





OCTOBER 2019 REPORT



CONTENTS

- 3 OCTOBER FIRST LOOK RELEASE
- 4 PREPAYMENT ACTIVITY
- 8 Q3 2019 EQUITY UPDATE
- 13 SERVICER RETENTION RATES
- 17 APPENDIX
- 20 DISCLOSURES
- 21 DEFINITIONS

OCTOBER 2019 OVERVIEW

Each month, the Black Knight Mortgage Monitor looks at a variety of issues related to the mortgage finance and housing industries.

This month, as always, we begin with a review of some of the high-level mortgage performance statistics reported in our <u>most recent First Look report</u>, with an update on delinquency, foreclosure and prepayment trends. Next, we provide a detailed breakdown of the recent – and significant – rise in prepayment activity by factors driving prepayment. In addition, we provide the most recent assessment of refinance incentive remaining in the market.

From there, we move on to the nation's equity landscape, with a specific focus on tappable equity – the amount available to homeowners with mortgages before reaching a maximum combined loan-to-value (CLTV) ratio of 80%. We examine tappable equity growth rates, geographic breakdowns and distributions of equity by borrowers' first lien interest rate positions. Finally, we take an updated look at servicer retention rates. Despite refinance lending hitting a three-year high, servicers struggled to retain the business of refinancing borrowers in Q3 2019. We therefore break down refinance activity and subsequent retention rates for insight into what factors may be influencing this trend.

In producing the Mortgage Monitor, Black Knight's Data & Analytics division aggregates, analyzes and reports upon the most recently available data from the company's <u>vast mortgage and housing related data assets</u>. Information is gathered from the McDash loan-level mortgage performance dataset, the Black Knight HPI and the company's robust public property records database covering 99.9% of the U.S. population. For more information on gaining access to Black Knight's data assets, please call 844-474-2537 or email mortgage.monitor@bkfs.com.









OCTOBER 2019 FIRST LOOK RELEASE

Here we have an overview of findings from Black Knight's 'First Look' at October mortgage performance data. This information has been compiled from Black Knight's McDash loan-level mortgage performance database. You may click on each chart to see its contents in high-resolution.

OCTOBER OVERVIEW STATS



CHANGE IN DELINQUENCY RATE

At 3.39%, the national delinquency rate is within 0.03% of the record low set in May 2019

October's delinquency rate was down 7% from this time last year



FORECLOSURE RATE

The number of loans in active foreclosure edged up slightly in October

While up 3K for the month, total active foreclosure inventory is down 12K yearover-year



PREPAYMENT RATE

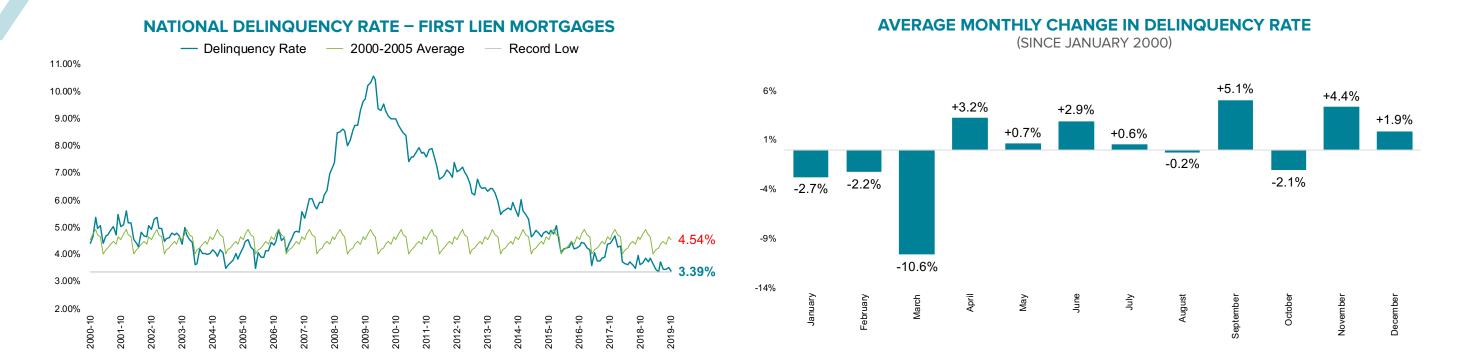
October's prepayment rate hit the highest level since May 2013

Prepayments have more than doubled (+134%) from this time last year

Spurred by low interest rates, mortgage prepayments continued to rise - however, recent upticks in rates, together with the typical seasonal slowing in home sales, may slow down prepay activity over the coming months







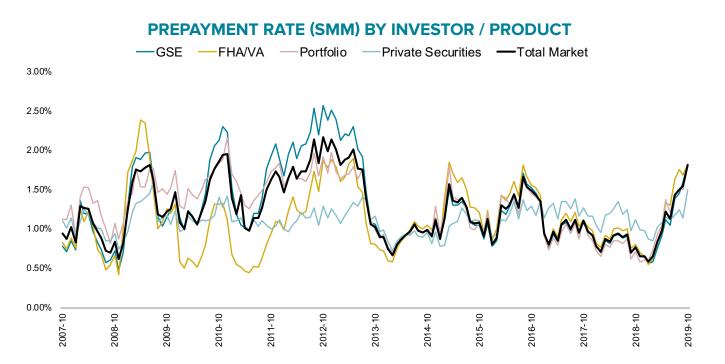
- » While October delinquency rate declines are common, this year's nearly 4% drop was almost twice the 20-year average
- » The national delinquency rate is now 1.15% below its pre-recession (2000-2005) average, the largest such delta on record

