

# **RMBS** Research

# First-Quarter 2019 RMBS Quarterly — High Prepayments Haven't Tarnished the Credit Quality of Non-QM RMBS

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#### **Authors:**

Youriy Koudinov | Senior Vice President | <a href="mailto:youriy.koudinov@morningstar.com">youriy.koudinov@morningstar.com</a> | + 1 212 548-6391

Rohit Jadhav | Assistant Vice President | <a href="mailto:rohit.jadhav@morningstar.com">rohit.jadhav@morningstar.com</a> | +1 646 560-4542

Olgay Cangur | Director of Quantitative Research | <a href="mailto:olgay.cangur@morningstar.com">olgay.cangur@morningstar.com</a> | +1 646 560-4514

#### **Analytical Manager:**

Stephen Buteau | Managing Director | stephen.buteau@morningstar.com | +1 646 560-4557

#### **Morningstar Perspective**

During the first quarter of 2019, the credit performance of residential mortgage-backed securities Morningstar Credit Ratings, LLC rates backed by nonqualified mortgage loans<sup>1</sup>, or non-QM RMBS, remained strong. Serious delinquency rates (60 or more days past due) were generally low and the credit-enhancement levels for all rated bonds rose because of steady voluntary prepayments and no realized losses. The prepayments have been steady and remained relatively elevated, with most deals seeing prepayment rates above 20%. Typically, we are concerned about the quality of the loans left in the pool when prepayments are high, but we found that the prepaid loans and the remaining loans have a similar credit quality (see Page 13).

Non-QM RMBS issuance also climbed in the first quarter, as several first-time issuers launched transactions. The new deals' collateral quality and structures were generally in line with those of the previously issued securitizations. As noted in our RMBS outlook for 2019, we expect non-QM RMBS issuance to continue to increase in 2019, with the credit quality of the collateral weakening somewhat but remaining overall consistent with the prior year<sup>2</sup>. Also, we expect the non-QM RMBS transaction structures to evolve as issuers explore ways to optimize funding costs and maximize proceeds from securitization.

<sup>&</sup>lt;sup>1</sup> A nonqualified mortgage loan is a loan that does not have the characteristics of qualified mortgage loan. The ability-to-repay rules issued by the Consumer Financial Protection Bureau established the categorization of QMs, which must meet certain criteria, including underwriting standards established in Appendix Q of the Truth in Lending Act. See CFPB mortgage rules.

<sup>&</sup>lt;sup>2</sup> See Morningstar RMBS Outlook for 2019: Solid Post-2010 RMBS Performance and Modest Issuance Growth Will Continue In 2019 for details.

This quarter also saw the outcome of the first known case to deal with a borrower seeking to prevent foreclosure by alleging a lender did not adequately establish the borrower's ability to repay; the court sided with the lender. In Elliott v. First Federal Community Bank of Bucyrus, the plaintiff brought an action in the U.S. District Court for the Southern District of Ohio against the bank, claiming that the lender violated Dodd-Frank's ability-to-repay rules in connection with a foreclosure action on his residence<sup>3</sup>. The court rejected the plaintiff's claims against the bank, finding that the lender "did its due diligence to confirm Plaintiff would have the ability to make the payments on his mortgage." The ruling signals potential challenges for borrowers who might seek to prevent foreclosure on similar grounds because the likelihood of the outcome is uncertain and will likely depend on case-specific circumstances

# New Issue Highlights: Issuance Grows as New Issuers Enter The Market

The amount of Morningstar-rated new issuance of non-QM RMBS rose in first-quarter 2019. We rated seven new transactions that quarter, which brought the total number of non-QM RMBS deals we rated through the end of March 2019 to 23. The credit quality and structure of the new transactions generally remained in line with those of the previously issued non-QM RMBS.

The credit quality of the collateral backing Residential Mortgage Loan Trust 2019-1 (RMLT 2019-1), a first-time securitization of non-QM loans aggregated by Seer Capital Management LP that closed in February 2019, is generally in line with the other deals. The weighted average current loan-to-value ratio, or LTV, was 68.5% and the weighted average FICO score was 693, though the average loan size of \$395,662 is below that of most other deals, while the weighted average coupon rate of 7.1% was the highest amongst the deals we rated. Also, the credit quality of Bunker Hill Loan Depositary Trust 2019-1 (BHLD 2019-1), a first-time securitization of loans aggregated by Oaktree Capital Management, L.P.<sup>4</sup>, was bolstered by generally higher FICO scores, with a weighted average FICO of 706; more borrower equity, as evidenced by the weighted average current LTV of 59.5%; and the lower share of interest-only loans of 4.4% by balance. Similarly, the higher borrower credit scores in New Residential Mortgage Loan Trust 2019-NQM2's collateral pool helped to boost the credit quality of the transaction, which was New Residential Investment Corp.'s second non-QM RMBS deal of the year and the first deal we rated from the company.

<sup>&</sup>lt;sup>4</sup> Oaktree Capital Management, L.P is an advisor to the funds that participate in funding mortgage loans aggregated by the transaction's sponsor, Grand Avenue Acquisition Company, LLC, and in funding the sponsor's obligation to repurchase the mortgage loans.



<sup>&</sup>lt;sup>3</sup> See Elliott v. First Federal Community Bank of Bucyrus for details.

