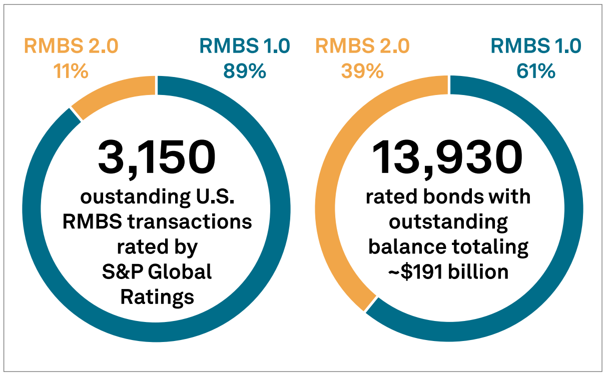
S&P Global Ratings

Market Insights
Sector Intelligence | U.S. RMBS

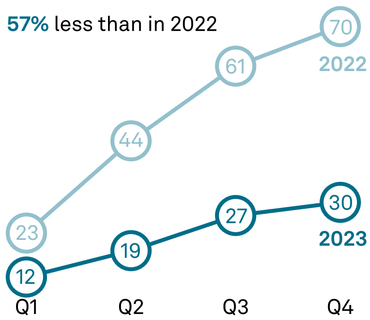
Feb. 21, 2024

This report does not constitute a rating action.

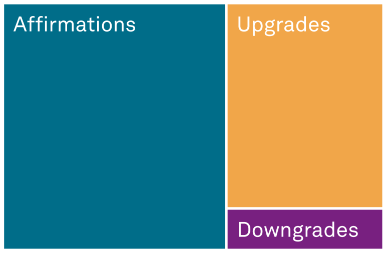


30 new U.S. RMBS transactions rated in 2023

57% less than in 2022



1,180 transactions had a surveillance action in 2023



Upgrades outpaced downgrades five to one in 2023

Data as of Jan 10, 2023. Source: S&P Global Ratings.

Key Takeaways

- Through December 2023, S&P Global Ratings assigned ratings to 30 new transactions totaling approximately $15.5 billion and took rating actions on 1,180 transactions. Upgrades outpaced downgrades five to one.
- In October 2023, we updated our market outlook and lowered the 'B' foreclosure frequency for the archetypal pool to 2.50% from 3.25%. The update reflects our benign view of the mortgage and housing market.
- As a result of the update to our market outlook, we raised 676 ratings, by one notch on average, out of 810 ratings from 174 transactions issued in 2009 or later that had been placed on CreditWatch positive.
- We expect no significant increase in delinquencies in 2024, though regional variations may occur. Low fixed-rate loans, inflation-protected monthly payments for most mortgagors, and strong equity positions contribute to generally stable RMBS performance.
- S&P Global Ratings expects non-agency RMBS issuance volume of about $100 billion in 2024--a 30% increase from 2023--on the back of an anticipated reduction in mortgage rates this year.
- Third-quarter 2023 saw the all-transactions FHFA House Price Index increase by an impressive 1.85% between second- and third-quarter 2023, while the purchase-only FHFA index rose 1.46%, both on an unadjusted basis. The purchase-only index rose month-over-month in October and November 2023 on a seasonally adjusted basis.
- S&P Global Ratings' assessment of overvaluation in the U.S. housing market remained elevated at 15.6% as of third-quarter 2023, comparable to our assessment from the same quarter last year. Despite regional variations, nationwide overvaluation remains high, with 89% of the MSAs still considered as overvalued.

CONTENTS

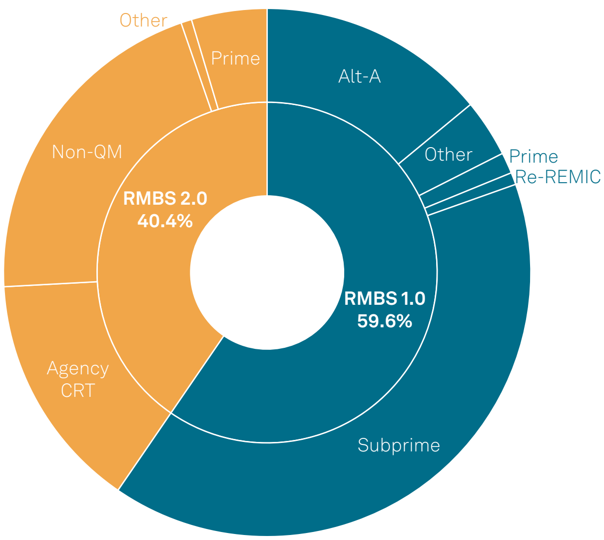
Rated U.S. RMBS Portfolio

The $191 billion U.S. residential mortgage-backed securities (RMBS) portfolio that S&P Global Ratings rates can be divided into two distinct vintages: RMBS issued prior to 2009 (the RMBS 1.0 portfolio) and RMBS issued in or after 2009 (the RMBS 2.0 portfolio). Key takeaways from our rated portfolio include:

- RMBS 2.0 transactions comprise only 11% of the entire rated U.S. RMBS portfolio by transaction count, but they account for 40% by outstanding principal balance. This difference by outstanding balance continues to converge as the RMBS 1.0 portfolio runs off (only about 4% of the original collateral remains) and the RMBS 2.0 portfolio grows.
- Through December 2023, we assigned ratings to 30 new transactions--a 57% decrease relative to 2022, partly attributable to the sharp decline in origination volumes as a result of elevated mortgage rates.

Chart 1

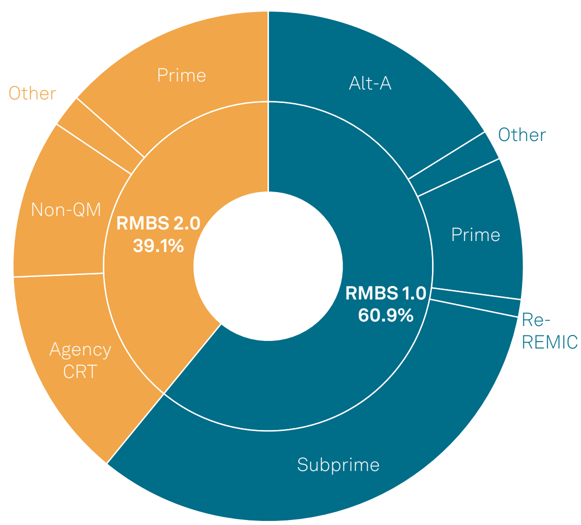
Distribution by balance (%)



Data as of Jan. 10, 2024. Non-QM--Non-qualified mortgage.
Source: S&P Global Ratings.

Chart 2

Distribution by bond count (%)



Data as of Jan. 10, 2024. Non-QM--Non-qualified mortgage.
Source: S&P Global Ratings.

Table 1 shows a breakdown of our RMBS 2.0 portfolio by rating category. The highlights include:

- We currently rate approximately $77.5 billion in RMBS 2.0 transactions. The largest subsector by balance is non-qualified mortgage (non-QM; 50.3%), followed by agency credit risk transfer (CRT; 36.7%), and prime (11.7%).
- The higher percentage of 'A' and 'BBB' ratings (9.3% and 17.3%, respectively) within agency CRT reflects the issuers' use of CRT to shed credit risk at certain attachment points.
- Of the 11.7% RMBS 2.0 prime ratings outstanding, the dominant majority are rated 'AAA', reflecting the borrowers' stronger credit profiles.