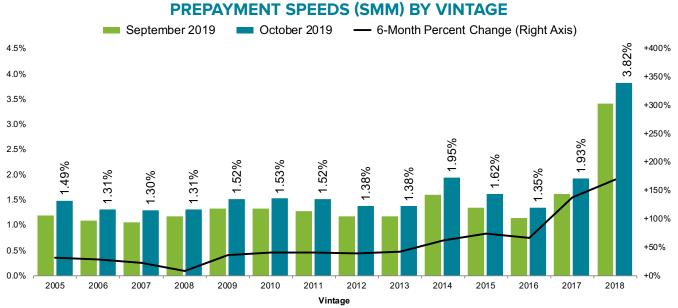
» As delinquencies tend to trend upward seasonally in both November and December, a rise in the coming months would not be unexpected



OCTOBER 2019 PREPAYMENT ACTIVITY

Here, we provide a detailed breakdown of the recent rise in prepayment activity along with factors driving prepayments. In addition, we provide the most recent assessment of refinance incentive remaining in the market. This information has been compiled from Black Knight's McDash loan-level mortgage performance database. You may click on each chart to see its contents in high-resolution.





- » Each of the past 15 vintages saw double-digit percentage increases in single-month mortality (SMM) rates from September to October
- » Some of the largest increases were seen among bubble vintage loans (2005-2007)
- » 2018 vintage loans accounted for 28% of dollars prepaid in October, while making up just 13% of active loan balances
- » Though GNMA loans continue to prepay at the fastest rate, they saw the smallest monthly increase (+8%)

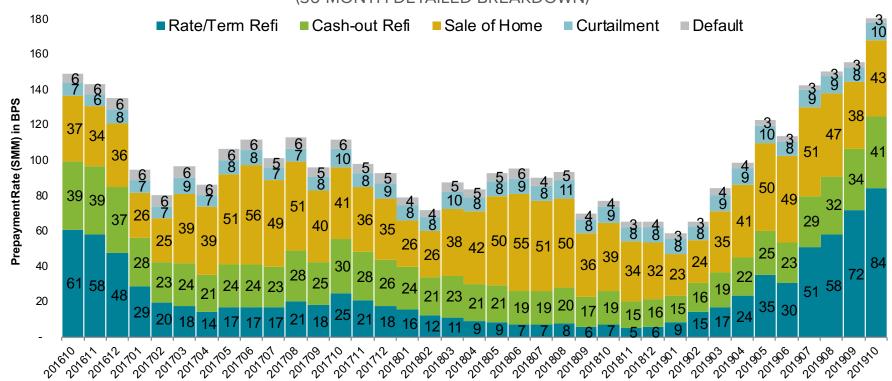
- » Legacy loans in private label securities (PLS) saw the largest increase at +32%, while portfolio loans were up 22%
- » Prepay speeds are now very similar between GNMA, GSE and portfolio loans, with SMM among PLS loans coming in about 30BPS lower
- » Due to increased prepayment activity and a resurgent refi market, YTD 2019 vintage loans now make up 17% of the total active mortgage market





PREPAY ACTIVITY (SMM) BY PREPAYMENT DRIVER

(36-MONTH DETAILED BREAKDOWN)



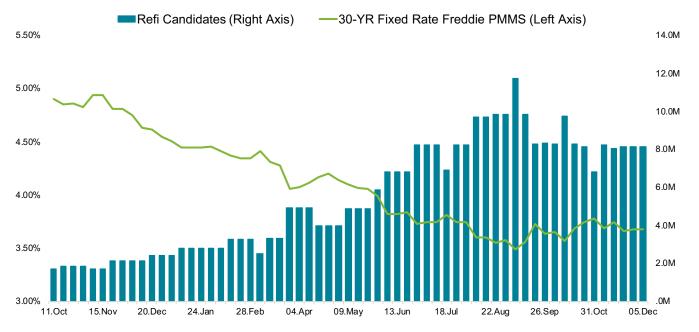
Overall prepayment activity is now more than 3X higher (+122BPS) than January 2019's 18-year low

- » The bulk of 2019's prepayment increase has been driven by a rise in refinance activity
- » Growth in rate/term refinance lending makes up 62% of the increase (+76BPS), and cash-out lending another 21% (+25BPS)
- » Fluctuations in home sale-related prepayments account for the remainder
- » A 5BPS increase in housing turnover-related prepays from September to October suggests that falling rates and improved affordability may have spurred a measurable increase in buy/sell transactions
- » October's prepayments also suggest another noticeable increase in refinance originations from September
- » Prepayments due to rate/term refinances are up more than 10X YTD; among cash-out refis they're up a more modest 2.5X



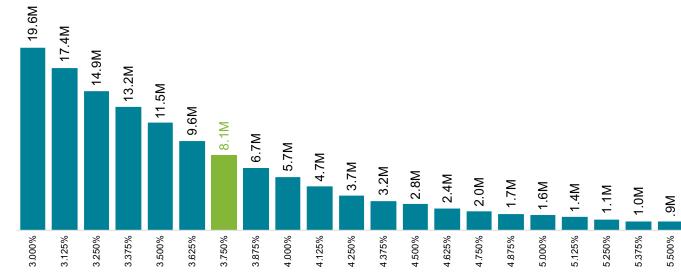


REFINANCE CANDIDATES BY WEEK VS. 30-YR FIXED RATES



NUMBER OF REFINANCE CANDIDATES UNDER DIFFERENT **30-YEAR FIXED RATE SCENARIOS**

(BASED ON FIRST LIEN MARKET MAKE-UP AS OF OCTOBER 2019)



