

U.S. Structured Finance Chart Book: March 2024

Kohlton Dannenberg

James Manzi

Tom Schopflocher

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Highlights | Calling All CLOs! Or Not? Assessing The Potential Volume Of CLO Refinances And Resets

- The primary factor that motivates a CLO manager to refinance or reset a CLO is the economic incentive provided by the difference between prevailing market CLO spreads and the spreads on the outstanding CLO notes.
- We offer a framework for assessing the volume of CLO refinances and resets that might come about at a given period in the future.
- We present four 'AAA' spread scenarios to illustrate what the cumulative refinance/reset volume could be through the end of 2024.
- We acknowledge the refinance/reset decision does not depend entirely on whether a CLO is "in the money" relative to prevailing market spreads. Many nuanced factors influence the viability of a refinance or reset, including portfolio performance.

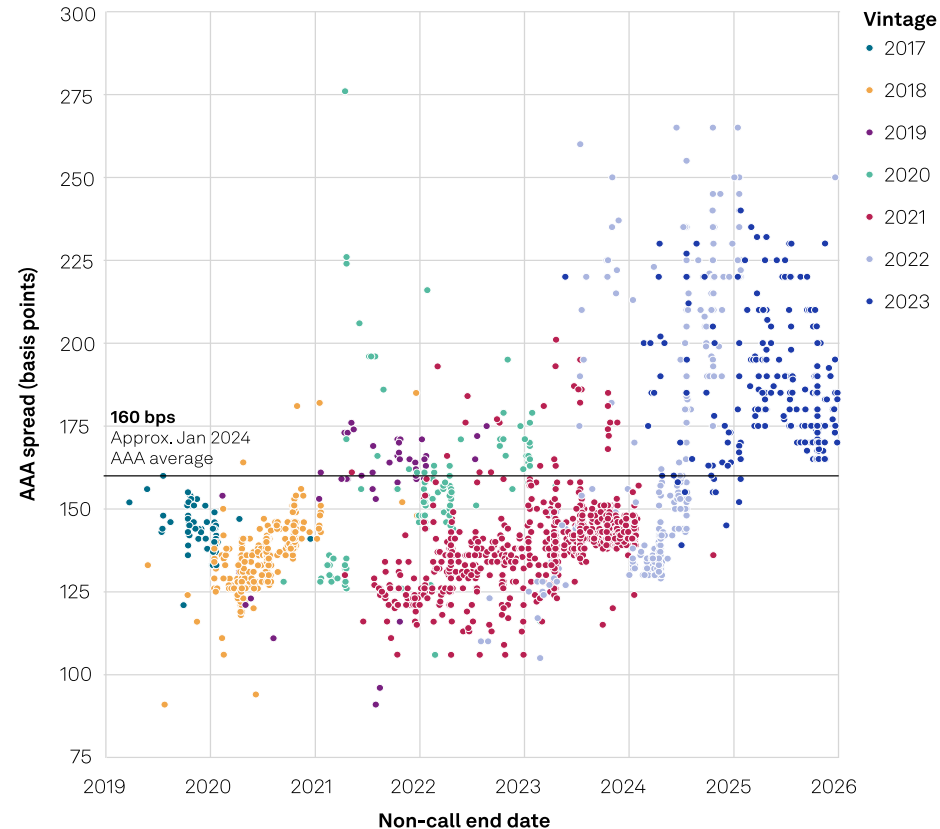
The spreads of reinvesting transactions and transactions within two years of their reinvestment period end date are plotted.

Sources: Pitchbook LCD, S&P Global Ratings.

[Access Article](#) >

S&P Global
Ratings

Outstanding U.S. BSL CLO AAA spreads and non-call period end dates by vintage

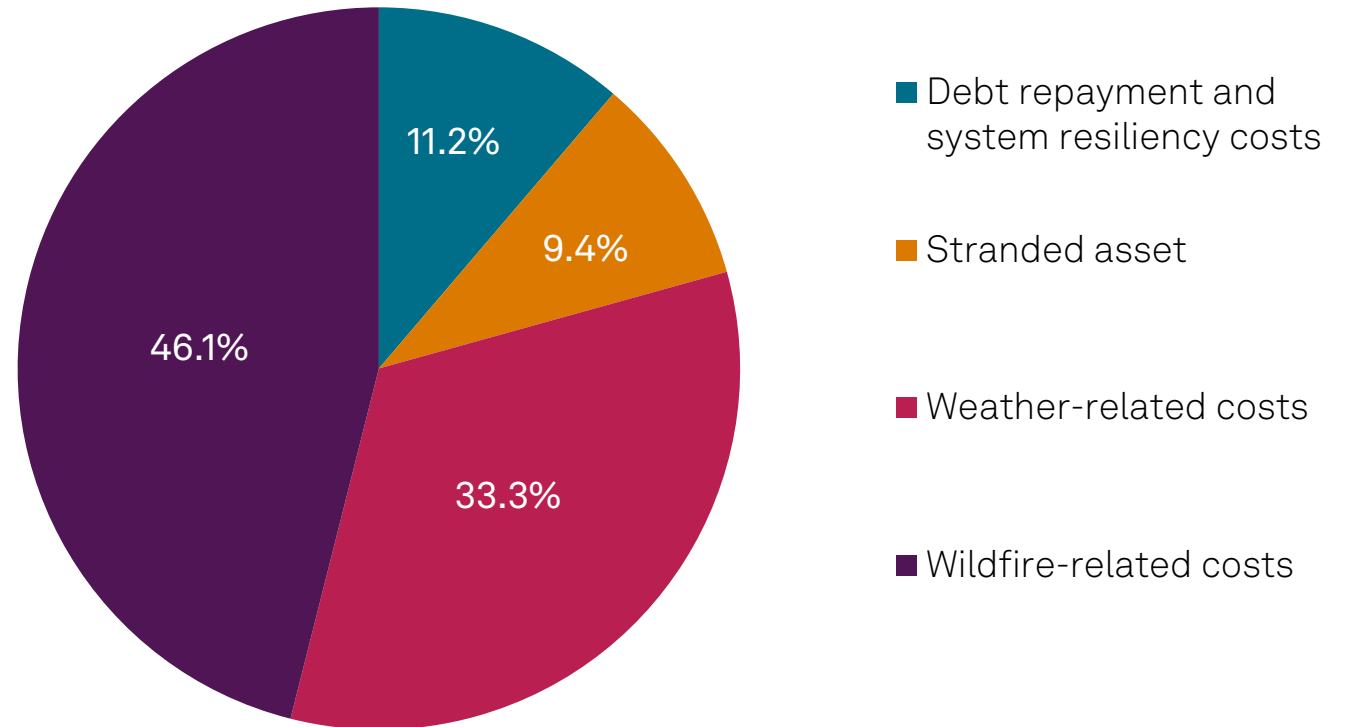




Highlights | The Rationale Behind U.S. Utility Securitization And Reasons For Recent Growth

- Historically, U.S. electric utility companies have used securitization to recover costs related to wildfire/storm damages, spikes in fuel expenses, and stranded assets--i.e., generating assets owned by a regulated utility that have become uneconomical due to deregulation.
- Utility securitization is authorized by state statutes. Such statutes allow for the debt service on the bonds to be paid via a surcharge on the monthly bill of the utility provider's retail customers. The initial surcharge can be adjusted periodically (uncapped) to ensure the collection of funds is sufficient for timely payment of the securitization's debt service and transaction fees.
- Utility companies are increasingly using securitization as a financing tool to recover sizable costs from impactful, and oftentimes unexpected, events. Since 2021, utility securitization issuance has increased considerably alongside an uptick in wildfires and other severe weather incidents.

