

The Fixed Income Digest

Fed pivots: market calibrating 2024 rate cut

Fed pivots, QT ending in April; market calibrates

Dovish December pivot by Fed Chair Powell fuels extension of massive year-end 2023 bond and spread rally (Exhibit 1). 2024 starts off on a more cautionary note, as market digests the epic 2-month bond rally that moved 10y UST yield from 5.0% at end of October to 3.8% on 12/27/23. Additional dovish Fed policy shift on QT came in early January from Dallas Fed President Logan: BofA now expects QT taper to begin in April, reducing the \$60 bn monthly UST cap by \$15 bn per month. End of QT is a positive for market liquidity and potential bank demand for securities, which was notably weak or absent in 2023. The market is calibrating reaction to the policy developments: it now expects 5.6 rate cuts in 2024, down from peak of 6.4 cuts on 12/27, but up from 2.5 cuts in late October, prior to November-December rally. December CPI had minimal impact on rate cut expectations. BofA expects only 4 rate cuts in 2024.

10y UST: modestly bearish 1H24, bullish 2H24

Current post-CPI 10y yield is 4.03%, versus BofA fair value estimate of 4.0%-4.1%. BofA rates strategy forecasts modest upside on 10y yield to the 4.25%-4.4% area in 1H24, although forecast risk is to the downside. Meanwhile, BofA technical strategist Paul Ciana says: "In '24 the 10Y yield should see a lower high (4.25/4.50) and lower low near 3.25% w/risk to downside." Expect choppy 1H24 rate environment, with a modest upward bias to yields, and a declining 2H24 rate environment, with potential for the 10y UST yield to drop down to the low 3% area. Shorter duration exposure for the near term but a more aggressive long duration exposure heading into the back half of the year.

Credit: bullish lev loans, IG/HY bond valuations stretched

For now, the baseline BofA view of a soft-landing scenario (1.0% GDP growth in 1Q-3Q 2024) is fully intact. With no hard landing, we are not surprised to see credit spreads tighten dramatically on the Fed policy shift. More near term spread tightening is expected but stretched IG/HY bond valuations suggest reducing exposure into strength (we had recommended BBB/BB bonds last month). As a short duration, high yield alternative, we continue to recommend leveraged loans as our top pick, emphasizing low return volatility relative to both stocks and bonds.

Agency MBS, preferreds, muni credit also recommended

Even after two months of exceptional MBS return performance (5.1% and 4.1% in November and December), agency MBS still offers value versus UST and corporates. The potential return of banks as a buyer is a tailwind for the sector. Next, we continue to recommend both shorter-duration fixed-to-floating \$1000 par and longer-duration \$25 par preferreds (add the latter on possible near-term rate backup). Finally, muni yield ratios are a little stretched to the downside. We would tactically add high quality muni duration 20-30 bps higher on the 10y UST yield, but for now prefer down in credit in the muni space.

Trading ideas and investment strategies discussed herein may give rise to significant risk and are not suitable for all investors. Investors should have experience in relevant markets and the financial resources to absorb any losses arising from applying these ideas or strategies.

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Refer to important disclosures on page 26 to 27.

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Exhibit 1: Total returns since November 30 and 2023 YTD

BBB CMBS leads monthly total returns as of 1/5

Sector (Eff Dur, Eff Yld)	Total Return (%)	
	Since 11/30	YTD
BBB CMBS (3.2, 17.3%)	3.5	0.4
US MBS (5.5, 4.9%)	3.0	-1.2
EM External Debt Govt. (7.0, 6.8%)	3.0	-1.8
S&P 500 (NA, 1.5%)	3.0	24.4
US IG Corp. (6.7, 5.3%)	2.8	-1.3
FX Preferred Stocks (7.5, 5.3%)	2.7	0.2
US Broad Index (6.1, 4.8%)	2.7	-1.0
US HY Corp. (3.4, 7.8%)	2.6	-1.1
EM Corp. (4.8, 6.5%)	2.5	-0.7
US Treasury & Agency (6.3, 4.3%)	2.5	-0.9
US Municipal Securities (6.6, 2.9%)	2.4	0.0
Nasdaq 100 (NA, 0.9%)	2.3	50.4
FL Preferred Stocks (0.6, 4.1%)	2.2	0.5
Agency CMBS Index (4.4, 4.7%)	2.1	-0.7
Global Govt. Excluding the US (8.3, 2.2%)	2.0	-0.6
US Inflation-Linked Treasury (5.5, 2.1%)	1.9	-0.6
Leveraged Loans (0.1, 10.1%)	1.9	13.6

Source: Ice Data Indices, LLC, Bloomberg
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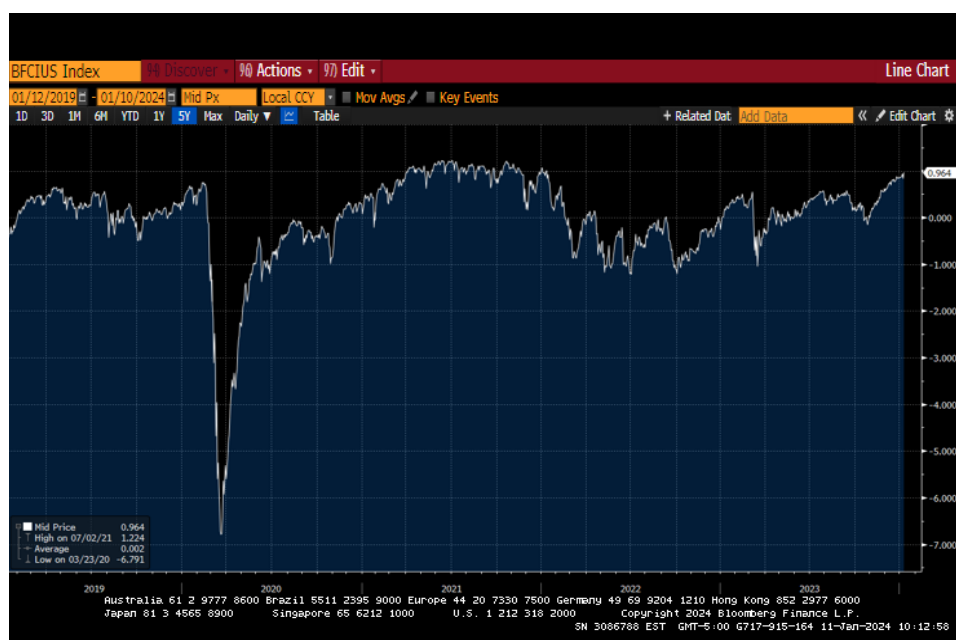
Fed pivots: market calibrating 2024 rate cuts

Fed pivots, QT ending in April; market calibrates

Dovish December pivot by Fed Chair Powell fuels extension of massive 2023 year-end bond and spread rally (Exhibit 1) – and loosening of financial conditions (Exhibit 2). 2024 starts off on a more cautionary note, as market digests the epic 2-month bond rally that moved 10y UST yield from 5.0% at end of October to 3.8% on 12/27/23 (Exhibit 3). Additional dovish Fed policy shift on QT came in early January from Dallas Fed President Logan: BofA now expects QT taper to begin in April, reducing the \$60 bn monthly UST cap by \$15 bn per month. End of QT is a positive for market liquidity and potential bank demand for securities, which was notably weak or absent in 2023.

Exhibit 2: Bloomberg Financial Conditions Index (BFCIUS)

Financial conditions have eased dramatically since late October, returning to levels seen in 2021, before the Fed embarked on historic policy tightening. Easy financial conditions may boost the economy and force the market to further calibrate Fed rate cut expectations.

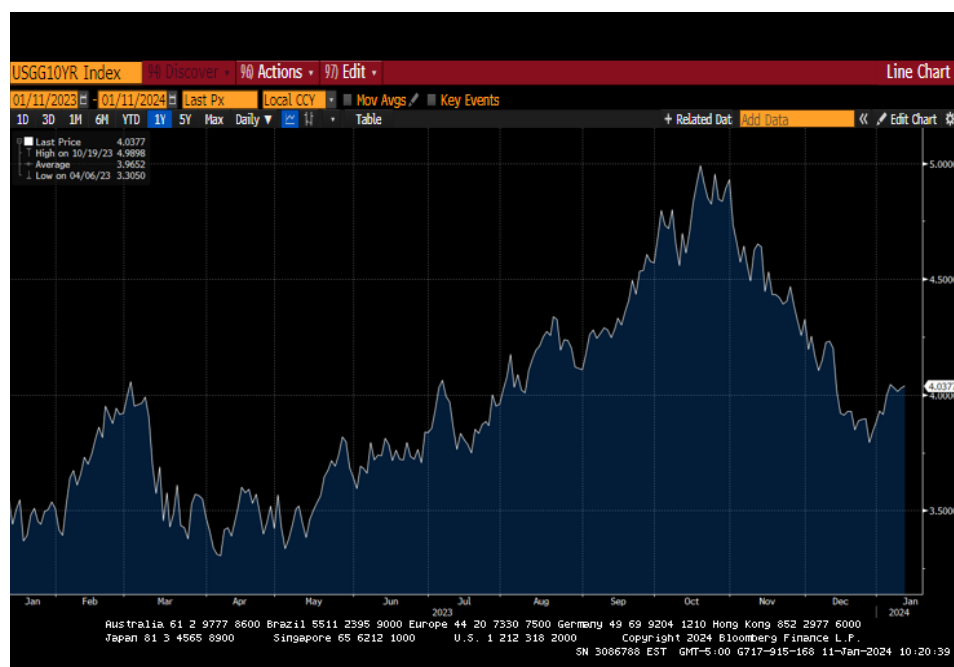


Source: Bloomberg

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Exhibit 3: 10y UST yield (USGG10YR)

10y UST rally continued in December, with yield reaching a low of 3.8%, down from the high of 5.0% in late October. 2024 has seen a 25 bp retrace higher of yields, as market calibrates Fed rate cut expectations. We would aggressively add duration 20-30bps higher from current level (c. 4.05%).



Source: Bloomberg

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The market is calibrating reaction to the policy developments: it now expects 5.7 rate cuts in 2024 (Exhibit 4), down from peak of 6.4 cuts on 12/27, but up from 2.5 cuts in late October, prior to November-December rally. December CPI had minimal impact on rate cut expectations. Market calibration of Fed cuts likely will have some dependency on easing of financial conditions and, of course, strength of economic data. We estimate upwards of a \$5 trillion increase in household net worth to an all-time high over \$155 trillion in 4Q23 (Exhibit 5), due to the bond and stock rally, enhancing the wealth effect on consumer spending. Along with strong average hourly earnings in December and low financial obligations costs to households, consumer spending may well continue to have upside risks. BofA expects 4 cuts in 2024, starting in March.