- » Interest rates climbing to 3.78% in late October drove refinance incentive to its lowest level in five months
- » With Freddie Mac reporting 30-year rates at 3.68% as of December 5th, 8.15M refinance candidates remain in the market
- » While down 15% from September's weekly average of 9.5M, it's still >4.5X the population from one year ago

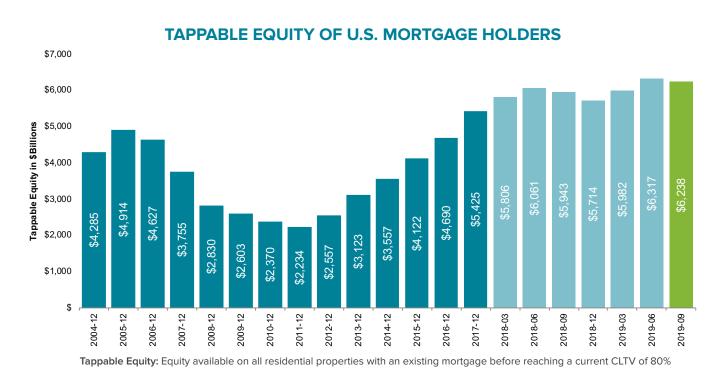
- » The market remains sensitive to even small movements in interest rates
- » Just 1/8th of a percent decline in 30-year rates would result in 1.5M (+19%) homeowners regaining incentive to refinance
- » Conversely, an 1/8th of a point increase would cut the population by 17%

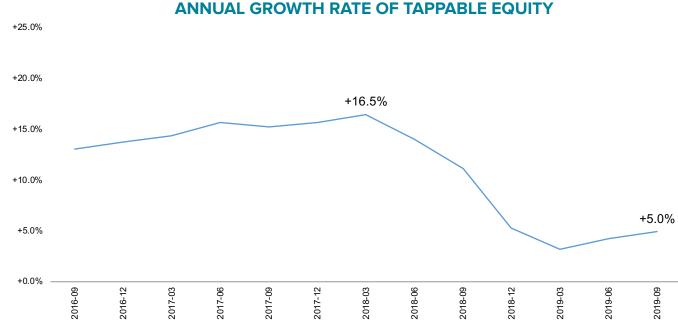




OCTOBER 2019 Q3 EQUITY UPDATE

Here, we look at tappable equity growth rates, geographic breakdowns, and distributions of equity by borrowers' first lien interest rate positions. This information has been compiled from Black Knight's Home Price Index, as well as the company's McDash loan-level mortgage performance database. You may click on each chart to see its contents in high-resolution.





- » Tappable equity the amount available to homeowners with mortgages before reaching a maximum combined loan-to-value (CLTV) ratio of 80% – edged down seasonally in Q3
- » However, its annual growth rate continues to rise, likely due to falling interest rates easing what had been a slowing housing market
- » Total tappable equity stands at \$6.2T as of the end of Q3 2019, the largest Q3 volume on record

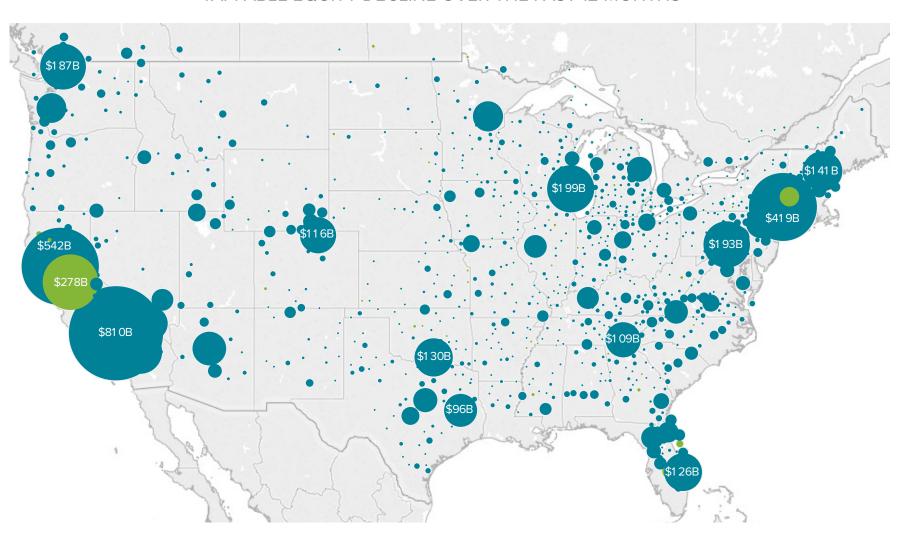
- » While down 1% from Q2, it's up 5.0% from the same time last year, the strongest growth rate since late 2018
- » The average homeowner holds \$119K in tappable equity that could be withdrawn while still retaining a conservative buffer of 20% equity, up \$3,450 from the same time last year
- » Total market CLTV rose slightly to 52%, up marginally from Q2 but level from the same time last year





