

A Santander US Capital Markets presentation

CLOutlook

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Caroline Chen
Managing Director
Senior Strategist
caroline.chen@santander.us
1 (646) 776 7809



Santander US Capital Markets LLC



Summary

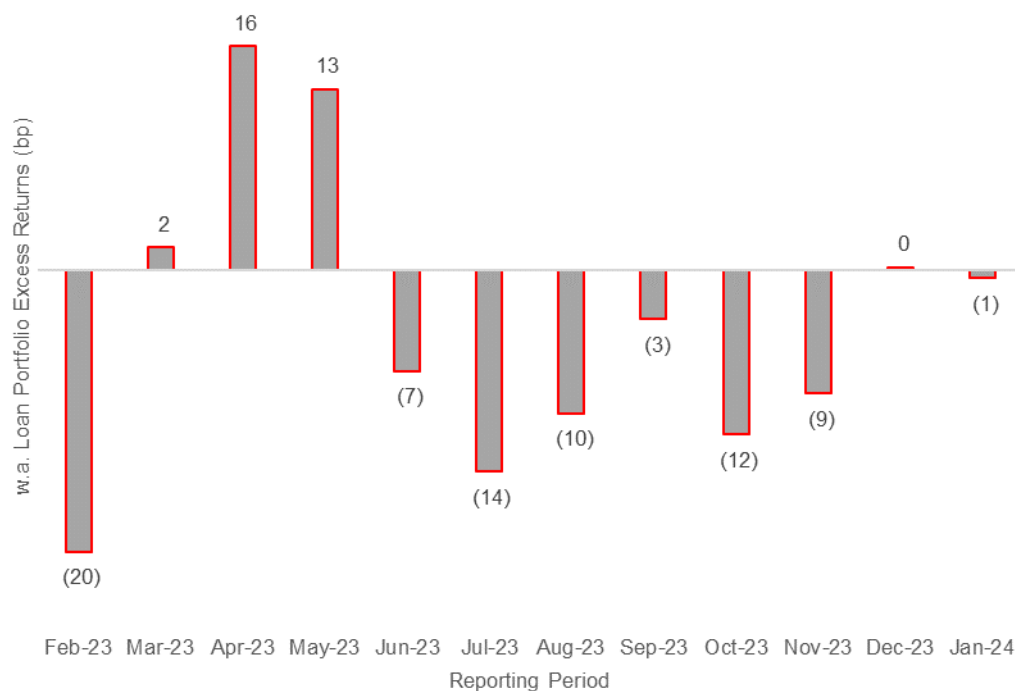
- Managers' loan portfolio performance trailed the index by 1 bp for the three months ending in January 2024.
- The CLO primary market kicked off 2024 with robust issuance. BSL CLO issuance approached \$11 billion in January, the highest first-month volume in years. MM CLO issuance was close to \$2 billion, roughly doubling the issuance in January 2023. The primary market has also seen a surge in refinance and reset activity.
- In the secondary market, CLO spreads carried over their strong momentum into the new year, reaching levels last seen in 1Q or 2Q 2022. The spread gaps between BSL CLOs and comparably rated corporates were either at or below their historical average by January month-end.
- In January, new-issue CLO debt funding cost continued to decline, with the tightest BSL CLO 'AAA' being priced at 148 bp over SOFR.
- The primary loan market also began the year on a strong note. In January, new issuance totaled \$65.5 billion, with loan refinancing contributing the most volume. The net loan supply outpaced demand from CLOs and prime loan funds.
- Both 'CCC' loans and trailing 12-month defaults in the leveraged loan index dropped modestly in January.

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Managers' performance lagged the broad market marginally through January

Managers' weighted average risk-adjusted loan portfolio performance trailed the index by 1 bp



(1) Each reporting period shows the average of managers' excess return performance in the past three months, ending on or before the 20th day of the recent month

(2) For the reporting period ending in November, the data shows the average excess return over the Morningstar/LSTA total return index for 82 managers with five or more active deals

Source: Santander US Capital Markets LLC, Markit, Intex

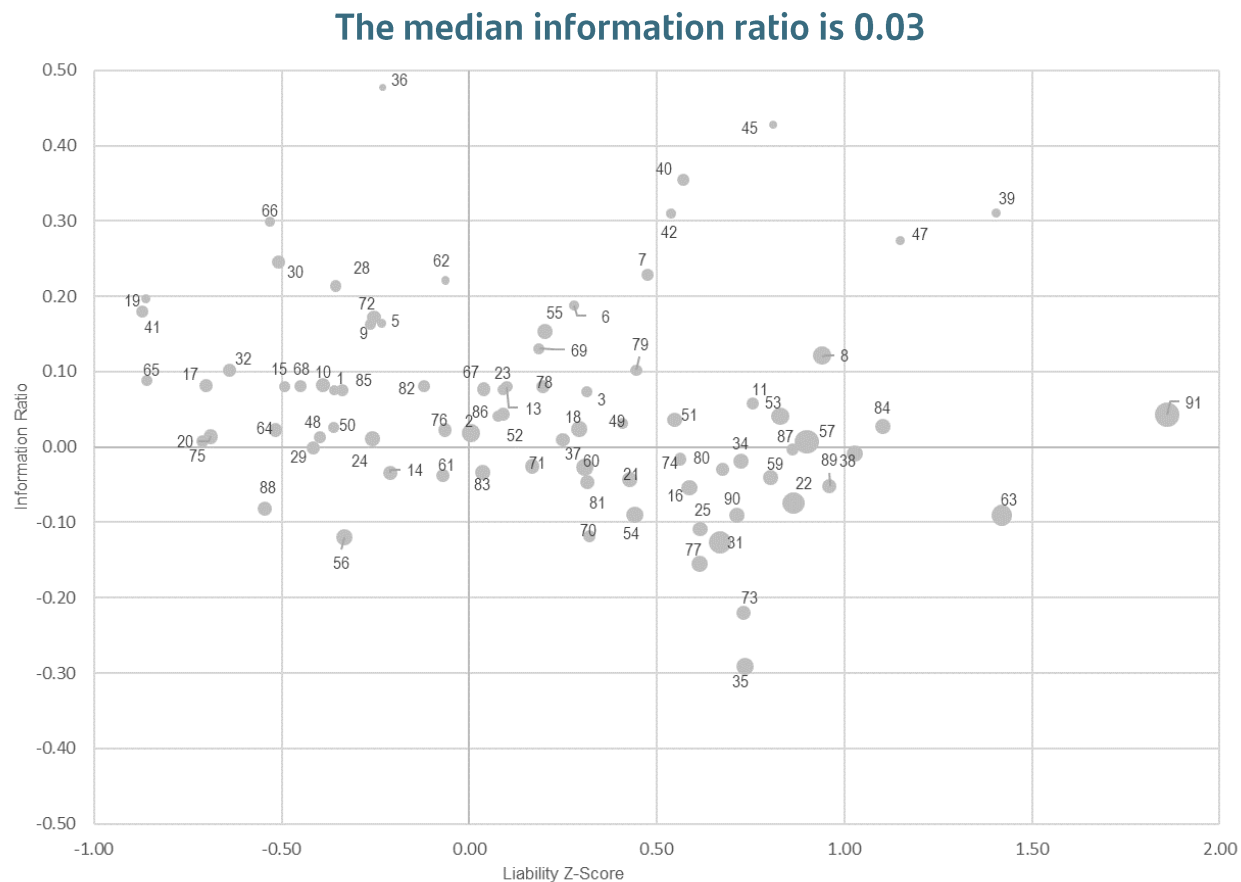
Top performers trailed the index in January

But Elmwood stands out

CLO Managers	β	3-mo average excess return (bp)				Jan Only
		1Q 2023	2Q 2023	3Q 2023	4Q 2023	
Oak Hill Advisors	0.97	41	44	16	32	-23
TCW Asset Management	0.98	26	13	9	23	-31
Elmwood Asset Management	0.88	49	60	21	19	17
Fortress Investment Group	0.94	40	44	3	19	-37
Generate Advisors	0.99	40	73	61	14	-6
Partners Group	1.01	15	6	36	9	-11
Hayfin Capital Management	0.93	32	32	60	6	-11
Allstate Investment Management	0.93	19	25	8	5	-12
Irradiant Partners	1.02	20	31	29	4	-19

Data shows the average excess return over the Morningstar/LSTA total return index. Each reporting period shows the trailing three-month average excess return.
Source: Santander US Capital Markets LLC, Markit, Intex

Most managers' excess returns have been consistent in the long run



(1) The information ratio measures managers' stability and reliability of the excess return performance. The liability z-score is the average cost of CLO debt relative to other deals in the market under similar market conditions, expressed as standard deviation. Each bubble size corresponds to a manager's beta.