Table 1

Distribution of bond balance per rating category by sector (%)

RMBS 2.0 Transactions

	Rating category							
Deal type	**AAA**	**AA**	**A**	**BBB**	**BB**	**B**	**CCC**	**Total**
Agency CRT	0.0	0.7	9.3	17.3	7.3	2.1	0.0	**36.7**
Non-QM	31.0	6.5	5.1	3.3	2.5	1.9	0.0	**50.3**
Prime	10.4	0.7	0.3	0.2	0.1	0.1	0.0	**11.7**
Other(i)	0.5	0.5	0.1	0.1	0.1	0.0	0.0	**1.3**
Total	**41.9**	**8.5**	**14.8**	**20.9**	**10.0**	**4.0**	**0.0**	**100.0(ii)**

Data as of Jan. 10, 2024. (i)Includes servicer advance transactions. (ii)The total balance is approximately $77.5 billion. CRT--Credit risk transfer. QM--Qualified mortgage. Source: S&P Global Ratings.

Table 2 shows a breakdown of our RMBS 1.0 portfolio by rating category. Some highlights of the portfolio include:

- We currently rate approximately $114.0 billion in RMBS 1.0 transactions.
- Subprime transactions represent about 67% (by balance) of RMBS 1.0 transactions, with two-thirds of the outstanding classes rated either 'CC' or 'D', which generally indicates classes with unrealized or actual principal write-downs, with or without unrecoverable interest shortfall.
- Investment-grade classes (rated 'BBB-' or higher) represent approximately 9% (by balance) of RMBS 1.0 transactions.

Table 2

Distribution of bond balance per rating category by sector (%)

RMBS 1.0 Transactions

	Rating category									
Deal type	**AAA**	**AA**	**A**	**BBB**	**BB**	**B**	**CCC**	**CC**	**D**	**Total**
Alt-A	0.0	0.8	0.5	0.5	0.8	1.1	7.0	6.9	5.9	**23.5**
Prime	0.0	0.4	0.3	0.3	0.4	0.2	0.5	0.0	0.1	**2.2**
Re-REMIC	0.1	0.5	0.1	0.0	0.0	0.0	0.5	0.0	0.0	**1.2**
Subprime	0.3	0.8	1.0	1.5	1.7	3.3	14.3	29.1	15.2	**67.1**
Other	0.0	1.2	0.0	0.2	0.0	0.1	0.8	0.6	3.0	**5.9**
Total	**0.4**	**3.7**	**1.9**	**2.5**	**2.9**	**4.7**	**23.1**	**36.6**	**24.2**	**100.0(i)**

Data as of January 10, 2024. (i)The total balance is approximately $114.0 billion. Alt-A--Alternative-A. REMIC--Real estate mortgage investment conduit. Source: S&P Global Ratings.

Surveillance Summary

In 2023, S&P Global Ratings conducted surveillance reviews on 1,180 RMBS 1.0 and 2.0 transactions, which resulted in rating actions on 9,700 classes with 3,342 upgrades, 665 downgrades, and 5,693 affirmations.

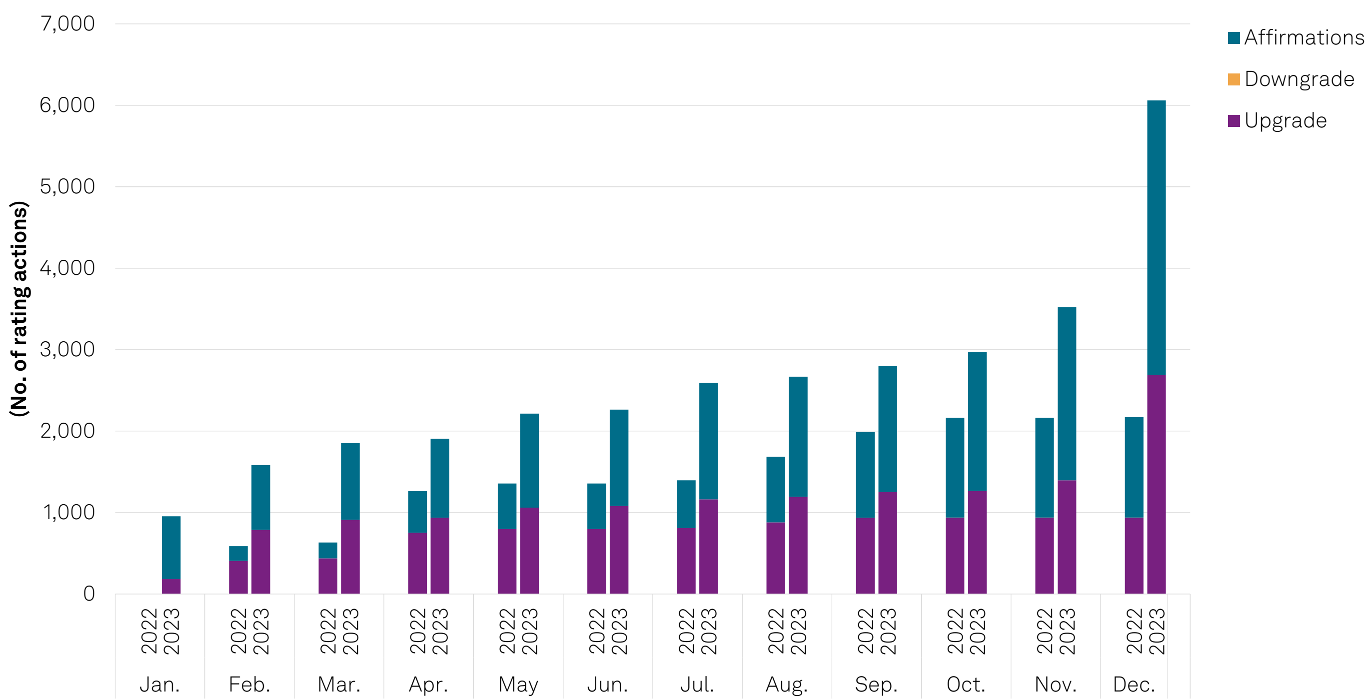
RMBS 2.0 Transactions

We took rating actions on 6,060 classes from 209 RMBS 2.0 transactions in 2023 (see charts 3 and 4). We made 2,687 upgrades, no downgrades, and 3,373 affirmations. The highlights include:

- While the upgrades primarily reflect deleveraging, with transactions benefitting from minimal to no accumulated losses to date, and a growing percentage of credit support to the rated classes, in 2023, they also result from the market outlook update (see the Methodology And Assumptions For Rating RMBS 2.0 Updated, Leading to Upgrades section below).
- No ratings were downgraded within this period, indicating resilience in mortgage credit.
- The recent slowdowns in prepayment speeds, the general overvaluation in the housing market, and adjustable-rate mortgages (ARM) due for rate resets in an elevated interest rate environment leading to payment shocks could affect future upgrade potential for certain classes. However, ultimately, rating actions will depend on transaction-specific considerations.