Use of proceeds for utility-related securitizations (2022-2023)



Source: S&P Global Ratings.

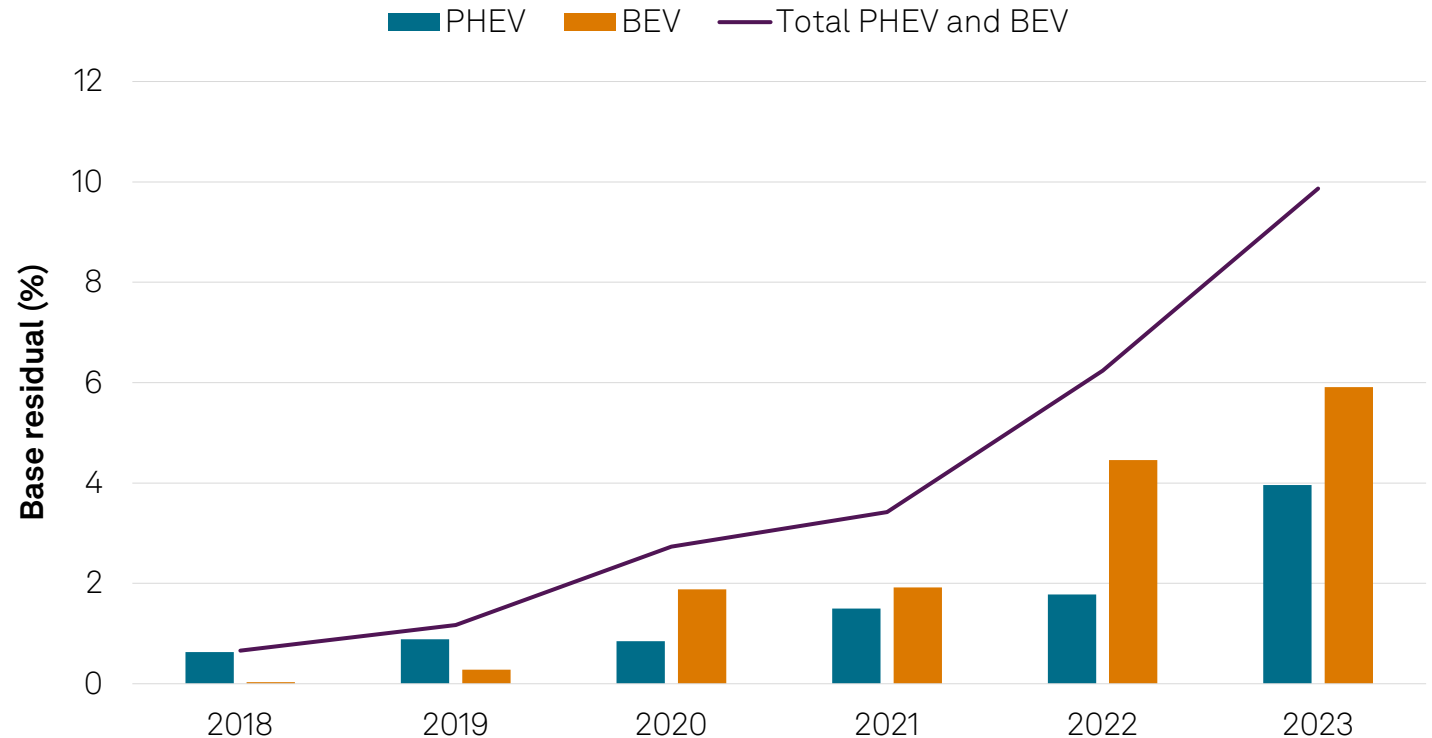
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Highlights | U.S. Electric Vehicle Auto Lease Growth Could Raise Residual Value Risk

- U.S. electric vehicle sales rose 51.0% year over year in 2023, with EV market share increasing to 9.1% due to charging station infrastructure growth, improvements in vehicle range, lower pricing, and government subsidies.
- However, higher exposure to EVs could increase residual value risk in U.S. auto lease ABS. Market studies show that EVs are depreciating faster than internal combustion engine vehicles, which could result in lower recoveries and lower residual values in our analysis.
- The residual performance of auto lease ABS transactions we rate remains strong, reflecting the well-diversified pool mix. Our analytical approach provides for adjustments to our assumptions, if needed, as EV concentrations increase in rated pools.
- We expect annual U.S. EV sales growth to slow to 25%, EV leasing rates to increase, and auto lease ABS ratings performance to remain stable this year.

EV concentration in auto lease ABS securitization



EV—Electric vehicle. BEV—Battery EV. PHEV—Plug-in hybrid EV. Source: S&P Global Ratings.

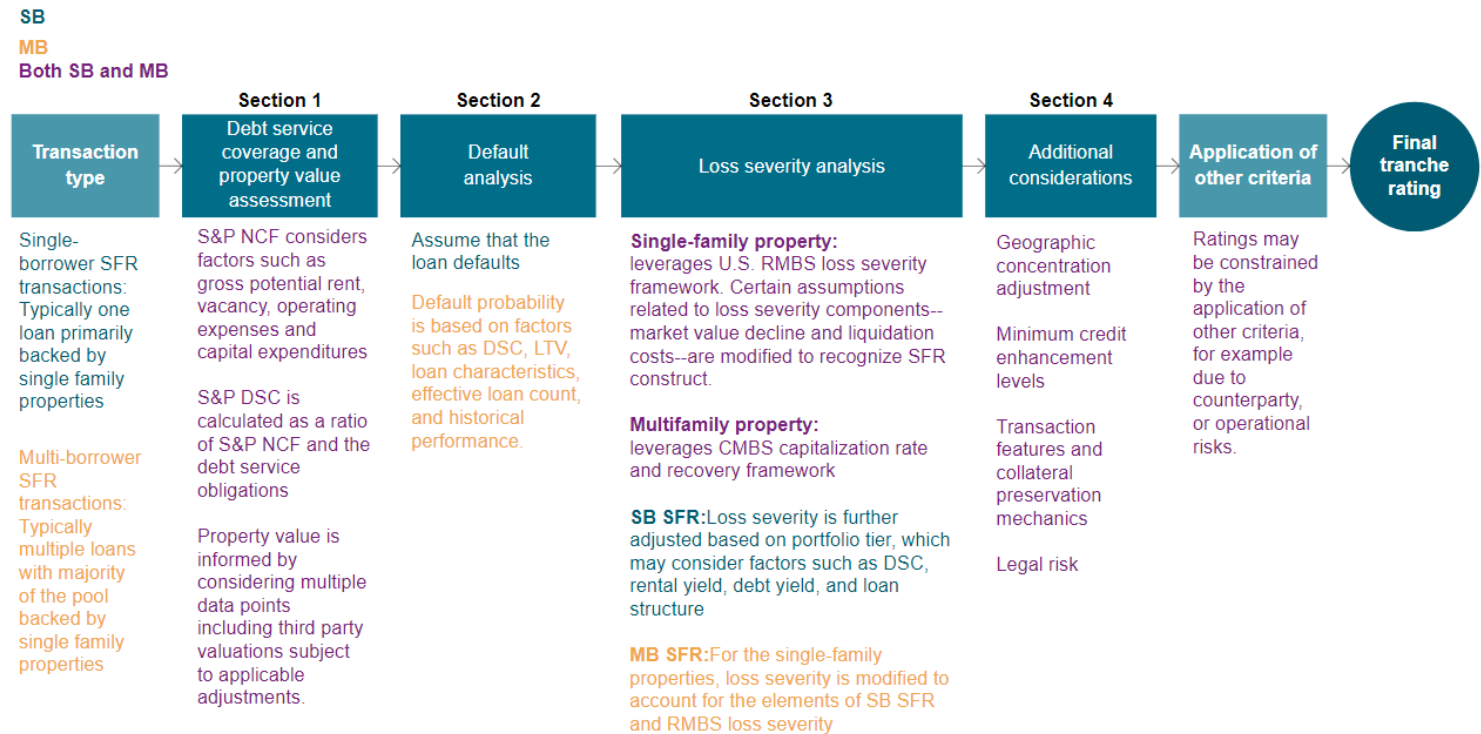
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Highlights | U.S. Single-Family Rental Securitization Final Criteria