Source: Santander US Capital Markets LLC, Markit, Intex

Managers key for the bubble chart

Manager Key	Manager Name	Manager Key	Manager Name	Manager Key	Manager Name
1	AEGON USA Investment Management	31	Crescent Capital Group	61	Morgan Stanley Eaton Vance
2	AGL Credit	32	CVC Credit Partners	62	Napier Park Global Capital
3	Clover (AIG Asset Management)	33	Denali Capital	63	Nassau Corporate Credit
4	Alcentra	34	Vibrant Capital (DFG)	64	Neuberger Berman
5	Allstate Investment Management	35	DoubleLine Capital	65	New York Life Investment Management
6	American Money Management	36	Elmwood Asset Management	66	Oak Hill Advisors
7	Anchorage Capital Group	37	First Eagle Private Credit	67	Oaktree Capital Management
8	Angelo, Gordon & Co	38	Five Arrows Managers	68	Octagon Credit Investors
9	Apollo Global Management	39	Fortress Investment Group	69	Onex Credit Partners
10	Ares Management	40	Generate Advisors	70	ORIX Advisers
11	ArrowMark Colorado Holdings	41	Goldentree Asset Management	71	Aristotle (Pacific Asset Management)
12	Assured Investment Management	42	Golub Capital	72	Palmer Square Capital Management
13	AXA Investment Managers	43	Greywolf Capital Management	73	Park Avenue Institutional Advisers
14	Bain Capital Credit	44	Gulf Stream Asset Management	74	Partners Group
15	Ballyrock Investment Advisors	45	Guggenheim Partners	75	PGIM
16	Bardin Hill Investment Partners	46	HalseyPoint Asset Management	76	PineBridge Investments
17	Barings	47	Hayfin Capital Management	77	PPM America
18	Benefit Street Partners	48	HPS Investment Partners	78	Pretium Credit Management
19	Blackrock Financial Management	49	ICG Debt Advisors	79	Sculptor Loan Management
20	Blackstone	50	Invesco	80	Seix Advisors
21	Brigade Capital Management	51	Investcorp Credit Management	81	Shenkman Capital Management
22	Canaras Capital Management	52	Irradiant Partners	82	Sixth Street
23	Canyon Capital Advisors	53	Jefferies Finance	83	Sound Point Capital Management
24	Carlyle Group	54	King Street Capital Management	84	Steele Creek Investment Management
25	CarVal	55	KKR Financial Advisors	85	Nuveen
26	CBAM	56	LCM Asset Management	86	TCW Asset Management
27	CFI Partners	57	Marathon Asset Management	87	Trimaran Advisors
28	CIFC Asset Management	58	Marble Point	88	Voya Alternative Asset Management
29	Columbia Management	59	MidOcean Credit Fund Management	89	Blue Owl (Wellfleet Credit)
30	Credit Suisse Asset Management	60	MJX Asset Management	90	WhiteStar
				91	ZAIS Group

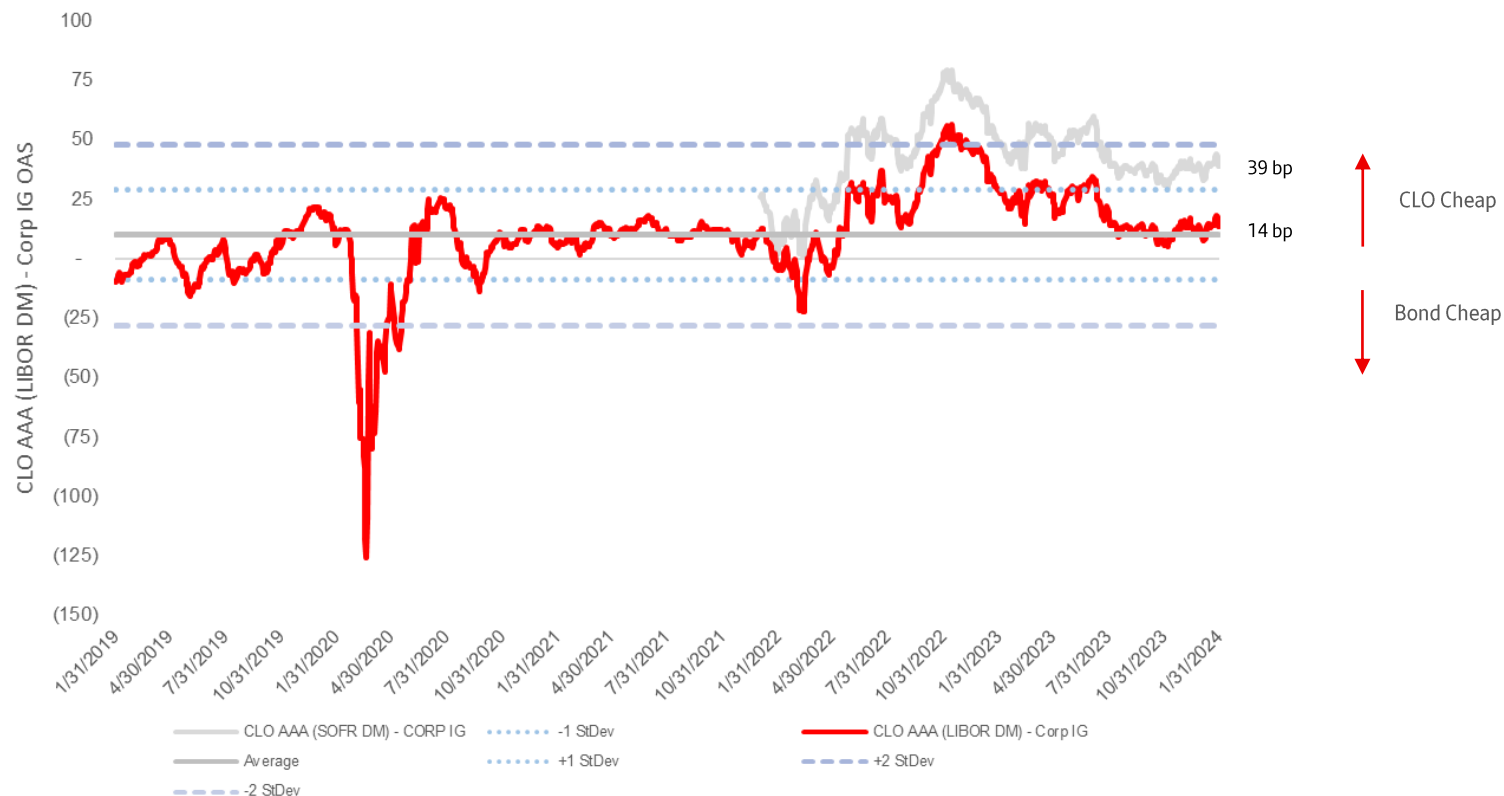
(1) The table shows the manager key code for 91 CLO managers. For our complete list of manager performance, click [here](#).
Source: Santander US Capital Markets LLC, Markit, Intex

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2. CLO relative value
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'AAA' CLOs: Spread to IG corporates stayed around the historical average

The spread gap between 'AAA' CLOs and IG Corp fell from highs in 4Q 2022 to near their 5-year average



Data as of January 31, 2024

Notes: Palmer Square continues publishing the CLO AAA LIBOR-based DM index. The DM is derived from the forward synthetic LIBOR curve.

Source: Santander US Capital Markets, FRED ICE BofA Corporate Index Option-Adjusted Spread (BAMLC0A0CM), Palmer Square CLO AAA DM index

'AA' CLOs: Spread to 'AA' corporates narrowed an additional 13 bp in January

The spread gap has fallen below its five-year average for the first time since May 2022



Data as of January 31, 2024.

Notes: Palmer Square continues publishing the CLO AA LIBOR-based DM index. The DM is derived from the forward synthetic LIBOR curve.

Source: Santander US Capital Markets, FRED ICE BofA AA US Corporate Index Option-Adjusted Spread (BAMLC0A2CAA), Palmer Square CLO AA DM index

'A' CLOs: Spread to 'A' corporates continued to drop

The spread gap between 'A' CLOs and 'A' corporates fell by an additional 9 bp in January



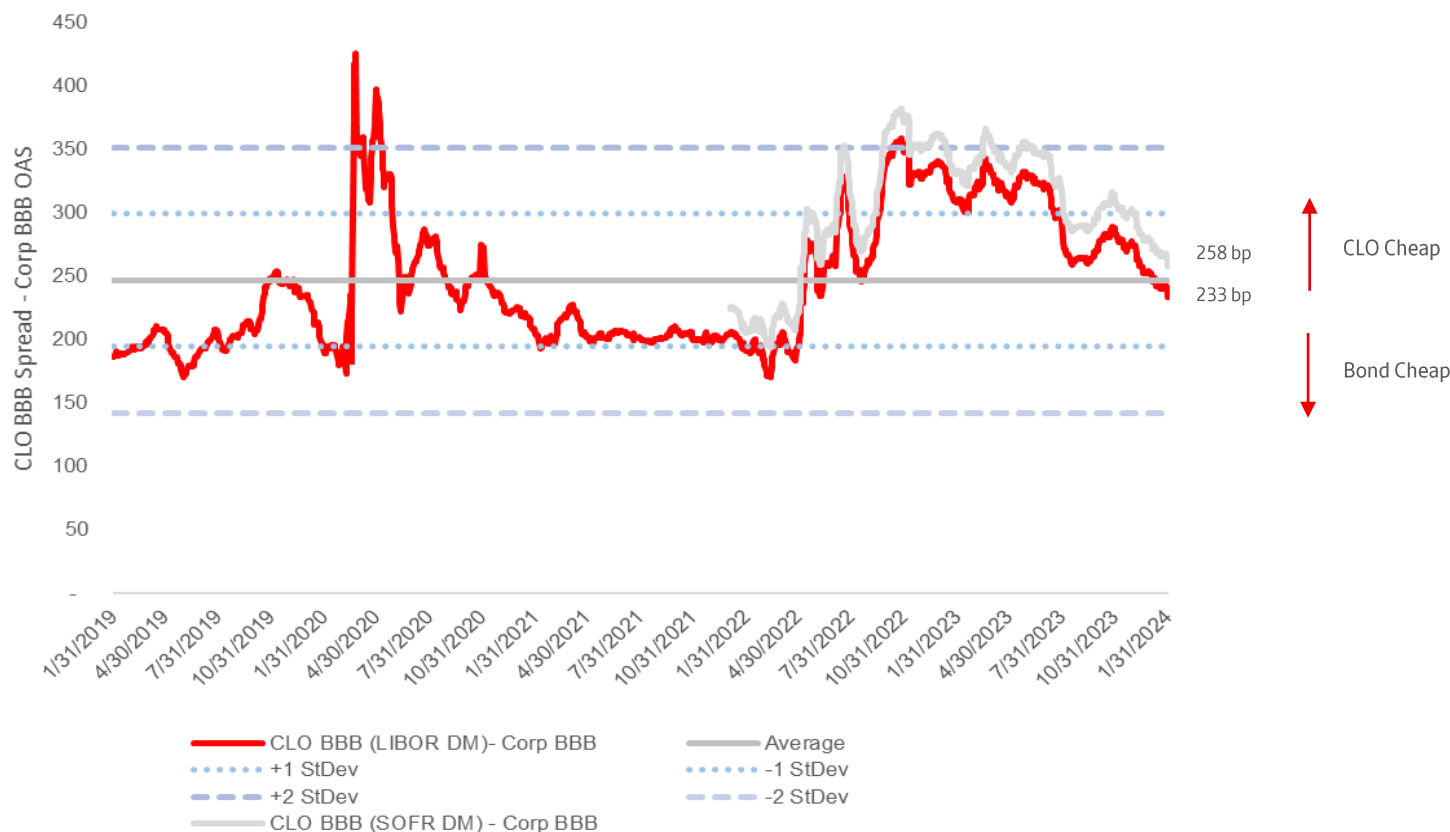
Data as of January 31, 2024.

