Quarterly Market Commentary

March 2024

Overview

March marked a period of positive returns across financial assets while the first quarter experienced mixed results that favored risk assets as traditional bonds fell. *(Figure 1)* For the month, the S&P 500 Index returned 3.22%, bringing its quarterly return to 10.55%. Risk-on sentiment in the equity market was driven in part by strong corporate earnings as well as thematic trades, such as artificial intelligence, which garnered fervent investor enthusiasm. The Bloomberg US Aggregate Bond Index rose 0.92% in March but was down 0.78% in the quarter as U.S. Treasury yields rose quarter-over-quarter (QoQ). Commodities rose across the month and quarter, with the Bloomberg Commodity Index up 3.31% and 2.19%, respectively, driven largely by higher oil prices.

Expectations eased across the quarter for the number of cuts to the federal funds rate in 2024. The repricing of market expectations for an eventual loosening of monetary policy was driven by the Federal Reserve's rhetoric during the period combined with resilient economic data and higher-than-expected inflation. The Consumer Price Index (CPI) marked a 0.4% month-over-month (MoM) increase in its February report, released in March, beating expectations for a 0.3% MoM increase, bringing the year-over-year (YoY) measure to 3.2%. The Core Personal Consumption Expenditures (PCE) Price Index, the Fed's preferred inflation gauge, marked a 0.3% MoM rise in its February report, also released in March, in line with expectations, and a 2.8% YoY increase, above the central bank's long-term target of 2.0%. *(Figure 2 on following page)* Treasury yields ended the quarter broadly higher as the two-year yield and 10-year yield rose 37 basis points (bps) and 32 bps QoQ, respectively.

On March 20, the Federal Open Market Committee (FOMC) announced it was maintaining the target federal funds rate at a range of 5.25% to 5.50%. The March Summary of Economic Projections (SEP), which is updated quarterly by the FOMC, reflected a more-resilient U.S. economy than participants forecast in December. Median estimates of U.S. gross domestic product were upgraded to 2.1% from 1.4% for 2024, and the unemployment rate was adjusted to 4.0% from 4.1%. FOMC officials' expectations for easing monetary policy in 2024 remained unchanged, as they still anticipate three cuts of 25 bps each by year-end. Market expectations for cuts to the federal funds rate shifted across the quarter, as tracked by the Bloomberg World Interest Rate Probability function. A forecast of six cuts of 25 bps each in 2024 converged over the quarter to the FOMC's projection for three cuts that will take the federal funds rate to a range of 4.50% to 4.75% by year-end. There is no consensus yet, however, for when a cutting cycle could begin, with market participants pricing in a roughly 50% chance of a cut at the June meeting.

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

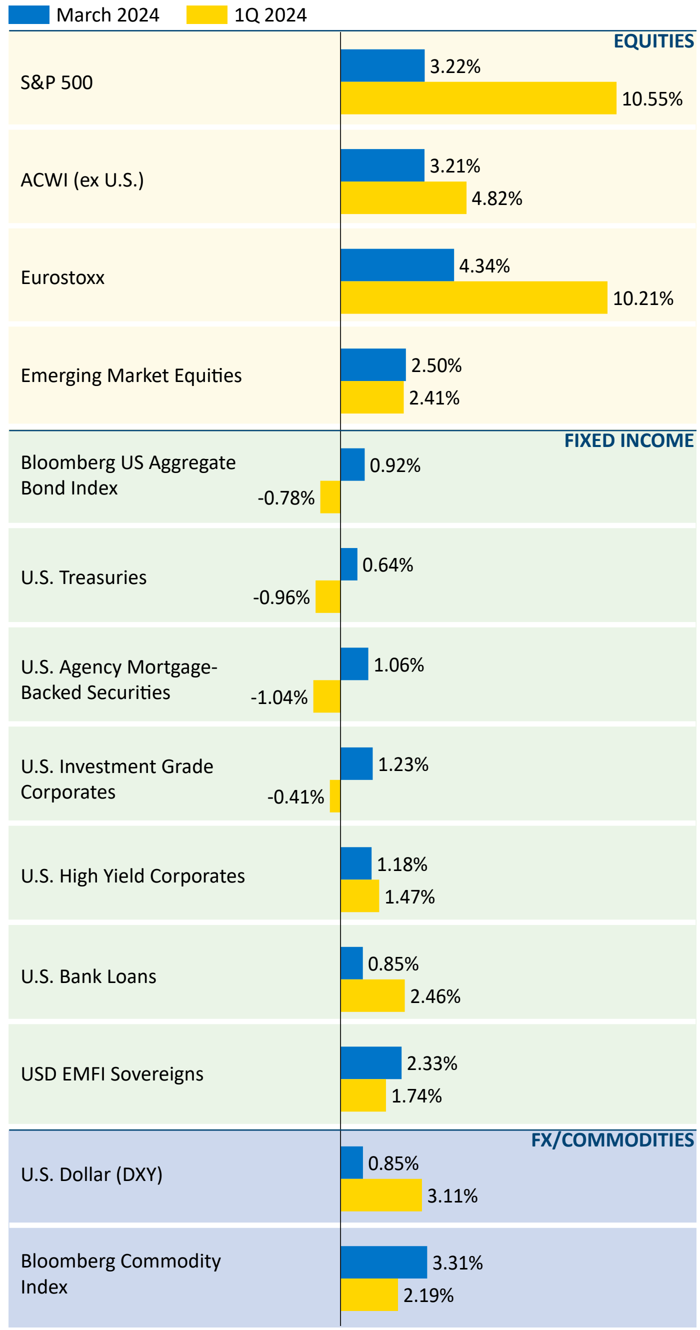


Figure 1
Source: DoubleLine, Bloomberg

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.