Table 1: Select Loan and Transaction Characteristics of Morningstar-Rated Non-QM RMBS

							Adj-Rate			Senior	AAA	
	Issuance		Loan Size	WAC	OLTV	Current	Mortgage		10	CE	Loss	B (%)
Issuer	Date	Issuance (\$)	(\$)	(%)*	(%)*	LTV (%)*	(%)*	FICO*	(%)*	(%)**	(%)***	Loss
<u>Transactions Issued in First-Quarter 2019</u>												
COLT 2019-2 Mortgage Loan Trust	3/29/2019	377,253,000	695,527	5.8	82.0	81.7	23.2	735	2.5	24.7	18.1	1.7
New Residential Mortgage Loan Trust 2019-NQM2	3/19/2019	300,167,000	517,471	6.2	73.6	73.4	51.6	729	13.8	30.1	23.5	3.2
Bunker Hill Loan Depositary Trust 2019-1	3/19/2019	259,858,000	438,885	5.7	61.8	59.5	87.7	706	4.4	28.1	18.5	0.9
Verus Securitization Trust 2019-1	2/22/2019	645,657,000	522,907	6.5	69.7	69.3	63.9	696	22.1	31.2	24.1	2.3
Residential Mortgage Loan Trust 2019-1	2/19/2019	221,773,000	395,662	7.1	68.2	68.5	78.6	693	12.7	37.5	28.2	2.5
Deephaven Residential Mortgage Trust 2019-1	2/19/2019	335,760,000	426,987	7.0	73.2	72.8	73.7	693	19.9	37.9	31.8	4.0
COLT 2019-1 Mortgage Loan Trust	2/4/2019	349,138,000	559,260	6.3	82.0	81.9	27.7	719	0.2	35.8	22.7	2.5
Deephaven Residential Mortgage Trust 2018-4	11/27/2018	362,131,000	436,752	6.8	72.9	72.6	64.2	694	14.8	37.9	28.6	3.0
Ellington Financial Mortgage Trust 2018-1	11/13/2018	223,333,000	455,917	6.3	69.0	68.5	72.4	704	4.2	30.2	24.2	2.0
Verus Securitization Trust 2018-3	10/19/2018	430,385,000	546,746	6.6	69.3	69.1	75.6	696	23.2	35.5	28.9	2.2
Deephaven Residential Mortgage Trust 2018-3	9/27/2018	317,452,000	435,372	6.9	72.9	72.6	74.7	693	11.9	37.0	34.1	3.4
Verus Securitization Trust 2018-2	7/26/2018	489,565,021	573,933	6.5	69.1	68.8	77.1	690	22.7	33.4	28.2	2.4
COLT 2018-2 Mortgage Loan Trust	6/5/2018	358,655,000	451,777	6.5	79.0	N/A	60.3	701	0.7	31.3	33.1	3.3
Deephaven Residential Mortgage Trust 2018-2	5/31/2018	292,034,000	382,045	6.8	71.8	71.5	80.1	679	7.8	37.1	34.6	3.4
SGRMT 2018-1	4/27/2018	129,688,000	551,687	6.6	71.9	71.6	65.1	701	3.2	45.3	27.5	2.1
Deephaven Residential Mortgage Trust 2018-1	1/31/2018	305,427,000	408,755	6.7	73.4	73.1	85.1	689	9.6	35.9	27.2	3.2
Verus Securitization Trust 2018-1	1/25/2018	242,521,000	443,842	6.7	70.0	68.8	69.9	698	13.5	37.7	22.4	2.3
Verus Securitization Trust 2017-SG1	11/16/2017	247,511,000	460,144	6.8	71.4	70.5	73.5	693	9.4	36.0	23.7	2.4
Ellington Financial Mortgage Trust 2017-1	11/15/2017	138,550,000	448,360	6.6	65.5	64.7	96.6	697	0.6	31.4	18.8	1.8
Deephaven Residential Mortgage Trust 2017-3	11/7/2017	305,016,000	389,712	6.9	74.9	74.6	82.4	687	4.4	38.8	27.8	3.3
Verus Securitization Trust 2017-2	7/28/2017	236,056,000	407,090	7.0	68.5	68.0	77.4	701	14.5	36.2	23.2	2.7
COLT 2017-1 Mortgage Loan Trust	5/3/2017	377,480,000	472,827	6.3	76.1	75.6	74.1	708	2.8	34.1	22.6	2.4
Verus Securitization Trust 2017-1	2/22/2017	137,403,000	501,789	6.7	69.9	69.2	91.8	700	5.8	39.8	19.6	2.0

<sup>\*</sup>Weighted average by loan balance.

Source: Morningstar Credit Ratings, LLC

Analogously to the deals we rated in fourth-quarter 2018, the structure of the transactions remained similar across various non-QM RMBS issuers. In these deals, the principal is usually distributed sequentially first to senior and then to subordinated bonds. The principal is typically paid pro rata among senior, or Class A, notes with a sequential trigger, which determines if such distributions should be made sequentially to various Class A notes based on severe delinquency rates or realized losses. The transactions also generally benefit from the excess interest, which could cover losses.



<sup>\*\*</sup>Credit enhancement to the most senior tranche.

<sup>\*\*\*</sup>Highest AAA scenario loss projected across high-, mid- and low- interest rates scenarios.

# Industry Highlights: Court Ruling Signals Legal Challenges for Borrowers Who Reference ATR Rules Against Foreclosure

Elliott v. First Federal Community Bank of Bucyrus was the first known case to deal with a borrower seeking to prevent foreclosure by invoking Dodd-Frank's ATR rules. Generally, the ATR rules require lenders to make a reasonable and good faith determination based on verified and documented information that, at the time the loan is originated, the borrower has the ability to repay such mortgage according to the terms of the loan agreement. In this case, the U.S. District Court for the Southern District of Ohio sided with the bank.

The plaintiff was a real estate agent who worked with his spouse from whom he ultimately divorced, claiming that the bank violated the ATR rules at the inception of his mortgage because the bank relied upon a favorable separation agreement between the plaintiff and his soon-to-be ex-wife. When his divorce settlement was finalized, after the mortgage closed, it contained far less favorable terms for him than the separation agreement and, in the interim, the plaintiff also lost his job with his now ex-wife's real estate agency. The court rejected the plaintiff's claims against the bank, finding that the bank "did its due diligence to confirm Plaintiff would have the ability to make the payments on his mortgage" and that the change in the plaintiff's financial health related to his finalized divorce "was not an event that was reasonably foreseeable to the Bank." In connection with the plaintiff's specific claim related to Appendix Q, Standards for Determining Monthly Debt and Income, the court further found that the "bank did its due diligence as required" because, according to the lender's calculations at the time of loan origination, the plaintiff's debt-to-income ratio was under 37.367%, while the maximum allowed under Appendix Q is 43%. The judge's ruling permitted the bank to foreclose on the mortgaged property and collect related fees in collection with the default.