Notes: Palmer Square continues publishing the CLO A LIBOR-based DM index. The DM is derived from the forward synthetic LIBOR curve.

Source: Santander US Capital Markets, FRED ICE BofA A US Corporate Index Option-Adjusted Spread (BAMLC0A3CA), Palmer Square CLO A DM index

'BBB' CLOs: Spread to 'BBB' corporates also fell below its five-year average

The spread gap between 'BBB' CLOs and 'BBB' corporate OAS dropped an additional 21 bp in January



Data as of January 31, 2024

Notes: Palmer Square continues publishing the CLO BBB LIBOR-based DM index. The DM is derived from the forward synthetic LIBOR curve.

Source: Santander US Capital Markets, FRED ICE BofA BBB US Corporate Index Option-Adjusted Spread (BAMLC0A4CBBB), Palmer Square CLO BBB DM index

'BB' CLOs: The spread gap to 'BB' corporates has also slid to the historical average

'BB' CLO spreads tightened 69 bp in January, while 'BB' Corp OAS widened 18 bp



Data as of January 31, 2024.

Notes: Palmer Square continues publishing the CLO BB LIBOR-based DM index. The DM is derived from the forward synthetic LIBOR curve.

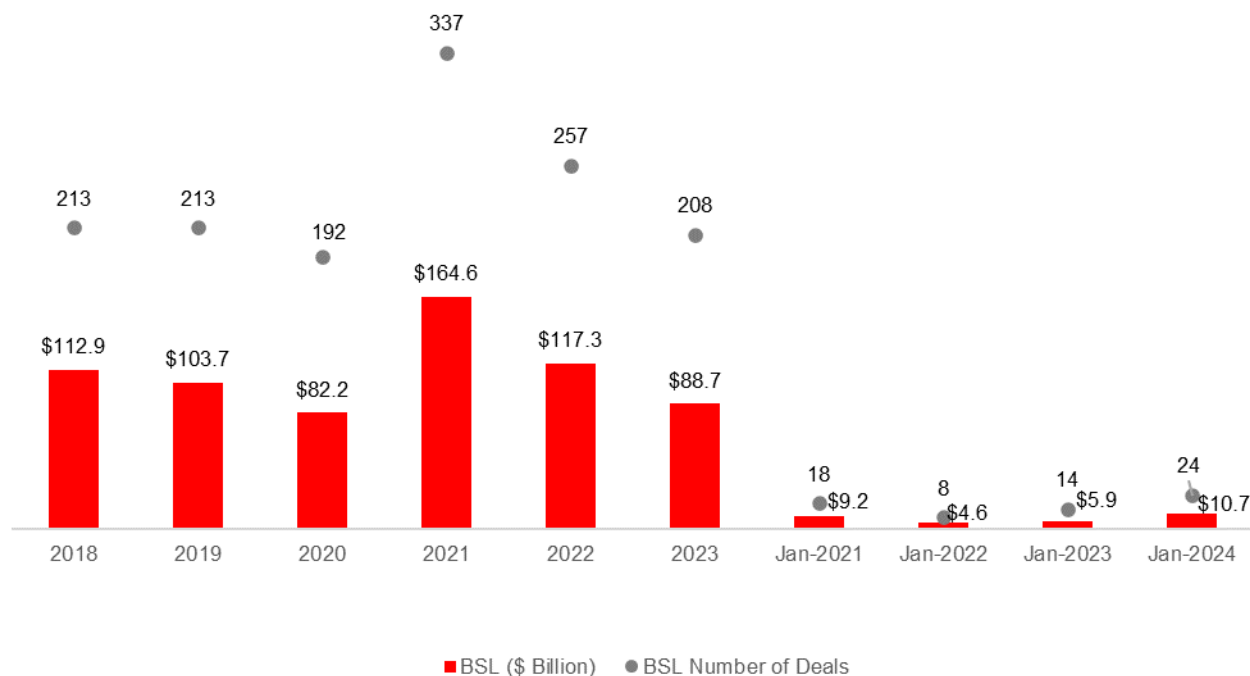
Source: Santander US Capital Markets, FRED ICE BofA BB US High Yield Index Option-Adjusted Spread (BAMLH0A1HYBB), Palmer Square CLO BB DM index

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The primary market started 2024 with robust issuance

BSL CLO issuance grew in volume and deal count compared to the first month of the last three years



New issue BSL CLO data as of January 31, 2024. Source: Santander US Capital Markets, Pitchbook LCD, Bloomberg

MM CLO issuance has maintained its strong momentum from last year

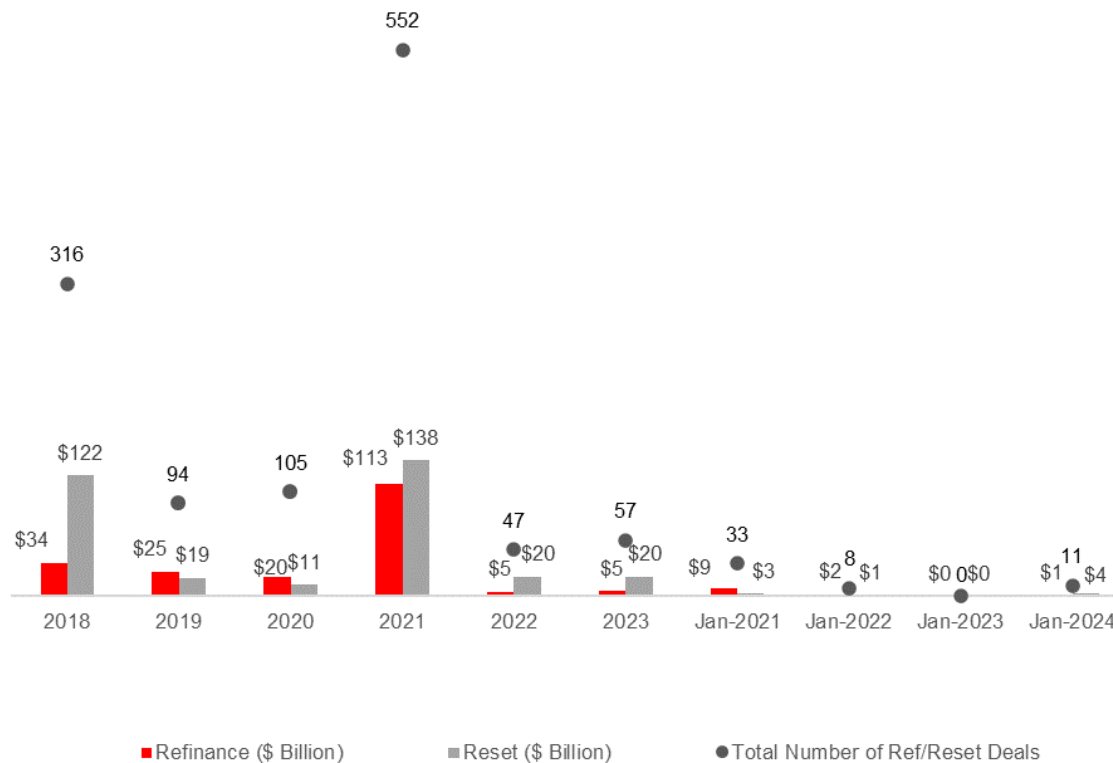
The primary market priced five deals totaling \$1.8 billion



New issue MML CLO data as of January 31, 2024. Source: Santander US Capital Markets, Pitchbook LCD, Bloomberg

CLO reset and refi market also saw busy activity in January

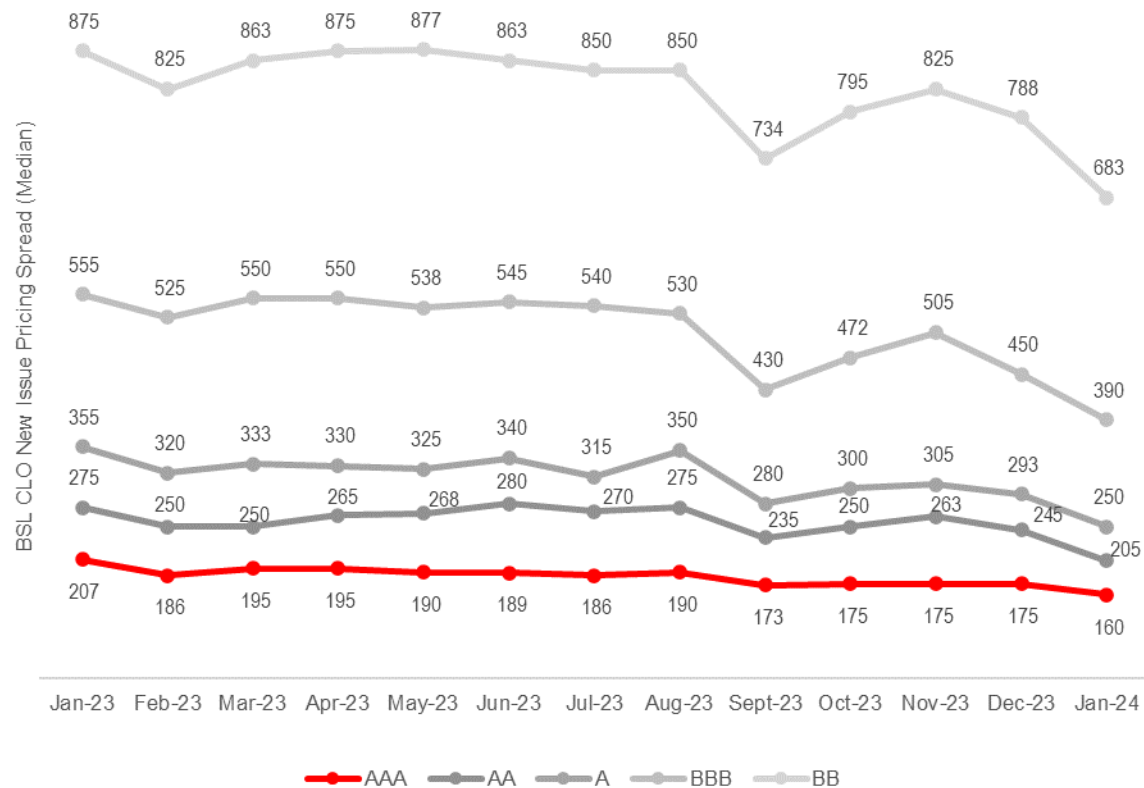
Issuances include eight reset and three refi CLOs totaling \$4.5 billion