Core Inflation | As of February 29, 2024

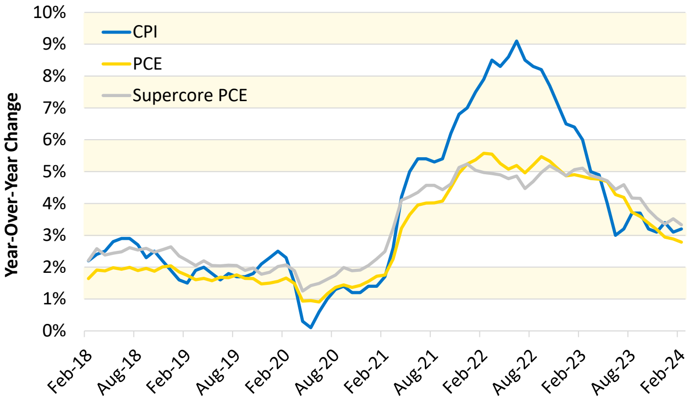


Figure 2
Source: DoubleLine, Bloomberg

In March employment news, the nonfarm payrolls report added 303,000 jobs MoM, beating a consensus estimate of 214,000, and the U-3 unemployment rate decreased slightly to 3.8%. The Job Openings and Labor Turnover Survey data for February, released in March, was in line with expectations, reporting 8.76 million job openings. Also among the February prints, the Conference Board Leading Economic Index (LEI) rose for the first time since March 2022, reaching 0.1% MoM and beating a consensus estimate of negative 0.1%. YoY LEI improved to negative 6.3% from negative 7.0%. The ISM Manufacturing PMI in March inched into expansionary territory (a PMI number above 50) for the first time since October 2022, increasing MoM to 50.3 from 47.8. The ISM Services PMI remained in expansionary territory but declined slightly more than expected MoM to 51.4 from 52.6.

In the eurozone, headline inflation fell to 2.6% YoY in February, the most recent month for which data was available, down from 2.8% YoY in January, according to Eurostat. Eurozone core inflation, which excludes volatile components such as food and energy, fell YoY to 3.1% from 3.3%. At the beginning of 2024, market participant expectations were for the European Central Bank to make its first rate cut at the March or April meeting, but by quarter-end, expectations were for the first rate cut to happen sometime this summer. S&P Global Eurozone Manufacturing PMI remained in contractionary territory throughout the quarter, ending the period at 46.1. S&P Global Eurozone Services PMI, however, made its way back into expansionary territory in February and increased again in March to 51.5.

China announced an ambitious economic growth target of 5% in early March, citing further stimulus measures in its monetary, fiscal and regulatory policy. The Bank of Japan (BOJ) delivered on a well-telegraphed message and removed its negative interest-rate policy and ended its yield curve control at the BoJ's March meeting.

After holding rates steady and in line with expectations throughout the first quarter, the Fed will now eye the second half of the year for an opening to relax monetary policy. The start of a cutting cycle still seems tied to the degree of confidence the Fed has in inflation continuing to ease. However, with financial conditions already accommodative and the continued strength of the labor market, market participants and the Fed seem likely to be guided by trends in monthly economic data.

U.S. Government Securities

U.S. Treasuries experienced choppy trading sessions in March, with yield levels finishing slightly below where they started the month. The Bloomberg US Treasury Index recorded a positive return of 0.64% for the month, but the first quarter return was negative 0.96%, primarily due to significant yield increases in February.

U.S. Treasury Yield Curve (%)

	2/29/2024	3/29/2024	Change
3 Months	5.38	5.36	-0.02
6 Months	5.32	5.32	0.00
1 Year	5.00	5.02	0.02
2 Years	4.62	4.62	0.00
3 Years	4.41	4.41	0.00
5 Years	4.24	4.21	-0.03
10 Years	4.25	4.20	-0.05
30 Years	4.38	4.34	-0.04

Source: Bloomberg

The yield on the benchmark 10-year Treasury gradually declined in the first half of March as the market further digested February's surprisingly strong economic data and gained more perspective on the factors contributing to January's volatility. February's Consumer Price Index print, released in March, came in hotter than expected, after which Treasuries began to shed their gains. The downward movement accelerated after the release of the Producer Price Index's February print, which also broadly surprised to the upside. Amid concerns about persistent inflation, Federal Reserve Chair Jerome H. Powell struck a balanced tone at the March Federal Open Market Committee meeting, downplaying the long-term impact of the January and February data. Chair Powell also highlighted positive supply-side improvements, suggesting the Fed is confident in the overall disinflation trajectory. The Fed's dovish posture helped stabilize the Treasuries market.

The overall theme for the first quarter was about repricing expectations regarding the Fed's interest-rate normalization path, as the narrative around resilient growth and sticky inflation was reaffirmed by strong economic data. The market's expectations swung from anticipating more interest rate cuts than the Fed had projected to then more closely aligning with the Fed's projections. Looking forward, the Treasuries market is expected to remain extremely sensitive to inflation and employment data releases.

Agency Residential and Agency Commercial Mortgage-Backed Securities

Agency residential mortgage-backed securities (RMBS) bounced back from a rough February and returned 1.06% and delivered an excess return of 0.34% in March, as measured by the Bloomberg US MBS Index. For March, the MBS index underperformed the Bloomberg US Credit Index's return of 1.23% and Bloomberg US Agency Commercial MBS (CMBS) Index's 0.82% but outperformed the Bloomberg US Treasury Index's 0.64%. In the first quarter, Agency RMBS returned negative 1.04%, underperforming Agency CMBS, U.S. Treasuries and investment grade credit bonds, as strong economic data and reduced expectations for Federal Reserve rate cuts lifted yields.

Agency RMBS option-adjusted spreads (OAS), as measured by the Bloomberg US MBS Index, ended the month tighter by 2 basis points (bps) but wider by 3 bps quarter-over-quarter (QoQ) at 49 bps. Agency CMBS OAS, as measured by the Bloomberg US Agency CMBS Index, tightened 4 bps on the month and 8 bps QoQ to 42 bps. Spread for current-coupon Agency RMBS tightened 17 bps month-over-month (MoM) to 139 bps and was basically flat in the quarter.