Exhibit 4: Market expectations of Fed rate cuts

Market now expects 5.6 rate cuts in 2024, down from peak of 6.4 cuts on 12/27, but up from 2.5 cuts in late October, prior to November-December rally. BofA expects 4 cuts in 2024, starting in March

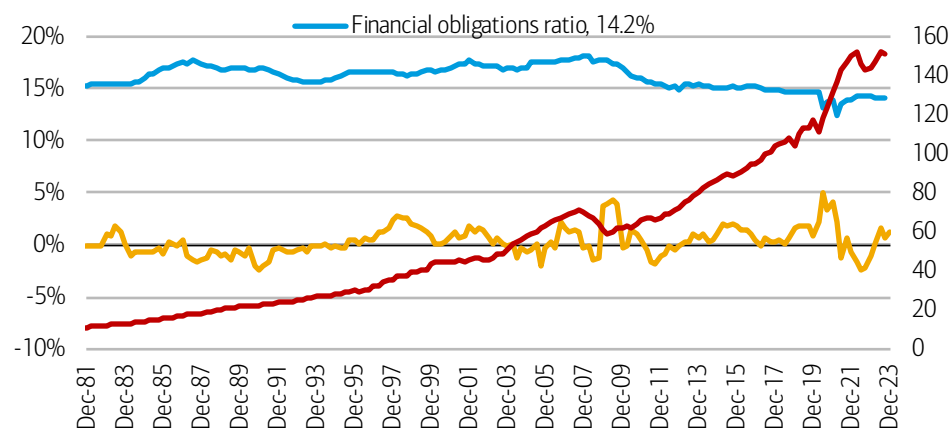


Source: Bloomberg

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Exhibit 5: Household net worth v financial obligations ratio v real average hourly earnings growth

US household wealth (red) of at least \$151 trillion through 3Q23, up \$35 trillion from pre-COVID. Does not account for spectacular 4Q23 bond and equity rallies. Wealth = consumption/spending. Financial obligations (debt service + lease/rent) ratio (blue): 14.2% of disposable personal income; never below 15% in the pre-COVID era. Benefit from mortgage refinancing at rate lows. Real average hourly earnings YOY growth (gold): 1.17% - high, 75th percentile of past 40 years



Source: Bloomberg

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10y UST: modestly bearish 1H24, bullish 2H24

Current post-CPI 10y yield is 4.05%, versus BofA fair value estimate of 4.0%-4.1%, suggesting neutral duration exposure. BofA rates strategy forecasts modest upside on 10y yield to the 4.25%-4.4% area in 1H24, due to heavy UST supply, but, taking a longer-term perspective, still recommends a long duration bias. Meanwhile, BofA technical strategist Paul Ciana says: "In '24 the 10Y yield should see a lower high (4.25/4.50) and lower low near 3.25% w/risk to downside." Potential return of bank buying due to QT end is supportive of the 2H24 bond rally view. Our takeaway is to expect a choppy 1H24 rate environment, with a modest upward bias to yields, and a declining 2H24 rate environment, with potential for the 10y UST yield to drop down to the low 3% area. This suggests a shorter duration exposure for the near term but a more aggressive long duration exposure heading into the back half of the year.

Credit: bullish lev loans, HY bond valuations stretched

The Goldilocks (good for risk assets) soft landing economic scenario continued into December. For now, the baseline BofA view of a soft-landing scenario (1.0% GDP growth in 1Q-3Q 2024) is fully intact. With no hard landing, we are not surprised to see credit spreads tighten dramatically on the Fed policy shift (Exhibit 6). More near term spread tightening is expected but stretched high yield bond valuations suggest reducing exposure into strength (we had recommended BB HY bonds last month). As a short duration, high yield alternative, we continue to recommend leveraged loans, which were a relatively weak performer within the context of the past month bond rally (over 1% monthly return is of course attractive, just less compelling versus duration sectors). Slow and steady wins the race on lev loans: low return volatility compared to bonds and equities make it a uniquely attractive sector (Exhibit 7).

Exhibit 6: Bloomberg high yield (LF98TRUU) v high grade (LUACTRUU) index spread to UST

Spreads on high yield (334 bps) and high grade (98 bps) indices have tightened to levels last seen in early 2022, at the beginning of the Fed tightening cycle. Benign technicals and fundamentals support the tight spreads, but the stretched valuations suggest some caution is warranted.



Source: Bloomberg

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Exhibit 7: Normalized 2024 cumulative returns for leveraged loans (whit, SPBDAL), S&P 500 (amber, SPXT), 10y UST (green, GA10)

Leveraged loan total return since YE 22 (13.7%) comparable to total return on 50/50 combo (14.45%) of S&P 500 (27.2%) and 10y UST (1.7%). However, loans return quality much higher due to negligible return volatility for loans relative to the equity-bond combo



Source: Bloomberg

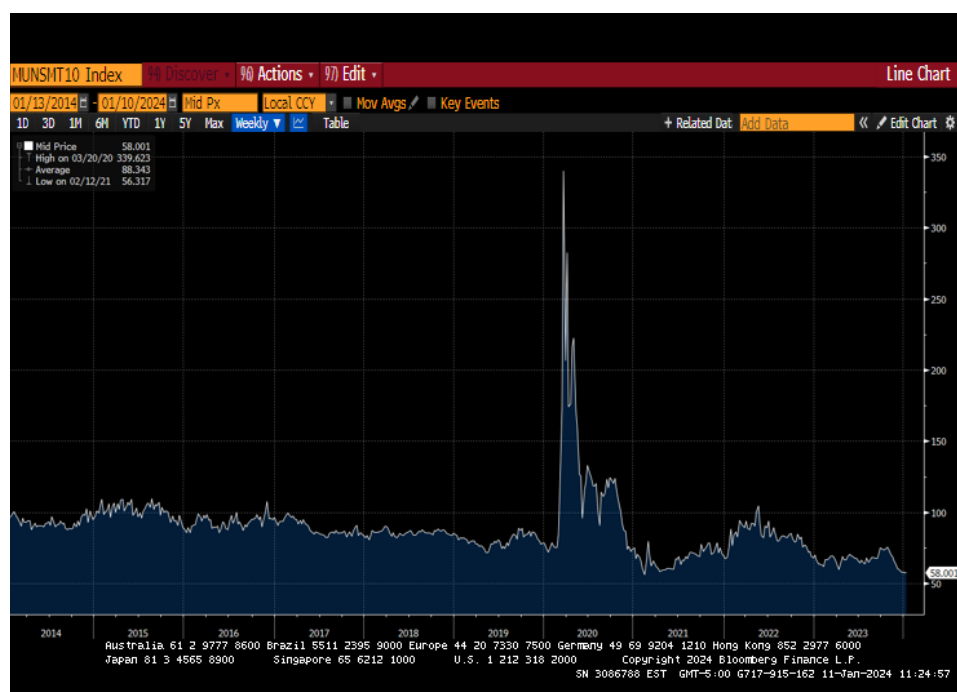
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Agency MBS, preferreds, muni credit also recommended

Even after two months of exceptional MBS return performance (5.1% and 4.1% in November and December), agency MBS still offers value versus UST and corporates. The potential return of banks as a buyer is a tailwind for the sector. Next, we continue to recommend both shorter-duration fixed-to-floating \$1000 par and longer-duration \$25 par preferreds (add the latter on possible near-term rate backup). Finally, muni yield ratios are a little stretched to the downside (Exhibit 8). We would tactically add high quality muni duration 20-30 bps higher on the 10y UST yield, but for now prefer down in credit in the muni space. Exhibit 9 provides more expansive return view.

Exhibit 8: 10y AAA muni yield ratio

10y AAA muni-UST yield ratio of 58.0% is near the 20+ year low of 56.3% observed in early 2021. Benign supply technicals relative to UST are supportive of low ratio, but better value down in muni credit.



Source: Bloomberg

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Exhibit 9: Total returns sorted by YTD

Nasdaq 100 leads YTD returns as of 1/5/24.

Sector (Eff Dur, Eff Yld)	Total Returns (%)				
	December	Since 3/23/20	Last 3M	2023 YTD	Last 12M
Nasdaq 100 (NA, 0.9%)	5.6	140.0	11.0	50.4	53.1
S&P 500 (NA, 1.5%)	4.5	123.0	10.7	24.4	25.4
Leveraged Loans (0.1, 10.1%)	1.6	52.9	3.4	13.6	13.1
FL Preferred Stocks (0.6, 4.1%)	1.7	56.6	4.4	0.5	11.7
BBB CMBS (3.2, 17.3%)	3.1	2.8	3.7	0.4	-1.2
FX Preferred Stocks (7.5, 5.3%)	2.5	31.5	11.1	0.2	4.4
US Municipal Securities (6.6, 2.9%)	2.4	12.3	8.1	0.0	5.6
US Inflation-Linked Treasury (5.5, 2.1%)	2.5	4.4	5.0	-0.6	2.7
Global Govt. Excluding the US (8.3, 2.2%)	2.6	-10.8	4.8	-0.6	2.6
Agency CMBS Index (4.4, 4.7%)	2.7	-0.5	4.7	-0.7	3.7
EM Corp. (4.8, 6.5%)	3.2	8.2	6.1	-0.7	6.3
US Treasury & Agency (6.3, 4.3%)	3.4	-12.3	5.5	-0.9	2.2
US Broad Index (6.1, 4.8%)	3.7	-5.0	6.3	-1.0	3.5
US HY Corp. (3.4, 7.8%)	3.7	40.3	7.3	-1.1	10.9
US MBS (5.5, 4.9%)	4.2	-7.6	7.0	-1.2	2.9
US IG Corp. (6.7, 5.3%)	4.0	9.3	7.7	-1.3	6.2
EM External Debt Govt. (7.0, 6.8%)	4.8	8.5	9.3	-1.8	8.0

Source: Ice Data Indices, LLC, Bloomberg

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Forecasts and yields

The BofA economics and rates forecasts can be seen in Exhibit 10 through Exhibit 12. Recession is no longer expected. The baseline view is that the Fed has successfully executes a soft landing. The near-term risk to the rate forecasts is to the downside.