New issue CLO data as of January 31, 2024. Source: Santander US Capital Markets, Pitchbook LCD, Bloomberg

New issue pricing spreads fell across the capital stack

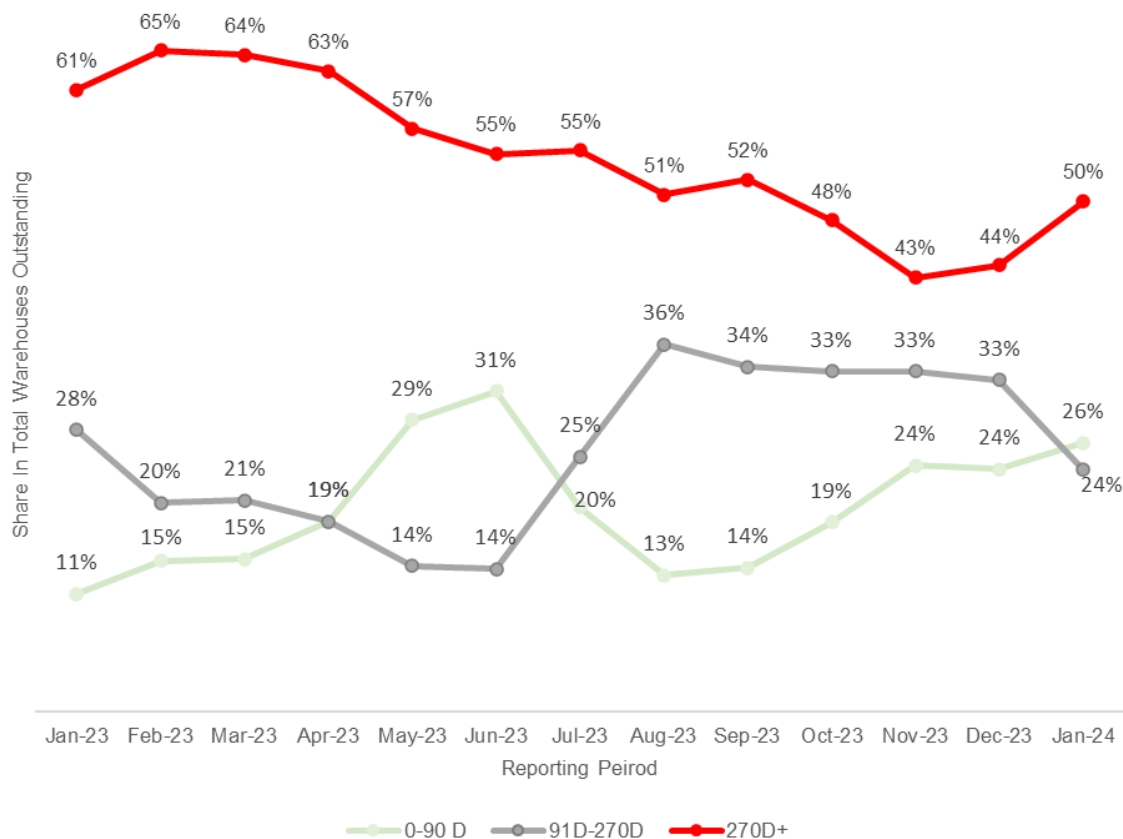
In January, the median of BSL CLO 'AAA' pricing spreads was about 50 bp tighter than a year ago



New issue BSL data as of January 31, 2024. Data reflect pricing DM reported by Bloomberg. If no pricing DM is reported, coupon DM is used as proxies.
Source: Santander US Capital Markets, Bloomberg

Warehouse closed for CLO issuance outpaced new warehouses

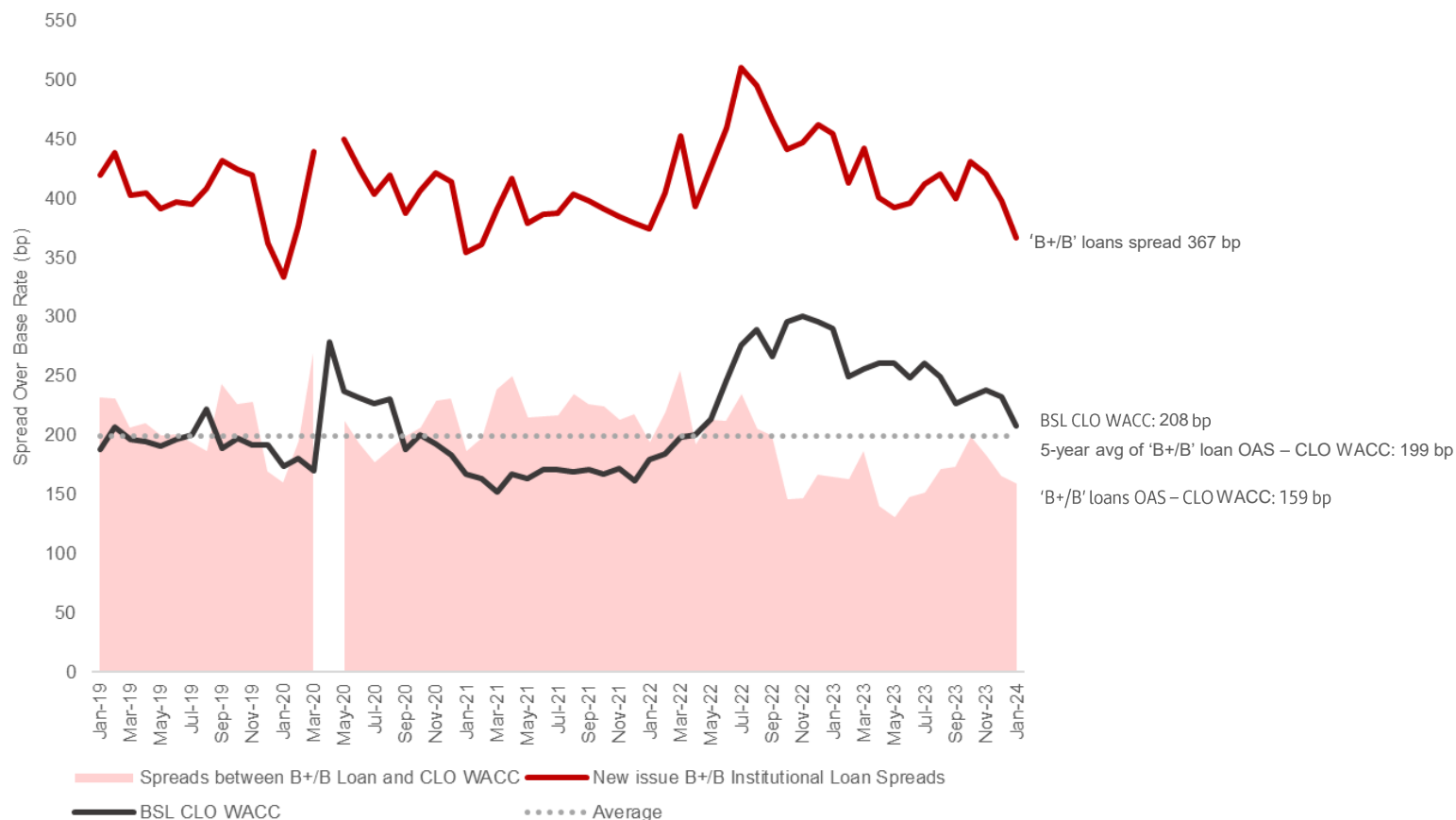
In January, the share of aged warehouses rose due to the decline of outstanding warehouses



Data comprises 76 warehouses that are administrated by U.S. Bank based on the bank's January report. The estimated market share of US Bank as warehouse administrator is around 45% to 50%. Percentage in the exhibit reflects the number of warehouses in each age bucket over the total outstanding warehouses. Warehouses in 270D+ include middle-market loan warehouses and warehouses with ever-green terms. Source: Santander US Capital Markets LLC, U.S. Bank

CLO debt funding cost continued to drop in January

But CLO arbitrage has stayed below its historical average due to the strong momentum in loan spreads



(1) Loan credit spreads are not available for April 2020 due to a lack of observations

(2) SOFR DM spreads are used for CLO data in 2022 and thereafter. BSL CLO WACC reflects the average of new issues priced in the month.