The ruling signals potential challenges for those borrowers who might seek a defense against foreclosure on similar grounds because the likelihood of the outcome is uncertain and will likely depend on case-specific circumstances. The case illustrates that borrowers bringing such claims may have obstacles in pursuing them based upon a consumer mortgage lender's reasonable business practices in determining the relevant ATR.

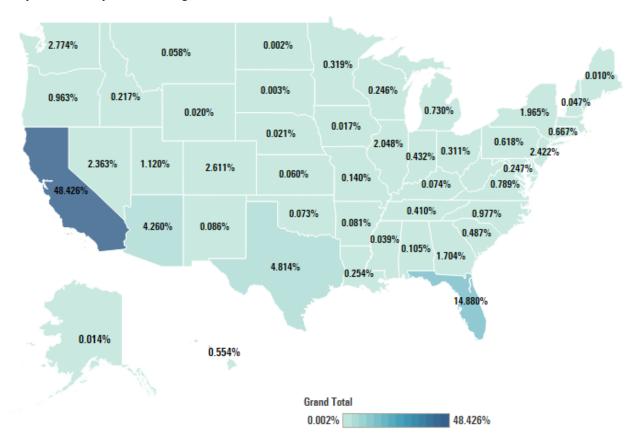
The ruling is a credit-positive for non-QM RMBS because a broader application of this court's approach will likely reduce the likelihood of delinquent borrowers raising a defense against foreclosure without merit, which, in turn, will help to reduce foreclosure costs and increase liquidation proceeds to bondholders. Also, for those borrowers who might raise the defense using ATR-based arguments, the application of this court's approach might decrease the likelihood that borrower's claim prevails without convincing evidence that such ATR determination was improperly calculated. That said, the immediate impact of the ruling on non-QM RMBS we rate will not be material because of the few loans in foreclosure.

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# Property-Level Highlights: Almost Half of the Properties Backing Non-QM RMBS Are in California

The geographical dispersion of the properties backing loans in non-QM RMBS we rate has not changed materially since the fourth quarter of 2018, with most properties in California, Florida, and Texas, as Map 1 shows. That said, Arizona became the fourth state with the largest share of properties backing non-QM loans, knocking out Washington. Of note, California's share has risen since fourth-quarter 2018 to 48.43% from 44.48%, indicating that the collateral backing non-QM RMBS has become slightly less geographically diverse.



Map 1: Most Properties Backing Loans in Non-QM RMBS are in California, Florida, Texas, and Arizona

Note: The map shows the percentage of properties backing loans in select rated non-QM RMBS in each state. The list of transactions for which the data is shown in the chart includes all rated non-QM RMBS except SGRMT 2018-1, DRMT 2019-1, RMLT 2019-1, Verus 2019-1, BHLD 2019-1, NRMLT 2019-NQM2, and COLT 2019-2, deals for which we do not have loan-level data.

Sources: Morningstar Credit Ratings, LLC, CoreLogic, and 1010data.



# **Performance Highlights: Credit Performance Remains Strong**

The credit performance of non-QM RMBS we rate remained strong and continued to improve in first-quarter 2019 as the creditenhancement levels increased steadily because of the steady voluntary prepayments, nonexistent losses, and excess interest. The strong credit performance on non-QM RMBS is a trend we observed and highlighted in our prior report<sup>5</sup>. Barring an economic downturn or a sudden drop in home prices, we expect the trend to continue throughout 2019.

## **Voluntary Prepayment Rates Remain Elevated**

The voluntary prepayment rates for most non-QM deals remained above a 20% conditional prepayment rate, or CPR, for most deals, in the first quarter, as Chart 1 shows. As we noted in our prior report, voluntary prepayment rates remain high, as prepayments in non-QM RMBS were generally unscathed by the rising long-term interest rates in 2018. On average over the last three reporting periods, loans backing COLT 2017-1 prepaid the most, at a 43.3% CPR; followed by COLT 2018-2, at 43.2%; DRMT 2018-1, at 37.0%; and Verus 2018-1, at 35.8%, as Chart 1 shows. Of recently issued deals, COLT 2019-1 started to prepay at an 11.3% CPR, a slightly lower rate than that of most other transactions following issuance.

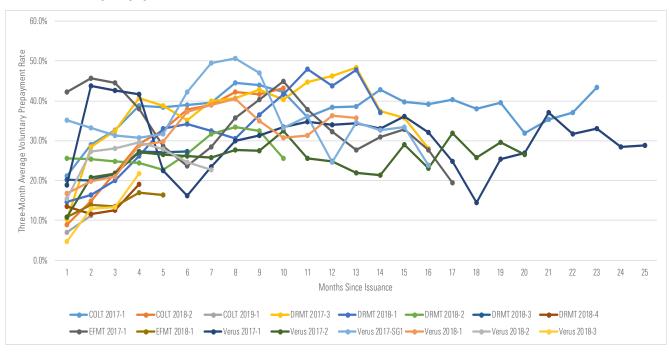


Chart 1: Voluntary Prepayments Rates Remain Elevated in Most Rated Non-QM Deals

Note: The chart shows three-month average voluntary prepayment rates for select rated non-QM RMBS. Sources: Morningstar Credit Ratings, LLC, CoreLogic, and 1010data.

<sup>5</sup>See Fourth-Quarter 2018 RMBS Quarterly — Non-QM RMBS Continue to Perform Well as Issuance Grows for details.

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## Delinquencies Continue to Remain Low in Most Non-QM RMBS

The serious delinquency rates (60 or more days past due) stayed low, remaining well below 3.0% of the current loan balance in all but four non-QM RMBS deals, as Chart 2 shows. As of the end of the first quarter, the weighted average serious delinquency rate was about 1.1% across the 16 deals for which we have delinquency data.