Exhibit 13 and Exhibit 14 show yields in low yield and high yield sectors over time. Yields moved higher over the past month, making them very attractive from a longer-term perspective.



Exhibit 10: US GDP forecast

GDP forecast as of 12/18/23

	Historical				Quarterly Forecast							
	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q
	23	23	23	23	24	24	24	24	25	25	25	25
Real GDP (QoQ, % SAAR)	2.2	2.1	5.2	1.5	1.0	1.0	1.5	1.5	2.0	2.0	2.0	2.0
Real GDP (YoY)	1.7	2.4	3.0	2.7	2.4	2.1	1.2	1.2	1.5	1.8	1.9	2.0

Source: BofA Global Research

Average Quarterly			
2022	2023	2024	2025
1.9	2.5	1.8	1.8

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Exhibit 11: Other key macro indicators and inflation forecasts

Forecasts are as of 12/18/23

Monthly Averages	Historical				Quarterly Forecast								Average Quarterly			
	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	2022	2023	2024	2025
	23	23	23	23	24	24	24	24	25	25	25	25				
Nonfarm Payrolls (Avg mom ch, 000s)	312	201	233	150	100	75	75	100	100	125	125	150	399	221	88	125
Civilian Unemployment Rate (%)	3.5	3.5	3.7	3.9	4.0	4.1	4.2	4.3	4.4	4.4	4.3	4.2	3.6	3.6	4.0	4.2
Civilian Participation Rate (%)	62.5	62.6	62.7	62.8	62.9	62.9	62.9	62.9	62.9	62.8	62.8	62.8	62.2	62.6	62.9	62.8
Core PCE Chain Prices (% YoY)	5.0	3.7	2.4	2.2	2.8	2.5	2.4	2.3	2.5	2.2	2.0	2.0	5.2	4.2	2.6	2.3
CPI, Consumer Prices (% YoY)	3.8	2.7	3.6	2.7	2.2	2.7	2.6	1.9	2.4	2.2	2.1	3.0	8.0	4.1	2.6	2.3
CPI ex Food & Energy (% YoY)	5.0	4.7	2.8	3.3	3.2	3.0	2.9	2.7	2.6	2.6	2.5	2.4	6.1	4.8	3.1	2.7

Source: BofA Global Research

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Exhibit 12: Rates forecast

Forecasts are as of 12/15/23

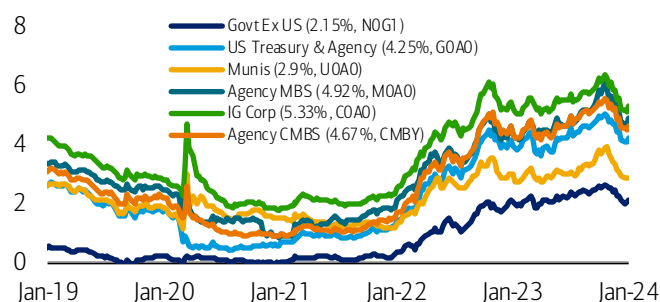
(% EOP)	Historical			Quarterly Forecast				
	2021	2022	YE 2023	Q1 24	Q2 24	Q3 24	YE 24	YE 25
Fed Funds	0.00-0.25	4.25-4.50	4.25-4.50	5.25-5.50	5.00-5.25	4.75-5.00	4.50-4.75	3.50-3.75
Fed effective	0.13	4.38	4.38	5.38	5.13	4.88	4.63	3.63
2-Year T-Note	0.50	4.50	4.75	4.75	4.50	4.25	4.00	3.75
5-Year T-Note	1.25	4.25	4.30	4.50	4.40	4.25	4.15	4.00
10-Year T-Note	1.51	3.88	4.50	4.40	4.30	4.25	4.25	4.25
30-Year T-Bond	2.10	4.10	4.20	4.70	4.65	4.65	4.75	4.75

Source: BofA Global Research

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Exhibit 13: Yields on high quality sectors

IG Corp leads yields as of 1/5/24 at 5.33%

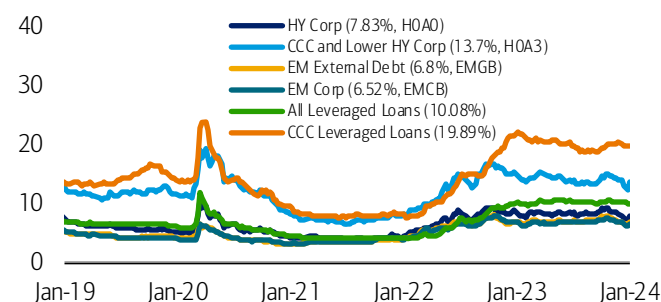


Source: ICE Data Indices, LLC

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Exhibit 14: Yields on HY bonds and loans

CCC Leveraged Loans leads yields as of 1/5/24 at 19.89%



Source: ICE Data Indices, LLC

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New issue debt market volumes slow – US treasury issuance high

Exhibit 15 shows gross and net supply numbers across various fixed income sectors, as well as forecasts for 2023. This does not account for runoff of the Fed balance sheet due to QT.

Exhibit 15: US Fixed Income Gross and Net Issuance (\$bn)

YTD FI total supply was \$4.7tn

	TSY	Munis	Tax Exempt	Taxable	AMT	Agency Debt	Agency MBS	Agency CMBS	ABS	US CLO	USD HG Corp	USD HY Corp	USD Lev Loans	Total Securitized Products	US Fixed Income Issuance
Gross Issuance (\$bn)															
2011	2,135	287	247	32	8	966	1,131	90	125	13	770	208	231	1,392	5,988
2012	2,153	380	334	33	13	840	1,663	102	201	56	969	322	295	2,074	7,032
2013	2,140	334	286	38	10	591	1,544	102	179	84	1,024	312	456	2,018	6,876
2014	2,215	337	303	27	8	482	923	87	205	124	1,105	292	377	1,475	6,284
2015	2,119	399	362	31	6	551	1,251	114	195	98	1,264	252	257	1,818	6,660
2016	2,019	452	409	31	12	794	1,472	134	195	71	1,289	228	337	1,996	7,114
2017	2,047	449	393	39	16	596	1,304	157	239	117	1,396	271	503	2,003	7,265
2018	2,388	339	295	33	11	546	1,174	157	244	121	1,237	162	438	1,923	7,033
2019	2,692	422	330	71	22	816	1,531	158	242	115	1,198	228	311	2,298	7,965
2020	3,434	474	319	145	9	923	3,158	183	183	90	1,851	390	289	3,789	11,149
2021	4,405	479	345	120	14	455	3,482	183	284	185	1,495	455	607	4,509	12,405
2022	3,305	385	310	53	22	738	1,674	128	253	128	1,216	106	225	2,427	8,401
2023 YTD	1,804	192	166	21	5	819	557	65	155	58	770	96	114	890	4,684
2023 Forecast	3,163	400	325	65	10	1,000	1,200	100	250	90	1,149	180	180	1,742	7,814
2011	1,326	-160	-130	3	-33	-207	15	45	-60	-17	335	-7	19	-264	1,042
2012	1,008	-104	-73	-1	-30	-245	33	60	-2	21	367	72	34	-117	1,014
2013	853	-123	-111	12	-23	-53	232	60	30	29	570	82	131	186	1,648
2014	783	-67	-42	-8	-17	-45	69	49	44	76	617	74	150	174	1,685
2015	632	-26	-13	5	-17	-55	164	59	-1	53	724	-3	41	200	1,513
2016	411	33	49	2	-19	-41	229	83	9	18	752	-67	8	199	1,294
2017	421	32	27	14	-8	-53	315	96	13	56	782	5	75	411	1,672
2018	754	-75	-75	2	-2	-105	276	79	20	82	627	-78	192	512	1,827
2019	987	39	3	30	6	-30	224	79	-6	88	574	30	46	456	2,103
2020	1,734	47	-26	78	-5	-163	508	88	-69	63	757	173	0	572	3,121
2021	819	111	44	63	4	-249	878	71	29	116	425	131	148	1,200	2,585
2022	1,540	-36	-51	12	3	208	496	32	18	88	383	-52	75	680	2,798
2023 YTD	530	3	8	-2	-3	268	95	25	5	34	293	38	-	139	1,270
2023 Forecast	1,062	-2	-	-	-	500	233	115	51	70	194	35	70	509	2,368

Source: BofA Global Research, SIFMA, Intex, S&P LCD, Bloomberg, Fannie Mae, Freddie Mac, FHLB. Gross issuance volumes are as of writing. Net Issuance volumes are as of last month end.

BofA GLOBAL RESEARCH

Next, we summarize highlights and themes from colleagues in BofA Economics and Strategy. Notably, our high yield strategist Oleg Melentyev is especially concerned about high yield bond valuations. Alternatively, leveraged loan strategist Neha Khoda highlights that loans look cheap to high yield bonds right now.

Economics – Michael Gapen, Aditya Bhawe, Stephen Juneau, Shruti Mishra, Jeseo Park

[US Watch: December employment: Simmering not boiling](#)

- On net, we think the signal from the employment report is one of gradual cooling despite the beat in headline payrolls.
- This supports our view that the labor market is coming into better balance, and income growth continues to support spending.
- We retain our view that the Fed will begin a gradual easing cycle starting with a 25bp cut in March.

[US Rates Watch: Logan and QT: QT taper now in March](#)

- **Logan speech points to early QT slowing**
Fed communication from the December FOMC minutes and Dallas Fed President Logan's speech Saturday point to an early slowing of Fed QT. The BofA US Economics Team now calls for tapering to be announced in March while retaining its view for an end to QT in the summer. Front end swap spreads should widen modestly.