Chart 3

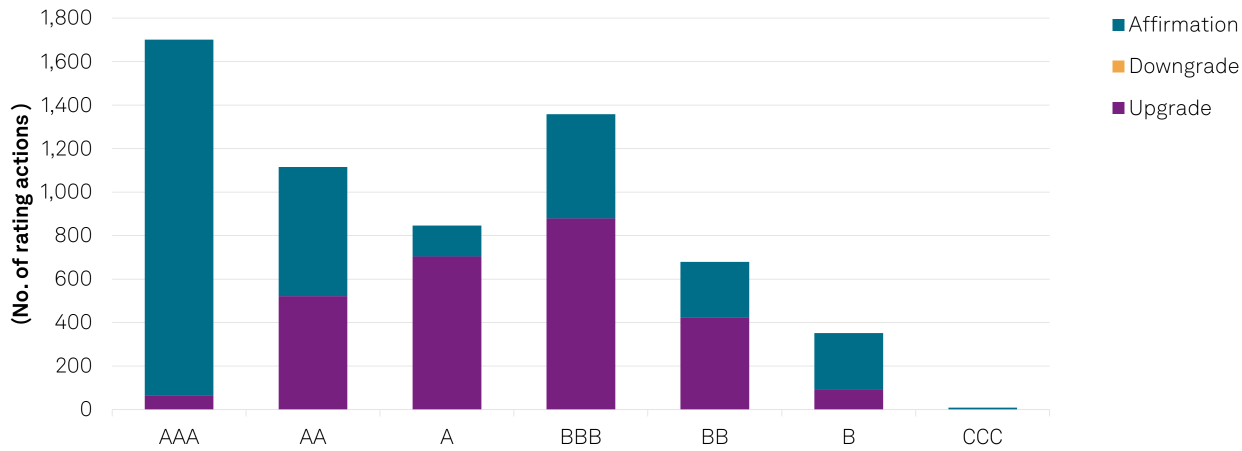
RMBS 2.0 surveillance rating activity in 2023 vs. 2022 (cumulative)



Source: S&P Global Ratings.

Chart 4

RMBS 2.0 surveillance rating actions by rating category in 2023



Source: S&P Global Ratings.

Methodology And Assumptions For Rating RMBS 2.0 Updated, Leading to Upgrades

On Oct. 17, 2023, we updated our market outlook as it relates to the 'B' projected archetypal loss level, and therefore revised and lowered our 'B' foreclosure frequency to 2.50% from 3.25%, which reflects the level prior to April 2020 preceding the COVID-19 pandemic. The update reflects our benign view of the mortgage and housing market as demonstrated through general national level home price behavior, unemployment rates, mortgage performance, and underwriting.

We placed 810 ratings from 174 transactions on CreditWatch positive in cases where our preliminary analysis indicated at least a one-in-two likelihood of being raised under our revised outlook and corresponding decrease in the projected archetypal 'B' foreclosure frequency. Of the 810 ratings, we raised 676 ratings by an average of 1.15 notches.

Table 3

CreditWatch resolution

	From rating											
Current rating	**A**	**A-**	**BBB+**	**BBB**	**BBB-**	**BB+**	**BB**	**BB-**	**B+**	**B**	**B-**	**CCC**
A				4								
A-				15	4	1						
BBB+				120	46	24	3					
BBB				25	123	20	2	1				
BBB-					13	33	15	4				
BB+						6	69	17	2			
BB							17	55	20			
BB-								10	52	4		
B+									5	31	4	
B										24	7	
B-											15	
CCC												3

Source: S&P Global Ratings.

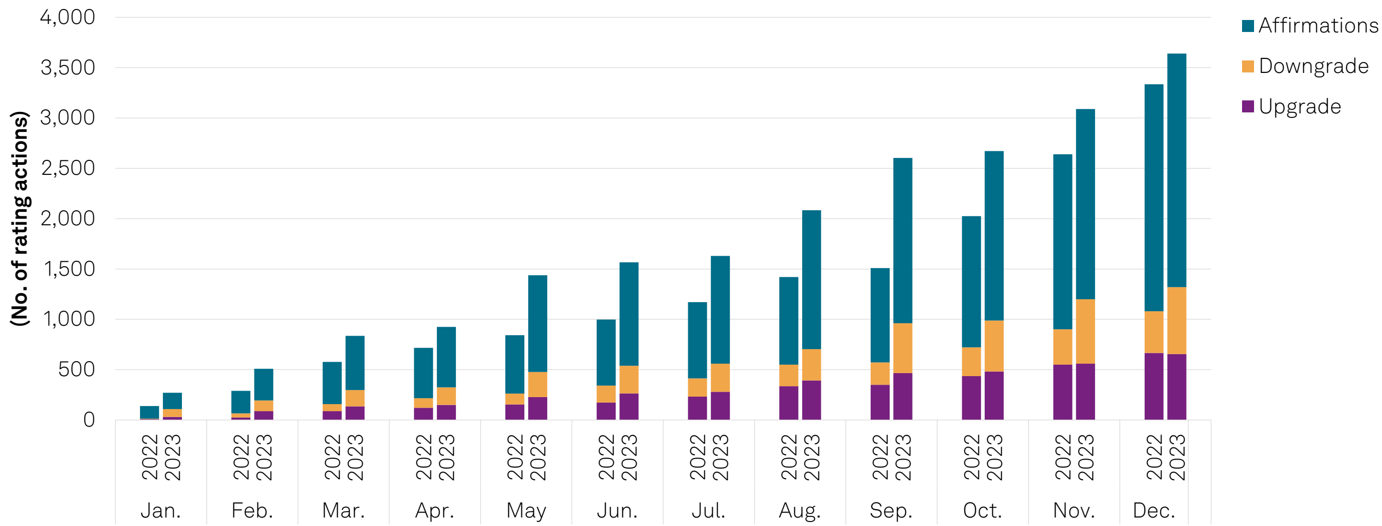
RMBS 1.0 Transactions

We took rating actions on 3,640 classes from 976 RMBS 1.0 transactions in 2023 (see charts 5 and 6). We made 655 upgrades, 665 downgrades, and 2,320 affirmations. The highlights include:

- The upgrades generally reflect an increase in credit support for front-pay classes in transactions where principal could no longer be redistributed to more junior classes and excess interest could be used to compensate for potential delays in interest payments.
- The downgrades primarily reflect the erosion of credit support due to weak structural protections and/or missed interest payments due to liquidity strain and credit related reduction in interest payment due to a preponderance of loan modifications in the pool.
- Of the 665 downgrades, 368 reflect classes that transitioned to ‘D’ from the ‘CCC’/‘CC’ rating levels. The majority of these rating transitions were due to observed interest shortfalls where reimbursement is unlikely as a result of the increase in interest rates.
- The withdrawals primarily reflect classes supported by a small number of loans. Once a pool has declined to a de minimis number of loans, its future performance becomes more difficult to project. Therefore, we believe there is a high degree of credit instability that is incompatible with any rating level.