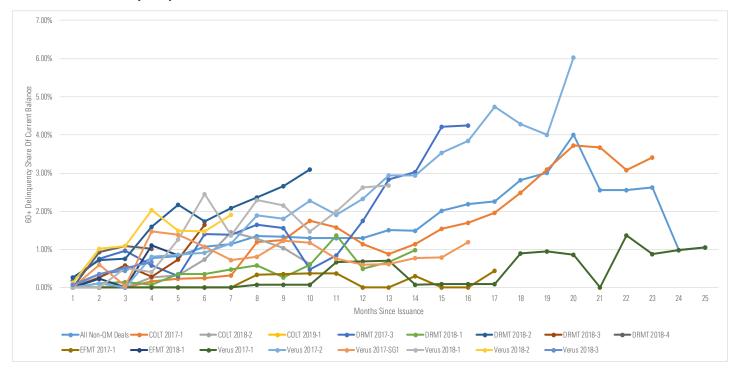


Chart 2: Serious Delinquency Rates Remain Low in Most Rated Non-QM Deals

Note: The chart shows the share of the unpaid balance of the 60 or more days delinquent loans, including those in foreclosure and real estate owned, as a percentage of the current outstanding loan balance.

Sources: Morningstar Credit Ratings, LLC, CoreLogic, and 1010data.

For the four transactions with the share of seriously delinquent loans above 3%, the delinquency rate remained low relative to the levels of credit enhancement and excess interest available to the rated bonds:

• Although the delinquency rate in Verus 2017-2 rose to 6.0% from 4.7% at the year-end 2018, Class A-1, rated AAA, had 44.6% of credit enhancement as of March 25, 2019 (up from 36.2% at origination) and Class B-3, rated BBB-, had 4.3% (up from 2.1% at origination), and the deal had about 3.4% of annualized excess interest<sup>6</sup>.



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<sup>&</sup>lt;sup>6</sup> We calculate excess interest as the annualized monthly excess cash flow as a percentage of the actual ending collateral balance. We calculate credit enhancement as a percentage of the actual ending collateral balance. Source: March 2019 remittance reports for Verus 2017-2, DRMT 2017-3, COLT 2017-1, and DRMT 2018-2 and IntexCalc.

- The delinquency rate in DRMT 2017-3 also rose to about 4.2% from about 2.8%, though, the rate remains low relative to the credit enhancement of about 17.7% available to Class M-1, rated AA-, the most junior class we rate.
- Also, the delinquency rate in COLT 2017-1 declined to 3.4% from 3.6% and remains low relative to the 9.5% of credit enhancement as of March 25, 2019 (up from 3.6% at origination) available to Class B-2, rated BBB<sup>7</sup>, the most junior class we rate.
- Lastly, the delinquency rate in DRMT 2018-2 rose to 3.1% from 2.1% but remained well below the credit enhancement of 14.4% (up from about 11.0% at origination) available to Class M-1, rated BBB+, the most junior class we rate.

As was the case in the prior quarter, servicers did not move most of the seriously delinquent loans to the foreclosure or real estate owned liquidation processes, as Chart 3 shows. As of March 25, 2019, only COLT 2018-2 had two loans in foreclosure. Therefore, we believe some of the currently delinquent borrowers might become current again or work out another solution with the servicer.

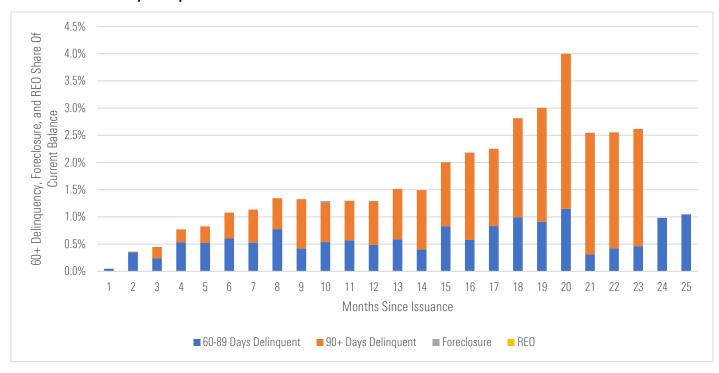


Chart 3: Most Seriously Delinquent Loans Still Have Not Moved to Foreclosure and REO

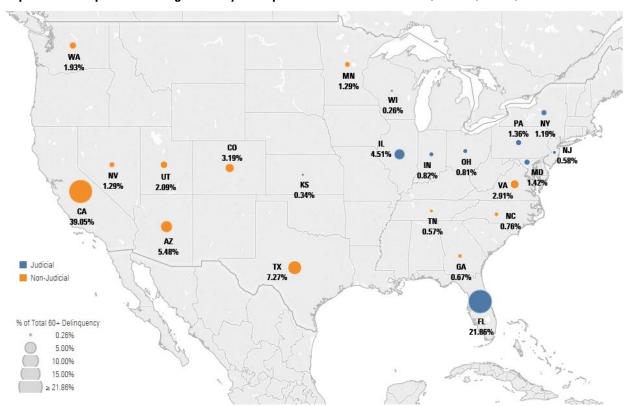
Note: The chart shows the average monthly share of the unpaid balance of the 60 or more days delinquent loans, including those in foreclosure and REO, as a percentage of the current outstanding loan balance of the select rated non-QM RMBS weighted by the deal balance. The data for 24 and 25 months since issuance only includes Verus 2017-1. As of March 25°, 2019, COLT 2018-2 had two loans in foreclosure, which is reflected in month 10. Sources: Morningstar Credit Ratings, LLC, CoreLogic, and 1010data.

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<sup>&</sup>lt;sup>7</sup> Rating reported as of April 24, 2019.

Properties backing most of the seriously delinquent loans reside in California, Florida, Texas, and Arizona, as Map 2 shows. These four states are also the states where most of the properties backing non-QM RMBS we rate are located. Compared with last quarter, the share of properties backing the seriously delinquent loans in South Carolina declined and the share of properties in Arizona increased.



Map 2: Most Properties Backing Seriously Delinquent Loans Are in California, Florida, Texas, and Arizona

Note: The map shows the percentage of properties backing loans in select rated non-QM RMBS in each state. The list of transactions for which the data is shown in the chart includes all rated non-QM RMBS except SGRMT 2018-1, DRMT 2019-1, RMLT 2019-1, Verus 2019-1, BHLD 2019-1, NRMLT 2019-NQM2, and COLT 2019-2, deals for which we do not have loan-level data.

Sources: Morningstar Credit Ratings, LLC, CoreLogic, and 1010data.