- This criteria article describes S&P Global Ratings' approach to analyzing credit risk in U.S. single-family rental (SFR) securitizations.
- Given the operating nature of SFR portfolios predominately containing single-family properties, our approach to rate SFR securitizations draws from both CMBS and RMBS criteria frameworks.
- Generally, there are two types of SFR transactions: single-borrower (SB) and multi-borrower (MB).
 - SB transactions are backed by one loan secured primarily by single-family properties.
 - MB transactions are backed by loans to multiple borrowers, where the underlying assets are mostly single-family properties, and the remaining assets are predominately multifamily properties.
- The criteria for SFR securitizations primarily address the likelihood that cash flow (whether from property generated rental income, liquidation proceeds, or other applicable forms) would be sufficient to satisfy amounts due to bondholders at the applicable rating levels.

Single-family rental securitization ratings framework



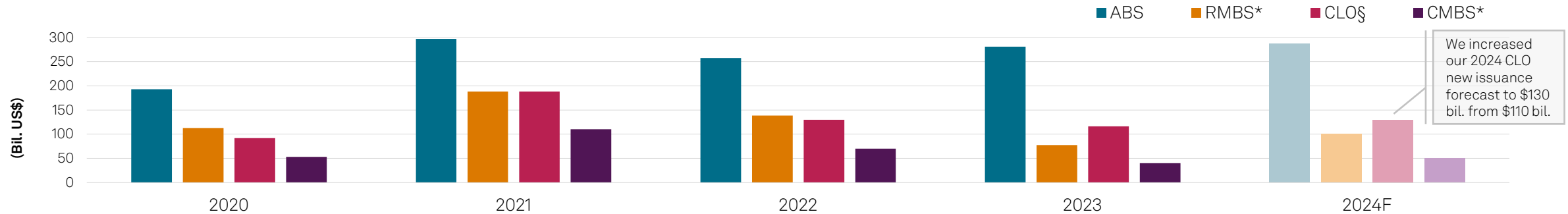
SB—Single borrower. MB—Multi borrower. SFR—Single-family rental. NCF—Net cash flow. DSC—Debt service coverage. LTV—Loan to value.
Source: S&P Global Ratings.

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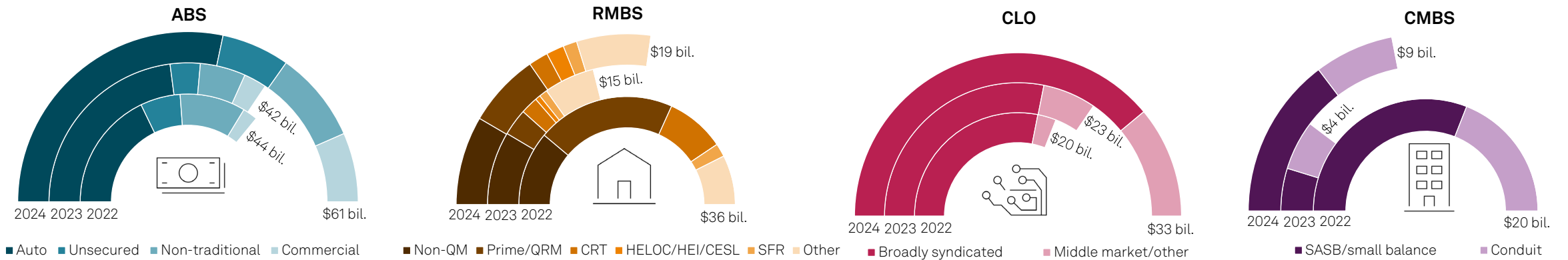


Market-Wide Structured Finance Issuance | ABS, CLO Markets Continue To Drive Robust 2024 Issuance Activity

Annual new issuance



New issuance through end of February

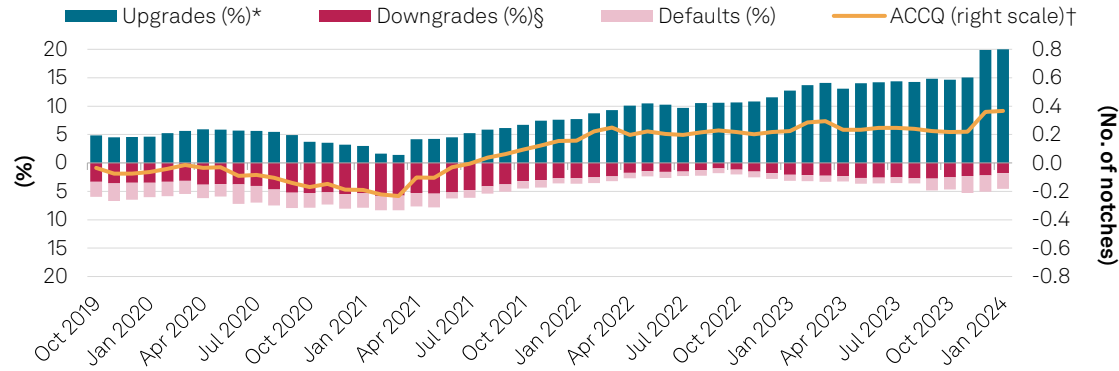


Issuance volumes are rounded. New issuance volumes exclude CRE CLO transactions. *CMBS and RMBS issuance volumes exclude agency mortgage-backed securities. §CLO refinancing-reset volume is not considered new issuance. Non-QM—Non-qualified mortgage. QRM—Qualified residential mortgage. F—Forecast. CRT—Credit risk transfer. HELOC—Home equity line of credit. HEI—Home equity investment. CESL—Closed-end second lien. SFR—Single-family rental. SASB—Single asset single borrower. Sources: S&P Global Ratings, Bloomberg, and Green Street.