Chart 5

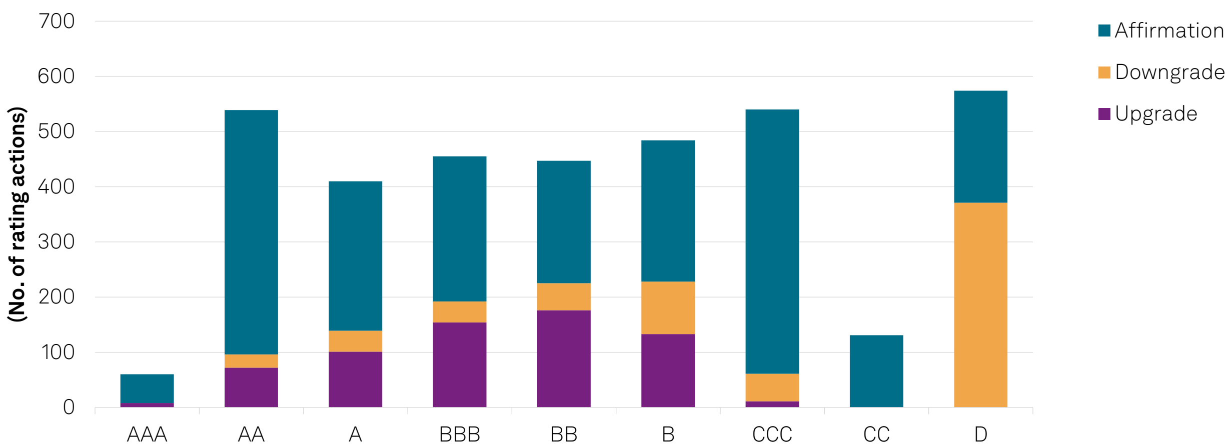
RMBS 1.0 surveillance rating activity in 2023 vs. 2022 (cumulative)



Source: S&P Global Ratings.

Chart 6

RMBS 1.0 surveillance rating actions by rating category in 2023



Data as of January 10, 2024. Source: S&P Global Ratings.

Delinquency And Conditional Prepayment Rate Highlights

Despite a 300 basis-point surge in the 30-year fixed-rate mortgage, which peaked near 8.0% in October 2023 and now sits at about 6.8%, mortgage performance remains resilient across S&P Global Ratings subsectors (refer to chart 7). Although buying a home today is a greater financial burden than it was only a few years ago (affordability is at its worst level in almost 40 years), mortgagors have displayed a consistent ability to service their home loans.

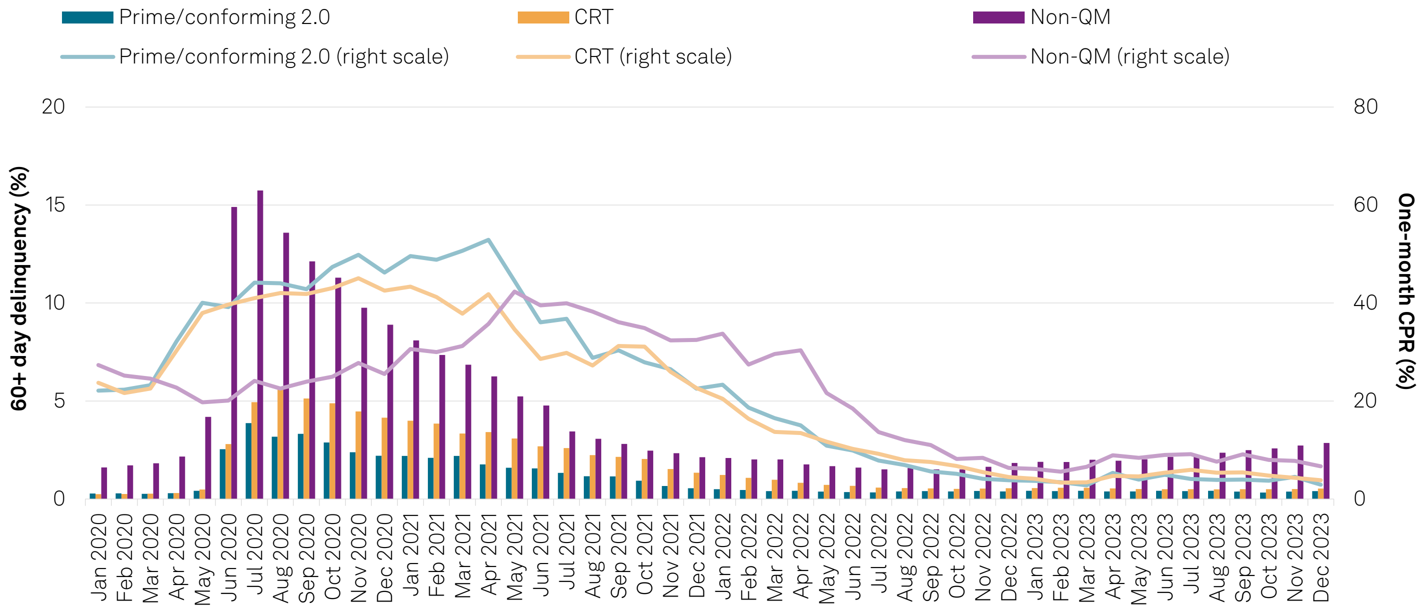
U.S. RMBS delinquency levels remained near post-pandemic lows in the first half of 2023, with only the non-QM sector experiencing a mild uptick towards the end of the year (some of which could be due to seasonal factors). Vintage breakout of delinquency levels shows the 2019 and 2020 vintage transactions with slightly higher delinquency levels than other vintages, due in part to their additional seasoning and correspondingly lower loan counts (see charts 8 and 9). The performance of deals from the 2023 vintage is weaker compared to 2021 and 2022 vintage deals. While the likelihood of a recession may have changed, higher-for-longer interest rates and persistent inflation may continue to place stress on some consumers, and, as a result, may lead to increased delinquencies despite strong home equity positions.

U.S. RMBS prepayments have remained near historic lows, as measured by the one-month conditional prepayment rate. We expect prepayments to remain subdued as many homeowners are locked into ultra-low mortgage interest rates ("golden handcuffs"), having little incentive to sell or refinance and give up favorable fixed rates. The enduring shift in remote working norms may have also contributed to muted turnover, as individuals don't necessarily have to move when their job relocates to a different city.

It's important to emphasize that while prepayments certainly influence bond pricing, their credit effects are also important, given their contribution to deleveraging and impact on excess interest generation for certain structures that use spread as a form of credit enhancement.