# Near Term Delinquency Rates Will Likely Remain Low for Most But May Rise in Some Deals

If the economic growth does not taper off, the delinquency rates will likely remain low in most non-QM RMBS in the near term because the rates at which borrowers who always stayed current on their mortgage payments and have become seriously delinquent, or "roll into serious delinquency," are low in most transactions, as Chart 4 shows. The roll into serious delinquency rates across the non-QM RMBS we rate was under 0.55% for most deals as of March 25, 2019 and remained relatively steady or below



the rates from the end of 2018. The lower roll rate into serious delinquency suggests there will be a lower share of severely delinquent loans in the near term.

That said, two recently issued deals showed a slight uptick in the rate: for Verus 2018-2, issued in July 2018, the rate jumped to 1.58% as of March 25 from 1.19% in February 2019, and for DRMT 2018-3, issued in September 2018, the first calculated rate since issuance was 1.6%, which is above the rate in other deals. We do not believe that these observations necessarily spell an imminent rise in serious delinquencies for the two deals because of only a few data points. However, we will continue to monitor the trend in roll into serious delinquency rates to anticipate a potential weakening in the credit performance.

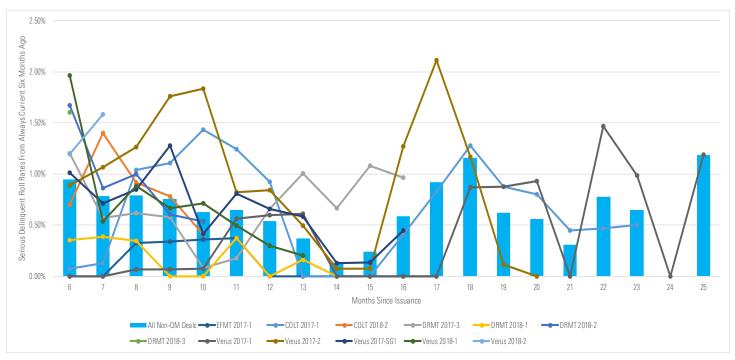


Chart 4: Delinquency Roll Rates Are Low in Most Rated Non-QM Deals

Note: The chart shows the rates at which always current borrowers (those who always stayed current on their mortgage payments) become 60 or more days delinquent. For every reporting period, we calculate the rate as the share of the unpaid loan balance of the always current borrowers six months ago, which are 60 or more days delinquent now. Also, the data for months 25 and 25 came from one transaction, Verus 207-1. Sources: Morningstar Credit Ratings, LLC, CoreLogic, and 1010data.



The good news is that some borrowers who became seriously delinquent in non-QM RMBS last quarter are current again, as Chart 5 shows. That said, the actual delinquency cure rates varied by deal in first quarter 2019. Of note, the chart does not show a clear trend because the serious delinquency rates are generally low, and a few loans becoming current or severely delinquent could affect the reported cure rates disproportionally.

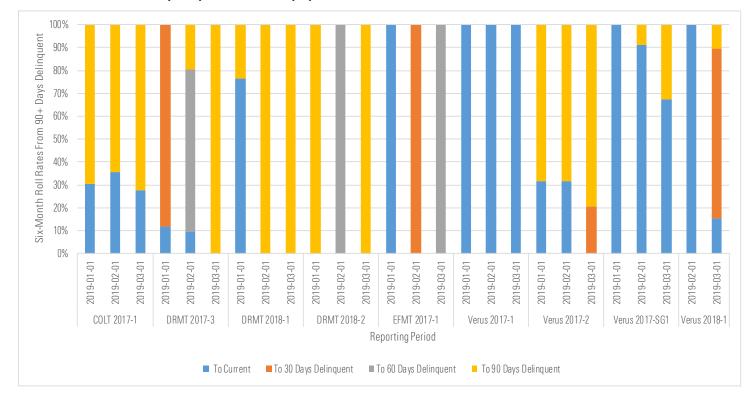


Chart 5: The Serious Delinquency Cure Rates Vary by Deal, But Some Borrowers Became Current

Note: The chart shows serious delinquency cure rates for select rated non-QM RMBS for the last reported quarter. For each reporting period within the previous quarter, we calculate the cure rate as the percentage of loan balance of the borrowers who were 90 or more days delinquent six months ago, which became current, paid off, 30- or 60-days delinquent, or remained 90 or more days delinquent.

Sources: Morningstar Credit Ratings, LLC, CoreLogic, and 1010data.

#### Growth in Credit Enhancement Continues to Support Credit Performance

In first-quarter 2019, credit enhancement to the rated bonds, the share of the loan balance available to cushion bonds against the future collateral losses, continued to grow, which is a credit positive for the deals. The credit enhancement for senior bonds increased from origination in all non-QM RMBS we rate, as Chart 6 shows. Barring a sudden economic downturn or a drop in home prices, we expect the trend to continue this year.



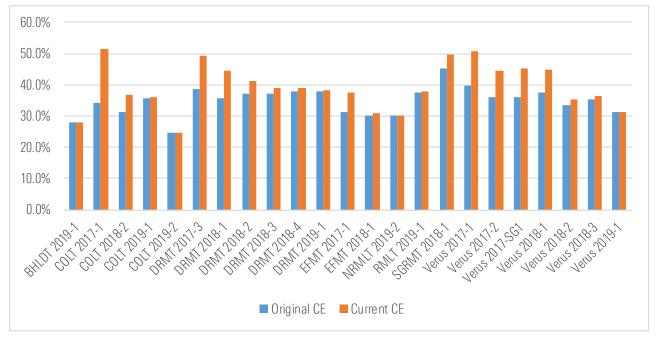


Chart 6: Credit Enhancement for Senior Bonds Continues to Grow in Rated Non-QM Deals

Note: The chart shows credit enhancement to the most-senior tranche as a percentage of unpaid loan balance at origination and as of March 25, 2019. Sources: Morningstar Credit Ratings, LLC and IntexCalc.

Elevated prepayments and no bond losses continue to help boost credit enhancement. The steady voluntary prepayments helped pay down senior bonds, making the remaining subordinated bonds the larger share of a deal's balance available to cushion against future potential losses. Also, there were no liquidations of properties backing seriously delinquent loans in non-QM RMBS and, consequently, no collateral and no bond losses. If there were such losses on the loans stemming from liquidations of the underlying properties, the excess interest in the deals would have also been available to cushion the bondholders against the losses.