Investment Strategy – Michael Hartnett

[The Flow Show: "Events, dear boy, events"](#)

- Rate optimism so plentiful...risk is Q4 rally in bonds, bullion, breadth reverses early doors '24
- Dec NFP >220k & AHE >0.3% AHE = GT10 to 4.25%; Dec NFP <140k & AHE <0.1% = GT10 to 3.75%
- 12 "events" with the potential to impact corporate profits & interest rates in 2024
- **Tale of the Tape:** Fed and yields dictating credit and stocks; lower inflation, lower rates = +ve risk assets, higher unemployment, lower rates = -ve; given upcoming big bond supply to refinance govt & corp sectors (UST \$1.8tn in '23, US IG \$0.8tn, 10% US HY and loans mature next 2 years), critical Fed eases H1 to avert corporates cutting jobs and capex H2

Rates – Mark Cabana, Ralph Axel, Bruno Braizinha, Meghan Swiber, Katie Craig, Caiyi (Anna) Zhang, Paul Ciana

[US Rates Viewpoint: 24 charts for 2024](#)

- **Macro: trade tactically but with long rate bias**
We see near-term US rate risks as being skewed to the downside though the easy part of the duration trade is likely over. Rate downside is informed by risks to Fed outlook, historical patterns after the last Fed hike, and market pricing vs forwards. Our core rate guidance: (1) trade tactically but with a lower rate bias, (2) trust rate sell-offs are likely to be seen as buying opportunities, (3) duration is likely easier trade vs curve.
- **Fair value: 10Y UST seems fair around 4-4.1%**
Our frameworks suggest the 10yT fair value consistent with current US fundamentals & global rates is 4-4.1%. These fundamentals + lingering UST supply / demand concerns sustain our end '24 10Y forecast of 4.25%, though we acknowledge downside risks. Despite our fair value work, we still think the near-term trading bias is for lower rates.

- **Supply: higher, demand: better, positioning: cleaner**

The UST supply / demand backdrop remains daunting in '24. UST auction sizes are likely to reach historic highs across several tenors. We are cautiously optimistic on improving demand in '24. UST rates positioning is likely cleaner into '24 vs most of '23.

- **Front end: SOFR to continue rising until QT stops**

SOFR will likely continue moving higher until QT ends. Cash will continue to be drained and collateral added. ON RRP reaching zero in Q2 or Q3 is risk for higher SOFR.

- **TIPS / vol / market structure: steeper real rate & vol curve**

We are relatively neutral on longer term real rates given the rally below fundamental fair value, but we hold our view for a steeper real rate & vol curve. UST reforms are coming.

- **Technical: Rates swing end lower, steeper curve**

We expect lower rates & a steeper curve, but not in a straight line. In '24 the 10Y yield should see a lower high (4.25/4.50) and lower low near 3.25% w/risk to downside. UST curve to steepen such as 2s10s to +25bps.

Municipals – Yingchen Li, Ian Rogow

Municipals Weekly: March's gravitational pull is strong

- Given a profound new issue/redemption imbalance, we expect muni yield rise in January to be mild.
- A 30bp selloff in high grades would be a good entry. The 10yr AAA should move to 1.80% or lower in 2024.
- First-time payment defaults totaled \$2bn in 2023; newly-distressed debt totaled \$2.7bn.
- Our views are summarized in Exhibit 16

Exhibit 16: Strategic and tactical views & key forecasts

Buy long duration high grade bonds, especially 4% coupons

Strategic views	Tactical views	Key forecasts
<ul style="list-style-type: none"> • OW 15-30yr part of the curve, particularly 4% coupon bonds • OW AMT bonds* • Neutral BBBs and high yield • UW (1) the territories; (2) small private colleges; (3) rural, single facility hospitals 	<ul style="list-style-type: none"> • Position for ratios to reach historically-rich levels. • Swap long-end muni taxables for long-end tax-exempts • 4% coupon bracket to benefit more in a rally 	<ul style="list-style-type: none"> • 2024 issuance to total \$400bn; \$300bn of new money and \$100bn of refundings. • 2024 principal redemptions to total \$416bn and coupon payments \$158bn. Cumulative fund inflows positive. • 1s10s slope to stay inverted in 2024; 10s30s to steepen, then flatten; 10s30s max slope of 110bp in 2024. • 10 yr muni/Tsy ratio range of 55%-80% and 30y 75%-92%. • Stable credit spreads in 2024 given non-recessionary environment; any material widening is an opportunity.

Source: BofA Global Research. *If the holder is certain they are not subject to the AMT under current tax law.

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Investment Grade Strategy – Yuri Seliger

Credit Market Strategist: The return of re-leveraging

- We look for 2024 to be the year when US IG non-financial, mostly single A or better issuers gradually begin to add leverage.
- That will end the 2022-2023 deleveraging cycle and high-quality issuer outperformance.
- We continue to prefer BBB-rated industrials, which are still relatively cheap. We screen for re-leveraging candidates inside.

High Yield Strategy – Oleg Melentyev

High Yield Strategy: Another Rare Opportunity

- High-quality credit now in the exact opposite corner vs last Oct: estimated returns below cash in most realistic scenarios.
- CCC could continue to rip in the near-term but unlikely to hold those gains. Use meaningful moves higher to de-risk.
- Over 20% of HY issuers are looking at negative free cash flows even if the Fed cuts to 3%.

Leveraged Loan Strategy – Neha Khoda

Collateral Thinking: Brace for a repricing wave

- Despite recent correction, loan premium over HY remains high. We expect loans to outperform HY going forward.
- We expect Q1 loan repricings to reach \$80bn with activity concentrated in the 250-450bps margin cohort.
- We think repricing activity will come in mini spurts as risk-premia bounces around with incoming data.

Preferred Strategy – Michael Youngworth

[Preferred Securities Quarterly Guide: A quarterly guide for individual investors](#)

- \$25 par fixed-rate preferreds (POP4) added 6.4% in Q4 amid investor sentiment that the Fed's rate hiking cycle has peaked.
- Longer-duration pockets of the market, including hybrids and REITs, led the rally, while floating-rate preferreds lagged.
- We're more constructive in 2024 as peak rates may benefit both longer duration assets and banks, both central to preferreds.

Preferred Recommended List: Recommended Lists for January

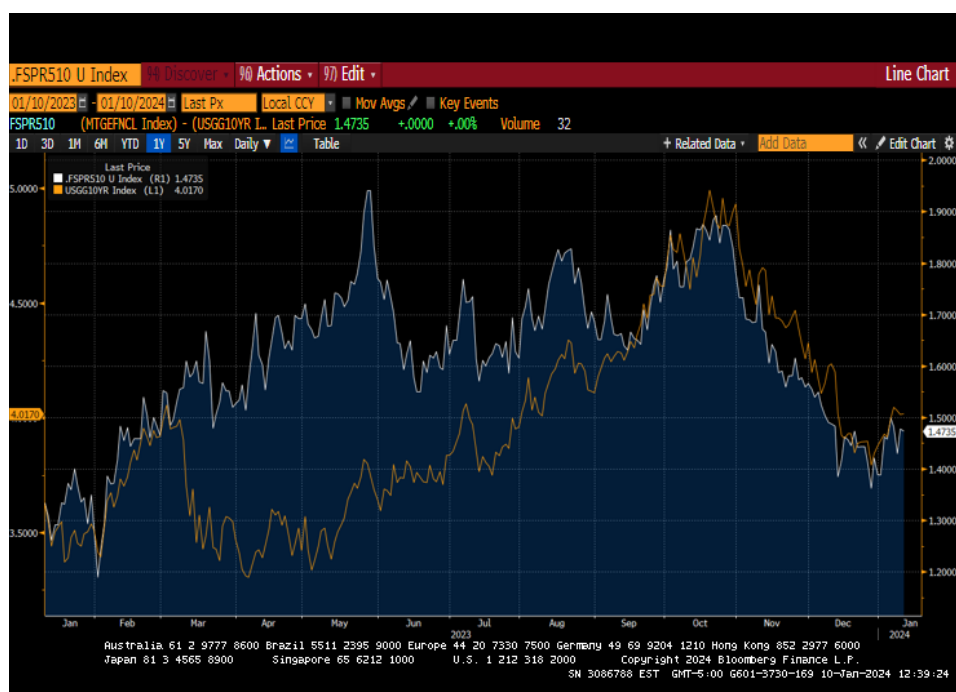
- Preferreds rallied into year-end as the market continues to reprice rates expectations lower amid dovish Fed commentary.
- This considered, for 2024 we remain constructive on preferreds, which have historically outperformed following peak rates.
- Banks may also benefit from lower rates. In our recommended lists, we include preferreds from our analysts' top bank picks.

Agency MBS – Chris Flanagan, Jeana Curro

- Agency MBS continued to deliver on cheap valuations in December, as economic data softened, registering a monthly total return of 4.3%, on top of the 5.1% return in November.
- MBS current coupon spread tightened dramatically, from 189 bps to a low of 136 bps in December, into the 10y yield decline to a low of 3.79% since late October (Exhibit 17). The 2024 bounce in the 10y yield up to 4.0% has seen the MBS spread retrace to 147 bps. We stay overweight but spread tightening likely will be a slower grinding process in 1H24.
- MBS value proposition: still cheap to corporates, even after recent OAS tightening. Agency MBS index OAS is 69% wider since Jan 1, 2022, when the Fed shifted to aggressive policy tightening (Exhibit 18). IG and HY OAS are only 8% and 22% wider, respectively.

Exhibit 17: Agency MBS current coupon spread to 5y/10y UST (FSPR510) v 10y UST yield

MBS current coupon spread tightened dramatically, from 189 bps to a low of 136 bps in December, into the 10y yield decline to a low of 3.79% since late October. The 2024 bounce in the 10y yield up to 4.0% has seen the MBS spread retrace to 147 bps. We stay overweight but spread tightening likely will be a slower grinding process in 1H24.