Chart 7

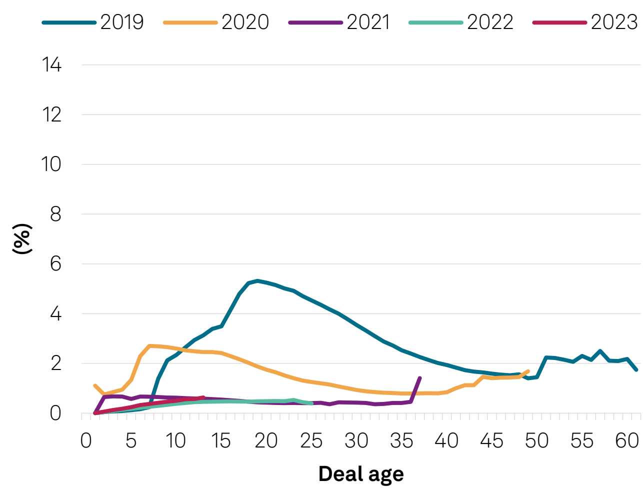
RMBS 2.0 transactions: one-month CPR and 60+ day delinquency



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

Chart 8

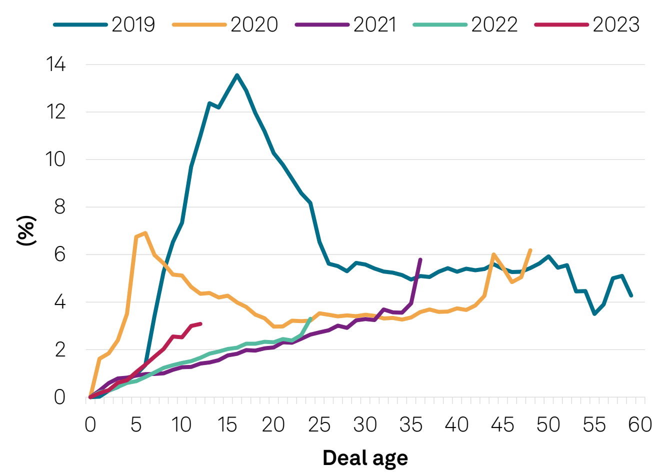
60+ days delinquency by vintage: CRT



Data as of Jan. 1, 2024. CRT--Credit Risk Transfer.
Source: S&P Global Ratings.

Chart 9

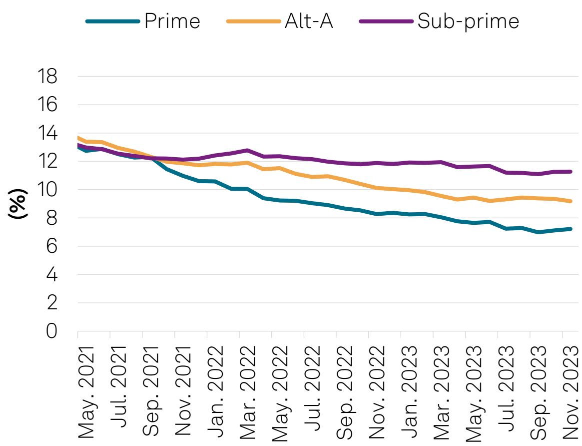
60+ days delinquency by vintage: non-QM



Data as of Jan. 1, 2024. Non-QM--Non-qualified mortgage.
Source: S&P Global Ratings.

Chart 10

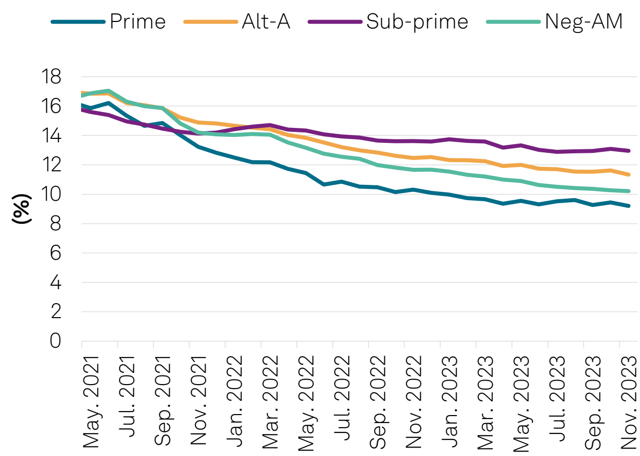
RMBS 1.0: 60+ day delinquency (pre-2005)



Data as of Jan. 1, 2024. Alt-A--Alternative-A.
Source: S&P Global Ratings.

Chart 11

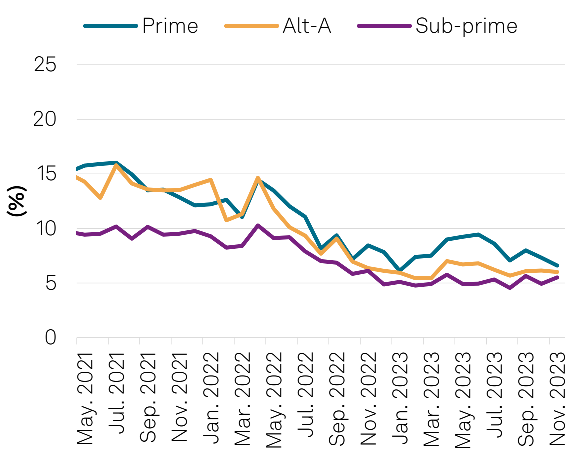
RMBS 1.0: 60+ day delinquency (2005-2008)



Data as of Jan. 1, 2024. Alt-A--Alternative-A.
Source: S&P Global Ratings.

Chart 12

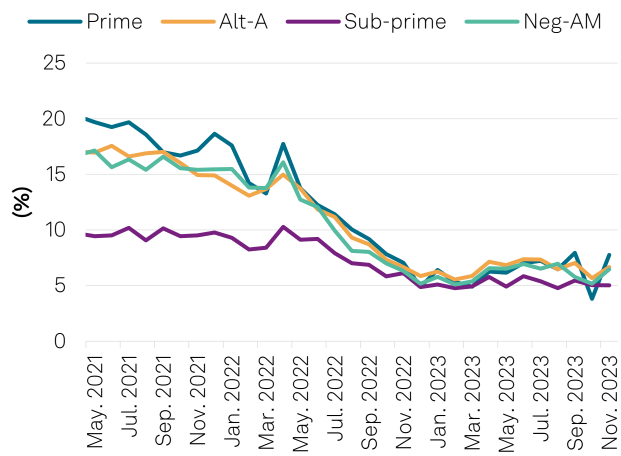
RMBS 1.0: one-month CPR (Pre-2005)



Data as of Jan. 1, 2024. CPR--Conditional prepayment rate.
Alt-A--Alternative-A. Source: S&P Global Ratings.

Chart 13

RMBS 1.0: one-month CPR (2005-2008)



Data as of Jan. 1, 2024. CPR--Conditional prepayment rate.
Alt-A--Alternative-A. Source: S&P Global Ratings.

Quantifying The Potential Effect Of Loan Modifications On Agency Credit Risk Transfers

The impact of loan modifications on RMBS varies depending on the type and structure of the transaction. In the case of agency credit risk transfer (CRT) transactions, amounts attributable to lost interest due to rate reductions and principal forbearance (forgiveness is not permitted) are generally passed through to the capital structure to permanently reduce contractual interest and then principal in reverse sequential order rather than allocated as a reduction in contractual interest across all classes. Losses on forborne principal are not realized unless the loan is liquidated. Excessive loan modifications could result in credit support depletion for agency CRT structures, depending on the degree and type of modifications, in addition to transaction specific structural features.