#### Loan-Level Performance Highlights: Credit Quality of Prepaid Loans and Remaining Loans Are Similar

Although high prepayments are concerning because the remaining loans could be weaker, we found that they have not had a serious impact on the credit quality of non-QM RMBS we rate because the remaining loans are of similar quality as that of the prepaid loans, as Table 2 shows. The RMBS credit quality would have weakened if the prepaid loans had materially better credit attributes than the remaining ones, which, in turn, would imply a higher credit risk for the deal in the future.

The top two sections of the table show select credit attributes of the prepaid loans and loans that remain current in the non-QM RMBS we rate. Although the exact characteristics vary by the deal, on average, the prepaid loans had a slightly higher FICO score of 706 relative to the 699 of the remaining current loans, and they had a higher interest rate of 6.79% versus 6.59%, but they also had



a somewhat higher DTI of 38.9% versus 38.2% of the remaining loans and had a slightly higher original LTV of 73.8% than 72.5% of the remaining current loans (though a marginally lower Morningstar LTV of 69.3% versus 70.6%). Moreover, in six of the 16 RMBS deals below, the average FICO score of the prepaid loans was lower than the FICO score of the remaining current loans. The overall results show that that the prepaid loans were not consistently of a higher credit quality than the remaining loans and the credit quality of the loans is about the same.

Table 2: Select Loan-Level Performance Characteristics of Rated Non-QM Deals

		COLT 2017-1	COLT 2018-2	COLT 2019-1	DRMT 2017-3	DRMT 2018-1	DRMT 2018-2	DRMT 2018-3	DRMT 2018-4	EFMT 2017-1	EFMT 2018-1	Verus 2017-1	Verus 2017-2	Verus 2017-SG1	Verus 2018-1	Verus 2018-2	Verus 2018-3
Current	Current Loan Count	343	651	662	438	476	593	649	800	190	474	128	327	334	372	711	749
	Original UPB (\$)	158,316,944	282,955,926	371,189,267	155,225,645	190,424,070	225,568,873	281,490,217	349,270,270	83,037,418	216,496,994	69,560,957	139,039,602	144,913,829	160,615,467	404,057,582	406,252,302
	Current UPB (\$)	148,460,731	278,079,686	369,589,412	150,572,727	185,716,961	221,110,159	278,002,497	346,131,561	79,615,892	213,940,330	65,004,079	135,236,405	140,818,576	155,685,329	398,889,035	403,602,389
	Average Loan Size (\$)*	432,830	427,158	558,292	343,773	390,162	372,867	428,355	432,664	419,031	451,351	507,844	413,567	421,613	418,509	561,025	538,855
	% Original Balance	38.9	70.2	98.0	52.1	61.5	74.9	85.8	92.9	58.0	92.5	47.1	57.2	56.9	64.3	83.6	93.2
	Months Since Issuance	23	10	2	16	14	10	6	4	17	5	25	20	16	13	7	4
	WA FICO**	757	699	719	686	689	678	693	694	699	705	695	704	690	698	691	696
	WA DTI (%)	42.6	41.3	41.0	33.6	36.0	36.7	38.7	38.0	38.8	36.9	34.6	37.5	37.1	38.3	37.4	37.8
	WAC (%)	6.2	6.5	6.3	6.8	6.7	6.8	6.8	6.8	6.6	6.3	6.7	6.9	6.8	6.6	6.5	6.6
	WA LTV (%)	75.5	79.1	82.0	74.2	72.3	71.5	72.9	72.9	64.3	68.9	68.3	66.9	70.2	69.1	69.1	69.1
	WA MORN LTV (%)	65.2	75.6	87.5	67.1	67.2	67.2	71.3	77.5	56.6	72.4	57.6	59.9	64.2	63.1	66.5	68.5
Prepaid	Current Loan Count	498	233	14	323	274	174	91	49	124	32	160	254	211	172	119	47
	Original UPB (\$)	243,092,374	118,438,076	7,390,533	136,137,142	117,552,264	68,541,364	41,908,161	23,351,132	59,684,717	15,681,846	77,322,928	95,234,144	108,257,265	84,806,858	71,481,577	26,901,345
	Current UPB (\$)	231,268,208	116,402,514	7,378,635	133,992,554	116,237,820	67,362,307	41,542,376	23,187,422	57,871,790	15,462,194	74,755,106	92,461,111	106,160,872	82,807,679	70,689,237	26,778,462
	Average Loan Size (\$)*	464,394	499,582	527,045	414,838	424,226	387,140	456,510	473,213	466,708	483,194	467,219	364,020	503,132	481,440	594,027	569,755
	% Original Balance	59.8	29.4	2.0	45.7	37.9	22.8	12.8	6.2	41.7	6.7	52.4	39.2	42.5	34.0	14.8	6.2
	WA FICO**	750	707	720	690	690	687	691	701	693	688	704	702	697	700	686	704
	WA DTI (%)	41.2	43.1	43.0	37.2	38.0	38.1	37.7	36.4	39.4	33.9	35.6	38.2	37.8	38.5	38.4	39.0
	WAC (%)	6.6	6.6	6.7	6.9	6.8	7.0	7.1	6.8	6.7	6.8	6.7	7.2	6.8	7.0	6.8	6.9
	WA LTV (%)	77.0	78.7	79.0	75.7	75.0	72.8	74.0	71.9	67.0	67.5	71.6	70.4	73.0	71.3	69.6	72.7
	WA MORN LTV (%)	70.6	76.7	83.8	69.9	70.3	69.6	72.8	75.9	60.7	70.5	64.3	64.1	67.8	65.9	67.5	72.2
Defaulted**	* Current Loan Count	12	5	0	11	4	17	9	8	1	4	1	11	5	11	10	5
	Original UPB (\$)	5,305,751	1,727,750	-	6,762,453	1,869,430	7,102,149	4,678,990	3,539,403	357,500	1,822,340	704,000	8,772,338	1,715,950	4,313,500	7,777,600	2,696,650
	Current UPB (\$)	5,232,397	1,720,012	-	6,670,320	1,851,302	7,036,304	4,652,211	3,529,952	351,822	1,810,425	686,525	8,672,572	1,689,826	4,277,685	7,752,672	2,689,892
	Average Loan Size (\$)*	436,033	344,002		606,393	462,825	413,900	516,912	441,244	351,822	452,606	686,525	788,416	337,965	388,880	775,267	537,978
	% Original Balance	1.3	0.4	0.0	2.3	0.6	2.4	1.4	0.9	0.2	0.8	0.5	3.6	0.7	1.7	1.6	0.6
	WA FICO**	717	634	0	601	576	639	659	666	650	664	645	637	679	639	681	605
	WA DTI (%)	39.1	44.6	0.0	34.1	39.5	38.3	42.2	37.2	50.0	32.6	49.4	36.1	44.9	40.7	40.1	43.3
	WAC (%)	6.9	7.7	0.0	6.9	7.5	7.1	7.3	7.3	6.9	7.3	7.9	7.7	7.2	7.4	6.2	8.2
	WA LTV (%)	87.4	78.0	0.0	69.1	73.6	72.3	72.1	73.8	55.0	79.9	80.0	73.6	70.9	72.9	69.1	69.4
	WA MORN LTV (%)	76.9	74.7	0.0	64.9	71.7	68.2	72.0	78.0	48.5	79.8	68.6	67.8	65.9	68.2	66.9	73.4
Liquidated	Current Loan Count	-	-	-	-	-	-		-	-		•	•	-	-		
	Original UPB (\$)	-	-	-	-	-	-		-	-		•	•	-	-		-
	Current UPB (\$)	-	-	-	-	-	-		-	-		•	•	-	-		-
	Average Loan Size (\$)*	-	-	-	-	-	-		-			•	•	-	-		
	% Original Balance	-			-	-	-		-			-		-	-	-	-
	Cum Loss WA FICO**	-			-	-		-			-		-			-	-
	WA DTI (%)	-			-	-		-			-		-			-	-
	WAC (%)	-	-	-	-	-	-	-	-	-		-	-	•	-	-	-
	WAC (%) WA LTV (%)	-	-	-		-	-	-	-	-		-	-		-	-	-
	WA MORN LTV (%)	-	-		-	-	-	-	-	-	-						-
	VVA IVIUKIN LIV (%)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