TAPPABLE EQUITY BY CBSA - Q3 2019

GREEN MARKETS HAVE SEEN THEIR TOTAL TAPPABLE EQUITY DECLINE OVER THE PAST 12 MONTHS



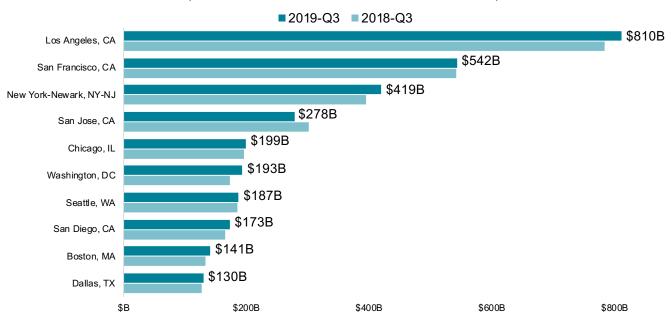
Tappable equity has grown in 97 of the 100 largest U.S. markets over the past 12 months

- » That said, growth rates have varied recently, with the most equity-rich markets seeing some of the lowest growth rates
- » The 10 most equity-rich markets hold nearly half (\$3T) of the country's tappable equity, but stronger growth rates among mid-tier markets have begun to edge the pendulum in 2019

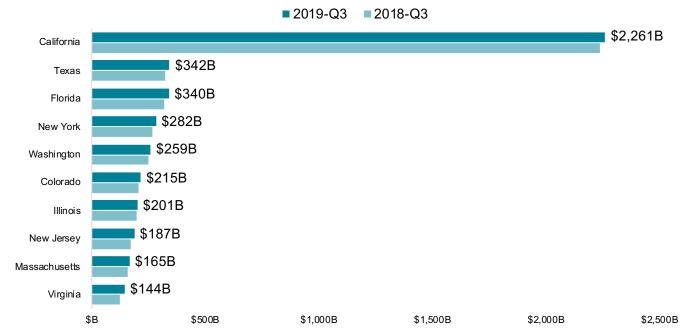


TAPPABLE EQUITY COMPARISON BY CBSA

(TOP 10 CBSAS BY TAPPABLE EQUITY VOLUME)







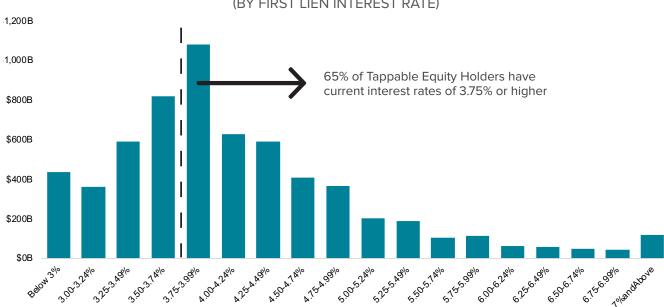
Tappable Equity: Equity available on all residential properties with an existing mortgage before reaching a current CLTV of 80%

- » Nine of the 10 most equity-rich markets were in the bottom third in terms of growth rates
- » In fact, four (Chicago, Seattle, San Francisco and San Jose) were among the bottom 10
- » Tappable equity declined on a year-over-year basis in just three of the 100 largest U.S. markets - San Jose, CA (-7%); Bridgeport, CT (-3%); and Honolulu, HI (-1%)
- » St Louis, MO; Boise City, ID; and Memphis, TN were among the markets seeing the largest Y/Y increases

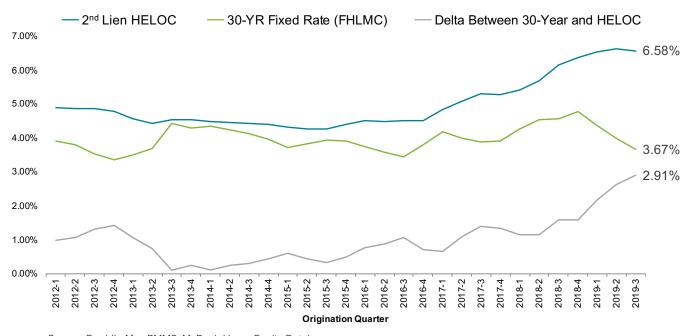








AVERAGE INTEREST RATE AT ORIGINATION



Source: Freddie Mac PMMS; McDash Home Equity Database

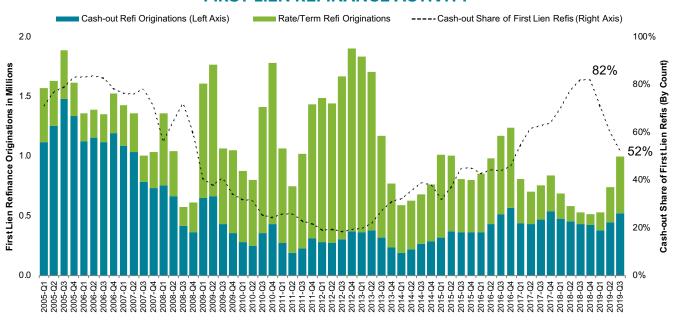
- » Despite record levels of tappable equity, HELOC originations have fallen Y/Y in each of the past nine quarters
- » Exploring the first lien interest rates of tappable equity holders, along with a comparison of HELOC vs. 30-year fixed interest rate offerings, provides an understanding of why the HELOC market is behaving the way it is
- » 65% of borrowers with tappable equity have current interest rates at or above the going rate in the market as of mid-November (3.75%)