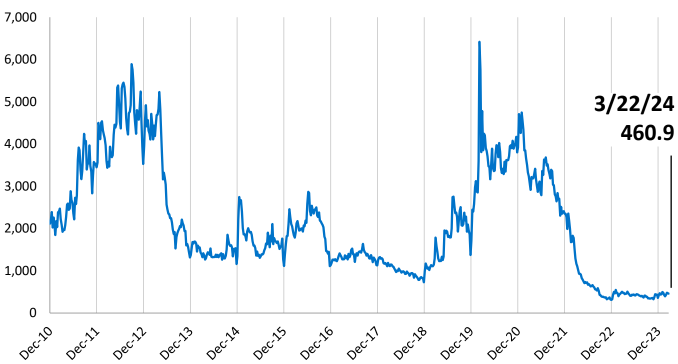
Conventional 30-year prepayment speeds came in slower than expected in March. The aggregate forecast miss was primarily driven by higher coupons, which were impacted by a rise in mortgage rates.

Despite decreasing modestly MoM in March, mortgage rates drifted upward across the quarter, approaching levels hit in early December. The 30-year mortgage, as measured by the Freddie Mac U.S. Mortgage Market Survey 30-Year Homeowner Commitment National Index, decreased 18 bps MoM but increased 18 bps QoQ to 6.79%.

March's gross issuance of Agency RMBS increased to $77.8 billion, as seasonal turnover picked up. Gross issuance decreased QoQ to $213.1 billion from $234.5 billion. Net issuance in March was $10.9 billion, bringing year-to-date net issuance to $25.5 billion. Gross issuance of Agency CMBS was $27.0 billion in the quarter, down 2.25% compared to the same period last year. March paydowns on the Federal Reserve's MBS portfolio increased MoM to $16.2 billion from $14.8 billion.

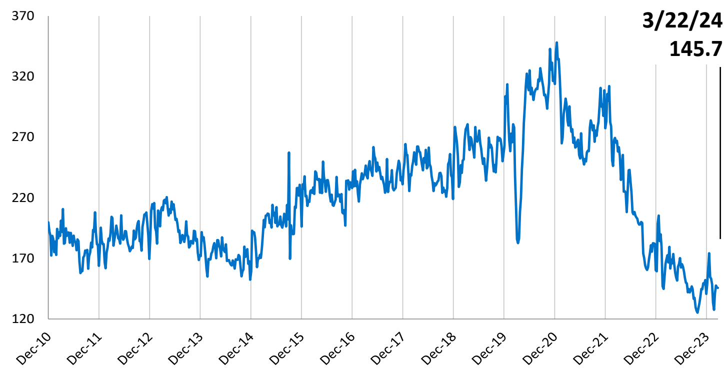
For more on mortgage market activity, please see the following page.

MBA U.S. Refinancing Index | As of March 22, 2024



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

MBA Purchase Index | As of March 22, 2024



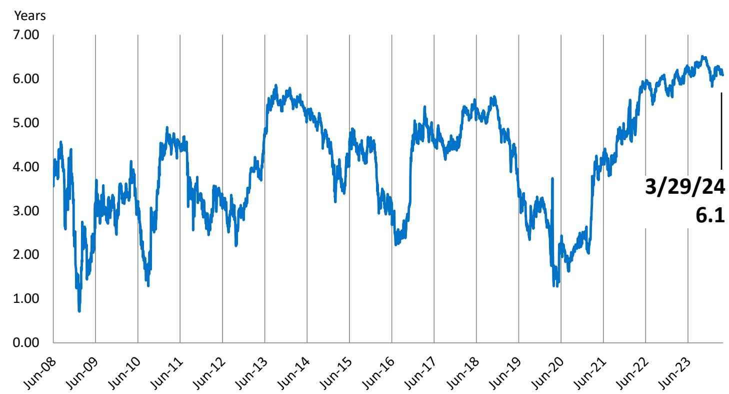
Source: Bloomberg. Base = 100 on 1/14/2011. Seasonally Adjusted

Freddie Mac Commitment Rate - 30 Year | As of March 28, 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 March 29, 2024



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

Conditional Prepayment Rates (CPR)

2023-2024	April	May	June	July	August	September	October	November	December	January	February	March
Fannie Mae (FNMA)	5.20	6.20	6.40	5.70	6.20	5.20	4.90	4.40	4.40	4.30	4.70	5.40
Ginnie Mae (GNMA)	6.40	7.60	7.80	7.10	7.50	6.10	5.30	5.40	5.10	6.00	6.80	6.90
Freddie Mac (FHLMC)	4.90	6.00	6.20	5.50	6.00	4.90	4.70	4.20	4.10	4.10	4.50	5.20

Bloomberg U.S. MBS Index	1/31/2024	2/29/2024	3/29/2024	Change
Average Dollar Price ($)	89.21	87.52	88.19	0.67
Duration (Years)	6.10	6.19	6.08	-0.11

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

Bloomberg U.S. Index Returns (%)	1/31/2024	2/29/2024	3/29/2024
Aggregate	-0.27	-1.41	0.92
MBS	-0.46	-1.63	1.06
Corporate	-0.17	-1.50	1.29
Treasury	-0.28	-1.31	0.64

Non-Agency Residential Mortgage-Backed Securities

Performance of non-Agency residential mortgage-backed securities (RMBS) was positive across sectors in March, largely driven by a rally in U.S. Treasury rates and modest credit spread tightening. Non-Agency RMBS performance was generally positive across the first quarter as a positive outlook on housing fundamentals contributed to strong investor demand for the asset class.

March credit fundamentals were mixed versus February remittance as prepayments were mixed, delinquencies increased, and mortgage rates decreased. The 30-year mortgage, as measured by the Freddie Mac U.S. Mortgage Market Survey 30-Year Homeowner Commitment National Index, decreased 18 bps month-over-month (MoM) but increased 18 bps quarter-over-quarter (QoQ) to 6.79%.

March marked $12.3 billion in new issuance, up approximately $3.4 billion MoM, according to BofA Global Research, with activity concentrated in non-qualified mortgages (non-QMs). New issuance also increased in the quarter, up approximately $12.5 billion QoQ to $29.6 billion, and activity was also largely concentrated in non-QMs.