<sup>\*</sup>Average loan size is based on the balance of loans as of the reporting period in which prepayment occurred.



<sup>\*\*</sup>FICO scores include Morningstar assumptions.

<sup>\*\*\*60</sup> or more days delinquent loans include loans in foreclosure and REO.

# Appendix I: Geographical Concentration of Properties Backing Rated Non-QM Deals

	COLT	COLT	COLT	DRMT	DRMT	DRMT	DRMT	DRMT	EFMT	EFMT	Verus	Verus	Verus	Verus	Verus	Verus
	2017-1				2018-1				2017-1		2017-1	2017-2	2017-SG1		2018-2	2018-3
Alaska	0.00%	0.06%	0.12%	0.00%	0.00%		0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%		0.00%
Alabama	0.18%	0.30%	0.07%	0.06%	0.13%	0.09%	0.25%	0.00%	0.00%	0.00%	0.00%	0.16%	0.03%	0.00%	0.17%	0.02%
Arkansas	0.02%	0.14%	0.23%	0.08%	0.00%	0.00%	0.09%	0.36%	0.00%	0.10%	0.00%	0.00%	0.00%	0.00%	0.08%	0.00%
Arizona	2.38%	4.79%	2.77%	7.65%	9.88%	6.34%	9.60%	4.96%	3.75%	3.41%	0.49%	2.77%	4.67%	1.74%	2.00%	0.89%
California	52.43%	31.51%	37.73%	36.53%	39.53%	41.74%	40.67%	49.41%	61.99%	53.19%	57.40%	48.97%	56.67%	53.11%	57.91%	65.32%
Colorado	2.06%	2.30%	4.15%	2.53%	2.39%	2.93%	2.52%	2.79%	8.20%	6.61%	2.10%	2.55%	1.91%	1.76%	1.03%	0.85%
Connecticut	0.16%	1.25%	0.81%	0.36%	1.01%	0.14%	0.62%	0.18%	0.17%	0.27%	0.27%	0.32%	1.71%	0.57%	1.10%	0.94%
District of Columbia	0.29%	0.42%	0.61%	0.27%	0.00%	0.19%	0.00%	0.07%	0.00%	0.00%	0.00%	0.20%	0.00%	0.08%	0.91%	0.10%
Delaware	0.23%	0.18%	0.03%	0.30%	0.13%	0.06%	0.00%	0.00%	0.00%	0.13%	0.00%	0.08%	0.00%	0.05%	0.00%	0.00%
Florida	11.25%	18.58%	10.35%	20.90%	17.77%	21.39%	15.62%	15.28%	6.64%	13.82%	11.87%	16.31%	12.37%	15.49%	15.83%	10.77%
Georgia	2.88%	1.67%	2.59%	2.44%	2.64%	1.06%	1.43%	1.41%	0.00%	0.41%	2.94%	1.22%	1.06%	0.82%	1.71%	1.59%
Hawaii	0.46%	1.36%	1.80%	0.27%	0.19%	0.26%	0.27%	1.00%	0.00%	0.00%	0.00%	0.12%	0.00%	0.13%	1.03%	0.25%
Iowa	0.07%	0.00%	0.08%	0.00%	0.00%	0.00%	0.02%	0.03%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.01%	0.00%
Idaho	0.00%	0.21%	0.37%	0.00%	0.56%	0.29%	0.27%	0.20%	0.00%	0.29%	0.00%	0.49%	0.39%	0.20%	0.11%	0.11%
Illinois	1.01%	2.17%	2.34%	4.58%	4.06%	2.51%	3.52%	1.75%	0.00%	0.13%	3.40%	2.27%	1.74%	1.19%	0.74%	1.56%
Indiana	1.12%	0.69%	0.96%	0.34%	0.49%	0.93%	0.50%	0.39%	0.00%	0.00%	0.30%	0.00%	0.29%	0.13%	0.06%	0.08%
Kansas	0.02%	0.34%	0.03%	0.15%	0.00%	0.04%	0.00%	0.05%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.14%	0.00%
Kentucky	0.03%	0.07%	0.00%	0.06%	0.00%	0.00%	0.64%	0.00%	0.00%	0.00%	0.16%	0.04%	0.08%	0.00%	0.00%	0.10%
Louisiana	0.63%	0.23%	0.23%	0.00%	0.00%	0.19%	0.31%	0.66%	0.00%	0.00%	0.00%	0.00%	0.82%	0.15%		0.05%
Massachusetts	0.00%	0.00%	0.00%	0.58%	0.35%	0.18%	0.67%	0.93%	0.00%	0.00%	0.00%	0.17%	0.40%	0.42%	0.24%	1.08%
Maryland	1.07%	1.57%	1.72%	0.45%	1.31%	1.07%	1.76%	1.61%	0.00%	1.02%	0.05%	0.67%	1.20%	0.84%	0.99%	0.57%
Maine	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.06%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.06%