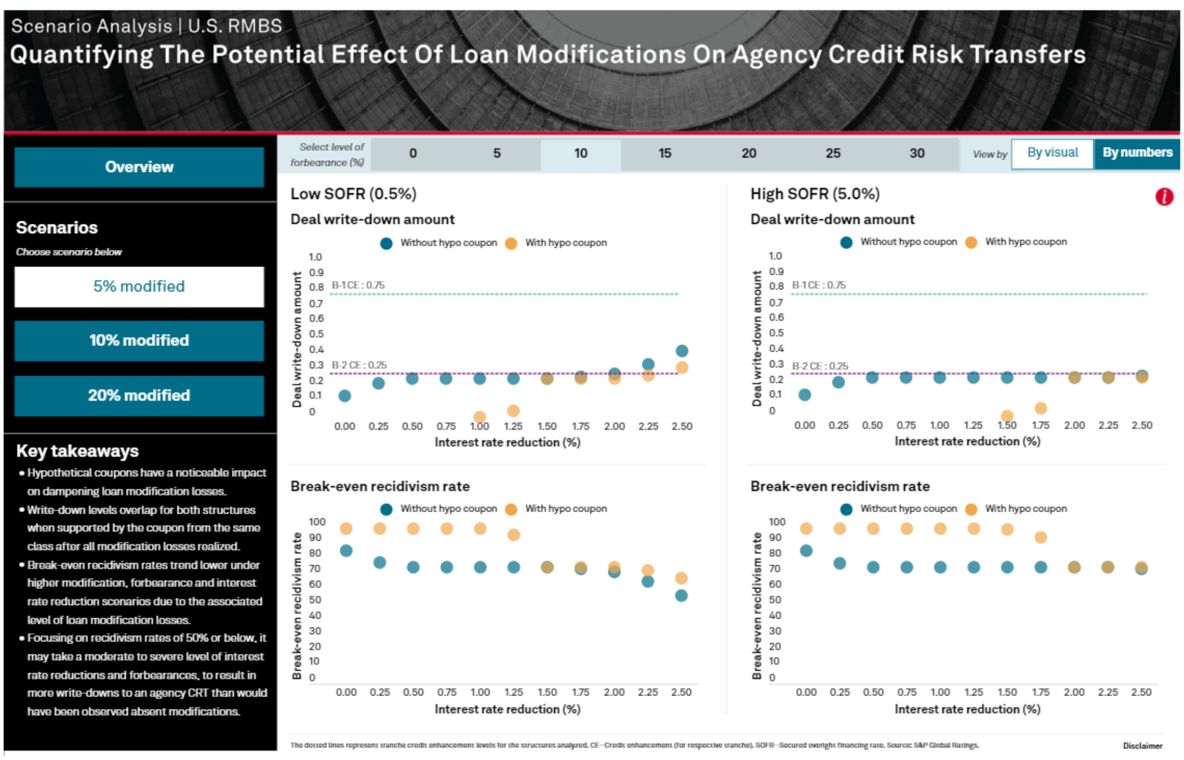
A scenario analysis on typical CRT transaction structures suggests the presence of a hypothetical coupon on the most subordinate B-3H class along with an elevated SOFR offers a considerable amount of protection against modification losses to the supported classes, particularly under higher interest rate reduction and forbearance stresses. M-1 classes under this analysis remain largely unscathed by principal write-downs even under severe modification assumptions applied on 5% of the mortgage pool.

The net benefit of loan modifications to a CRT (comparing principal write-downs from loan modification losses to write-downs from the alternative of default and liquidation losses) depends on the level, duration, and effectiveness of the loan modifications and corresponding rate and timing of recidivism. Assuming a recidivism rate of 50% or less, it may take a moderate to severe level of interest rate reductions and/or forbearance on over 5% of a mortgage pool to result in higher write-downs to CRT transactions than would have occurred under liquidation absent loan modifications.

For detailed analysis on the subject, refer to "Quantifying The Potential Effect Of Loan Modifications On Agency Credit Risk Transfers," published Oct. 19, 2023. Explore the data in our interactive dashboard: Click here. The below image is a preview.

Chart 14

U.S. RMBS Interactive Dashboard



Screenshot Oct. 26. 2023. Source: S&P Global Ratings.

Peer Comparison (Non-QM Transactions)

Total 2023 issuance of non-QM transactions rated by S&P Global Ratings was lower than 2022 issuance. There continues to be a shift in collateral composition when compared to prior years (see table 4) as well. For example, the percentage of investor homes backing transactions we rated in 2023 more than doubled to 67%, from 32% in 2018. In addition, while average FICO scores for the transactions issued in 2023 declined from 2022, they remain higher than pre-pandemic years (2021 and earlier). However, we note that certain changes are partially driven by the subset of non-QM transactions rated by S&P Global Ratings. Other highlights include:

- Loans underwritten to a debt service coverage ratio (DSCR) increased to 62% from 52%. Before 2022, this was about a third of the loan pools on average.
- The weighted average coupon (WAC) increased significantly to above 7.5% from 5.1% in 2022, due to increases in interest rates.
- Projected losses trended upward for 2023 issuances due, in part, to the increase of DSCR loans, the decline in their DSCR, and higher loss severities because of the continued over-valuation in the housing market.

Table 4

Rated non-QM transactions by issuance vintage(i)

	Transactions issued in					
Collateral characteristics	**2023**	**2022**	**2021**	**2020**	**2019**	**2018**
Closing pool balance ($)	7,424,939,617	20,357,952,960	18,615,221,020	10,841,934,875	18,713,343,405	6,571,908,079
Transactions (no.)	22	52	57	31	46	18
Closing loan count (no.)	22,216	51,288	50,568	29,660	46,633	16,506
Avg. loan balance ($)	334,216	396,934	368,123	365,541	401,290	398,153
WA original CLTV ratio (%)	69.3	70.0	69.3	69.5	69.3	67.4
WA current CLTV ratio (%)	68.8	69.5	67.8	68.6	68.6	66.6
WA FICO score	733	736	730	716	715	712
WA current rate (%)	7.6	5.1	5.4	6.1	6.4	6.4
WA seasoning (months)	5	5	12	9	6	8
WA debt-to-income ratio (%)	35.9	34.8	35.1	35.8	36.1	36.5
WA DSCR (non-zero)	1.19	1.36	1.35	1.32	1.24	1.25
Owner occupied (%)	31.4	41.6	53.7	56.9	63.0	64.9
Investor (%)	66.8	56.3	43.2	39.6	33.3	31.8
Single-family (including PUD) (%)	76.0	74.9	78.2	78.6	78.7	80.5
Two- to four-family homes (%)	13.8	15.1	12.6	12.1	12.2	10.0
Fixed-rate loans (%)	76.3	86.0	67.4	43.5	34.3	24.3
Adjustable-rate loans (%)	23.7	14.0	32.6	56.5	65.7	75.7
Loans with IO payments (%)	14.9	17.9	14.0	17.9	13.0	12.7
Purchase (%)	54.9	52.5	53.4	47.7	53.6	55.5
Cash-out refinancing (%)	35.9	35.4	31.3	40.3	36.0	33.2
Full documentation (%)	9.6	16.1	24.1	28.3	32.5	31.3
Alternative/bank statement documentation (%)	28.5	31.8	37.8	39.4	43.1	42.3
Other/asset depletion/DSCR documentation (%)	61.9	52.0	38.2	32.3	24.5	26.4
Self-employed borrowers (%)	30.4	36.9	46.8	51.2	54.2	60.0
Loans with coborrowers (%)	18.1	20.9	22.3	26.9	27.8	28.7
Loss estimation (%)						
'AAA' loss coverage	33.29	29.62	23.90	28.85	27.35	25.45
'AAA' foreclosure frequency	55.67	53.05	48.65	56.55	52.59	51.60
'AAA' loss severity	59.80	55.83	49.13	51.02	52.00	49.32
'BBB' loss coverage	10.83	9.85	7.95	9.70	8.70	7.85
'BBB' foreclosure frequency	31.30	30.00	27.55	32.10	27.54	26.78
'BBB' loss severity	34.60	32.81	28.86	30.22	31.59	29.31
'B' loss coverage	3.29	3.10	2.65	3.15	2.30	1.95
'B' foreclosure frequency	13.51	13.28	12.56	14.63	10.07	9.80
'B' loss severity	24.32	23.34	21.10	21.53	22.84	19.90