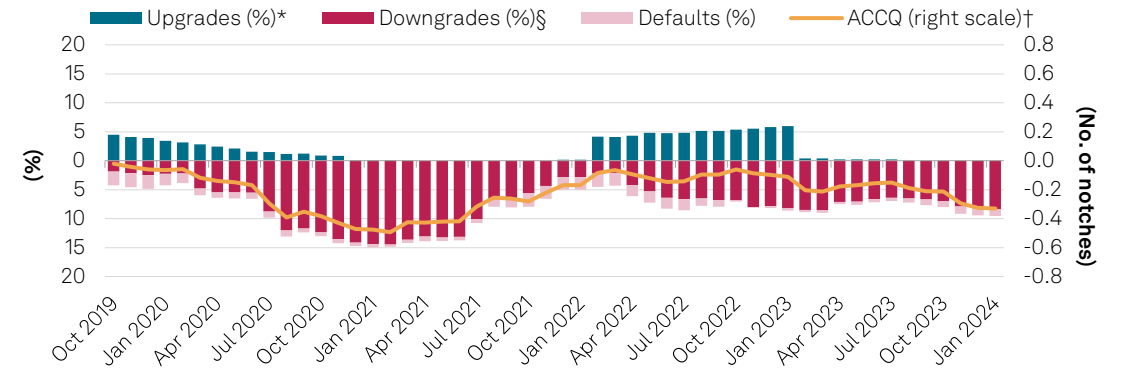


U.S. | Average Change In Credit Quality By Sector

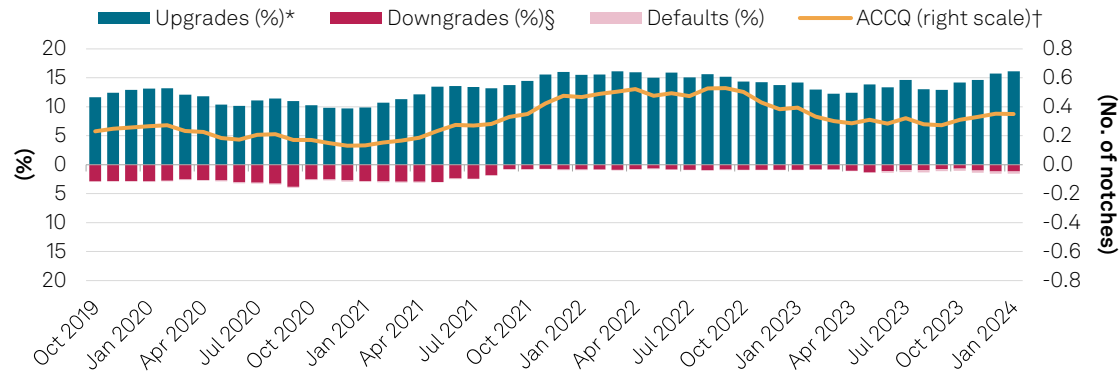
RMBS



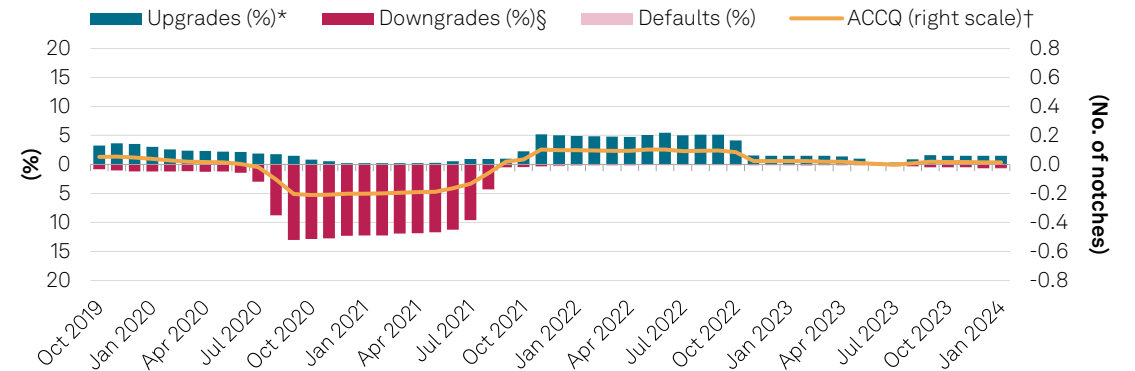
CMBS



ABS‡



CLO



*Total number of upgrades (downgrades) divided by the total number of outstanding ratings in the sector on a trailing 12-month basis. Securities whose ratings migrated to NR over the sample period are classified based on their rating prior to NR.
 ‡The downgrade proportion excludes defaulted tranches. †The average number of notches by which ratings across all tranches in each sector changed on a trailing-12-month basis. ‡ABS includes ratings performance data from esoteric asset classes.
 ACCQ—Average change in credit quality. NR—Not rated. Source: S&P Global Ratings Credit Research and Insights.