Michigan	0.61%	2.81%	1.39%	0.52%	0.78%	0.46%	0.53%	0.64%	0.00%	0.00%	0.94%	1.06%	0.11%	0.17%	0.31%	0.39%
Minnesota	0.36%	0.90%	0.46%	0.45%	0.91%	0.25%	0.29%	0.28%	0.00%	0.00%	0.00%	0.00%	0.00%	0.36%	0.22%	0.05%
Missouri	0.12%	0.35%	0.32%	0.10%	0.00%	0.00%	0.21%	0.52%	0.00%	0.00%	0.00%	0.18%	0.00%	0.00%	0.02%	0.09%
Mississippi	0.00%	0.17%	0.04%	0.00%	0.00%	0.03%	0.11%	0.00%	0.00%	0.00%	0.00%	0.02%	0.05%	0.00%	0.00%	0.11%
Montana	0.09%	0.00%	0.23%	0.00%	0.13%	0.00%	0.00%	0.05%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.22%	0.00%
North Carolina	0.84%	1.53%	1.28%	1.91%	0.94%	1.27%	1.50%	1.47%	0.00%	0.00%	0.20%	1.05%	0.42%	0.69%	0.77%	0.48%
North Dakota	0.00%	0.02%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Nebraska	0.00%	0.14%	0.12%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
New Hampshire	0.00%	0.00%	0.09%	0.00%	0.00%	0.18%	0.27%	0.06%	0.00%	0.00%	0.00%	0.15%	0.00%	0.00%	0.00%	0.00%
New Jersey	3.48%	4.25%	4.23%	2.21%	1.95%	2.66%	2.35%	1.38%	0.00%	0.18%	3.40%	2.33%	0.94%	3.95%		1.70%
New Mexico	0.08%	0.09%	0.19%	0.10%	0.10%	0.15%	0.05%	0.17%	0.00%	0.00%	0.00%	0.00%	0.10%	0.17%	0.02%	0.05%
Nevada	3.16%	4.75%	2.65%	2.31%	2.38%	2.81%	2.18%	2.20%	1.05%	1.83%	2.75%	1.64%	1.71%	2.75%		1.69%
New York	0.00%	0.00%	1.20%	0.00%	0.00%	0.00%	0.36%	0.39%	0.00%	0.00%	3.62%	7.43%	3.83%	6.00%		4.09%
Ohio	0.43%	0.31%	0.67%	0.90%	0.26%	0.34%	0.30%	0.31%	0.00%	0.00%	0.07%	0.07%	0.29%	0.24%	0.28%	0.09%
Oklahoma	0.00%	0.07%	0.19%	0.10%	0.06%		0.00%	0.08%	0.00%	0.00%	0.00%	0.04%	0.00%	0.00%		0.25%
Oregon	1.17%	2.06%	1.20%	0.76%	0.64%		0.58%	0.31%	1.83%	2.10%	0.31%	0.80%	1.22%	0.73%		
Pennsylvania	0.46%	0.70%	0.73%	1.56%	0.90%		1.51%	0.48%	0.00%	0.00%	0.36%	0.77%	0.58%	0.12%		0.31%
Rhode Island	0.00%	0.06%	0.00%	0.00%	0.00%		0.13%	0.00%	0.00%	0.00%	0.00%	0.08%	0.11%	0.00%		0.00%
South Carolina	0.25%	0.56%	1.03%	0.95%	0.81%		0.77%	0.48%	0.00%	0.00%	0.29%	0.10%		1.14%		0.36%
South Dakota	0.00%	0.00%	0.00%	0.00%	0.00%		0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%		0.03%
Tennessee	0.47%	0.51%	1.09%	0.22%	0.26%		0.84%	0.29%	0.00%	0.00%	0.15%	0.99%		0.21%		0.19%
Texas	3.33%	4.87%	3.95%	5.00%	3.72%		4.51%	5.15%	13.66%	12.57%	6.19%	4.19%	5.09%	4.41%		3.03%
Utah	1.64%	1.18%	1.92%	2.36%	2.65%		2.03%	1.24%	0.78%	0.84%	0.00%	0.06%		0.00%		0.00%
Virginia	0.17%	1.29%	1.59%	0.59%	0.65%		0.87%	0.63%	0.00%	1.21%	0.00%	1.60%	0.41%	1.39%		0.76%
Washington	6.98%	5.32%	7.79%	1.57%	2.22%		1.31%	2.50%	1.93%	1.90%	2.48%	0.95%	0.94%	0.84%		1.52%
Wisconsin	0.05%	0.20%	0.57%	0.83%	0.17%		0.54%	0.24%	0.00%	0.00%	0.24%	0.09%	0.00%	0.04%		0.21%
West Virginia	0.00%	0.20%	0.08%	0.00%	0.17%		0.00%	0.2470	0.00%	0.00%	0.24%	0.03%				0.21%
Wyoming	0.00%	0.00%	0.00%	0.00%	0.00%		0.00%	0.00%	0.00%		0.00%	0.00%				
vvyullilig	0.00%	0.00%	0.00/0	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00/6	0.00%	0.00%	0.00%	0.00%	U.Z 170	0.00%

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