- » Those borrowers can withdraw equity via a cash-out refinance at a similar or even better rate than what they have today
- » At the same time, HELOC rate offerings in Q3 2019 were on average 2.9% higher than 30-year fixed rates, the largest such delta following the financial crisis
- » Even if the full 0.5% of recent Federal Reserve rate cuts translates directly to reductions in HELOC interest rates, the delta between 30-year and HELOC rates remains significant
- » This may well continue to push borrowers towards cash-out refinance products as a way to tap available equity



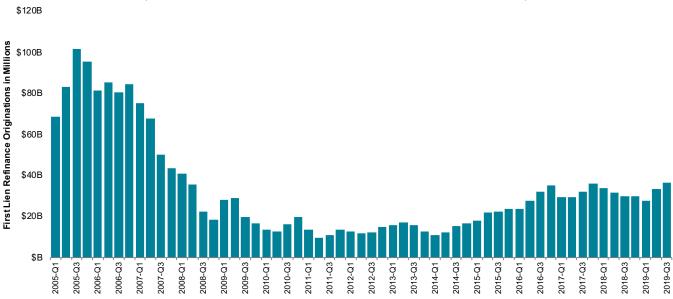






EQUITY WITHDRAWN VIA CASH-OUT REFINANCE

(INCLUDES 2ND MORTGAGE AND HELOC CONSOLIDATION)



- » In Q3 2019, refinance lending hit its highest level in nearly three years, fueled by an increase in rate/term refinances
- » After hitting an 18-year low in the fourth quarter of 2018, refinance lending has nearly doubled (+94%) since then
- » The bulk of that increase was driven by people refinancing to improve the rate or term on their current mortgage, with 5X the number of such rate/term refis as there were in Q4 2018

- » Cash-out refinances were up as well, although by a more modest 24%, over the same period
- » Still, cash-outs made up 52% of all Q3 2019 refinances, with homeowners withdrawing more than \$36 billion in equity, the largest amount in nearly 12 years
- » Any upward movement in rates would likely drive the cash-out share of lending higher

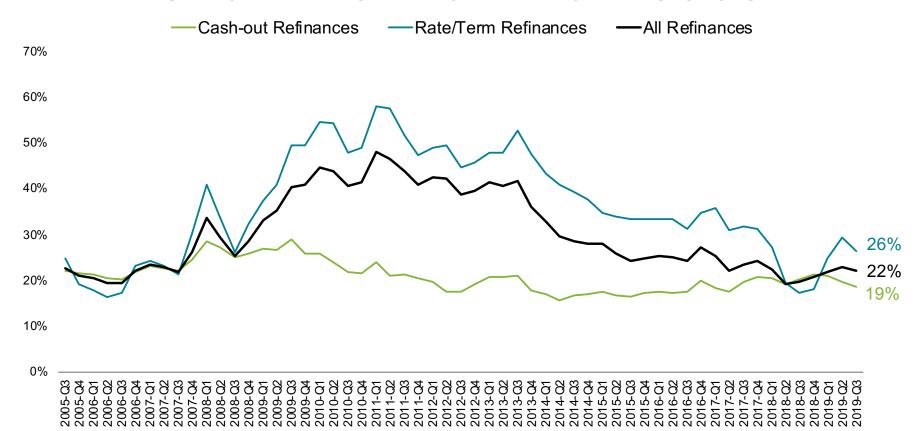




OCTOBER 2019 SERVICER RETENTION

While refinance lending is at multi-year highs, servicers struggled to retain refinancing borrowers in Q3 2019. Here, we break down refinance activity and subsequent retention rates for insight into what factors may be influencing this trend. This information has been compiled from Black Knight's McDash loan-level mortgage performance database. You may click on each chart to see its contents in high-resolution.

SERVICER RETENTION RATE OF REFINANCE TRANSACTIONS



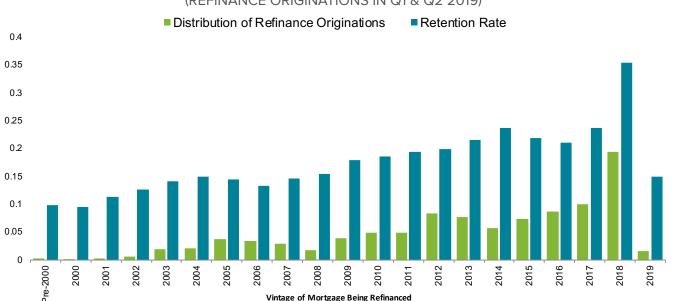
After seeing the highest retention rates since late 2017 earlier in the year, just 22% of borrowers stayed with their servicer post-refinance in Q3 2019

- » The business of nearly three of every four rate/term refinance borrowers – historically an easier segment to retain – was lost, with servicers retaining just 26% of borrowers, down from 29% in Q2 2019
- » Cash-out borrower retention was even more dismal; servicers lost more than four out of every five (81%) borrowers post-refinance