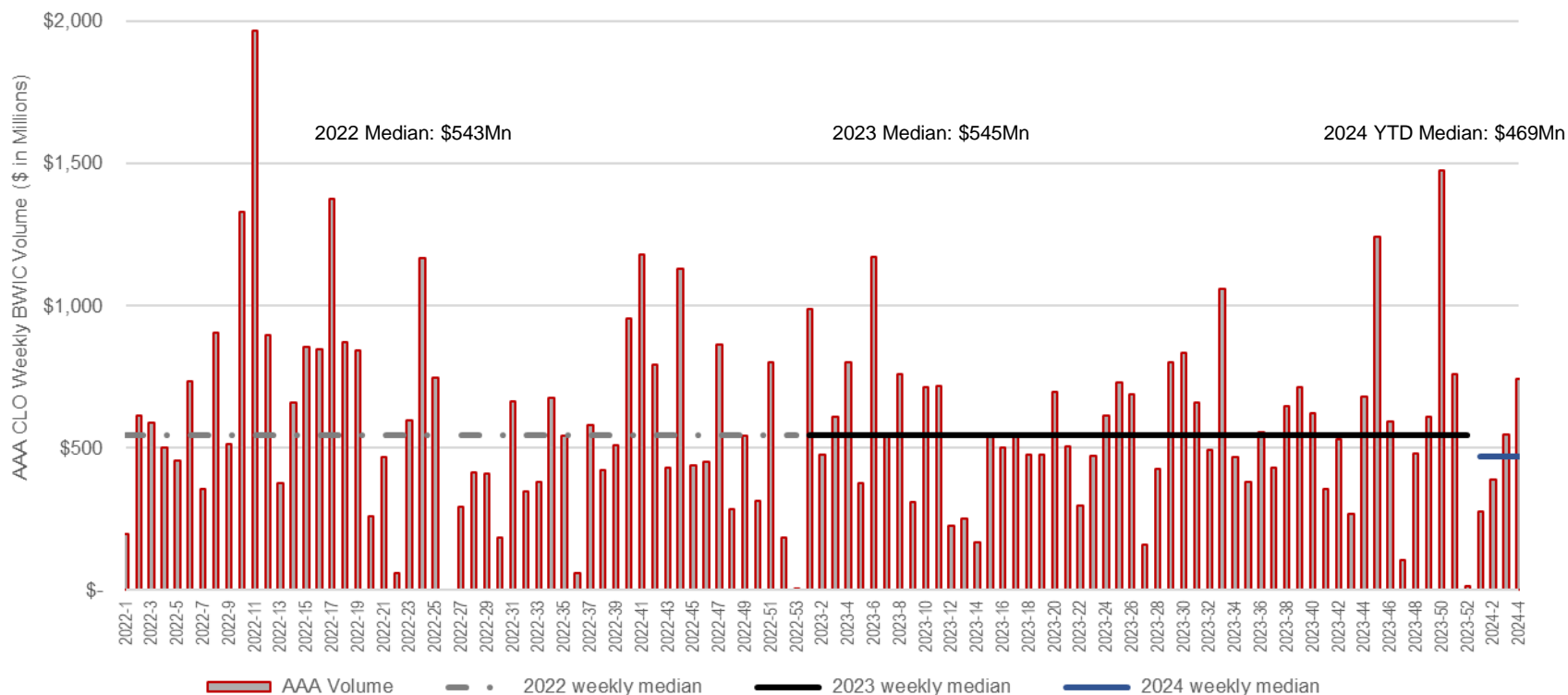
Source: Santander US Capital Markets, Pitchbook LCD

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'AAA' weekly BWIC started the year lower than the median of the past two years

But BWIC activity picked up in the last two weeks of January

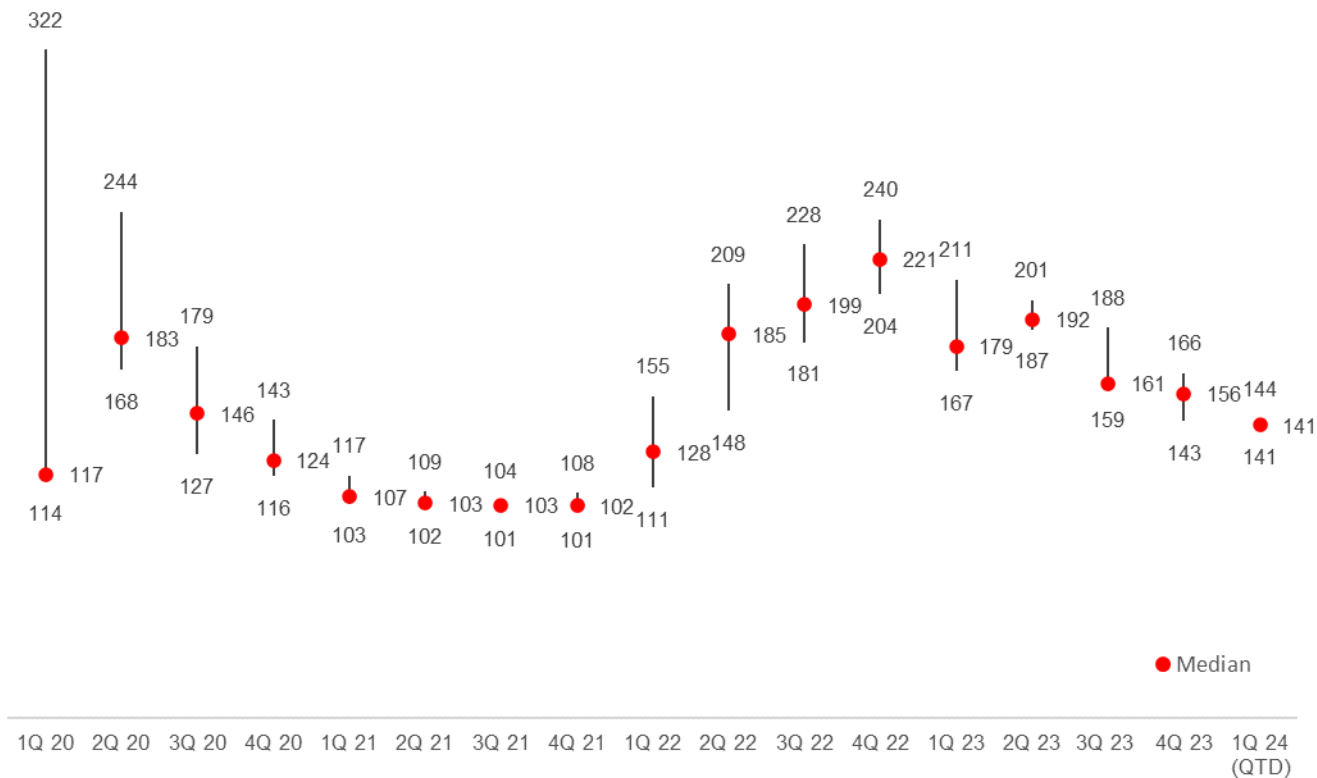


The x-axis shows the week in a year. For example, January 2024 volume includes data from week 1 (2024-1) to week 4 (2024-4). Data as of January 26, 2024.

Source: Santander US Capital Markets LLC, Kopen Technologies

'AAA' CLO secondary spreads reached a new tight of 141 bp by January

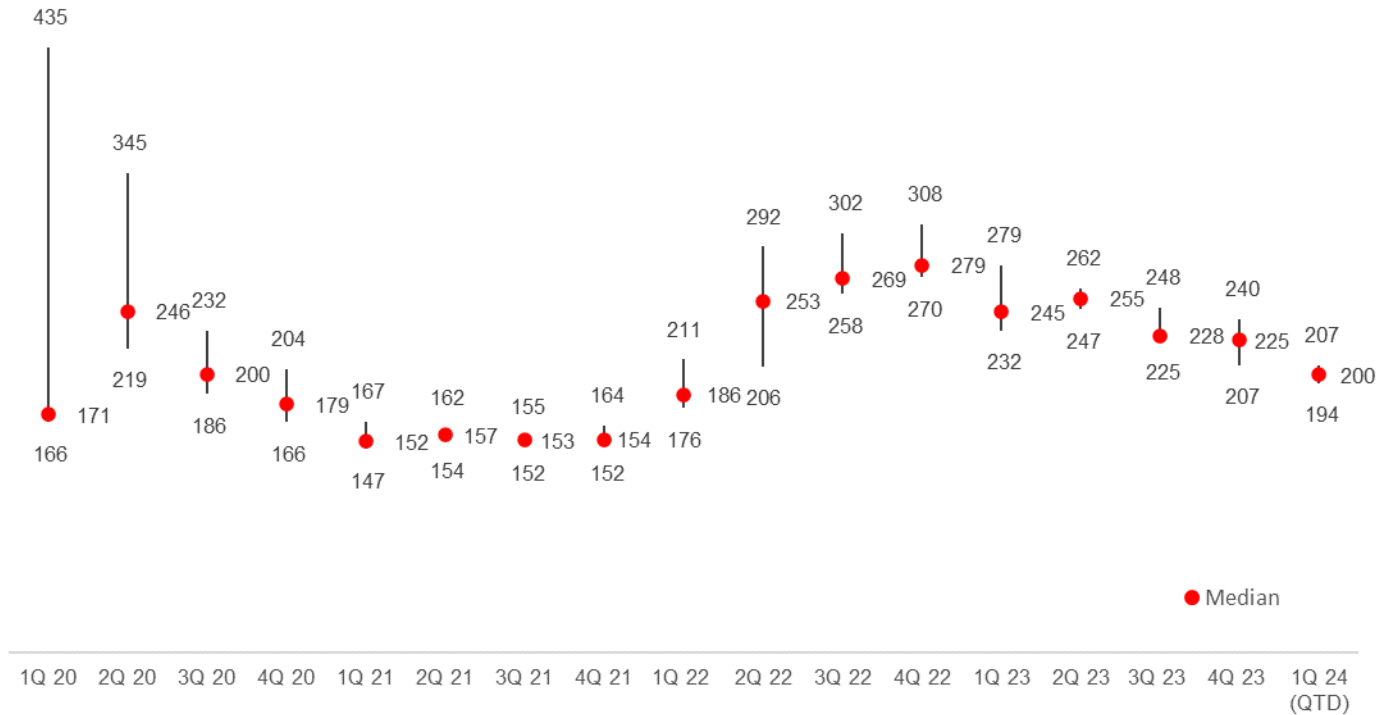
'AAA' CLO secondary spreads ranged between the low to mid 140 bp in January



Data as of January 31, 2024. LIBOR DM spreads are used for CLOs in 2021 and prior. SOFR DM spreads are used for CLOs in 2022 and thereafter.
Source: Santander US Capital Markets LLC, Palmer Square AAA CLO DM index