RMBS



James Taylor

+1 (212) 438 6067

james.taylor@spglobal.com



Vanessa Purwin

+1 (212) 438 0455

vanessa.purwin@spglobal.com



Jeremy Schneider

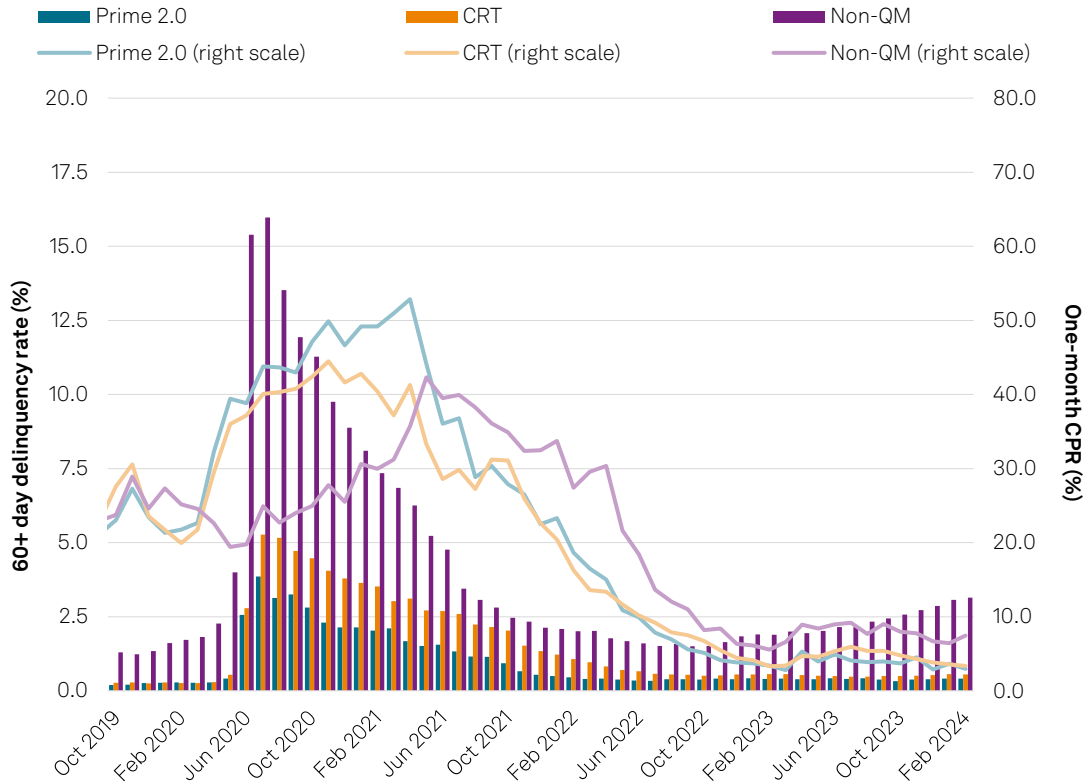
+1 (212) 438 5230

jeremy.schneider@spglobal.com



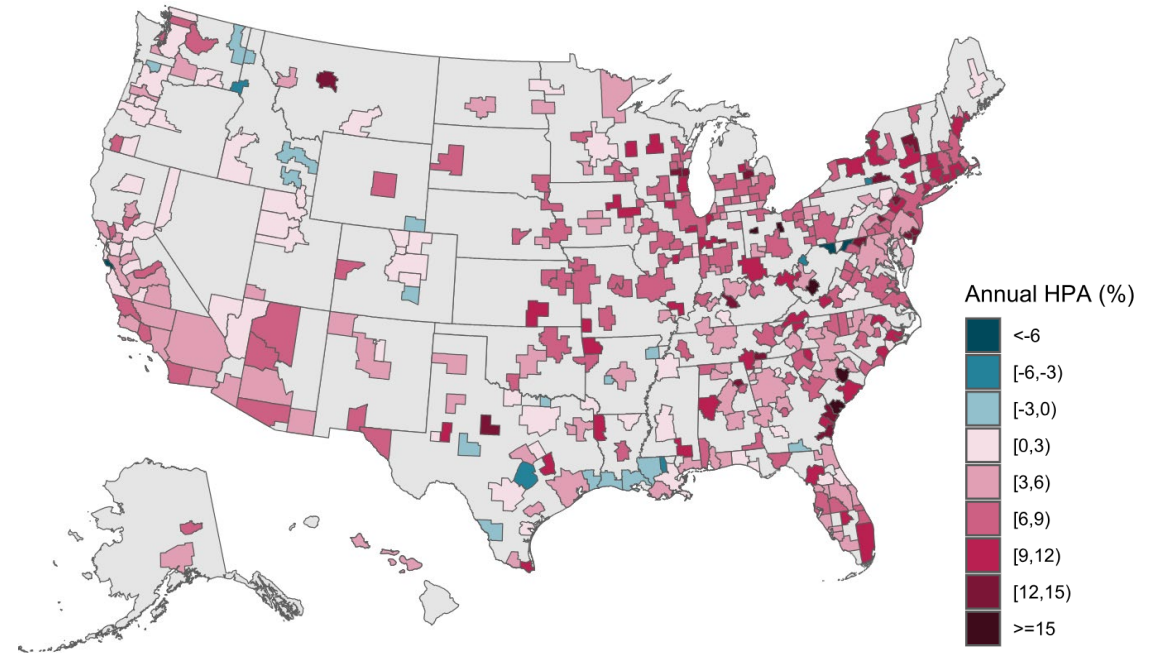
RMBS | Non-QM Delinquencies Gradually Drifting Upwards, Strong Annual Home Price Appreciation Continues

RMBS collateral performance



Data as of March 1, 2024. Based on loans backing RMBS transactions rated by S&P Global Ratings. CRT—Credit risk transfer. Non-QM—Non-qualified mortgage. CPR—Conditional prepayment rate. Source: S&P Global Ratings.

Annual HPA by MSA Q4 2022 to Q4 2023



Non-seasonally adjusted All Transactions Home Price Index data. Ten MSAs reflect combined data from two or more metropolitan divisions due to overlapping geographic locations. The HPA data from the metropolitan division with the highest core city population was chosen for each combined MSA. HPA—Home price appreciation. MSA—Metropolitan statistical area. Sources: Federal Housing Finance Agency and S&P Global Ratings.