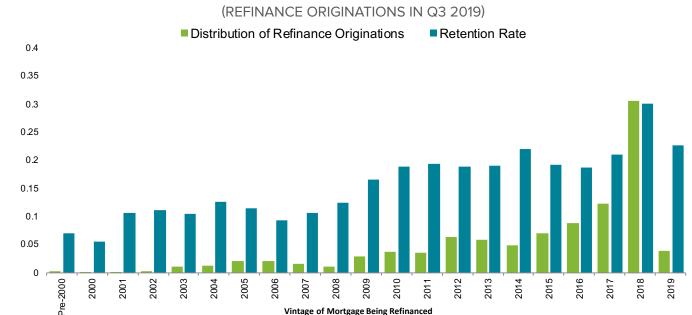








RETENTION RATES BY PRIOR LOAN VINTAGE

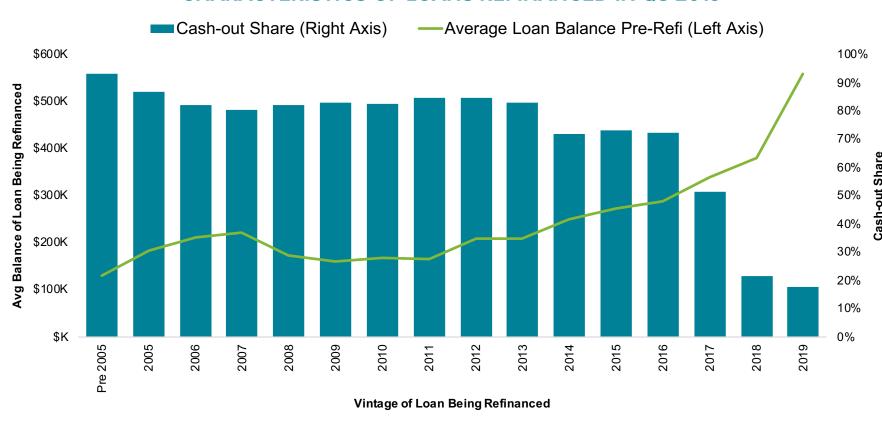


- » As 2019 has progressed, the 2018 vintage has made up an increasing share of refinance originations
- » In Q1 and Q2 2019, borrowers refinancing out of 2018 vintage loans made up roughly 1/5th of refinance originations
- » As of Q3, they accounted for nearly one third of all refinance loans

- » However, servicer retention rates among the 2018 vintage have declined from 35% in Q1/Q2 to just 30% in Q3, the sharpest pullback of any vintage
- » Retention rates among 2018 vintage loans still remain the highest of any vintage, but the gap has certainly narrowed



CHARACTERISTICS OF LOANS REFINANCED IN Q3 2019

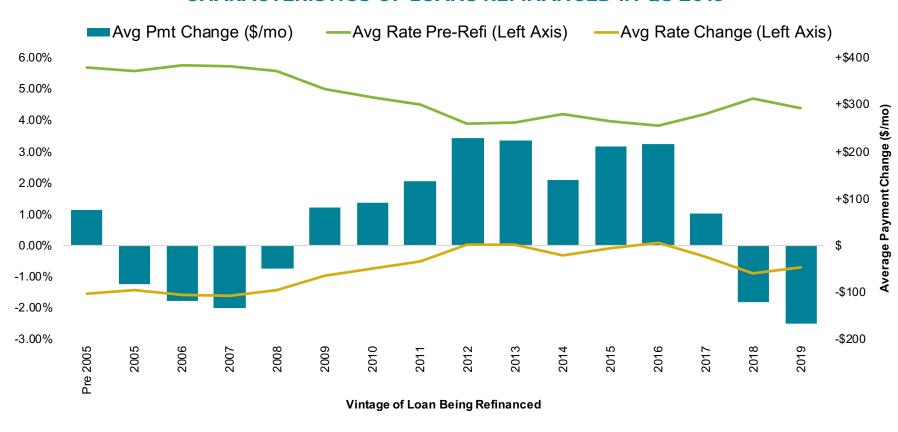


Data shows that borrowers' motivations for refinancing are anything but uniform

- » Borrowers refinancing out of newer-vintages (2017, 2018 or 2019) tend to carry much higher balances and are primarily refinancing for interest rate reduction
- » On average, 2018 vintage borrowers had pre-refinance balances of \$380K; those refinancing out of early-2019 vintage loans had balances of \$560k
- » Just 18% and 21% withdrew equity respectively as compared to 52% in the market as a whole
- » Homeowners refinancing out of 2008-2011 vintage loans carried much smaller average balances (\$160K-\$172K), but were much more equity-focused
- » More than 80% of refinances stemming from those vintages involved the borrower withdrawing equity from their home



CHARACTERISTICS OF LOANS REFINANCED IN Q3 2019



Advanced portfolio and market analysis can help servicers better understand these changing borrower dynamics and tune their strategies accordingly

- » 2018 and early-2019 vintage borrowers are seeing average interest rate savings of 0.9% and 0.7% respectively
- » On the other hand, 2012, 2013, and 2016 vintage borrowers (when rates were lower) are in many cases actually raising their interest rates in order to tap equity
- » On average these borrowers are raising their monthly mortgage payment by \$200/month by refinancing
- » Many borrowers in these vintages are choosing to raise their first lien balance rather than tap their equity via a HELOC at a higher rate
- » A retention strategy that targets borrowers with high balances and significant interest rate incentive to refinance – while perhaps effective for 2018 and 2019 vintage borrowers – would be widely ineffective in reaching 2009 – 2017 vintage borrowers
- » These borrowers tend to carry lower balances and tapping equity is the primary motivation behind refinancing