'AA' CLO secondary spreads finished January at 195 bp

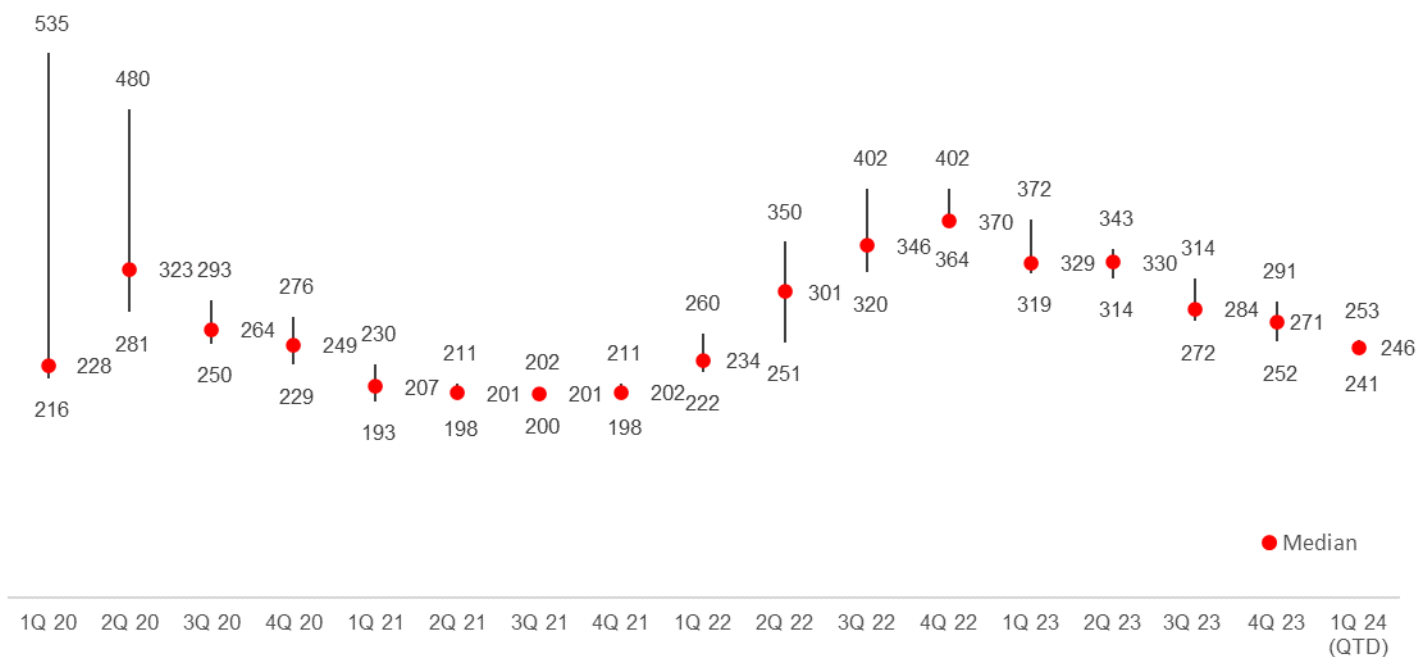
A level last seen in 1Q 2022



Data as of January 31, 2024. LIBOR DM spreads are used for CLOs in 2021 and prior. SOFR DM spreads are used for CLOs in 2022 and thereafter.
Source: Santander Capital Markets LLC, Palmer Square AA CLO DM index

'A' CLO spreads also narrowed to a level last seen in 1Q 2022

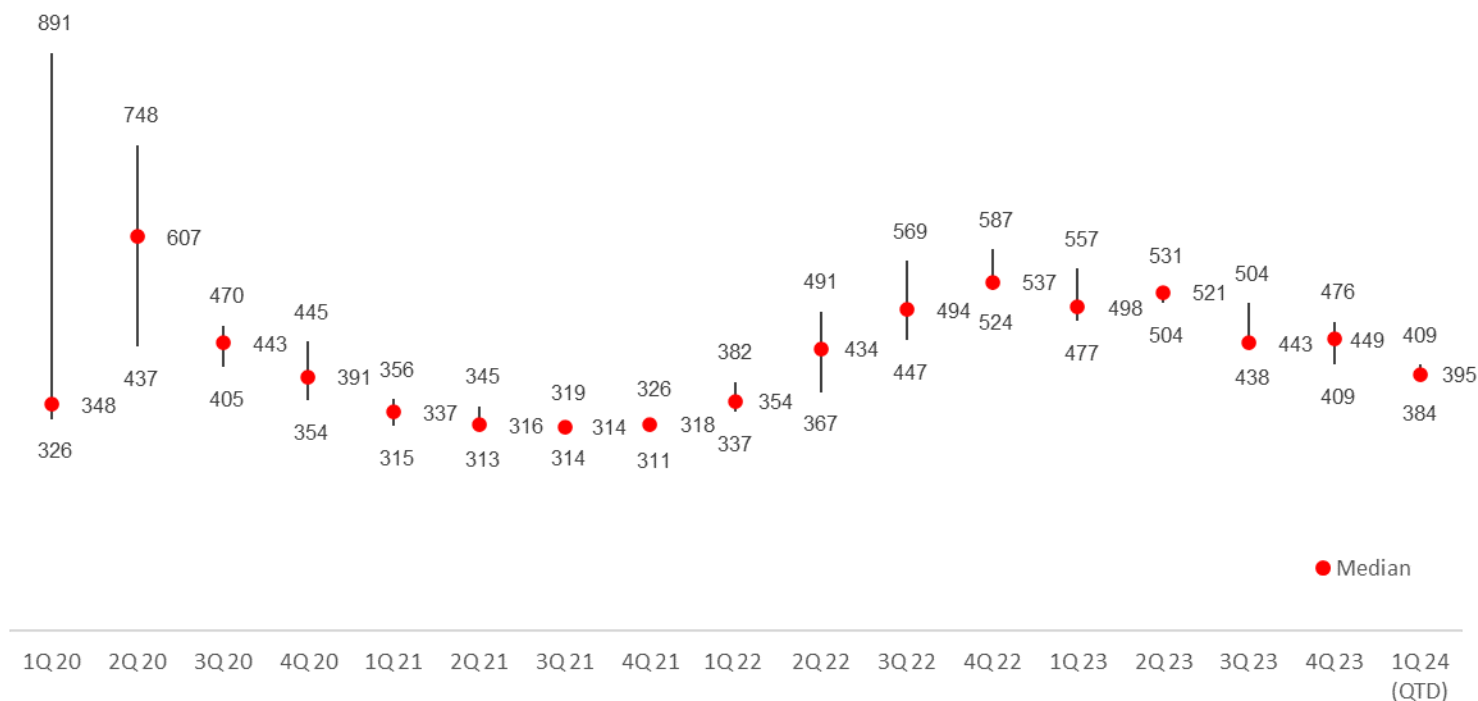
'A' CLO secondary spreads finished January at 241 bp



Data as of January 31, 2024. LIBOR DM spreads are used for CLOs in 2021 and prior. SOFR DM spreads are used for CLOs in 2022 and thereafter.
Source: Santander US Capital Markets LLC, Palmer Square A CLO DM index

'BBB' CLO spreads ended January below 400 bp

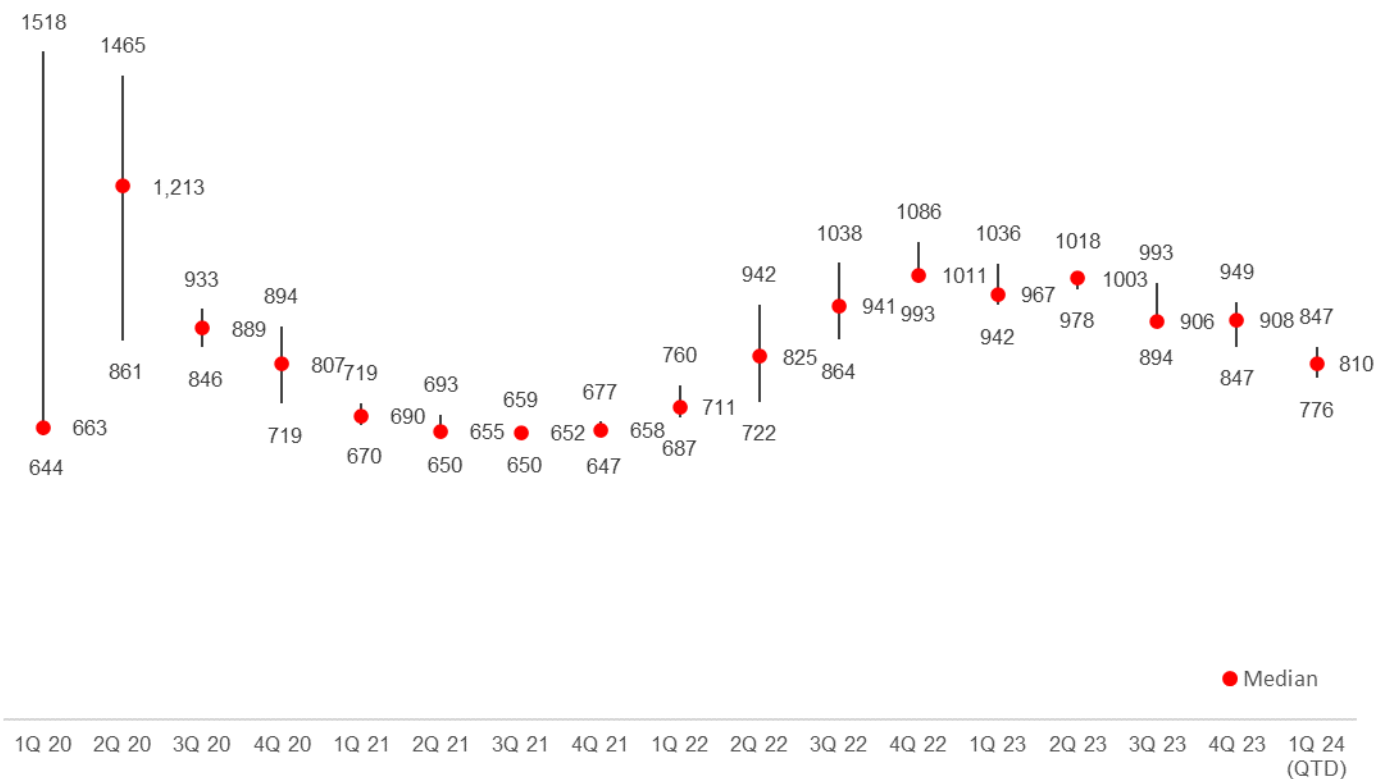
'BBB' secondary spreads have tightened an additional 25 bp since the end of 2023



Data as of January 31, 2024. LIBOR DM spreads are used for CLOs in 2021 and prior. SOFR DM spreads are used for CLOs in 2022 and thereafter.
Source: Santander US Capital Markets LLC, Palmer Square BBB CLO DM index