An increase in housing supply in recent months has slowed the pace of home price appreciation. Home prices fell 0.11% MoM in January, the most recent month for which data was available for the S&P CoreLogic Case-Shiller 20-City Composite Home Price NSA Index, but were up 6.59% year-over-year (YoY). Existing-home sales increased 9.5% MoM in February, the most recent month for which data was available as measured by the National Association of Realtors Existing-Home Sales Report. YoY sales continued to decline nationwide.

Non-Agency Commercial Mortgage-Backed Securities

Issuance in the primary non-Agency commercial mortgage-backed securities (CMBS) market picked up in March, with $8.99 billion of deals pricing across 11 transactions, responsible for a large part of the $19.34 billion and 25 posted in the first quarter. *(Figure 3)* With a strong rally in January and a grind tighter since then, spreads have significantly tightened on the year. In March, conduit benchmark last-cash-flow (LCF) bonds rated AAA tightened 7 basis points (bps) to 96 bps compared to duration-matched U.S. Treasuries; bonds rated BBB- tightened 40 bps to 7.40% compared to duration-matched Treasuries. In the quarter, conduit AAA LCF bonds tightened 40 bps while BBB- tightened 114 bps.

Property Type	MoM Price Change	YoY Price Change
Apartment	-0.96%	-8.92%
Retail	0.05%	-2.46%
Industrial	0.16%	1.91%
Office - Central Business District	-1.33%	-29.91%
Office - Suburban	-0.39%	-11.58%
National All-Property	-0.28%	-3.98%

Figure 4
Source: Real Capital Analytics as of February 29, 2024.

RCA U.S. CPPI Indexes | As of February 29, 2024

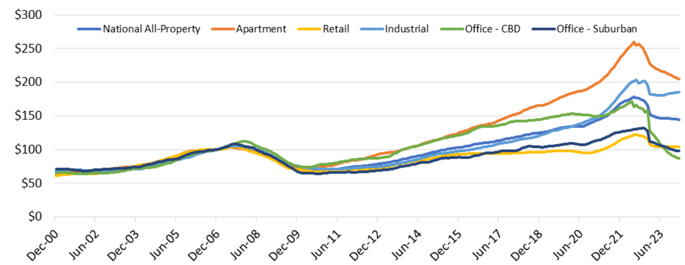


Figure 5
Source: Real Capital Analytics

Private-Label New Issuance ($ Billions)	Monthly		Quarter-to-Date		Year-to-Date		Comparable to YTD 2023	
	Deals	Volume	Deals	Volume	Deals	Volume	Volume	% of YTD 2023
Conduit	3	$2.66	7	$5.66	7	$5.66	$3.29	172%
Single Asset, Single Borrower	8	$6.33	16	$12.16	16	$12.16	$2.71	449%
Commercial Real Estate CLO	0	$ –	2	$1.52	2	$1.52	$1.12	136%
Other	0	$ –	0	$ –	0	$ –	$0.24	0%
Private-Label Total	11	$8.99	25	$19.34	25	$19.34	$7.36	263%

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

Month-over-month (MoM) price adjustments on commercial real estate (CRE) were minimal across most property types in February, the latest month for which data was available. The RCA U.S. All-Property Commercial Property Price Index was down 0.3% MoM but fell 4.0% year-over-year (YoY). CRE transaction volume in February was $13.7 billion, down 60% YoY. *(Figures 4 and 5)*

The 30-day-plus delinquency rate for CMBS dipped 4 bps to 4.67% in March. *(Figure 6)* The percentage of loans that fell into the seriously delinquent category (60 days or longer, in foreclosure, real estate owned or non-performing) rose 10 bps MoM to 4.51%. Delinquencies in the heavily watched office segment declined 5 bps to 6.58%, multifamily delinquencies jumped 3 bps to 1.84%, and retail delinquencies declined 47 bps to 5.56%.

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

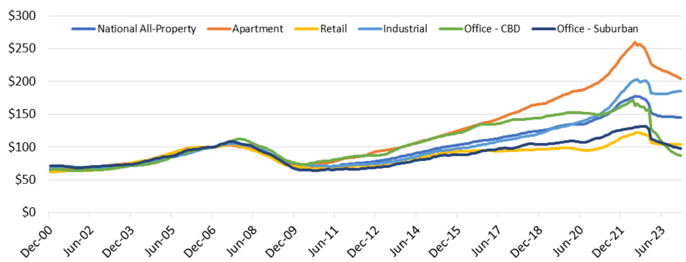


Figure 6
Source: Trepp

Asset-Backed Securities

The asset-backed securities (ABS) market delivered positive returns in March, driven primarily by robust demand. Short-duration and high-credit-quality ABS, such as those held in the Bloomberg US ABS Index, returned 0.49%; more off-the-run ABS, such as those held in the ICE BofA U.S. Fixed-Rate Miscellaneous ABS Index, returned 0.72%. The broader fixed-income market, as measured by the Bloomberg US Aggregate Bond Index, returned 0.92% as longer-term interest rates fell slightly. For the first quarter, the Bloomberg US ABS index returned 0.68% while the ICE BofA U.S. Fixed-Rate Miscellaneous ABS Index returned 1.69%. Both indices outperformed the Bloomberg US Aggregate Bond Index's return of negative 0.78%, benefiting from the lower interest-rate sensitivity of the asset class in a period when U.S. Treasury yields shifted mostly higher.

First quarter primary issuance outpaced the first three months of 2023 as roughly $89 billion of new issues was delivered. Investors have shown strong demand in absorbing the supply.

Securitizations backed by aviation collateral were the top performers on the month, as the sector rallied amid a strong fundamental environment. Short-duration, high-quality consumer-related securitizations also delivered positive performance, benefiting from their high interest income.