CMBS



Cathy de la Torre

+1 (212) 438-0502

cathy.de.la.torre@spglobal.com



James Digney

+1 (212) 438 1832

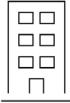
james.digney@spglobal.com



Senay Dawit

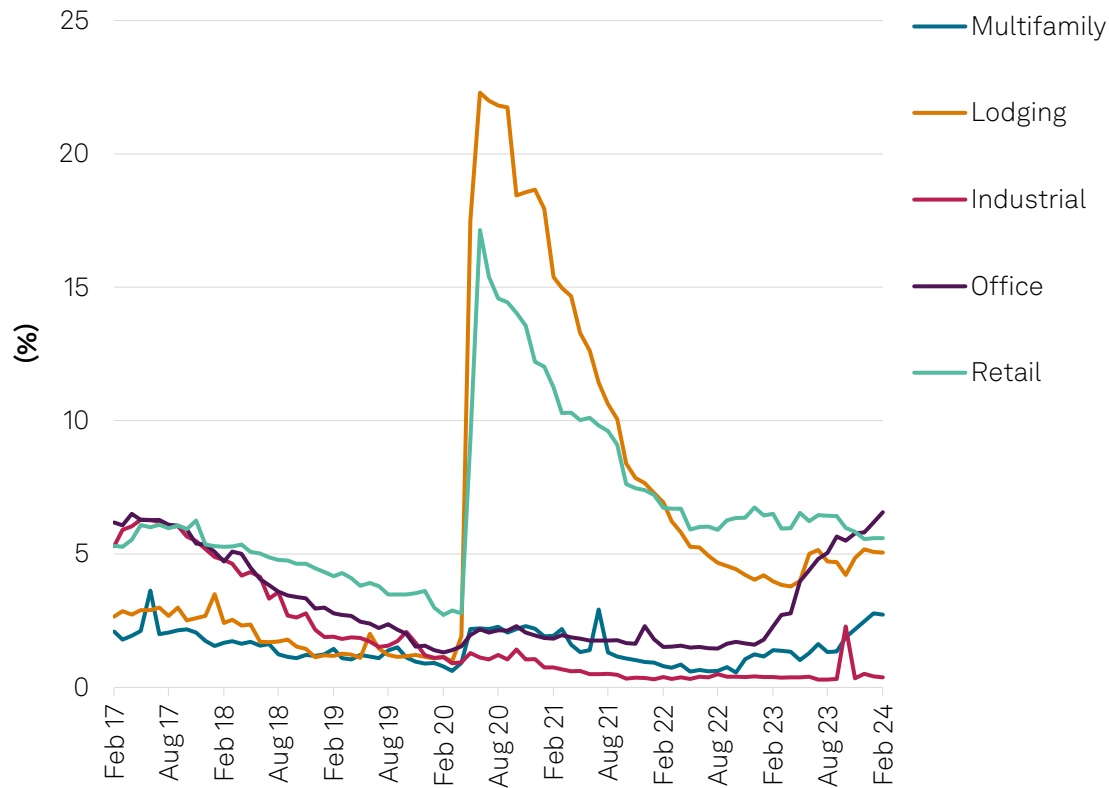
+1 (212) 438 0132

senay.dawit@spglobal.com



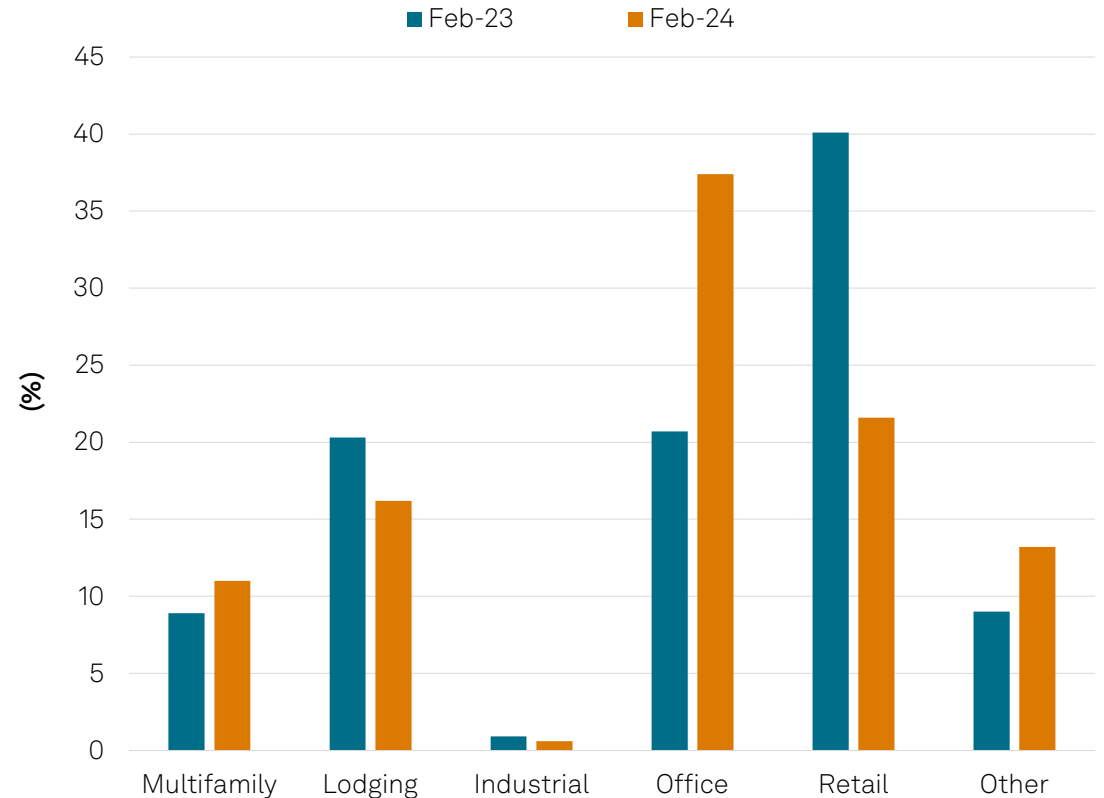
CMBS | Delinquencies By Property Type

Overall delinquency rate by property type



Based on loans backing CMBS transactions rated by S&P Global Ratings. Source: S&P Global Ratings.

Property type composition of total delinquent loan balance



Based on loans backing CMBS transactions rated by S&P Global Ratings. Source: S&P Global Ratings.

ABS



Frank Trick

ABS Secured
+1 (212) 438-1108
frank.trick@spglobal.com



Amy Martin

ABS Secured
+1 (212) 438-2538
amy.martin@spglobal.com



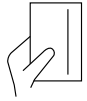
Ildiko Szilank

ABS Unsecured
+1 (212) 438-2614
ildiko.szilank@spglobal.com



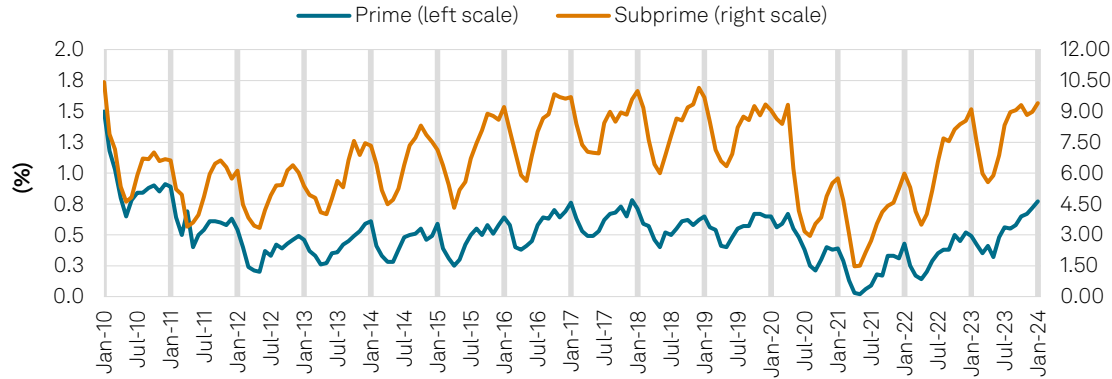
John Anglim

ABS Unsecured
+1 (212) 438-2385
john.anglim@spglobal.com

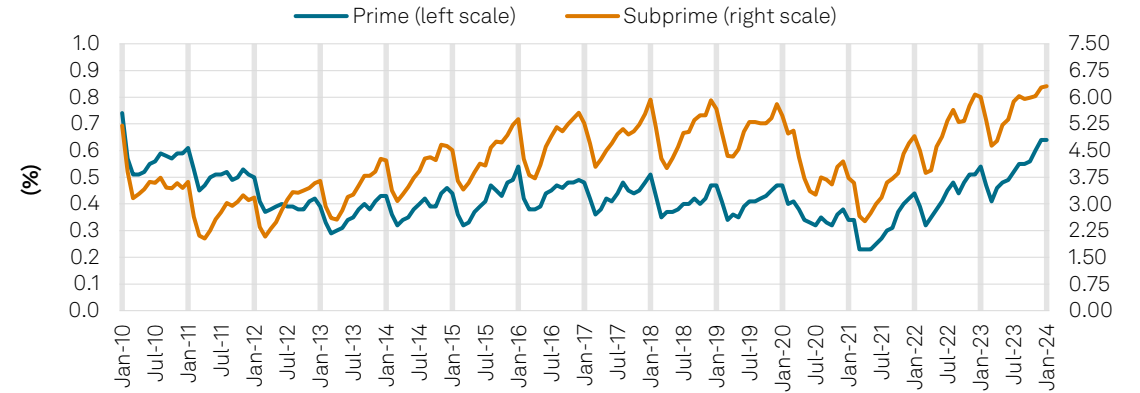


ABS | Subprime Auto Loan ABS Performance Showing Weakness, Credit Card ABS Performance Remains Largely Stable

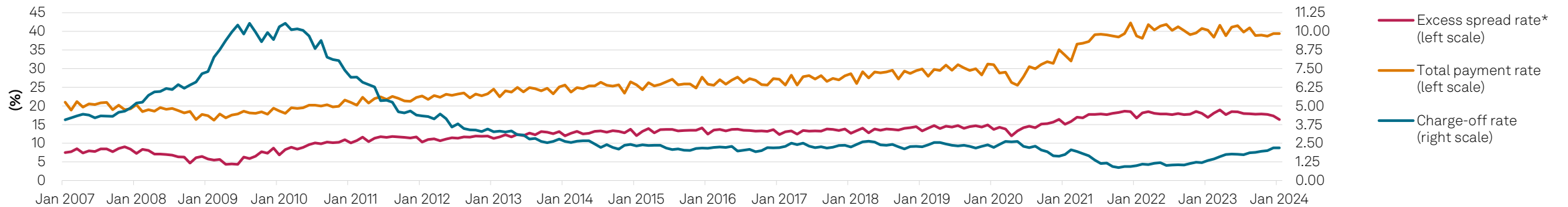
1. Auto loan ABS net loss rates



2. Auto loan ABS 60+ day delinquency rates



3. Bankcard Credit Card Quality Index



1-2. Based on S&P Global Ratings-rated auto loan ABS transactions. Monthly net loss rates are annualized. Source: S&P Global Ratings. 3. Based on S&P Global Ratings-rated credit card ABS transactions. *Yield minus base funding rate minus charge-off rate. Source: S&P Global Ratings.