'BB' CLO secondary spreads finished January at 776 bp

A level last seen in 2Q 2022



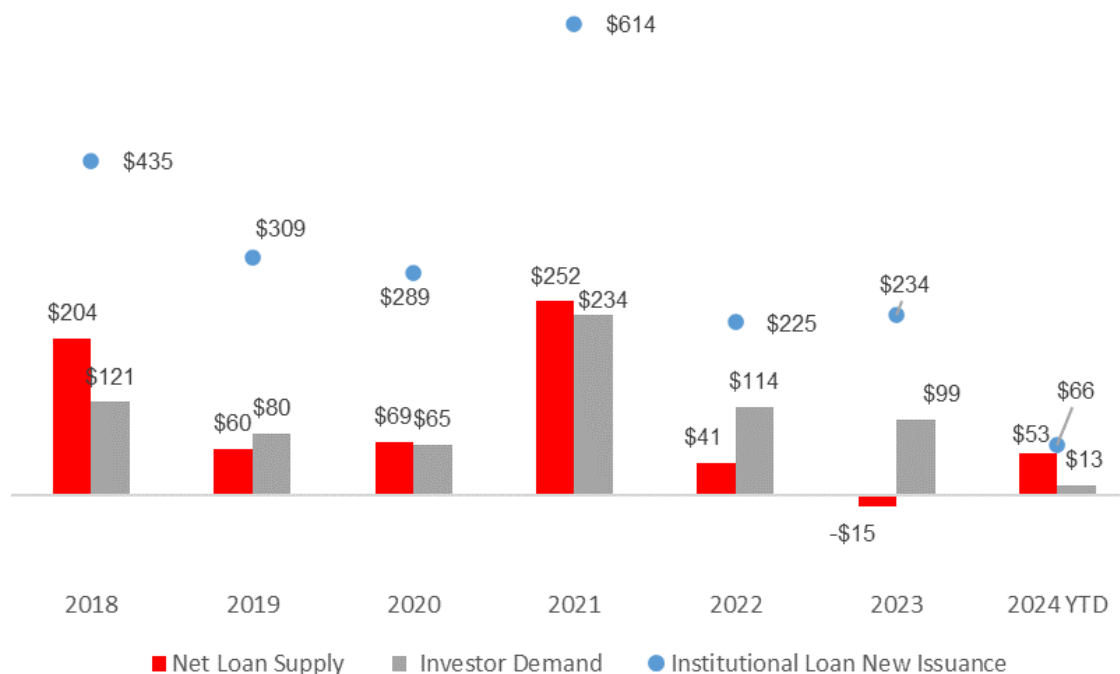
Data as of January 31, 2024. LIBOR DM spreads are used for CLOs in 2021 and prior. SOFR DM spreads are used for CLOs in 2022 and thereafter.
Source: Santander US Capital Markets LLC, Palmer Square BB CLO DM index

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The loan primary market saw a \$65.5 billion new issuance in January

The issuance boom led to a positive net loan supply



New issuance includes loans issued for dividends, M&A, Refi, LBO, and general corporate purpose

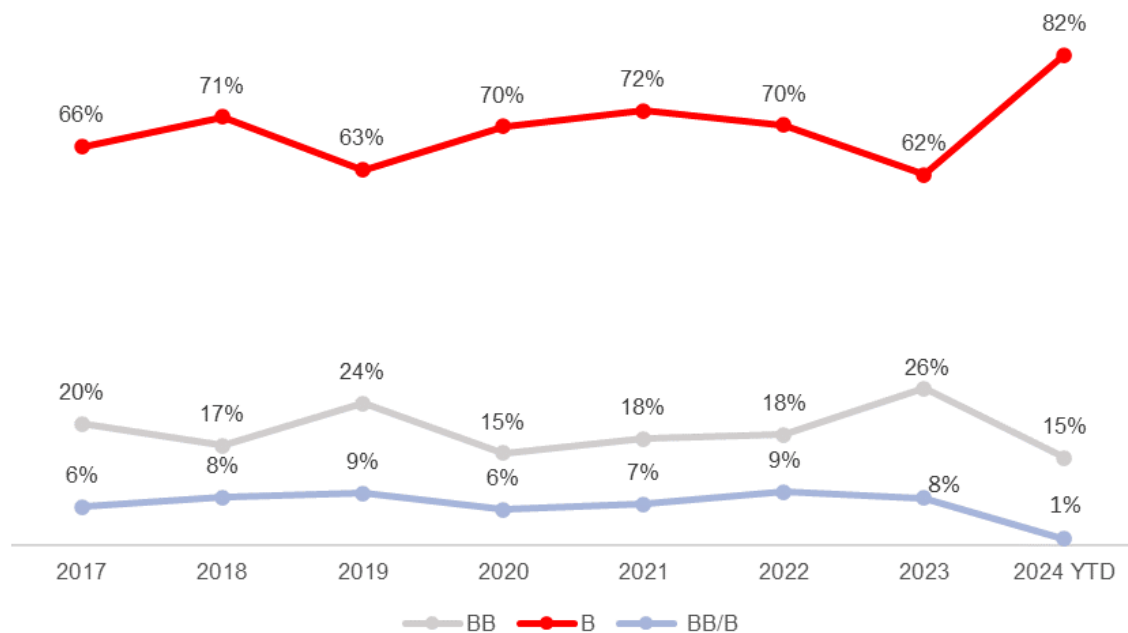
Net loan supply = institutional loan new issuance – repayments, Investors demand = CLO new issuance +/- prime fund flows

Data as of January 31, 2024. Institutional loan new issuance and loan repayments were \$65.5 billion and \$12.4 billion, respectively in January. CLO's new issuance, including both BSL CLOs and MM CLOs, was \$12.5 billion in January 2024. Prime loan funds had an aggregated inflow of 0.3 billion in January 2024.

Source: Santander US Capital Markets LLC, Pitchbook LCD

The share of 'B' loans increased in January

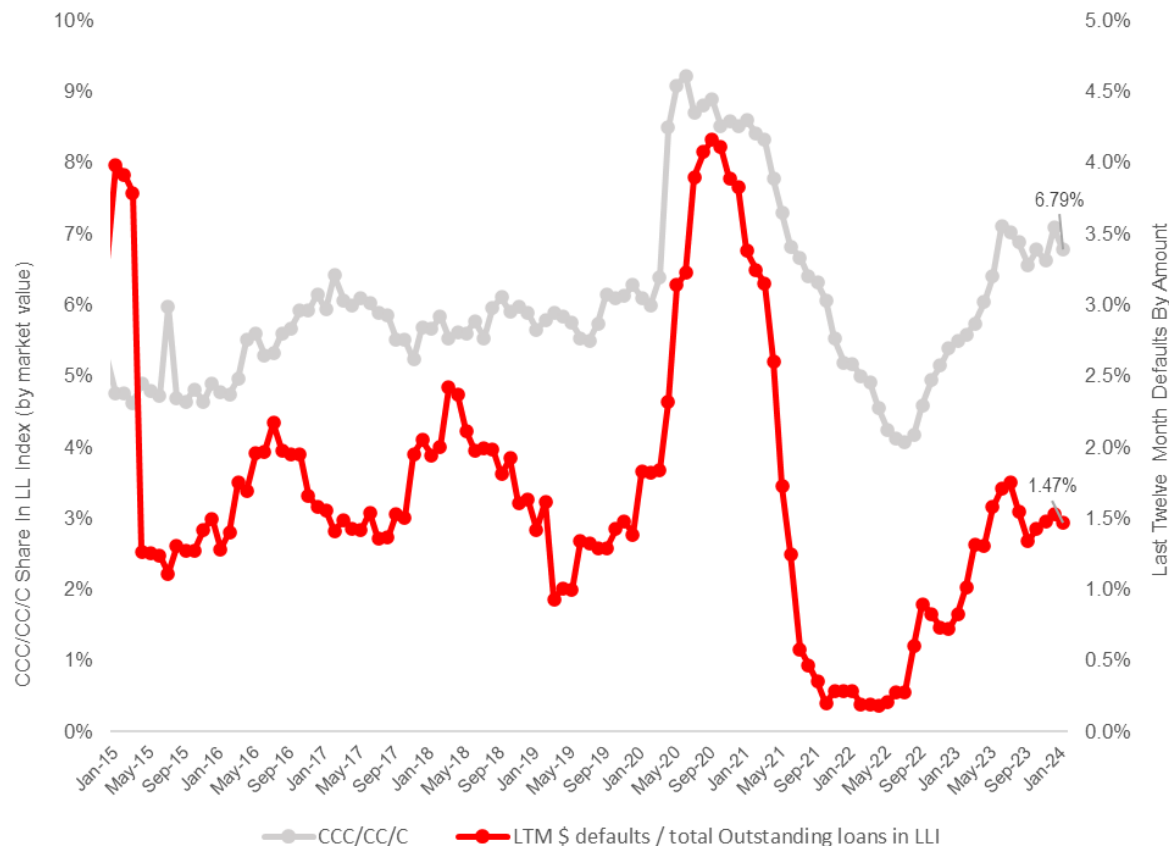
'B' loan issuance totaled \$53.5 billion, mostly contributed by refinancing



Data as of January 31, 2024. New issue loans that are not shown in above exhibit include loans rated 'BBB/BB or higher', 'CCC or lower' and 'NR'.
Source: Santander US Capital Markets LLC, Pitchbook LCD