(i)As of the transactions' closing date. WA--Weighted average. CLTV--Combined loan-to-value.
DSCR--Debt service coverage ratio. PUD--Planned unit development. IO--Interest only. Source: S&P Global Ratings.

Market Overview

We anticipate a year-over-year rise in mortgage origination and securitization activity in 2024 as the economy starts to recover. Our non-agency issuance forecast expectation is about a 30% increase in volume from 2023 to $100 billion (see the Non-agency Issuance section).

In 2023, the relatively strong home price was driven by lack of housing supply though there was downward pressure from rising mortgage rates. The national home purchase-only seasonally adjusted FHFA HPI increased 6.5% between December 2022 and November 2023, demonstrating the housing market's resilience despite affordability limitations. We believe U.S. home prices will continue to depend on a combination of factors, including the trajectory and stability of the 30-year fixed-rate mortgage, local housing market dynamics, and economic fundamentals. Chart 15 shows the regional differences in home price changes, some of the increases are due to the population migration trends during the past five years.

We expect the single-family rental market to be resilient in 2024 due to affordability constraints, limited housing supply, growing population, and near historic mortgage interest rates with some regional variations.

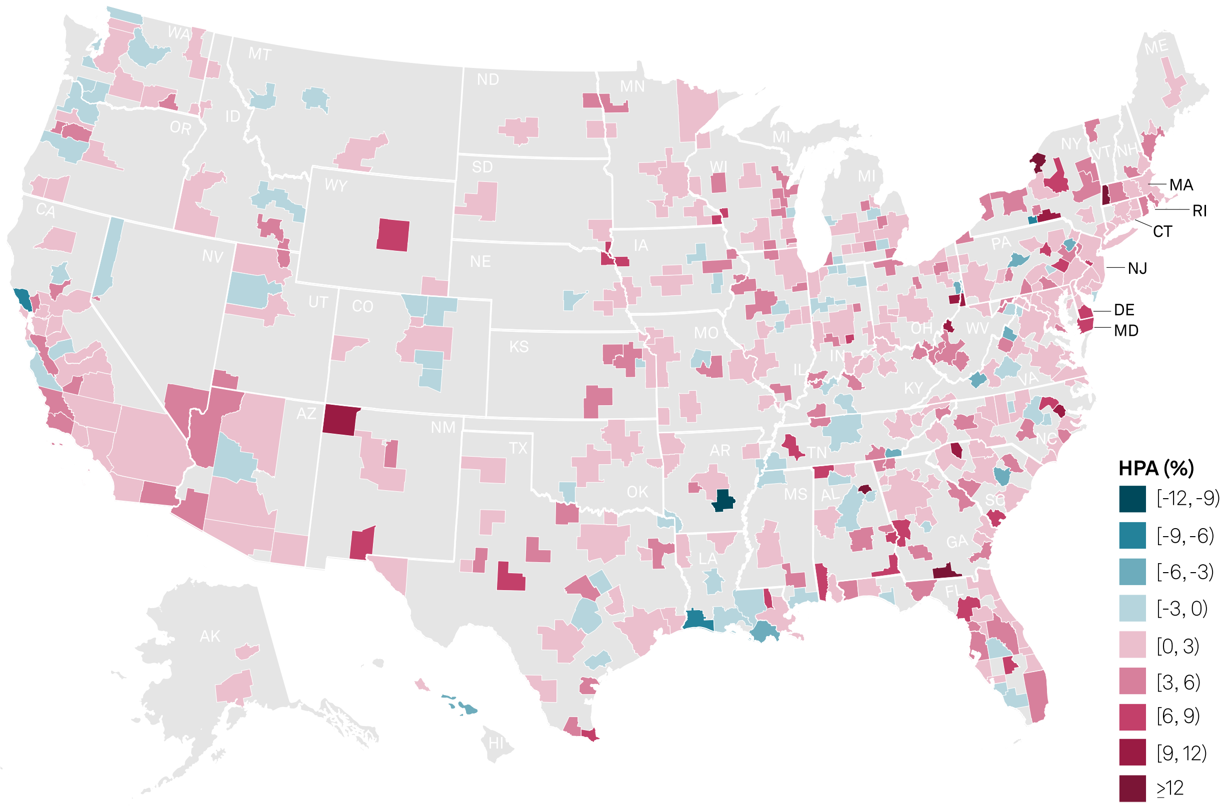
We maintain a benign outlook for RMBS credit performance in 2024, supported by strong home equity, low unemployment, and stable home price appreciation. Over 90% of mortgages in the U.S. are fixed-rate, but a portion of our outstanding RMBS portfolio has exposure to adjustable-rate mortgages that were originated in a lower-rate environment; they are exposed to the risk of interest rate shocks, which could affect performance of related RMBS. For details see “2024 U.S. Residential Mortgage And Housing Outlook: A Rate And Supply Story," published Jan.17, 2024.

Chart 16 below summarizes the trends of four important variables: the delinquency levels; the unemployment rate; the 30-year fixed mortgage rate, which came off its historical lows and increased last year and remains thereabouts; and home price appreciation, which, after a dip in late 2022, now shows modest increases.