Investment Grade Credit

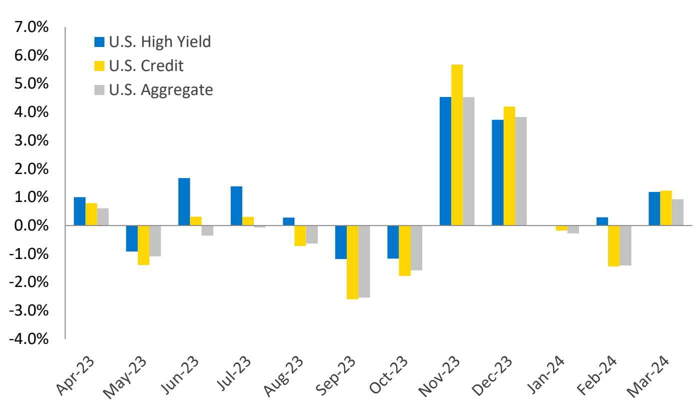
The investment grade (IG) credit market benefited in March from a drop in yields across the U.S. Treasury curve, with the Bloomberg US Credit Index up 1.23%. Conversely, a rise in yields across the curve in the first quarter left the index down at negative 0.41%. Spreads tightened on the month and in the quarter as the Federal Reserve continued to signal an end to its hiking cycle without presenting a firm window for when this could happen. IG credit spreads tightened 5 basis points (bps) to 85 bps on the month, as measured by the index, outperforming duration-matched Treasuries by 51 bps. IG credit spreads tightened 8 bps in the quarter to 85 bps, outperforming duration-matched Treasuries by 83 bps.

Bloomberg US Credit Index
As of March 29, 2024

	Total Return by Rating Category (%)			
	One Month	Quarter-to-Date	Year-to-Date	Last 12 Months
US IG Credit Index	1.23	-0.41	-0.41	4.15
AAA	0.64	-0.45	-0.45	1.71
AA	1.08	-0.78	-0.78	2.10
A	1.19	-0.55	-0.55	3.66
BBB	1.39	-0.20	-0.20	5.43

Source: Barclays Live

Performance of Select Bloomberg Indexes
April 2023 through March 2024



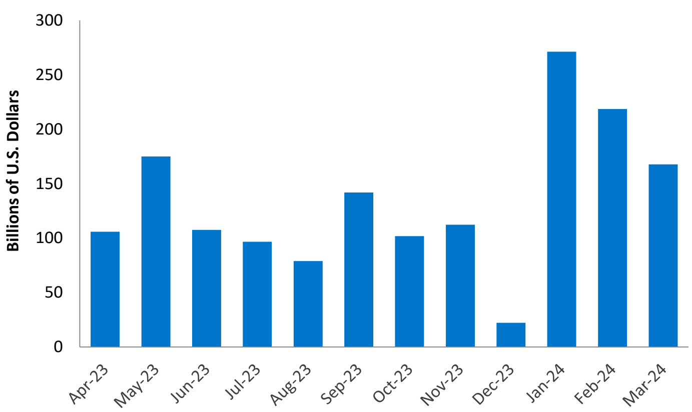
Source: Barclays Live

On the month, long-duration credit returned 1.91% versus 0.90% for intermediate-duration credit and 0.50% for short-duration credit. In the quarter, short-duration credit returned 0.72% versus 0.20% for intermediate-duration credit and negative 1.65% for long-duration credit.

Longer-duration business sectors tended to outperform shorter-duration sectors on the month, and the reverse was true in the quarter. The best performers in March were wirelines, cable satellite and tobacco. The worst performers were supranational, foreign agency and construction machinery. In the quarter, airlines, home construction and finance companies were the best performers; railroads, aerospace/defense and cable satellite were the worst performers.

U.S. dollar-denominated IG new issuance in March was $167.8 billion on a gross basis and $43.7 billion on a net basis, up 43% and 21% year-over-year, respectively, as reported by Barclays. In the quarter, gross issuance was $658 billion, and net issuance was $356 billion, up 29% and 25%, respectively, from the same period last year.

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



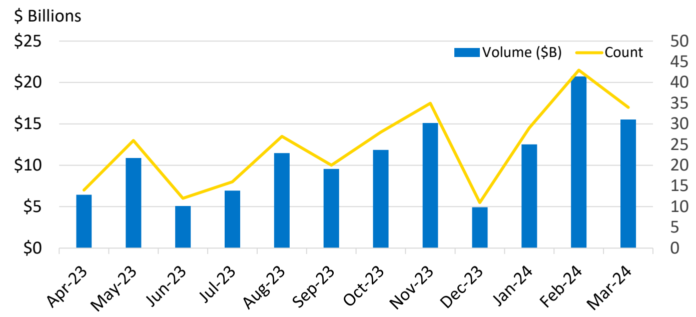
Source: Barclays Live

IG fund inflow was $39 billion on the month and $106.5 billion in the quarter, according to EPFR Global as reported by J.P. Morgan, way up over the same periods from last year, which were impacted by the regional banking turmoil.

Collateralized Loan Obligations

The U.S. collateralized loan obligations (CLOs) market continued to perform at a steady pace in March. The J.P. Morgan CLO Total Return Index was up 0.72%, pushing the first quarter return to 2.31%. Spreads were more or less flat across the capital stack on the month and tightened 8 basis points (bps) in the quarter to 152 bps.

Last 12 Months Issuance | April 2023 to March 2024



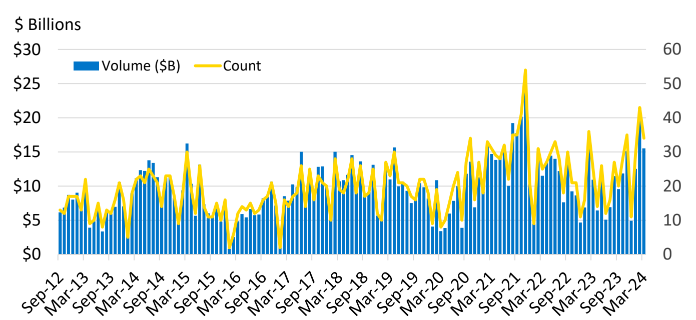
Source: LCD-CLO Global Databank

March marked another month of robust U.S. CLO primary supply, with $15.5 billion pricing across 34 deals; 21 refinancings (refi) and 23 resets also priced, totaling $8.3 billion and $10.7 billion, respectively. The aggregate total of refi and reset volume was the highest since October 2021. In the quarter, primary issuance hit $48.8 billion via 106 deals, outpacing the year-ago period by 45%. Refi volume totaled $14.0 billion via 36 transactions; reset volume totaled $24.4 billion via 52 transactions.