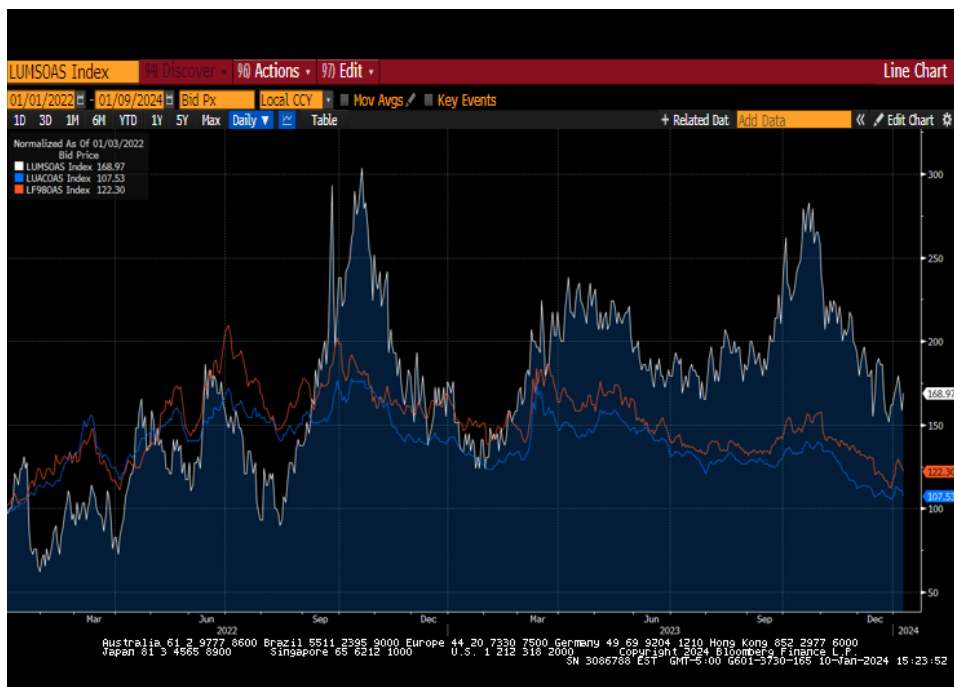


Source: Bloomberg

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Exhibit 18: Normalized index OAS since 1/1/22: agency MBS, high grade, high yield

MBS value proposition: still cheap to corporates, even after recent OAs tightening. Agency MBS index OAS is 69% wider since Jan 1, 2022, when the Fed shifted to a aggressive policy tightening. IG and HY OAS are only 8% and 22% wider, respectively.



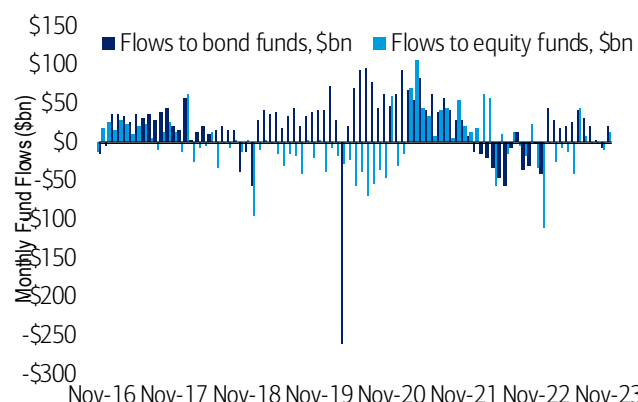
Source: Bloomberg

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Mutual fund flows

Exhibit 19: Equity vs Fixed Income fund flows (\$bn)

Data as of 11/30/2023; Fund flows have been mixed this year

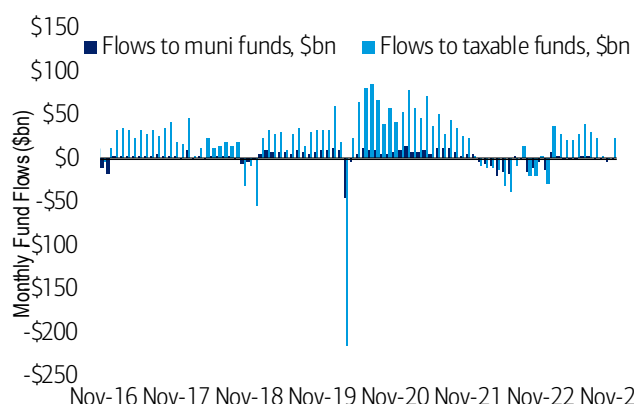


Source: EPFR

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Exhibit 20: Taxable vs Municipal fund flows (\$bn)

The data is as of 11/30/2023. Fund flows have been mixed this year.

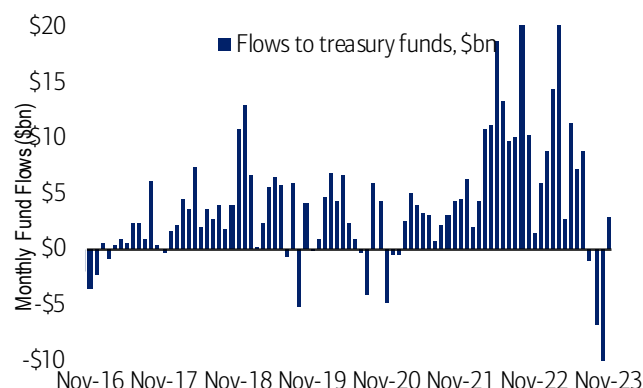


Source: EPFR

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Exhibit 21: Treasury fund flows (\$bn)

The data is as of 11/30/2023. Fund flows have been strong for the most of 2023 year but started to weaken towards the end of 2023.

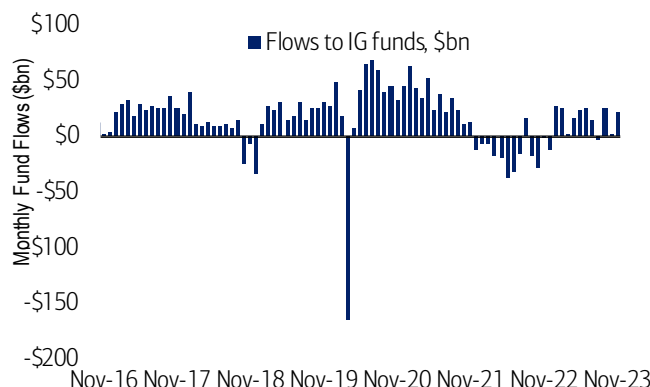


Source: EPFR

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Exhibit 22: Investment grade fund flows (\$bn)

The data is as of 11/30/2023. Fund flows have been mixed this year.

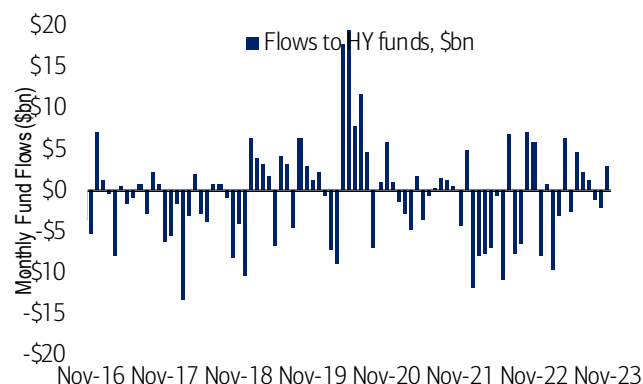


Source: EPFR

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Exhibit 23: High yield corporate fund flows (\$bn)

The data is as of 11/30/2023. Fund flows have been mixed this year.

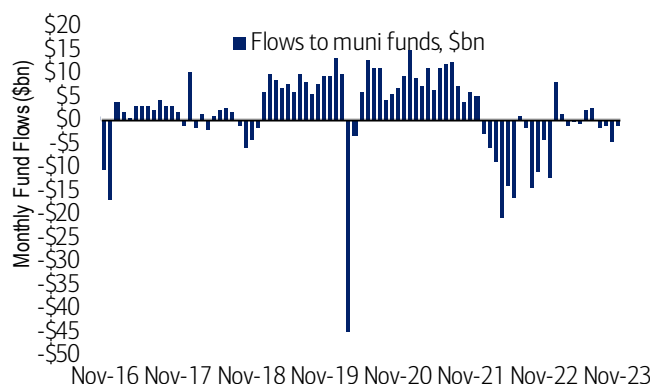


Source: EPFR

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Exhibit 24: Municipal fund flows (\$bn)

The data is as of 11/30/2023. Fund flows have been mostly outflows this year.



Source: EPFR

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Exhibit 25: Market total returns (%)