'CCC' loans and defaults both lowered slightly in the index

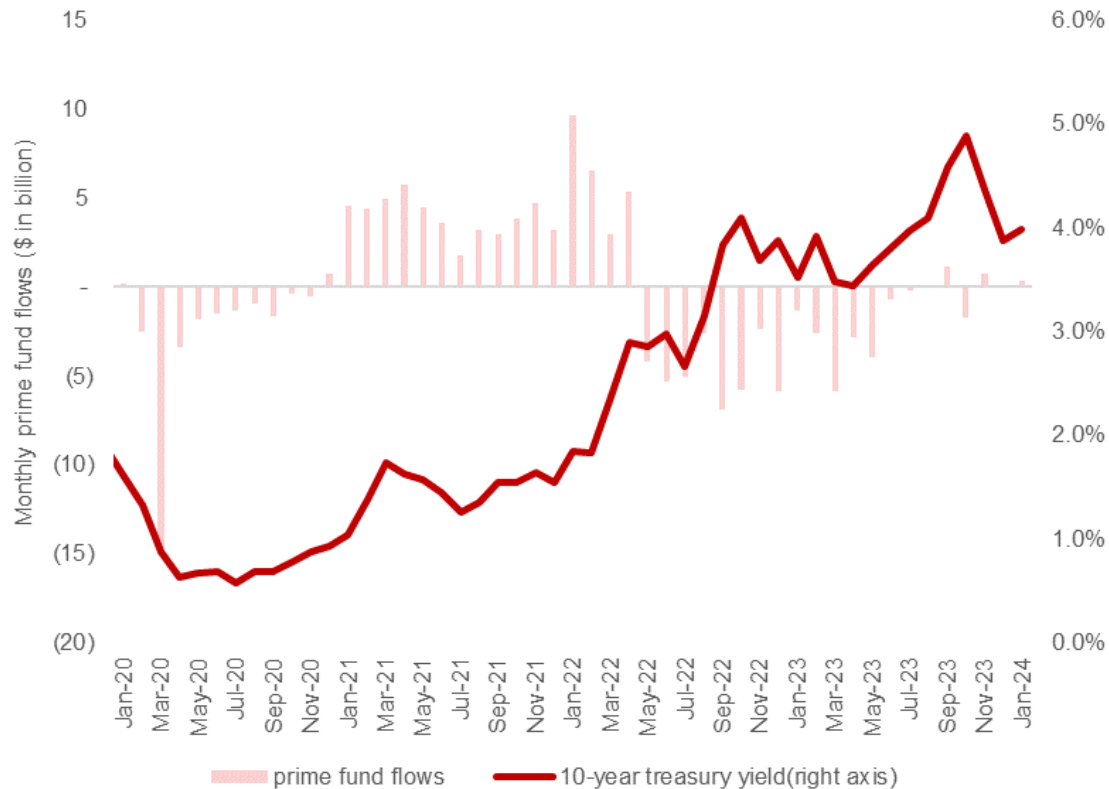
'CCC' loans dropped to 6.8% while the trailing 12-month defaults fell to below 1.5%



Data as of January 31, 2024. TXU defaults are excluded in 2017.
Source: Santander Capital Markets LLC, Pitchbook LCD

Prime loan funds had a modest \$0.31 billion inflow in January

Loan funds received small inflows in three consecutive months



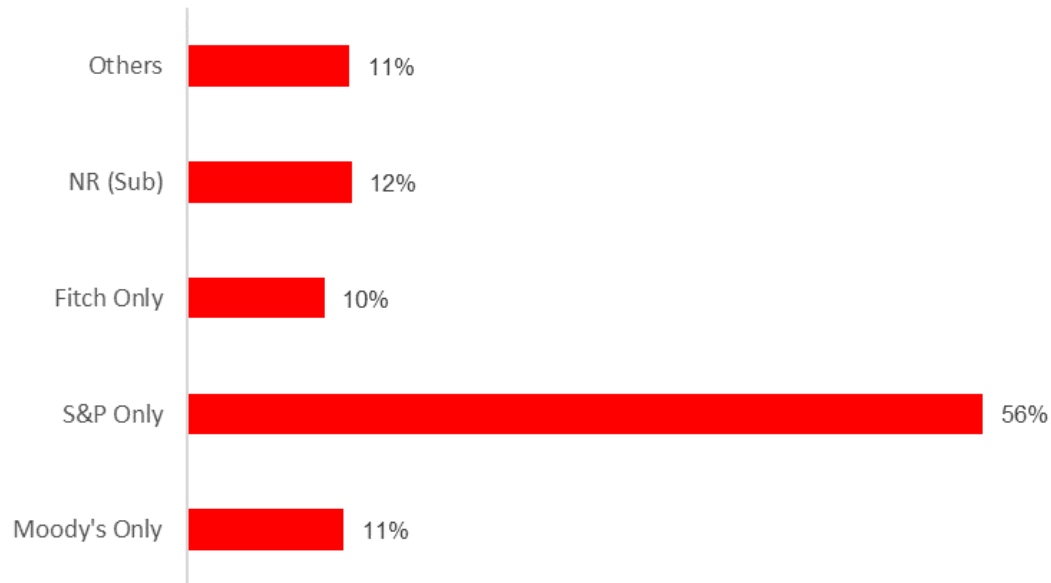
Data as of January 2024. The monthly flow in August 2023 was revised to a \$0.09 billion inflow from a previously reported \$0.46 billion outflow by LCD.
Source: Santander US Capital Markets LLC, Pitchbook LCD

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S&P continues to lead the new issuance market in 2024

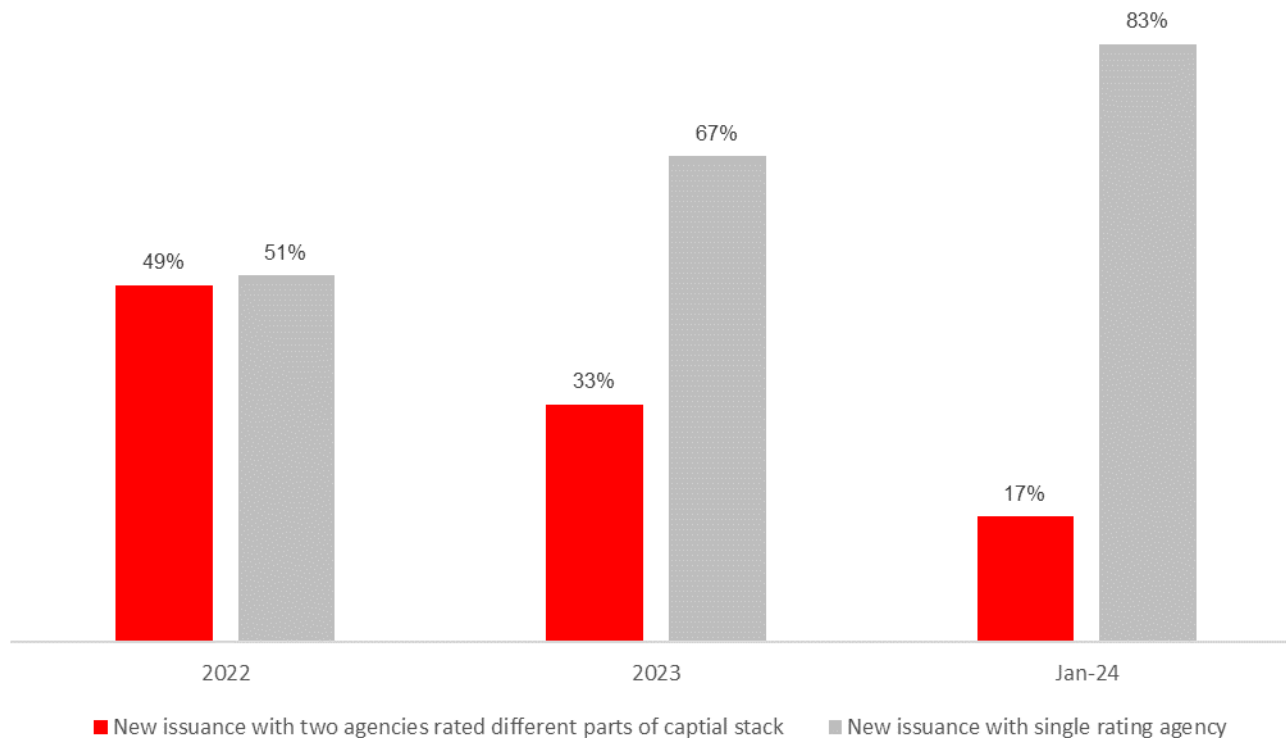
S&P rated 22 out of the 29 new CLOs priced in January



(1) Data as of January 31, 2024. New issuance includes both BSL CLOs and MM CLOs. Others include tranches with ratings from two agencies. The percentage represents the tranche par outstanding at pricing.
Source: Santander US Capital Markets LLC, Bloomberg

Rating arbitrage share in the primary market dropped in January

Most new issuances had one agency rate the entire capital stack



Data as of January 31, 2024. New issuance includes both BSL CLOs and MM CLOs. The percentage represents the tranche par outstanding at pricing.
Source: Santander US Capital Markets LLC, Bloomberg

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Noteworthy events in January 2024

- 1/4: Obra Capital, a New York-based alternative asset manager, has hired a former senior executive, Scott Macklin, from AllianceBernstein, to lead its U.S. leveraged finance business. Obra also plans to build out a CLO platform. (Source: LCD Pitchbook)
- 1/18: Shares of Palmer Square's BDC began trading on the NYSE under the ticker symbol PSBD in January. The BDC will invest in liquid, broadly syndicated loans and large private deals. Palmer Square currently manages about \$28 billion assets. (Source: LCD Pitchbook)
- 1/23: The New Mexico State Investment Council approved a commitment of up to \$350 million to a direct lending fund managed by Oak Hill Advisors during a board meeting in January. The fund, with a three-year investment period, will focus on sponsor-backed, first-lien loans to upper-middle-market companies. Oak Hill also launched a new BDC last year by partnering with T.Rowe Price. (Source: Creditflux)
- 1/26: Rating agencies see MM CLO collateral performance as relatively stable in 2023, but exposure to 'CCC' assets has risen. Fitch's latest U.S. MM CLO Snapshot shows muted defaults in 2023, but the percentage of loans with Fitch's issuer default ratings or credit opinions of 'CCC+' or below increased from 14.9% in December 2022 to 18.9% by the end of 2023. S&P also identifies the same trend. According to S&P's latest Private Credit and MM CLO Quarterly, exposure to S&P-rated 'CCC' assets started 2023 at 9.5% but ended the year at over 14%. (Source: Fitch, S&P)
- 1/29: Blackstone aims to raise \$10 billion for its latest opportunistic private credit fund. The fund will be Blackstone's fifth private credit opportunistic strategy fund, echoing global private credit market growth. (Source: Creditflux)

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