In the secondary market on the month, investment grade (IG) trading volume was down 14% to $13.5 billion while below-IG trading volume increased 26% to $4.9 billion, per Trade Reporting and Compliance Engine data. The monthly supply of bids wanted in competition fell 6% to $4.1 billion.

CLO credit fundamentals were mostly improved on the month with a reduction in concentrations rated CCC and higher minimum overcollateralization cushions. While negative rating actions still outweighed positive, the rolling three-month ratio of downgrades to upgrades continued to improve to a five-month low of 1.64x from 1.97x in February.

CLO New Issuance | September 2012 to March 2024



Source: LCD-CLO Global Databank

Bank Loans

Resilient economic data was a boon to risk markets generally in March, and tempered expectations for Federal Reserve rate cuts improved sentiment in the bank loan market specifically. The bank loan market returned 0.85% on the month, per the Morningstar LSTA US Leveraged Loan TR USD, capping off a 2.46% return for the first quarter. The weighted average bid price of the Morningstar LSTA US Leveraged Loan PR USD Index ended the month at $96.73, up from $96.45 in February and $96.23 at the start of the quarter. The bank loan market ended the quarter with a yield to maturity of 9.82% and spread to maturity of 4.36%.

Investors continued to reach for yield in discount paper and lower-rated names in March. Loans rated CCC returned 1.01%, loans rated B were up 0.87%, and loans rated BB increased 0.80%. This was a continuation of trends across the quarter, which marked returns of 5.17%, 2.45% and 2.00% for loans rated CCC, B and BB, respectively. The distressed ratio, defined as names trading below $80, ended March at 3.51%, up slightly from the prior month but down from 4.54% at the start of the quarter. At month-end, 79.37% of loans were above $98, with 38.73% above par.

Against the strong market backdrop, new issuance roared to life. March primary volume of $40.3 billion was up from $10.7 billion last year while first quarter volume of $141.9 billion dwarfed $52.5 billion in the same period a year ago. The majority of primary issuance was for refinancing transactions as borrowers moved aggressively to extend maturities and improve cost of capital. Merger and acquisition volume remained light.

The maturity wall remains elevated by historical standards but is steadily being addressed, and, accordingly, the outlook for near-term defaults has improved. The trailing 12-month default rate ended March at just 1.14%, down from 1.41% the previous month and 1.53% at the start of the quarter. This marked the lowest default rate since early 2023. Beyond defaults, troubled companies have been active in negotiating out-of-court exchange transactions to raise liquidity, push out maturities and capture discounts in loans trading below par. By avoiding bankruptcies, these transactions have kept the headline default rate low. Including discounted exchanges, the default rate would have been 4.22%.

On the demand side, CLO issuance was robust in the quarter, with $48.8 billion of capital raised across 106 transactions. It was up 45% compared to last year and was the highest volume for a first quarter since the Global Financial Crisis. At the same time, retail funds marked inflow in each of the first three months of the year, culminating in $2.08 billion in March, the highest level since April 2022.

High Yield

The Bloomberg US Corporate High Yield (HY) Index returned 1.18% in March, as the market rallied on supportive earnings and dovish statements from Federal Reserve officials. Yields fell 20 basis points (bps) to 7.66%, and spreads tightened 13 bps to 2.99%, according to the index. Default rates were largely unchanged while new issue remained very active with a heavy skew to refinancings. The index's monthly performance boosted the first quarter return to 1.47%.

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

	Total Return by Rating Category (%)			
	One Month	Quarter-to-Date	Year-to-Date	Last 12 Months
US High Yield Index	1.18	1.47	1.47	11.15
BB	1.25	1.13	1.13	9.11
B	1.06	1.36	1.36	11.46%
CCC	1.10	2.14	2.14	16.63

Source: Bloomberg, DoubleLine

The HY 12-month, par-weighted default rate increased 1 bp to end the month at 1.67%, as reported by J.P. Morgan, down from 2.08% at the end of 2023. That compares to a 25-year average of 3.00%. When including distressed exchanges, the default rate increased 6 bps on the month to 2.59%, compared to 2.85% at the end of 2023. The 25-year default average including distressed exchanges is 3.40%.

March had a higher volume of upgrades ($49.3 billion) than downgrades ($37.7 billion), as reported by J.P. Morgan, breaking a five-month run of downgrades exceeding upgrades. In the quarter, the upgrade-downgrade dollar ratio finished at 0.9x, compared to 0.8x at the end of 2023 and 1.3x for all of last year. In contrast by number, March downgrades (30) modestly outpaced upgrades (25). The upgrade-downgrade number ratio finished the quarter at 0.9x, compared to 0.8x in the fourth quarter and 1.0x for all of last year.

HY primary market issuance remained very active in March, making the first quarter the busiest since the third quarter of 2021. For the month, 40 bonds priced for $28.3 billion, as reported by J.P. Morgan, bringing the first quarter total to $87.6 billion, compared to $40.2 billion for the same period in 2023. Refinancing remained the predominant use of proceeds, accounting for 83% of issuance in the quarter.

March reported an outflow of $815 million, the first outflow in five months, dropping quarter inflow to $2.6 billion, according to Lipper as reported by J.P. Morgan. Outflow totaled $7.9 billion in 2023.

Commodities

Energy powered a commodity surge in March and the first quarter, with the energy-heavy S&P GSCI up 4.30% and 8.92%, respectively, outperforming the 2.89% and 0.85% for the Bloomberg Commodity Index.

Precious metals experienced a strong March, rising 7.97%, lifted by silver (+8.87%) and gold (+7.89%). Energy was also up, rising 5.30%, fueled by Brent crude (+6.94%) and WTI crude (+6.89%). Industrial metals were up 2.66%.