S&P 500 leads YTD returns as of 12/31/2023

As of 12/31/2023

Index	Ticker	1mo	3mo	12mo	YTD	2020	2021	3yr ²	5yr ²	10yr ²
US Treasury	GOQ0	3.4	5.7	3.9	3.9	8.2	-14.9	-4.0	0.5	1.3
US 3-Month Treasury Bill	GOO1	0.5	1.4	5.0	5.0	0.7	1.5	2.2	1.9	1.3
Current 2-year Treasury	GA02	1.1	2.4	3.5	3.5	3.0	-4.7	-0.5	1.0	0.9
Current 10-year Treasury	GA10	4.0	6.6	2.8	2.8	10.6	-19.4	-6.1	0.0	1.3
Current 30-year Treasury	GA30	8.2	12.3	1.2	1.2	18.6	-36.5	-13.7	-2.4	1.7
US Composite Agency	UAGY	2.0	3.9	4.9	4.9	5.7	-9.3	-1.6	1.3	1.6
US Inflation-Linked Treasury	GOQ1	2.5	4.5	3.6	3.6	11.5	-7.3	-1.4	3.1	2.5
US Corporate	COA0	4.0	7.9	8.4	8.4	9.8	-16.2	-3.2	2.6	3.0
AAA US Corporate	COA1	4.2	8.4	6.5	6.5	12.2	-20.9	-5.6	1.6	2.6
AA US Corporate	COA2	3.8	7.3	6.7	6.7	9.5	-17.2	-4.0	1.4	2.3
Single-A US Corporate	COA3	3.9	7.6	7.6	7.6	9.8	-16.2	-3.4	2.3	2.7
BBB US Corporate	COA4	4.2	8.2	9.5	9.5	9.8	-16.0	-2.8	3.2	3.3
US High Yield	HOA0	3.7	7.1	13.5	13.5	6.2	-6.5	2.0	5.2	4.5
BB US High Yield	HOA1	3.3	7.3	11.4	11.4	8.6	-6.5	1.4	5.5	4.9
Single-B US High Yield	HOA2	3.6	6.8	14.0	14.0	3.7	-6.2	2.2	4.8	4.1
CCC & Lower US High Yield	HOA3	5.8	6.6	20.4	20.4	2.9	-7.6	3.6	4.5	4.1
Leveraged Loans	SPBDAL	1.6	2.9	13.3	13.3	3.1	4.4	7.0	5.8	4.4
BB Loans	SPBDBB	1.2	2.7	10.2	10.2	0.8	6.0	6.3	5.2	4.0
Single-B Loans	SPBDBL	1.8	3.2	14.8	14.8	3.8	3.9	7.3	6.2	4.7
US Mortgage Backed Securities	MOA0	4.2	7.4	5.0	5.0	4.1	-12.9	-3.0	0.3	1.4
Fixed Rate Preferred Securities	POP1	2.8	6.6	10.2	10.2	6.9	-12.7	-1.3	3.9	5.0
DRD Eligible Preferred Securities	POD0	2.9	6.6	9.0	9.0	7.3	-10.9	-1.0	4.0	4.9
Hybrid Preferred Securities	POH0	3.5	8.1	16.5	16.5	7.3	-18.6	-1.7	3.6	4.7
REIT Preferred Securities	PON0	2.4	7.7	16.4	16.4	8.3	-25.0	-4.4	2.6	4.7
American Depository Shares Preferred Securities	POS0	2.5	7.4	14.5	14.5	6.0	-21.7	-3.6	2.5	4.1
Adjustable Rate Preferred Securities	POA0	1.7	3.1	12.3	12.3	8.0	4.3	5.4	7.7	6.9
US Fixed Rate Asset Backed	ROA0	1.5	2.9	6.3	6.3	3.8	-4.1	0.6	2.0	1.9
US Municipal Securities	UOA0	2.4	7.6	6.5	6.5	5.3	-7.4	-0.5	2.3	3.1
Taxable equivalent ¹	UOA0*	2.7	8.4	9.6	9.6	8.1	-2.4	2.3	5.1	6.1
US General Obligation Municipal Securities	UOAG	2.2	7.2	5.7	5.7	5.3	-6.6	-0.4	2.2	2.7
Taxable equivalent ¹	UOAG*	2.4	8.0	8.8	8.8	8.1	-1.6	2.4	5.0	5.6
US Revenue Municipal Securities	UOAR	2.5	7.8	6.8	6.8	5.3	-7.6	-0.5	2.3	3.3
Taxable equivalent ¹	UOAR*	2.8	8.6	9.9	9.9	8.1	-2.7	2.3	5.2	6.2
US Pre-refunded Municipal Securities	UOAF	0.8	2.9	3.0	3.0	2.4	-2.9	0.0	1.1	1.1
Taxable equivalent ¹	UOAF*	1.1	3.7	6.2	6.2	5.5	2.8	3.0	4.2	4.2
1-5 Year US Municipal Securities	UVA0	1.0	3.5	3.6	3.6	2.8	-3.0	0.2	1.4	1.3
Taxable equivalent ¹	UVA0*	1.3	4.3	6.6	6.6	5.8	2.4	3.0	4.3	4.2
5-10 Year US Municipal Securities	U6AX	2.2	6.5	5.0	5.0	5.0	-5.8	-0.4	2.2	2.6
Taxable equivalent ¹	U6AX*	2.4	7.3	8.0	8.0	7.9	-0.8	2.4	5.0	5.4
10+ Year US Municipal Securities	U9AX	3.0	9.6	8.1	8.1	6.2	-9.8	-0.8	2.5	3.8
Taxable equivalent ¹	U9AX*	3.3	10.4	11.3	11.3	9.0	-5.0	1.9	5.3	6.8
Global Government Excluding the US Index	NOG1	5.3	10.0	3.4	3.4	9.8	-29.3	-9.9	-3.4	-1.5
Emerging Markets										
BBB & Lower Sovereign USD	IGOV	5.1	10.6	12.6	12.6	4.8	-20.5	-3.6	1.4	2.9
Local Debt Markets Plus Index	LDMP	3.2	6.8	10.0	10.0	4.5	-17.5	-3.2	2.0	0.8
Emerging Markets Corporate Plus Index	EMCB	3.3	6.2	7.9	7.9	7.8	-16.5	-3.4	1.7	2.6
S&P 500	SPXT	4.5	11.7	26.3	26.3	18.4	5.4	15.3	15.7	12.0
US CPI Urban Consumers NSA	CPURNSA	0.0	0.0	3.2	10.4	1.4	13.9	5.7	4.0	2.8
BBG GOLD TR Index	BCOMGCTR	1.1	11.4	12.8	12.8	20.9	-5.0	2.5	8.9	4.7
VIX Index	VIX	-3.6	-28.9	-42.5	-42.5	65.1	-4.7	-31.1	-13.3	-1.0

Source: ICE Data Indices, LLC; ¹Assumes a 40.8% Federal tax bracket. ²Three-year, five-year and 10-year returns are annualized. *Price return index

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Exhibit 26: Sector yields, duration and credit ratings

Data as of 1/05/2024. Sectors have higher yields as credit risk increases.

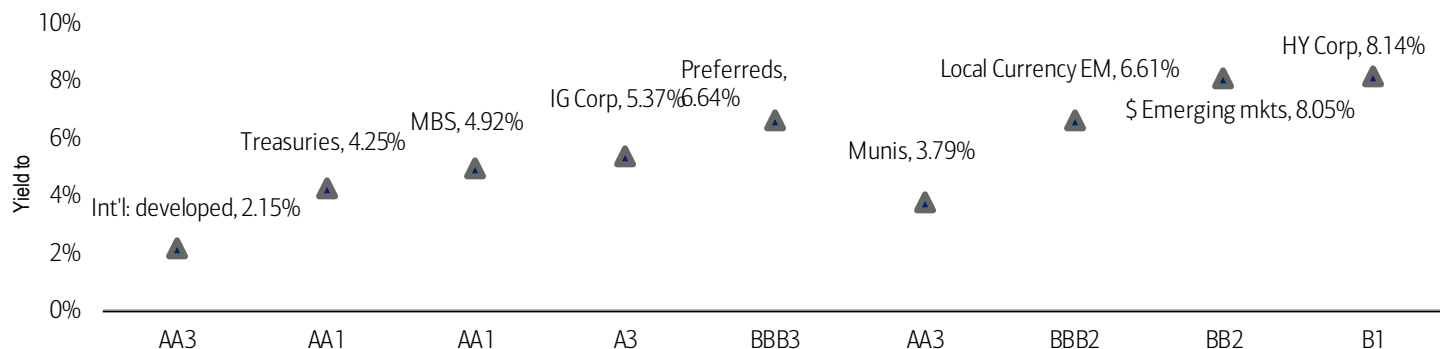
	Effective yield*	Effective Duration*	Average Credit Rating	% of US taxable market
Treasuries				
US Treasury	4.25	6.35	AA1	42.8%
1-5 Year	4.31	2.58	AA1	23.1%
5-10 Year	4.04	6.22	AA1	9.5%
10-15 Year	4.04	9.95	AA1	0.4%
15+ Year	4.32	15.17	AA1	9.9%
US Inflation-Linked Treasury	2.11	5.54	AA1	5.1%
US Agency	4.43	3.33	AA1	0.8%
US Mortgage Backed Securities	4.92	5.52	AA1	22.6%
IG Corporates				
US Corporate	5.33	6.71	A3	24.6%
1-5 Year	5.23	2.52	A3	10.2%
5-10 Year	5.29	6.02	BBB1	6.7%
10-15 Year	5.46	8.71	A3	1.3%
15+ Year	5.51	13.60	A3	6.5%
Core Plus Fixed Rate Preferred Securities	5.31	7.47	BBB3	0.3%
High Yield				
US High Yield	7.83	3.39	B1	3.7%
1-5 Year US Cash Pay HY	8.04	2.29	B1	2.0%
5-7 Year US Cash Pay HY	7.61	4.12	B1	1.2%
7-10 Year US Cash Pay HY	6.87	5.34	BB3	0.4%
10-15 Year Cash Pay HY	7.63	7.78	BB3	0.0%
15+ Year US Cash Pay HY	7.38	11.21	BB2	0.0%
				100.0%
International				
Global Government Excluding the US	2.15	8.34	AA3	
EM				
Sovereign	8.03	6.81	BB2	
BBB-B Sovereign USD External Debt	6.69	7.03	BB1	
Local Debt Markets Plus Index	6.61	5.91	BBB2	
Emerging Markets Corporate Plus Index	6.52	4.78	BBB2	
Municipals				
				% of Muni Market
Municipals	2.90	6.62	AA3	100.0%
US Municipal Securities	2.39	2.17	AA2	22.0%
1-5 Year US Municipal Securities	2.56	4.76	AA3	19.1%
5-10 Year US Municipal Securities	2.85	6.58	AA3	13.5%
10-15 Year US Municipal Securities	3.31	9.57	AA3	45.4%

Source: ICE Data Indices, LLC. *Effective yield and duration adjust for call options

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Exhibit 27: Yield to maturity vs. credit rating

Data as of 1/05/2024. The data is showing sector, effective duration, yield-to-maturity



Source: ICE Data Indices, LLC

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Profile of taxable & tax-exempt bond markets

Exhibit 28: Sensitivity of total returns on Treasuries to yield changes. 1-year horizon*

Data As of 1/04/2024. High maturity has high sensitivity to yield changes.

Treasury maturity	Change in yield				
	-2%	-1%	0	+1%	+2%
2-Year	NA	NA	4.4%	2.5%	0.7%
5-Year	NA	8.6%	4.0%	-0.4%	-4.6%
10-Year	NA	12.6%	4.0%	-3.8%	-10.9%
30-Year	NA	23.5%	4.2%	-11.0%	-23.1%

Source: BofA Global Research. *Approximate total return (income plus price change) over a one-year horizon for the given change in yield. Excludes the effect of rolling down the yield curve.

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Exhibit 29: Sensitivity of total returns on municipals to yield changes. 1-year horizon*

Data As of 1/04/2024. High maturity has high sensitivity to yield changes.

Municipal maturity	Change in yield				
	-2%	-1%	0	+1%	+2%
2-Year	NA	NA	2.5%	0.6%	-1.3%
5-Year	NA	7.6%	2.3%	-2.3%	-6.7%
10-Year	NA	12.1%	3.1%	-5.0%	-12.4%
30-Year	NA	24.6%	3.4%	-13.1%	-26.0%

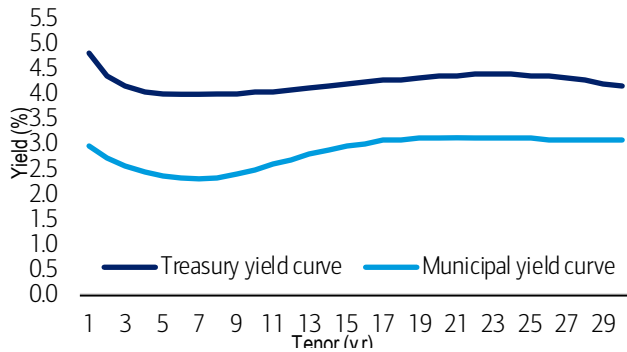
Source: BofA Global Research. *Approximate total return (income plus price change) over a one-year horizon for the given change in yield. Excludes the effect of rolling down the yield curve.