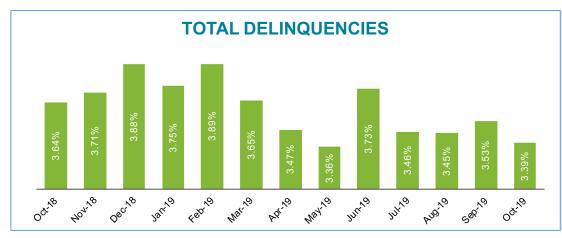


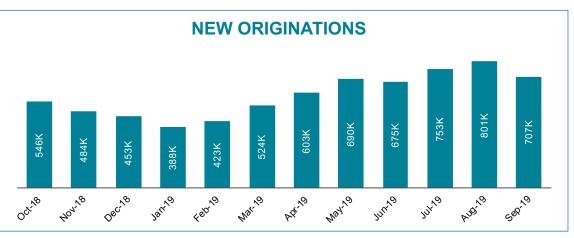


OCTOBER 2019 DATA SUMMARY

	Oct-19	Monthly Change	YTD Change	Yearly Change
Delinquencies	3.39%	-3.82%	-9.54%	-6.92%
Foreclosure	0.48%	1.05%	-5.02%	-6.21%
Foreclosure Starts	43,900	11.42%	-12.55%	-13.24%
Seriously Delinquent (90+) or in Foreclosure	1.31%	-1.16%	-11.76%	-11.82%
New Originations (data as of Sep-19)	707K	-11.8%	55.8%	41.0%

	Oct-19	Sep-19	Aug-19	Jul-19	Jun-19	May-19	Apr-19	Mar-19	Feb-19	Jan-19	Dec-18	Nov-18	Oct-18
Delinquencies	3.39%	3.53%	3.45%	3.46%	3.73%	3.36%	3.47%	3.65%	3.89%	3.75%	3.88%	3.71%	3.64%
Foreclosure	0.48%	0.48%	0.48%	0.49%	0.50%	0.49%	0.50%	0.51%	0.51%	0.51%	0.52%	0.52%	0.52%
Foreclosure Starts	43,900	39,400	36,200	39,200	40,100	39,000	41,400	39,700	40,400	50,200	46,300	45,200	50,600
Seriously Delinquent (90+) or in Foreclosure	1.31%	1.32%	1.33%	1.34%	1.37%	1.37%	1.40%	1.45%	1.47%	1.48%	1.51%	1.50%	1.48%
New Originations		707K	801K	753K	675K	690K	603K	524K	423K	388K	453K	484K	546K









LOAN COUNTS AND AVERAGE DAYS DELINQUENT

Month	TOTAL ACTIVE COUNT	30 DAYS	60 DAYS	90+DAYS	FC	Total NC	FC Starts	Average Days Delinquent for 90+	Average Days Delinquent for FC	Ratio of 90+ to FC
1/31/05	47,706,128	1,197,062	339,920	458,719	276,745	2,272,446	50,922	242	324	165.8%
1/31/06	50,900,620	1,242,434	387,907	542,378	258,613	2,431,332	76,477	207	308	209.7%
1/31/07	53,900,458	1,425,030	468,441	551,439	393,973	2,838,883	117,419	203	267	140.0%
1/31/08	55,478,782	1,743,420	676,266	950,639	813,560	4,183,885	195,033	190	256	116.8%
1/31/09	55,788,441	2,001,314	932,436	1,878,981	1,321,029	6,133,760	250,621	193	323	142.2%
1/31/10	55,098,009	1,945,589	903,778	2,972,983	2,068,572	7,890,922	292,308	253	418	143.7%
1/31/11	53,861,778	1,750,601	746,634	2,078,130	2,245,250	6,820,615	277,374	333	527	92.6%
1/31/12	52,687,781	1,592,463	652,524	1,796,698	2,205,818	6,247,503	223,394	395	666	81.5%
1/31/13	51,229,692	1,464,583	587,661	1,551,415	1,742,689	5,346,348	156,654	460	803	89.0%
1/31/14	50,380,779	1,341,074	529,524	1,278,955	1,213,046	4,362,599	97,467	486	935	105.4%
1/31/15	50,412,744	1,238,453	465,849	1,060,002	884,901	3,649,204	93,280	509	1,031	119.8%
1/31/16	50,754,010	1,300,564	444,962	832,265	660,056	3,237,847	72,021	494	1,047	126.1%
1/31/17	51,159,681	1,110,977	390,341	665,258	481,613	2,648,190	70,568	454	1,012	138.1%
1/31/18	51,428,922	1,085,065	413,313	708,248	337,351	2,543,976	62,470	364	931	209.9%
1/31/19	51,896,438	1,074,044	367,750	503,655	264,875	2,210,325	50,196	391	830	190.1%
2/28/19	51,952,453	1,154,445	362,974	501,897	264,225	2,283,541	40,353	385	838	190.0%
3/31/19	52,081,244	1,061,924	348,443	492,889	264,451	2,167,707	39,657	391	853	186.4%
4/30/19	52,228,211	1,003,514	335,160	473,565	259,290	2,071,529	41,356	393	880	182.6%
5/31/19	52,304,596	965,815	332,992	461,036	255,386	2,015,229	38,970	394	897	180.5%
6/30/19	52,288,778	1,145,626	349,170	454,890	259,274	2,208,960	40,126	364	920	175.4%
7/31/19	52,260,606	1,020,037	343,343	443,500	257,859	2,064,739	39,189	369	908	172.0%
8/31/19	52,519,269	1,025,863	343,145	444,029	252,873	2,065,911	36,179	364	913	175.6%
9/30/19	52,574,229	1,058,103	352,565	442,868	252,215	2,105,751	39,433	348	892	175.6%
10/31/19	52,657,467	1,007,146	345,630	432,863	255,268	2,040,907	43,933	351	871	169.6%