Esoteric ABS



Jie Liang

+1 (212) 438 8654
jie.liang@spglobal.com



Ryan Butler

+1 (212) 438 2122
ryan.butler@spglobal.com



Deborah Newman

+1 (212) 438-4451
deborah.newman@spglobal.com

Esoteric ABS | Rating Actions Following Container ABS Criteria Revisions

- Following the publication of our [revised criteria](#) for rating container lease-backed ABS transactions, we reviewed 50 outstanding ratings on over 20 container lease ABS securitizations.
- As a result of our review, we raised eight ratings and affirmed 42.
- Key changes to the criteria include:
 - The addition of ‘AA-’ and ‘AA’ assumptions, with no changes to existing assumptions up to ‘A+’.
 - Altering the supplemental test to implement the largest obligor test from our CDO criteria. This could potentially affect (generally lower) the gross default rate assumptions applied for a given portfolio based on its lessee mix.

Container lease ABS rating upgrades

Issuer, series	Class	Current rating	Prior rating	Rationale for upgrades
Textainer Marine Containers VII Limited, 2020-2	B	BBB+ (sf)	BBB (sf)	The upgrades on all eight classes of notes primarily reflect each transaction’s strong performance, improvement in credit enhancement, and the notes’ ability to withstand increased stress at the higher rating level. Rating action press releases: November 16, 2023 March 11, 2024
Global SC Finance II SRL, 2014-1	A-2	A (sf)	A- (sf)	
CLI Funding VI LLC, 2020-1	B	BBB+ (sf)	BBB (sf)	
CLI Funding VI LLC, 2020-2	B	BBB+ (sf)	BBB (sf)	
CLI Funding VI LLC, 2020-3	B	BBB+ (sf)	BBB (sf)	
TIF Funding II LLC, 2020-1	B	BBB+ (sf)	BBB (sf)	
TIF Funding II LLC, 2021-1	A	A+ (sf)	A (sf)	
TIF Funding II LLC, 2021-1	B	BBB+ (sf)	BBB (sf)	

Source: S&P Global Ratings.

CLO



Jimmy Kobylinski

+1 (212) 438-6314
jimmy.kobylinski@spglobal.com



Belinda Ghetti

+1 (212) 438-1595
belinda.ghetti@spglobal.com



Stephen Anderberg

+1 (212) 438-8991
stephen.anderberg@spglobal.com



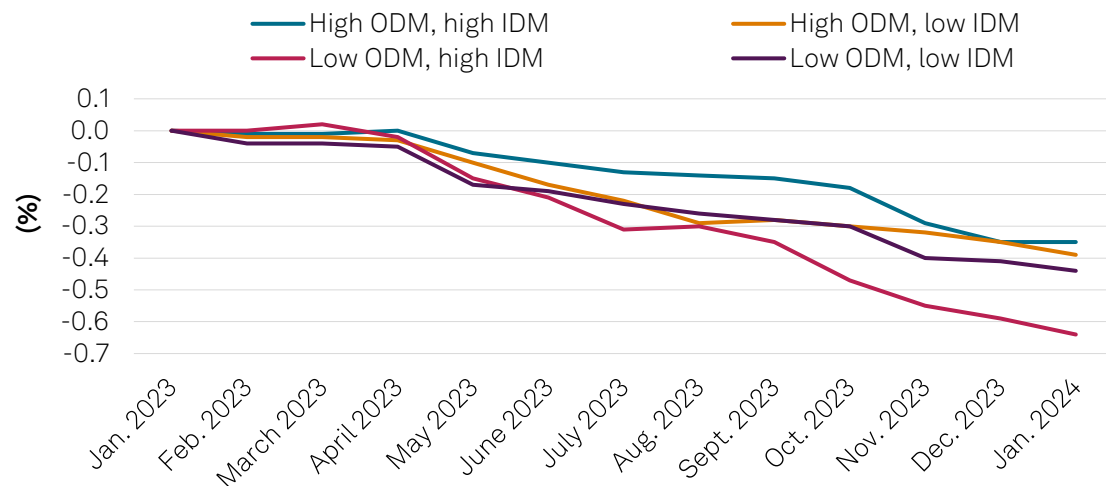
Daniel Hu

+1 (212) 438-2206
daniel.hu@spglobal.com

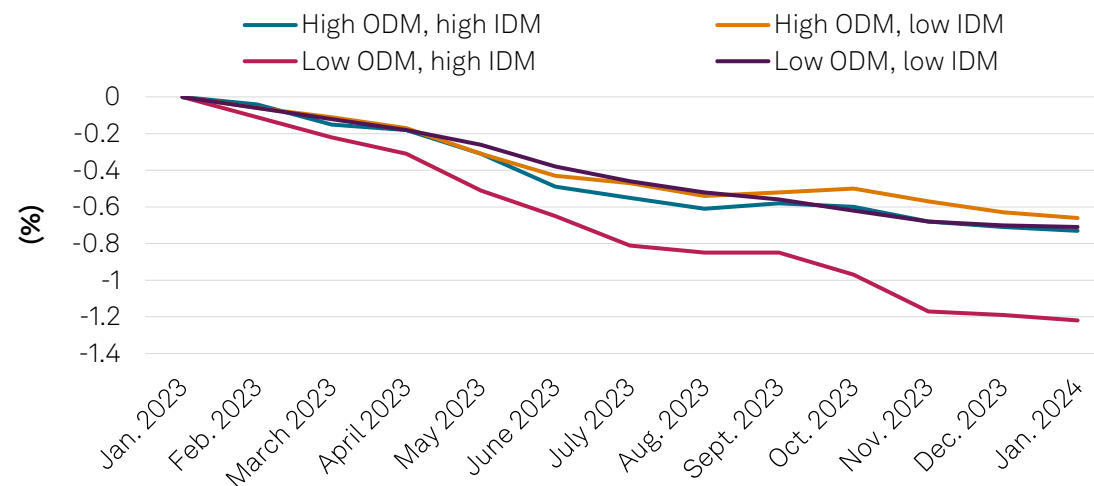


CLO | Assessing Obligor And Industry Portfolio Diversity

Change in par portfolio balance



Change in junior overcollateralization test cushion



- In a [prior study](#) on CLO portfolio diversity, we found that CLO portfolios with low obligor diversity but high industry diversity experienced a greater level of credit deterioration during the Great Financial Crisis and the energy slowdown in 2016. These CLO portfolios were more likely to have material exposure to the next industry that would experience stress (e.g., energy and retail during the 2016 slowdown).
- Doing the same analysis on our rated CLOs in 2023, we found notable differences in CLO performance given the extent and type of CLO portfolio diversity.
- To quantify levels of diversity for CLO asset pools, we borrowed two diversity measures from our [CDO monitor framework](#), segmenting a sample of 492 reinvesting CLOs into four groups based on their obligor diversity metric (ODM) and industry diversity metric (IDM).
- The ODM provides an effective count of obligors within a CLO portfolio, normalizing for the CLO’s exposure to each obligor, and the IDM does the same for industry exposures. Across our sample, ODM ranges from 113 to 330, while IDM ranges from 13 to 30.
- Similar to our previous study, we found that CLOs with low obligor diversity and high industry diversity tended to realize more par loss and higher rates of junior overcollateralization test cushion decline over the rolling one-year period.

ODM—Obligor diversity metric. IDM—Industry diversity metric. Source: S&P Global Ratings.