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Fixed Income Chartbook

Exhibit 30: Treasury and municipal yield curves (%)

As of 1/10/2024, Treasury and municipal yields by tenor; yields converge at the long end

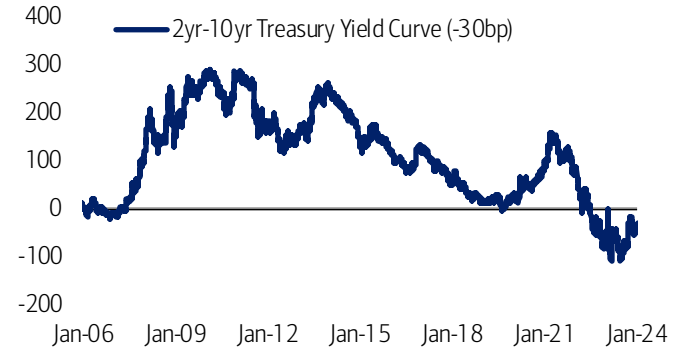


Source: ICE Data Indices, LLC

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Exhibit 31: Historical 2yr / 10yr Treasury yield spread (bps)

Data as of 1/10/2024. The 2/10yr treasury curve is inverted.

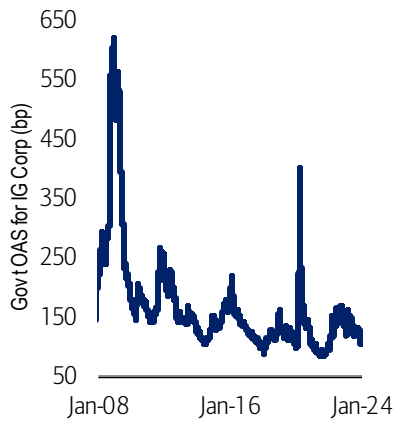


Source: Bloomberg

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Exhibit 32: IG corporate Govt OAS spreads (bps)

Data as of 1/10/2024; Spreads have tightened this year.

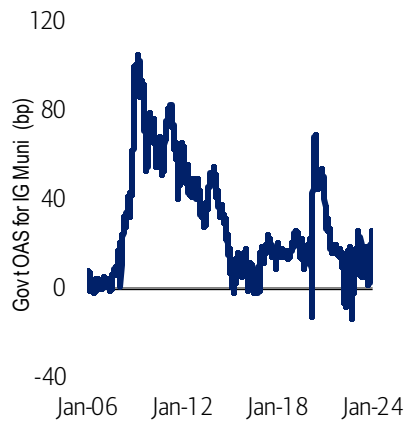


Source: Ice Data Indices, LLC

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Exhibit 33: IG muni Govt OAS spreads (bps)

Data as of 1/10/2024; Spreads have widened this year

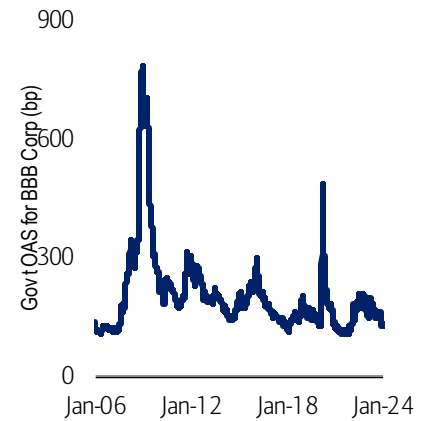


Source: Ice Data Indices, LLC

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Exhibit 34: BBB corporate Govt OAS spreads (bps)

Data as of 1/10/2024; Spreads have tightened this year

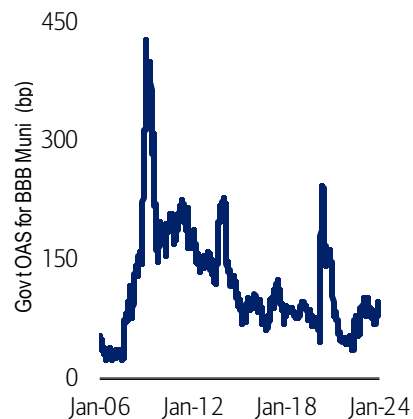


Source: Ice Data Indices, LLC

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Exhibit 35: BBB muni Govt OAS spreads (bps)

Data as of 1/10/2024; Spreads have tightened this year

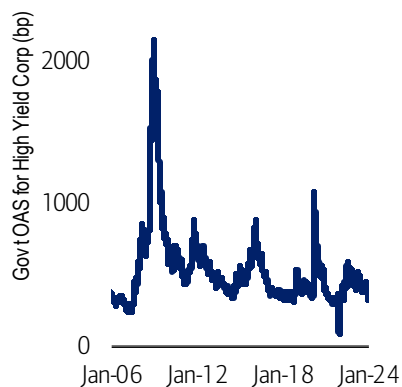


Source: Ice Data Indices, LLC

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Exhibit 36: High yield corporate Govt OAS spreads (bps)

Data as of 1/10/2024; Spreads have tightened this year

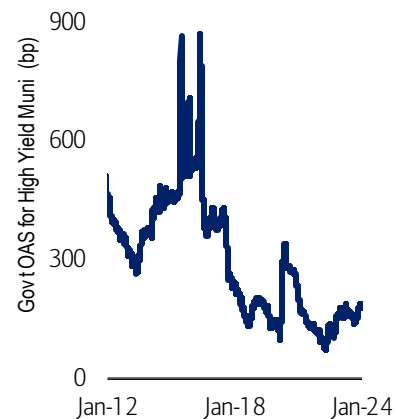


Source: Ice Data Indices, LLC

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Exhibit 37: High yield muni Govt OAS spreads (bps)

Data as of 1/10/2024; Spreads have widened this year



Source: Ice Data Indices, LLC

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Appendix: common acronyms

Table 1: Common Terminology – Multiple Sectors

Acronyms	Description
Multiple Sectors	
ABCP	Asset-backed commercial paper
AIFM	Alternative Investment Fund Managers
AIFMR	EU financial regulation of hedge funds, private equity, real estate funds and other alternative investment fund managers
ALS	Average Loan Size
AMF	Financial Markets Authority (France)
BaFin	Federal Financial Supervisory Authority (Germany)
BLS	Bureau of Labor Statistics
BPS	Basis points
BWIC	Bid Wanted In Competition
CDR	Constant default rate
CE	Credit Enhancement
CEE	Central and Eastern Europe
CFPB	Consumer Financial Protection Bureau
CLTV	Combined Loan-to-value ratio or Current Loan-to-value ratio
CPR	Constant prepayment rate
CQS	Credit quality step
CRD	Capital Requirements Directive (EU)
CRR	Capital Requirements Regulation (EU)
CRR	Conditional Repayment Rate
CRR	EU prudential regulation for credit institutions and investment firms
DD	Due diligence
DM	Discount Margin
DQ	Delinquency
DTI	Debt-to-Income ratio
EBA	European Banking Authority
EC	European Council (EU)
EComm	European Commission (EU)
EDSF	Euro Dollar Swap FRA
EL	Expected Loss
EP	European Parliament (EU)
ESAs	European Supervisory Authorities (EU)
ESG	Environmental, Social and Governance
ESMA	European Securities Market Authority
EU	European Union
Euribor	European interbank offered rate
FCA	Financial Conduct Authority (UK)
FCF	Front cash flow
Fed or FRB	Federal Reserve Board
FICO	Fair Isaac Corporation
FINRA	Financial Industry Regulatory Authority
FNMA	Federal National Mortgage Association
GDP	Gross domestic product
Ginnie Mae	Government National Mortgage Association
GNMA or GNR	Government National Mortgage Association
HAMP	Home Affordable Modification Program
HARP	Home Affordable Refinance Program
HY	High Yield
IAA	Internal Assessment Approach
IG	Investment grade
IO	Interest-only mortgages or tranches

Source: BofA Global Research

Acronyms	Description
Multiple Sectors	
ISM	Institute for Supply Management
ITS	Implementing Technical Standards (EU)
JHF	Japanese Housing Finance Agency
LCF	Last cash flow
LGD	Loss Given Default
LIBOR	London Interbank Offered Rate
LTV	Loan-to-value ratio
MBS	Mortgage-Backed Security
MEP	Member of European Parliament (EU)
MoM	Month over Month
NR	Non-rated
NSFR	Net Stable Funding Ratio
N-Spread	Nominal spreads to swaps
NY Fed	The Federal Reserve Bank of New York
OAS	Option-adjusted Spreads
OC	Overcollateralization
OID	Original issue discount
OLTV	Original Loan-to-value ratio
OWIC	Offer wanted in competition
PRA	Prudential Regulation Authority (UK)
QE	Quantitative Easing
QM	Qualified Mortgages
R&W	Representation and warranty
REIT	Real estate investment trust
RTS	Regulatory Technical Standards (EU)
SEV	Severity
SOFR	The Secured Overnight Financing Rate
Solvency II	EU insurance regulation
SONIA	Sterling overnight interbank average rate
SRT	Significant Risk Transfer
SSM	Single Supervisory Mechanism (EU)
STC	Simple Transparent and Comparable Securitisation
STS	Simple Transparent and Standardised Securitisation
TRACE	Trade Reporting and Compliance Engine
	Undertakings for the Collective Investments in
UCITS	Transferable Securities
UST	United States Treasury
WAC	Weighted average coupon
WAL	Weighted average life
WALA	Weighted average loan age
WAM	Weighted Average Maturity
WAS	Weighted average spread
WAVG	Weighted average
WoW	Week over Week
YoY	Year over Year
YTD	Year to date
YTM	Yield to maturity

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Table 2: Common Terminology – Asset Backed Securities (ABS) and Collateralized Loan Obligations (CLO)