STATE-BY-STATE RANKINGS BY NON-CURRENT LOAN POPULATION

State	Del %	FC %	NC %	Year/Year Change in NC%	State	Del %	FC %	NC %	Year/Year Change in NC%	State	Del %	FC %	NC %	Year/Year Change in NC%
National	3.4%	0.5%	3.9%	-6.8%	National	3.4%	0.5%	3.9%	-6.8%	National	3.4%	0.5%	3.9%	-6.8%
MS	9.4%	0.8%	10.2%	1.8%	OH*	4.0%	0.7%	4.6%	-5.9%	NH	3.2%	0.3%	3.4%	-5.6%
LA*	6.9%	0.8%	7.7%	-2.1%	TN	4.3%	0.2%	4.5%	-7.6%	VA	3.2%	0.2%	3.4%	-4.9%
AL	6.3%	0.4%	6.7%	-1.2%	VT*	3.3%	1.1%	4.4%	-3.4%	NV	2.5%	0.5%	3.0%	-8.1%
WV	5.8%	0.6%	6.3%	1.3%	KS*	3.9%	0.5%	4.4%	-5.1%	WY	2.7%	0.3%	3.0%	-7.4%
AR	5.6%	0.5%	6.1%	1.2%	NJ*	3.6%	0.7%	4.3%	-11.8%	AZ	2.6%	0.2%	2.8%	-1.1%
IN*	4.9%	0.7%	5.7%	-3.2%	NC	3.9%	0.4%	4.3%	-14.0%	SD*	2.3%	0.5%	2.8%	8.5%
OK*	4.7%	0.9%	5.6%	-0.8%	IL*	3.5%	0.7%	4.2%	-2.1%	AK	2.4%	0.3%	2.7%	-3.1%
PA*	4.5%	0.7%	5.2%	-4.1%	NM*	3.4%	0.8%	4.1%	-8.8%	MN	2.3%	0.2%	2.5%	2.0%
RI	4.4%	0.7%	5.2%	-6.8%	MO	3.8%	0.3%	4.1%	-2.2%	DC	2.0%	0.5%	2.5%	-16.9%
ME*	3.6%	1.5%	5.1%	-8.9%	FL*	3.3%	0.8%	4.1%	-13.2%	UT	2.2%	0.2%	2.4%	-6.1%
GA	4.7%	0.3%	5.1%	-5.5%	KY*	3.5%	0.5%	4.0%	-9.1%	MT	1.9%	0.3%	2.3%	-8.7%
SC*	4.4%	0.6%	5.0%	-6.8%	IA*	3.3%	0.6%	3.9%	-0.1%	ND*	1.7%	0.4%	2.2%	-5.2%
DE*	4.1%	0.8%	4.9%	-7.8%	NE*	3.6%	0.3%	3.9%	1.8%	CA	1.8%	0.2%	2.0%	-14.0%
TX	4.5%	0.4%	4.9%	-2.8%	MI	3.6%	0.2%	3.8%	-4.4%	ID	1.8%	0.2%	2.0%	-13.4%
MD*	4.3%	0.6%	4.9%	-5.7%	HI*	2.3%	1.4%	3.7%	-17.4%	OR	1.6%	0.2%	1.9%	-8.2%
CT*	4.0%	0.9%	4.8%	-7.4%	WI*	3.1%	0.5%	3.6%	-3.7%	WA	1.6%	0.2%	1.8%	-19.3%
NY*	3.3%	1.4%	4.8%	-9.2%	MA	3.1%	0.5%	3.6%	-11.9%	CO	1.6%	0.1%	1.7%	-4.8%

^{*} Indicates Judicial State





Mortgage Monitor Disclosures

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TOTAL ACTIVE COUNT:	All active loans as of month-end including loans in any state of delinquency or foreclosure. Post-sale loans and loans in REO are excluded from the total active count.
DELINQUENCY STATUSES (30, 60, 90+, ETC):	All delinquency statuses are calculated using the MBA methodology based on the payment due date provided by the servicer. Loans in foreclosure are reported separately and are not included in the MBA days delinquent.
90 DAY DEFAULTS:	Loans that were less than 90 days delinquent in the prior month and were 90 days delinquent, but not in foreclosure, in the current month.
FORECLOSURE INVENTORY:	The servicer has referred the loan to an attorney for foreclosure. Loans remain in foreclosure inventory from referral to sale.
FORECLOSURE STARTS:	Any active loan that was not in foreclosure in the prior month that moves into foreclosure inventory in the current month.
NON-CURRENT:	Loans in any stage of delinquency or foreclosure.
FORECLOSURE SALE / NEW REO:	Any loan that was in foreclosure in the prior month that moves into post-sale status or is flagged as a foreclosure liquidation.
REO:	The loan is in post-sale foreclosure status. Listing status is not a consideration, this includes all properties on and off the market.
DETERIORATION RATIO:	The ratio of the percentage of loans deteriorating in delinquency status vs. those improving.

