's strategies. Past performance is no guarantee of future results.

Important Information Regarding DoubleLine

To receive a copy of DoubleLine's current Form ADV (which contains important additional disclosure information, including risk disclosures), please contact DoubleLine's Client Services.

Los Angeles
Tampa
Dubai
Tokyo
London

(813) 791-7333
DoubleLine.com
@DLineCap
DoubleLine-Capital

DoubleLine®

For Investors in Chile

If any products are offered in Chile, they will be offered and sold only pursuant to General Rule 336 of the SVS, an exemption to the registration requirements, or in circumstances which do not constitute a public offer of securities in Chile within the meaning of Article 4 of the Chilean Law No. 18,045 on Securities Markets.

This communication is addressed only to “Qualified Investors” (as defined in SVS General Rule No. 216).

Si algunos valores son ofrecidos dentro de Chile, serán ofrecidos y colocados sólo de acuerdo a la Norma de Carácter General 336 de la SVS, una excepción a la obligación de registro, o en circunstancias que no constituyan una oferta pública de valores en Chile según lo definido por el Artículo 4 de la Ley 18.045 de Mercado de Valores de Chile.

Esta comunicación está dirigida a “Inversionistas Calificados” (según se define en la Norma de Carácter General N° 216 de la SVS).

For Investors in Colombia

DoubleLine no desarrollará ninguna campaña con el propósito de promocionar y comercializar sus productos y servicios en el país sin la respectiva autorización de la Superintendencia Financiera, de conformidad con el párrafo 1.1.7 de la Parte I, Título II, Capítulo II de la Circular Externa 035 de 2019 de la Superintendencia Financiera (Circular Básica Jurídica). DLC no utilizará ningún medio masivo para la promoción de sus productos y servicios en Colombia o a residentes colombianos.

Esta presentación no hace parte de ninguna promoción o campaña publicitaria ni se distribuirá ni se permitirá su distribución por medios masivos ni su reproducción por ningún medio.

Esta presentación no constituye una oferta pública en la República de Colombia. Los productos y servicios se ofrecen en circunstancias que no constituyen una oferta pública de valores bajo las leyes y regulaciones aplicables a la bolsa de valores colombiana.

La oferta de los productos y servicios de DLC se dirige a menos de cien inversionistas identificados especificados. Los productos y servicios de DLC no pueden ser promovidos u ofrecidos en Colombia o a residentes colombianos, a menos que la promoción y oferta se realice de acuerdo con el Decreto 2555 de 2010 y otras regulaciones aplicables relacionadas con la promoción de servicios financieros y/o el mercado de valores en Colombia. DoubleLine ofrece en el exterior los productos que se enumeran en esta presentación.

DoubleLine shall not develop any campaign to promote and commercialize its products and services in the country without the authorization of the Superintendence of Finance, in accordance with paragraph 1.1.7 of Part I, Title II, Chapter II of External Circular 035 of 2019 of the Superintendence of Finance (Circular Básica Jurídica). DLC will not use any mass media for the promotion of its products and services in Colombia or to Colombian residents.

This presentation is not part of any promotion or advertising campaign and will not be distributed or allowed to be distributed by mass media or reproduced by any means.

This presentation does not constitute a public offering in the Republic of Colombia. The products and services are being offered in circumstances that do not constitute a public offering of securities under the laws and regulations applicable to the Colombian stock exchange.

The offering of DLC’s products and services is directed to less than one hundred specified identified investors. DLC’s products and services may not be promoted or offered in Colombia or to Colombian residents, unless the promotion and offer is made in accordance with Decree 2555 of 2010 and other applicable regulations related to the promotion of financial services and/or the securities market in Colombia. DoubleLine offers abroad the products that are listed in this presentation.

For Investors in Japan (Discretionary Investment Manager (DIM) & Non-Discretionary Investment Manager (Non-DIM)

DoubleLine Investment Management Asia Ltd. (“DoubleLine Asia”) is registered with the Kanto Local Finance Bureau as an Investment Advisory and Agency (“IAA”) operator in Japan (Registration No. 2986). However, DoubleLine Asia only conducts the agency business under its IAA registration. Under its agency business, DoubleLine Asia is authorized to intermediate in the execution of investment advisory and investment management contracts between its affiliates which are registered investment managers outside of Japan (“Foreign Investment Managers”) and discretionary investment managers and trust banks conducting investment management business (together the “Japan DIMs”) registered in Japan.

DoubleLine Asia is not permitted to market or solicit any securities or other investment products, nor is it able to provide any direct investment advisory or investment management services in Japan or elsewhere.

While discussions with Japan DIMs may involve its agency business of intermediating investment advisory and investment management arrangements, all discussions with persons other than Japan DIMs are necessarily limited to general information about DoubleLine Asia and its affiliates and nothing herein should be read to suggest a solicitation of products or services inconsistent with such regulatory status.

For Investors in Latin America

This material has not been registered with, or approved or passed on in any way by, any regulatory body or authority in any jurisdiction. This material is for prospective investors only and nothing in this material is intended to endorse or recommend a particular course of action. By receiving this material, the person or entity to whom it has been issued understands, acknowledges and agrees that neither this material nor the contents therein shall be deemed an offer to sell or a solicitation of an offer to buy, or a recommendation of, any security or any other product, strategy or service by DoubleLine or any other third party.

For Investors in the Middle East

This material is communicated by Double Line Middle East Limited (“DLME”) located at Unit 21, Level 3, Gate Village Building 4, DIFC, PO Box 113355, Dubai, UAE. DLME is regulated by the Dubai Financial Services Authority (“DFSA”). This material is intended for Professional Clients only as defined in the DFSA rules and must not be communicated to or relied on by any other person.

For Investors in Peru

All content in this document is for information or general use only. The information contained in this document is for reference purposes only and may not be construed as an offer, invitation or recommendation, nor should be taken as a basis to take (or stop taking) any decision.

This is neither an offer or an invitation to offer nor authorizes such sales or invitations in places where such offers or invitations are contrary to the corresponding applicable law.

This communication is not intended for any person who is not qualified as an institutional investor, in accordance with provisions set forth in SMV Resolution Nº 021-2013-SMV-01, and as subsequently amended. No legal, financial, tax or any other kind of advice is hereby being provided.

Todo lo contenido en este documento es sólo para fines informativos o de uso general. La información contenida en este documento es referencial y no puede interpretarse como una oferta, invitación o recomendación, ni debe considerarse como fundamento para tomar (o dejar de tomar) alguna decisión.

La presente no constituye una oferta ni una invitación a ofertar ni autoriza tales ventas o invitaciones en los lugares donde tales ofertas o invitaciones sean contrarias a las respectivas leyes aplicables.

Esta comunicación no está dirigida a ninguna persona que no califique como un inversionista institucional, de conformidad con lo dispuesto en la Resolución SMV Nº 021-2013-SMV-01, así como pueda ser modificada en el futuro. Por medio de la presente comunicación no se le está proveyendo de consejo legal, financiero, tributario o de cualquier otro tipo.