ABCP/ Muni- Structured



Kate Scanlin

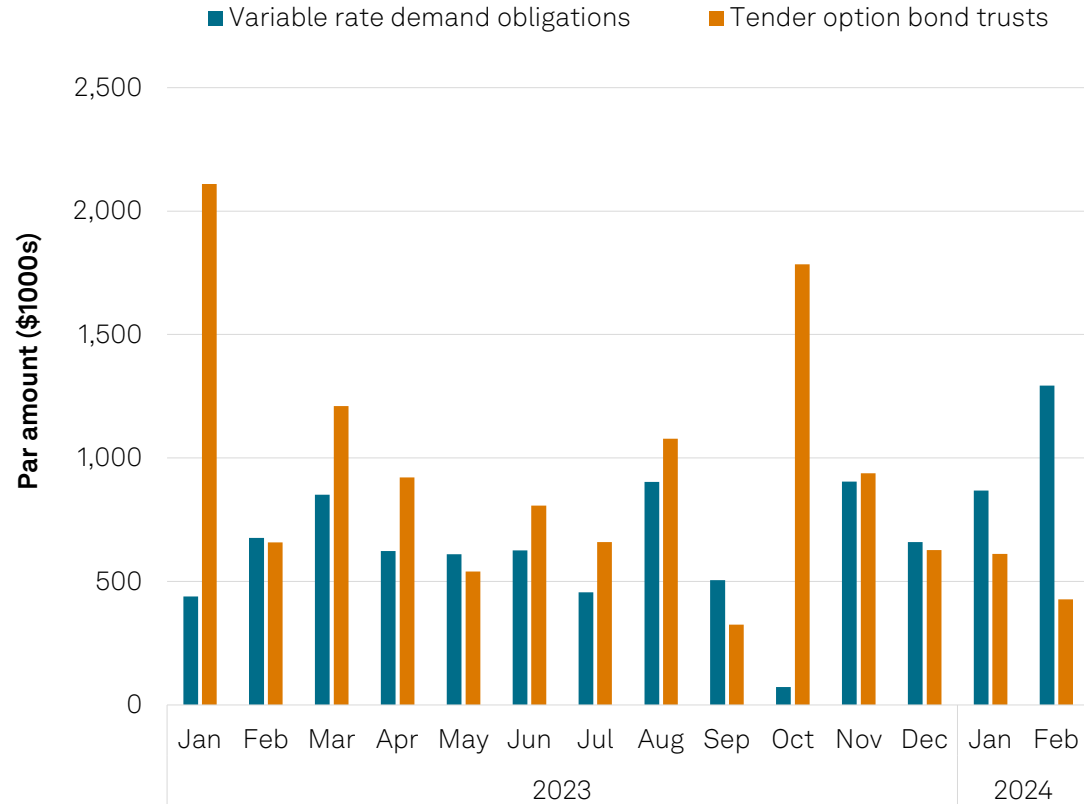
+1 (212) 438-2002

kate.scanlin@spglobal.com



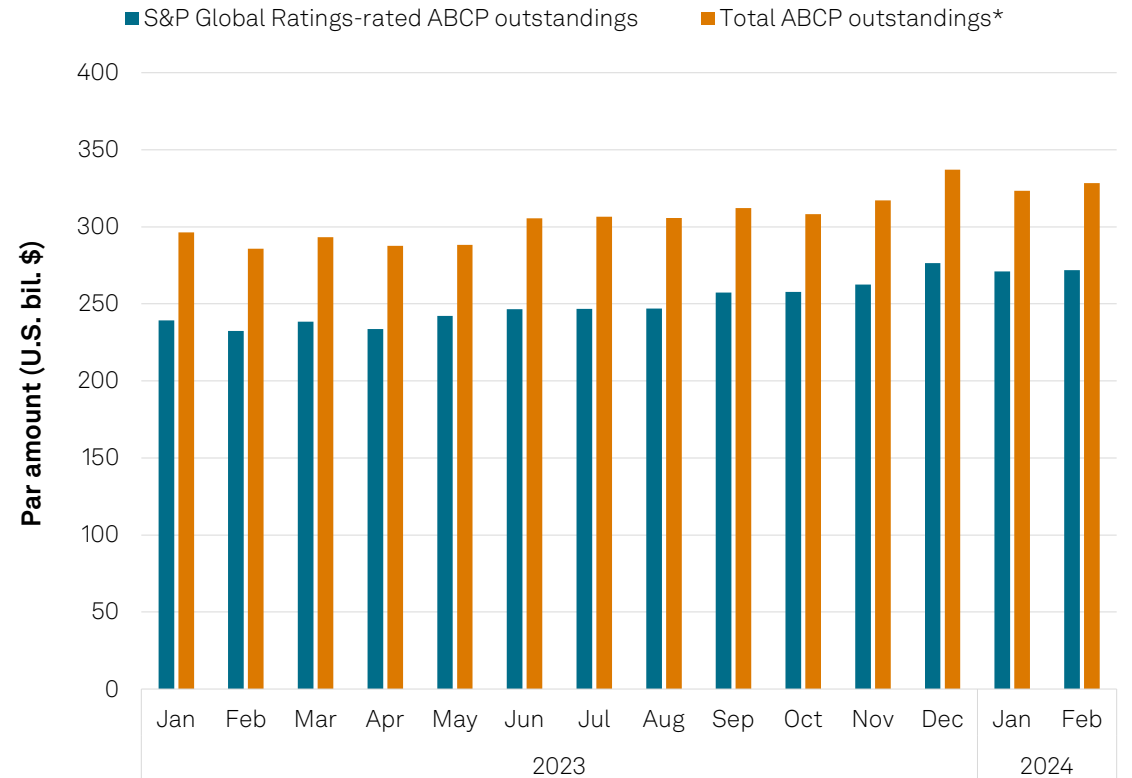
ABCP Muni-Structured | New Issuance And Outstanding Amounts

S&P Global Ratings-rated VRDO and TOB trust par new issuance



VRDO—Variable rate demand obligation. TOB—Tender option bond. Source: S&P Global Ratings.

Par ABCP outstanding



*S&P Global Ratings-rated ABCP outstanding amount not yet available. ABCP—Asset-backed commercial paper. Source: S&P Global Ratings, U.S. Federal Reserve.



Recent Research

Sector	Publications
RMBS	U.S. RMBS Newsletter: February 2024
	U.S. Home Price Overvaluation Relatively Steady, But Bumps Up A Bit
CMBS	U.S. CMBS Overall Delinquency Rate Rose 5 Bps To 4.4% In February 2024; Office Saw The Highest Increase For The Third Consecutive Month
ABS	U.S. Auto Loan ABS Tracker: January 2024 Performance
	U.S. Student Loan ABS Newsletter: February 2024
	Credit Unions Make A Splash In 2023, Almost Tripling 2022's Auto Loan ABS Issuance
Esoteric ABS	ABS Frontiers: Music Royalty Securitizations Are Getting The Band Back Together
	ABS Frontiers: The Blurring Of Private Credit Funds And CLOs
	Scenario Analysis: Performance Of Aircraft ABS Transactions At ARD And Final Maturity Date
CLO	CLO Insights 2024 U.S. BSL Index: Corporate Rating Upgrades Outpace Downgrades For The First Time In Almost Two Years; Defaults Tick Up Across CLO Portfolios
	U.S. BSL CLO And Leveraged Finance Quarterly: Have We Turned The Corner Yet? (Q1 2024)
	Private Credit And Middle-Market CLO Quarterly: Shelter From The Storm (Q1 2024)
ABCP/Muni-Structured	U.S. Fund-Sponsored Tender Option Bond Leverage Remains Elevated As Short-Term Losses Rise
	Tender Option Bonds: 2023 Ratings Recap

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