Chart 15

Home price appreciation by MSA

Second-quarter 2023 to third-quarter 2023

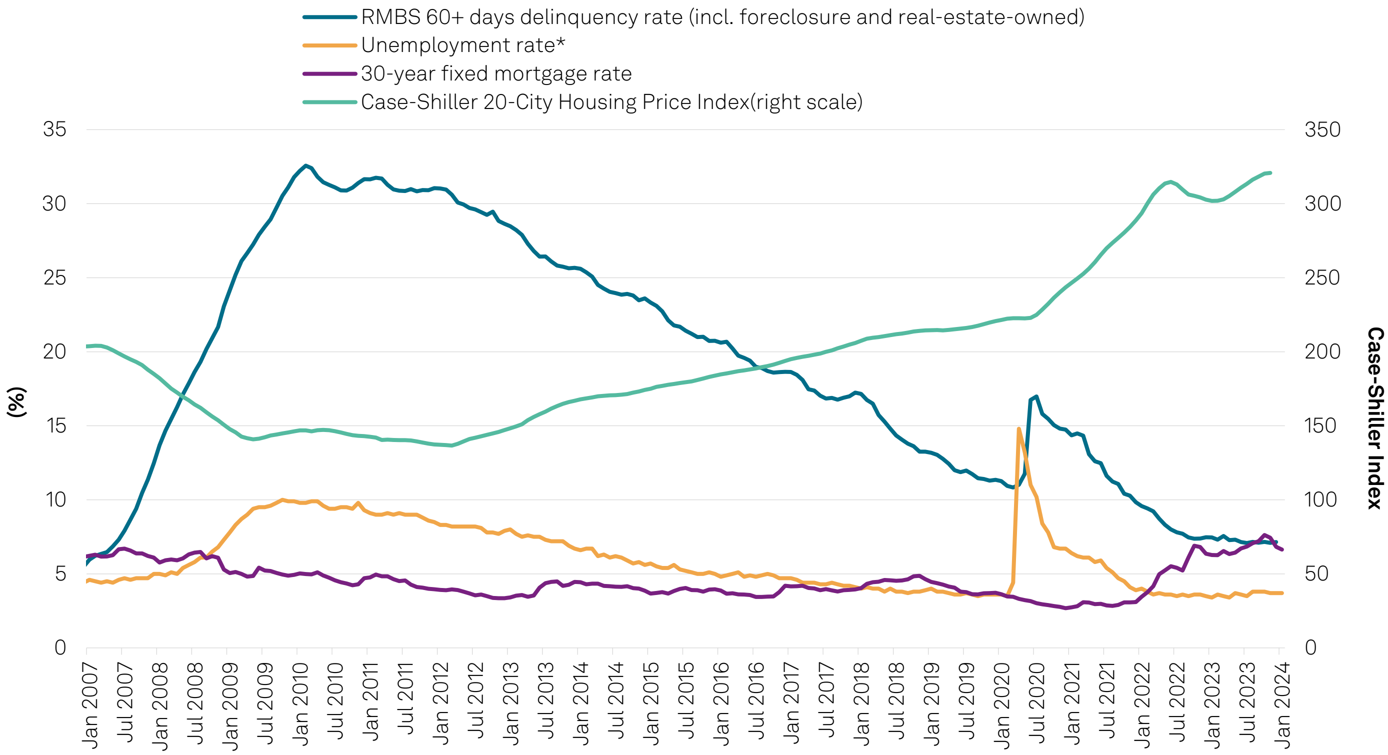


Non-seasonally adjusted All Transactions Home Price Index data. Ten MSAs depict combined data from two or more metropolitan divisions due to overlapping geographic locations. The HPA data from the metropolitan division with the highest core city population was chosen for each combined MSA. HPA--Home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

For our assessment of U.S. home price overvaluation, refer to the article "U.S. Home Price Overvaluation Relatively Steady, But Bumps Up A Bit," published Feb.5, 2024.

Chart 16

Mortgage and housing fundamentals



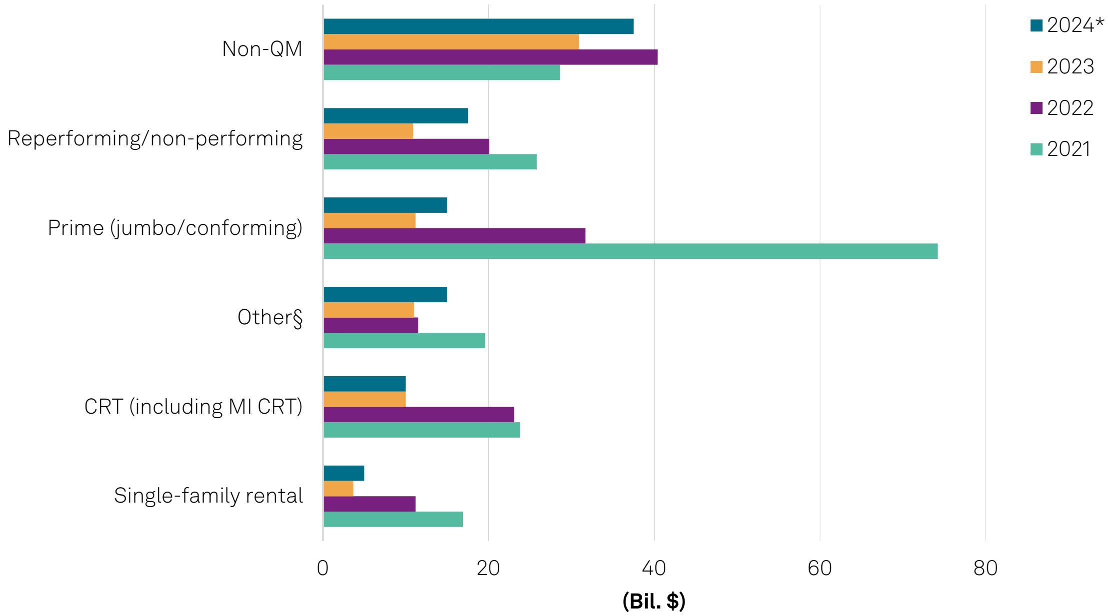
*Quarterly. Not seasonally adjusted. HPA--Home Price Appreciation. Source: Federal Reserve Bank of St. Louis.

Non-agency Issuance

We expect non-agency U.S. RMBS issuance to be around $100 billion in 2024, a 30% increase from 2023, driven primarily by non-QM RMBS volume, which is expected to increase by 25% to approximately $37.5 billion. The non-QM sector benefits from a broadening investor base and originators' comfort with the non-QM subsector. We also anticipate re-performing/nonperforming RMBS volume to increase to about $17.5 billion as 2021 vintage non-performing loan transactions enter their callable phase. We are projecting growth in the "other" category, which includes second liens/home equity lines of credit, reverse mortgages, residential transition loans, and shared appreciation assets.

Chart 17

U.S. non-agency RMBS issuance



*Forecast. Non-QM--Non-qualified mortgage. CRT--Credit risk transfer. MI--Mortgage Insurance. Source: S&P Global Ratings.

Analytical Contacts

James Taylor
New York
james.taylor@spglobal.com

Vanessa Purwin
New York
vanessa.purwin@spglobal.com

Jeremy Schneider
New York
jeremy.schneider@spglobal.com

Manmadh Venkatesan
Toronto
manmadh.balaji@spglobal.com

Daniel Pageau
Toronto
daniel.pageau@spglobal.com

Sujoy Saha
New York
sujoy.saha@spglobal.com

Research Contributors

Deegant Pandya
New York
deegant.pandya@spglobal.com

Sahay Senathikagu
New York
sahayajayaseelan.sen@spglobal.com

Bushra Dawawala
Mumbai
bushra.dawawala@spglobal.com

Research Contacts

Tom Schopflocher
New York
tom.schopflocher@spglobal.com

Investor Contact

Eric Demers
New York
eric.demers@spglobal.com

Commercial Contacts

Ryan Erb
New York
ryan.d.erb@spglobal.com

Media Contact

Jeff Sexton
New York
jeff.sexton@spglobal.com