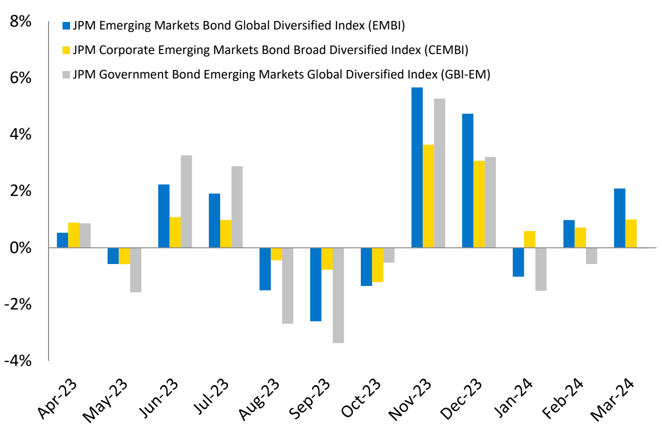
In the quarter, the best performer was energy, up 14.19%, boosted by strong gains for Brent crude (+14.88%) and WTI crude (+16.74%). Precious metals were up 5.65% on the back of gold (+5.96%) and silver (+2.47%). Industrial metals were down 1.06%.

Emerging Markets Fixed Income

Emerging markets (EM) sovereign and corporate bonds posted positive returns in March, capping off a first quarter that also marked positive performance for both asset classes. The J.P. Morgan Emerging Markets Bond Index Global Diversified (EMBI GD), which tracks sovereign bonds, returned 2.09% in March and 2.04% in the quarter. The J.P. Morgan Corporate Emerging Markets Bond Index Broad Diversified (CEMBI BD), which tracks corporate bonds, returned 1.00% and 2.32%, respectively. The credit spread for the EMBI GD tightened 27 basis points (bps) on the month and 42 bps in the quarter. The credit spread for the CEMBI BD tightened 8 bps and 36 bps, respectively.

Performance across most regions was positive for the month and quarter in the EMBI GD and CEMBI BD. Africa had the best return in both indices for the month and quarter. In the EMBI GD, the Middle East was the laggard in March and was the only region with a negative quarterly return. In the CEMBI BD, Europe was the laggard for the month while the Middle East was the laggard in the quarter.

J.P. Morgan Emerging Markets Bond Index Performance
April 28, 2023 to March 28, 2024



Source: J.P. Morgan

The high yield subindex outperformed the investment grade subindex for the month and quarter in the EMBI GD and CEMBI BD amid a risk-on macroeconomic backdrop.

After a resilient start to the year for the economy, boosted by better-than-expected fundamentals and economic data, risk appetite for the remainder of 2024 will likely be driven by expectations around central banks' monetary policy in developed markets, China's fiscal and monetary stimulus measures, and geopolitics. Other factors to watch include inflation surprises, China-Taiwan tension, the Israel-Hamas war, the Russia-Ukraine war and the U.S. presidential election.

International Sovereign

Global government bonds, as measured by the FTSE World Government Bond Index, returned 0.43% in March amid a fall in global government bond yields. The index returned negative 2.42% in the first quarter, driven by rising global government bond yields and foreign currency depreciation against the U.S. dollar.

The dollar, as measured by the U.S. Dollar Index, strengthened against nearly all G-10 peers over the month and quarter, fueled by upside surprises in U.S. economic data. These reports led investors to curb bets for when the Federal Reserve might begin easing monetary policy, pushing U.S. Treasury yields higher across the quarter. Bonds staged a partial recovery in March after Fed policymakers left their forecast for three rate cuts in 2024 unchanged despite recent higher-than-expected inflation prints. The dollar was also boosted after several global central banks delivered dovish policy signals, including G-10 member Switzerland, which cut interest rates in March.

The euro weakened against the dollar across the month and quarter amid broad dollar strength and increased speculation that the European Central Bank (ECB) might begin lowering interest rates sooner than the Fed amid lackluster economic growth and easing inflation in the eurozone. ECB officials signaled they could be prepared to cut rates as early as June if they become sufficiently confident that inflation will reach the ECB's official 2% target by mid-2025.

The Japanese yen continued to weaken across the month and quarter, even after the Bank of Japan (BOJ) moved in March to end its long-standing negative interest-rate policy and yield curve control program. BOJ Governor Kazuo Ueda vowed to maintain an easy policy stance and refrained from signaling further hikes, which weighed on the yen, triggering speculation that officials might intervene to prop up the currency.

Infrastructure

Infrastructure assets delivered strong absolute and relative performance in March and the first quarter, generally outperforming the Bloomberg US Aggregate Bond Index respective returns of 0.92% and negative 0.78%.

On the month, the best-performing infrastructure assets were aviation securitizations that rallied amid a strong fundamental environment. Infrastructure assets in the form of corporate debt outperformed securitized products, benefiting from modest spread tightening and duration-related price increases as yields fell slightly across the longer U.S. Treasuries. In the quarter, infrastructure assets in the form of securitized products generally outperformed corporate debt, benefiting from higher carry and lower interest-rate sensitivity as Treasury yields shifted mostly higher.

U.S. Equities

U.S. equities had an excellent run in the first quarter with March gains the icing on the cake. On the month, the S&P 500 Index was up 3.22%, the Nasdaq Composite Index climbed 1.85%, and the Dow Jones Industrial Average (DJIA) increased 2.21%. Across the quarter, the S&P 500, Nasdaq and DJIA were up 10.55%, 9.32% and 6.14%, respectively. The broad-based nature of the rally was illustrated by the S&P 500 Equal Weight Index return of 4.46% on the month and 7.91% in the quarter. Growth stocks surged, up 1.76% on the month and 11.41% in the quarter, as tracked by the Russell 1000 Growth Index. But value stocks still held their own, rising 5.00% and 8.99%, respectively, as tracked by the Russell 1000 Value Index.