Acronyms	Description	Acronyms	Description
Asset Backed Securities		Collateralized Loan Obligations	
A&C	Agriculture and Construction	A to E	Amend to extend
ABS	Asset Backed Securities	AMA	Asset manager affiliate
ABS	Absolute Prepayment Speed	AUM	Assets under management
CEU	Container shipping, Cost Equivalent Unit	BDC	Business development company
CNL	Cumulative Net Loss	BSL CLO	CLO backed primarily by broadly syndicated loans
DPP	Device Payment Plan	CBO	Collateralized bond obligation
ECASLA	The Ensuring Continued Access to Student Loans Act	CDO	Collateralized debt obligation
ED	The Department of Education	CLO	Collateralized loan obligation
EFC	Education Financial Council	CMV	Capitalized management vehicle
FDLP	William D. Ford Federal Direct Loan Program	Cov-Lite	Covenant-lite
FFELP	The Federal Family Education Loan Program	CQT	Collateral quality tests
HEA	Higher Education Act of 1965, as amended	DIV	Diversity Score
IBR	Income based repayment	EBITDA	Earnings before interest, tax, depreciation and amortization
IDR	Income driven repayment	ELLI	European Leveraged Loan Index
MPR	Monthly payment rate	EOD	Event of default
NCHER	The National Council of Education Resources	IC	Interest coverage
PAYE	Pay As You Earn	ID	Interest diversion
REPAYE	Revised Pay As You Earn Plan	IPO	Initial public offering
RV	Residual value (auto lease / loan)	IRR	Internal rate of return
SAARS	Seasonally adjusted annual rate	JR OC	Junior overcollateralization
TEU	Container shipping, Twenty Foot Equivalent Unit	LBO	Leveraged buyout
TIVAS	Title IV Additional Servicers	Liquidation NAV	NAV assuming portfolio can be liquidated immediately at its market value without any additional costs
VT	Voluntary Termination (auto loan by borrower)	LLI	Leveraged loan index
WBS	Whole business securitization	LTM	Last-twelve-months
YSOC	Yield Supplement Overcollateralization	M&A	Mergers and acquisitions
		MM CLO	CLO backed primarily by middle-market loans
		MOA	Majority owned affiliate
		MVOC	Market value overcollateralization
		NAV	Net asset value
		O&G	Oil and gas
		PIK	Payment in kind
		PPT	Portfolio profile tests
		RCF	Revolving credit facility
		RP	Reinvestment Period
		RR	Risk retention
		SME	Small and medium enterprise
		SROC	Senior overcollateralization
		TLA	Term loan A
		TLB	Term loan B
		TRUPS	Trust preferred securities
		WAP	Weighted average price
		WARF	Weighted average rating factor
		WARR	Weighted average recovery rate
		WAS	Weighted average spread

Source: BofA Global Research

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Table 3: Common Terminology – Commercial Mortgage Backed Securities (CMBS)

Acronyms	Description	Acronyms	Description
Commercial Mortgage Backed Securities		Commercial Mortgage Backed Securities	
ACLI	American Council of Life Insurers	PSF	Per Square Foot
ADR	Average Daily Rate	SH	Senior Housing
ARA	Appraisal Reduction Amount	SPE	Special purpose entity
ARD	Anticipated Repayment Date	SS	Special Servicing
ASERs	Appraisal Subordinate Entitlement Reductions	SS (Property Type)	Self-storage
Cap Rate	Capitalization rate	TI	Tenant Improvements
CapEx	Capital Expenditure	TIC	Tenant-In-Common
CBD	Central Business District	UW	Underwriting/Underwritten
CMBS	Commercial mortgage backed security	WAM	Weighted average maturity
CPY	Constant Prepayment Yield	WL	Watchlist
CRE	Commercial real estate	YM	Yield maintenance
Def	Defeasance		
DSCR	Debt service coverage ratio		
DUS	Fannie Mae delegated underwriting and servicing		
DY	Debt yield		
ERV	Estimated Rental Value		
Fannie Mae GeMs	Fannie Mae Guaranteed Multifamily Structures		
FRESB	Freddie Mac Small Balance Mortgage Transactions		
Freddie K	Freddie Mac K deals		
FT IO	Full term interest only loan		
GFC	Global Financial Crisis		
GLA	Gross Leasing Area		
GSA	Green Street Advisors		
HT	Hotel		
IN	Industrial		
L/O	Lockout		
LC	Leasing Commissions		
MCAS	Multifamily Connecticut Avenue Securities		
Mezz	Mezzanine tranche		
MF	Multifamily		
MH	Manufactured Housing		
MP3	Monetary Policy 3		
MR	Most Recent		
MX	Mixed Use		
MU	Mixed Use		
NAV	Net Asset Value		
NCF	Net cash flow		
NCREIF	National Council of Real Estate Investment Fiduciaries		
NOI	Net operating income		
OF	Office		
OMV	Open Market Valuation		
PL CMBS	Private Label CMBS		
PT IO	Partial term interest only loan		
RCA	Real Capital Analytics		
RevPar	Revenue Per Available Room		
RT	Retail		
SASB	Single asset/single borrower		
SBA	Small Business Administration		
SBIC	Small Business Investment Company		
SBL	Small balance loan		

Source: BofA Global Research

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Table 4: Common Terminology – Agency MBS**Acronyms Description****Agency MBS**

AFS	Available-for-sale
AOCI	Accumulated other comprehensive income
AOLS	Average original loan size
ARM	Adjustable-rate mortgage
BU/BD	Buy-up/Buy-down
CBR	Constant buyout rate
CC	Current coupon rate
CMO	Collateralized mortgage obligation
CPR	Cumulative prepayment rate
CSP	Common Security Platform
CSS	Common Securitization Solutions
EHS	Existing home sales
FG	Freddie Gold security (typically followed by a two-letter code: LMC, CI, etc.)
FHA	Federal Housing Administration
FHFA	Federal Housing Finance Agency
FHLB	Federal Home Loan Bank
FHLMC	Federal Home Loan Mortgage Corporation
FLS	Funding for Lending Scheme (FLS)
FN	Fannie Mae security (typically followed by a two-letter code: CL, CI, etc.)
FRM	Fixed-rate mortgage
GEO	Mortgages by state
G-Fee	Government-sponsored entity fee
GN, G2	Ginnie Mae security (typically followed by a two-letter code: SF, JO, etc.)
GSE	Government-sponsored entity
GWAC	Gross-weighted average coupon
HAC	Hedge-adjusted carry
HARP	Home Affordable Refinance Program
HECM	Home equity conversion mortgage
HELOC	Home equity line of credit
HERA	Housing and Economic Recovery Act of 2008
HFA	Housing Finance Authority
HLB	High loan balance MBS
HPA	Home price appreciation
HPI	Home price index
HTB	Help-to-Buy scheme
HQLA	High-quality liquid assets
HR	Hedge ratio
HTM	Held-to-maturity
HY CDX	High yield credit default swap index
IIO	Inverse interest-only securities
IO	Interest-only
IOS	Interest-only swap
IG CDX	Investment grade credit default swap index
JPY	Japanese Yen
LCR	Liquidity coverage ratio
LLB	Low loan balance MBS
MBS	Mortgage Backed Securities
LLPA	Loan-level pricing adjustment
MBA	Mortgage Bankers Association
MHA	Making Home Affordable program
MIP	Mortgage insurance premium
MLB	Mid loan balance MBS
MMI	Mutual Mortgage Insurance

Source: BofA Global Research

Acronyms Description**Agency MBS**

MPE	Mortgage payment to earnings ratio
mREIT	Mortgage real-estate investment trust
MSR	Mortgage servicing rights
NHS	New home sales
NTB	Net tangible benefit
OC	Overcollateralisation
OO	Owner-occupied
P/S spread	Primary/Secondary spread
PAC	Planned Amortization Class CMO
PIH	Office of Public and Indian Housing
PIW	Property Inspection Waiver
PLS	Private label security
PMI (or MI)	Private mortgage insurance
PMMS	Primary mortgage market survey rate
PO	Principal-only MBS
PSA	Public Securities Association
PT	Passthrough MBS
RELO	Relocation loan
RESPA	Real Estate Settlement Procedures Act
RF	Reserve Fund
RHS	Rural Housing Service
RMBS	Residential mortgage-backed security
RRP	Reverse repurchase agreement
SATO	Spread at origination
SCRT	Seasoned Credit Risk Transfer Trust
SEQ	Sequential CMO
SLR	Supplementary leverage ratio
SMM	Single monthly mortality
TAC	Targeted Amortization Class CMO
TBA	To be announced securities
TFS	Term Funding Scheme (UK)
TIC	Treasury International Capital System
TILA	Truth in Lending Act
TRID	TILA/RESPA integrated disclosure
UMBS	Uniform MBS
USD	United States Dollar
USDA	United States Department of Agriculture
VA	Veterans Affairs
VADM	Very Accurately Defined Maturity CMO
VPR	Voluntary prepayment rate
ZVOAS	Zero-volatility option-adjusted spreads

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Table 5: Common Terminology – Non-agency MBS

Acronyms	Description
Non-agency MBS	
5/1 ARM	Loan has a fixed interest rate for the first 5 years. After 5 years, the rate can change once every year for the remaining life of the adjustable-rate mortgage
60+	60 or more days delinquent
90+	90 or more days delinquent
AC	Always Current
ATR	Ability to Repay
CAS	Connecticut Avenue Securities
CBDB	Current but delinquent before
C-D	Current-to-delinquent roll rate
CRT	Credit Risk Transfer
Cum Default	Cumulative Default
Cum Loss	Cumulative Loss
Cum prepay	Cumulative Prepayment
D180	Delinquent for 180 days or more
ERR	Enhanced Relief Refinance program
FCLR	Foreclosure
FRM	Fixed rate mortgages
FstBuy	First time home buyer
HOA	Hybrid Option ARM
Home Eq	Home Equity Loans or Subprime Loans
HUD	United States Department of Housing and Urban Development
ILN	Insurance Linked Note
LTD Loss	Loss to date
MILN	Mortgage Insurance Linked Note
NAIC	National Association of Insurance Commissioners
Neg am	Negative amortization
NIW	New insurance written
Non-agency RMBS	Non-agency residential mortgage backed securities
Non-QM	Non-Qualified Mortgages
NPL	Non-performing loans (securities or loans)
PMIERS	Primary Mortgage Insurer Eligibility Requirements – requirements set by Fannie Mae and Freddie Mac to insure loans acquired by either GSE
POA	Pay Option ARM
REMIC	Real Estate Mortgage Investment Conduit
REO	Real estate owned
ReREMIC	Resecuritization of real estate mortgage investment conduits
RIF	Risk in Force
RPL	Re-performing loans (securities or loans)
SA	Servicer Advance
SFR	Single Family Rental Securitizations
SLST	Freddie Mac Seasoned Loan Structured Transaction
STACR	Freddie Mac Structured Agency Credit Risk debt notes
VPR	Voluntary Prepayment Rate
XoL	Excess of Loss reinsurance

Source: BofA Global Research

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