On the month, the best-performing business sectors were energy (+10.57%), utilities (+6.62%) and materials (+6.47%) while the worst performers were consumer discretionary (-0.08%), technology (+0.80%) and real estate (+1.06%). In the quarter, the best performers were energy (+13.55%), communication services (+12.76%) and financial services (+12.46%). The worst performers were real estate (-2.06%), consumer discretionary (+3.14%) and utilities (+4.57%).

Global Equities

Global equities continued their positive momentum in March and delivered a strong first quarter performance, as measured by the MSCI All Country World Index (ACWI). Better-than-expected economic data across the quarter supported overall risk sentiment.

U.S. equities performed in line with the MSCI ACWI on the month, led by the Russell 2000 Index, which tracks small-capitalization companies. But U.S. equities outperformed in the quarter, buoyed by the tech-heavy Nasdaq Composite Index. European equities broadly outperformed in both periods. Asian equities were a mixed bag, as Japanese equities had a very strong quarterly performance while Chinese equities were mostly flat on the month. Dragged down by China exposure, emerging markets equities significantly underperformed.

Global and U.S. Equities

	March 2024	February 2024	Q1 2024
MSCI All Country World Index	3.19%	4.33%	8.32%
S&P 500 Index	3.22%	5.34%	10.55%
Nasdaq Composite Index	1.85%	6.22%	9.32%
Dow Jones Industrial Average	2.21%	2.50%	6.14%
Russell 2000 Index	3.58%	5.65%	5.17%

Eurozone

	March 2024	February 2024	Q1 2024
Euro Stoxx 50 (Eurozone)	4.38%	5.08%	12.94%
DAX (Germany)	4.61%	4.58%	10.39%
CAC 40 (France)	3.62%	3.54%	9.04%
FTSE Milano Indice di Borsa (Italy)	6.77%	5.98%	15.12%
IBEX (Spain)	11.21%	-0.74%	10.63%
FTSE 100 Index (U.K.)	4.84%	0.45%	3.98%

Asia

	March 2024	February 2024	Q1 2024
Nikkei 225 (Japan)	3.69%	7.99%	21.43%
Shanghai Stock Exchange Composite (China)	0.86%	8.13%	2.24%
Hang Seng Index (Hong Kong)	0.64%	6.63%	-2.52%
KOSPI (South Korea)	4.30%	6.04%	4.02%
TAIEX (Taiwan)	7.22%	6.02%	13.50%

Emerging Markets

	March 2024	February 2024	Q1 2024
MSCI Emerging Markets Index	2.50%	4.78%	2.41%
Ibovespa (Brazil)	-0.71%	0.99%	-4.53%
MSCI India Index	1.41%	2.62%	6.36%

Source for the above market chart data: Bloomberg

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).

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) Function – 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."

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."

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

Core Personal Consumption Expenditures (PCE) Price Index – This index, published by the U.S. Bureau of Economic Analysis, measures prices paid by consumers for goods and services, excluding the volatility of food and energy prices, to gauge underlying inflation trends. It is the Federal Reserve's preferred index for tracking inflation.

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.

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.

Excess Return – Return achieved above and beyond the return of a proxy such as a benchmark index.

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 number below 50 is considered a contractionary signal for the economy; a number above 50 is considered expansionary.

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 number below 50 is considered a contractionary signal for the economy; a number above 50 is considered expansionary.

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 Global Diversified (GBI-EM GD) – This custom-weighted index tracks local currency bonds issued by emerging markets governments, excluding China and India, and has a broader roster of countries than the base GBI-EM, which limits inclusion to countries that are readily accessible and where no impediments exist for foreign investors.

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.

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.

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.

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.

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.

Overcollateralization (OC) – Provision of collateral that is worth more than enough to cover potential losses in cases of default.

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.

Personal Consumption Expenditures (PCE) Price Index – This index, published by the U.S. Bureau of Economic Analysis, measures price changes in consumer goods and services exchanged in the U.S. economy to reveal underlying inflation trends.

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.

Producer Price Index (PPI) – This index, published by the U.S. Bureau of Labor Statistics, uses a target set of goods and services to track the entire marketed output of U.S. producers. This includes goods, services and construction products purchased by other producers as inputs to their operations or as capital investment; goods and services purchased by consumers either directly from the service producer or indirectly from a retailer; and products sold as export and to government.

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 Global Eurozone Manufacturing Purchasing Managers' Index (PMI) – This index measures the performance of the manufacturing sector derived from a survey of 3,000 manufacturing firms and includes national data for Germany, France, Italy, Spain, the Netherlands, Austria, the Republic of Ireland and Greece. The PMI is based on five individual indices: new orders (30%), output (25%), employment (20%), suppliers' delivery times (15%) and stock of items purchased (10%), with the delivery times index inverted to move in a comparable direction. A reading above 50 indicates an expansion of the sector, a reading below 50 represents a contraction, and 50 indicates no change.

S&P Global Eurozone Services Purchasing Managers' Index (PMI) – This index is based on original survey data from a representative panel of around 2,000 private service sector firms. National data is included for Germany, France, Italy, Spain and the Republic of Ireland. These countries account for an estimated 78% of eurozone private-sector services output. A reading above 50 indicates an expansion of the sector, a reading below 50 represents a contraction, and 50 indicates no change.

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

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.

Summary of Economic Projections (SEP) – Four times a year, the Federal Reserve releases a summary of Federal Open Market Committee (FOMC) participants' projections for gross domestic product (GDP) growth, the unemployment rate, inflation and the appropriate policy interest rate. The summary also provides information regarding policymakers' views on the uncertainty and risks attending the outlook. The projections provide information on the values that participants view as the most likely to prevail in the current year and the subsequent two years as well as over the longer run. The FOMC chair presents information about these projections in the press conference following the FOMC meeting for which they were prepared.

Supercore Personal Consumption Expenditures (PCE) Price Index – Inflation metric used by the Federal Reserve that tracks services inflation in the Personal Consumption Expenditures (PCE) Price Index while excluding housing and energy costs. It functions as an even narrower gauge than Core PCE inflation, which excludes seasonally volatile components such as food and energy.

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.

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.

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