JANUARY 2018 **REPORT**

MORTGAGE MONITOR

BLACK KNIGHT®

CONTENTS

JANUARY 2018 OVERVIEW

Each month, the Black Knight Mortgage Monitor looks at a variety of issues related to the mortgage and financial services industry.

This month, as always, we begin with a review of some of the high-level mortgage performance statistics reported in the company's most recent First Look report, with an update on delinquency, foreclosure and prepayment trends. In addition, we take a look at the latest data related to the lingering impact on mortgage performance from the 2017 hurricane season.

Next, we examine the effect a 43 BPS rise in the 30-year fixed interest rate over just the first six weeks of 2018 is having on the mortgage market. In particular, we see how the increase has changed the size and make-up of the population of remaining refinance candidates.

Then, using a final look at 2017 home price appreciation metrics as our starting point, we provide an update on home affordability. Specifically, we examine how rising home prices coupled with interest rate increases have affected the national affordability landscape. Finally, we review 2017 mortgage originations volumes and make-up and see how they compare to historical levels.

In producing the Mortgage Monitor, the Data & Analytics division of Black Knight aggregates, analyzes and reports upon the most recently available mortgage performance data from the company's McDash loan-level database.
For more information on McDash or Black Knight Data & Analytics in general, please call 844-474-2537 or email AskBlackKnight@bkfs.com.

Stay connected with Black Knight Data & Analytics

JANUARY FIRST LOOK RELEASE

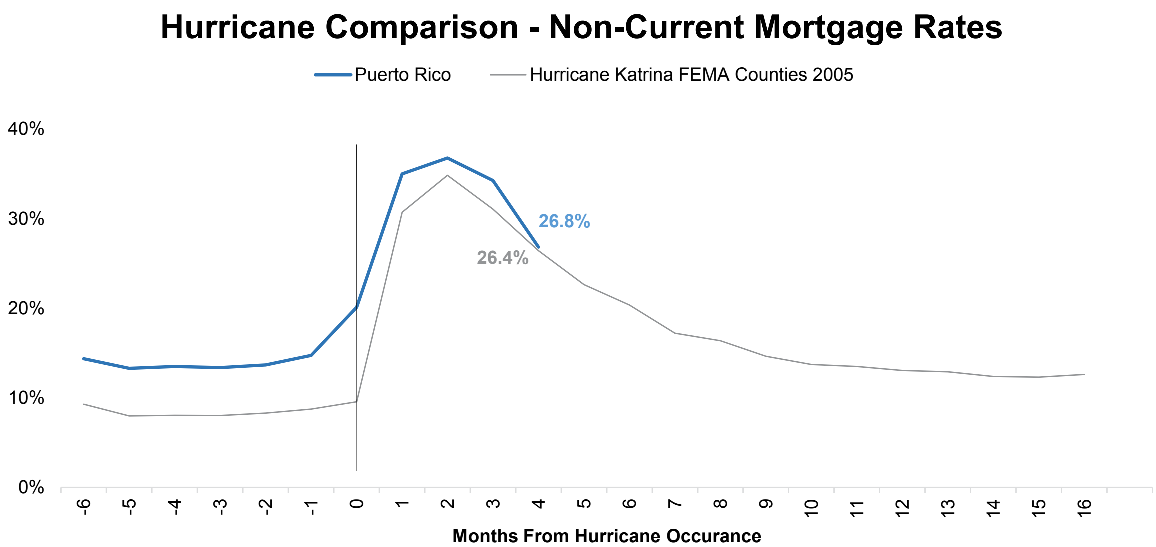
Here we have an overview of findings from Black Knight's 'First Look' at January mortgage performance data. We also revisit the lingering effects on mortgage performance from the 2017 hurricane season. This information has been compiled from Black Knight's McDash loan-level mortgage performance database. You may click on each chart to see its contents in high-resolution.

	Jan-18	Month-over-month change	Year-over-year change	12 Month Trend
Total U.S. loan delinquency rate (loans 30 or more days past due, but not in foreclosure):	4.31%	-8.57%	1.31%	
Total U.S. foreclosure pre-sale inventory rate:	0.66%	1.84%	-30.35%	
Total U.S. foreclosure starts:	62,300	40.00%	-11.51%	
Monthly Prepayment Rate (SMM):	0.79%	-14.73%	-16.80%	
Foreclosure Sales as % of 90+:	1.74%	42.25%	-21.75%	

Number of properties that are 30 or more days past due, but not in foreclosure:	2,202,000	-210,000	40,000	
Number of properties that are 90 or more days past due, but not in foreclosure:	707,000	-19,000	43,000	
Number of properties in foreclosure pre-sale inventory:	337,000	6,000	-144,000	
Number of properties that are 30 or more days past due or in foreclosure:	2,539,000	-204,000	-104,000	

- Though January declines in delinquencies are seasonally typical, this month's 8.57 percent drop was the largest decline to start any year since the turn of the century
- Declines in hurricane-related and calendar-driven delinquencies (recovery from December's Sunday month-end), plus seasonal effects drove the improvement
- Every state other than Alaska saw delinquencies decline, and 48 states saw them fall by at least 5.0 percent
- Serious delinquencies (90+ days past due) fell in 44 states, but improvement in Florida and Texas accounted for nearly half of the total national decline
- Loans in active foreclosure prior to the hurricanes – but put on hold after – are shifting back to that status as foreclosure moratoria become set to expire
- As a result, foreclosure starts spiked in January, jumping 40 percent from December's post-recession low to hit a 12-month high
- 62 percent of January's starts were repeat foreclosures, the second highest share ever recorded
- This year's increase was larger than the otherwise commonly-seen increases in January (which typically follow holiday moratoriums)
- The rise in starts outpaced an increase in foreclosure sales, resulting in active foreclosure inventory increasing by 6,000, only the second monthly rise in more than five years

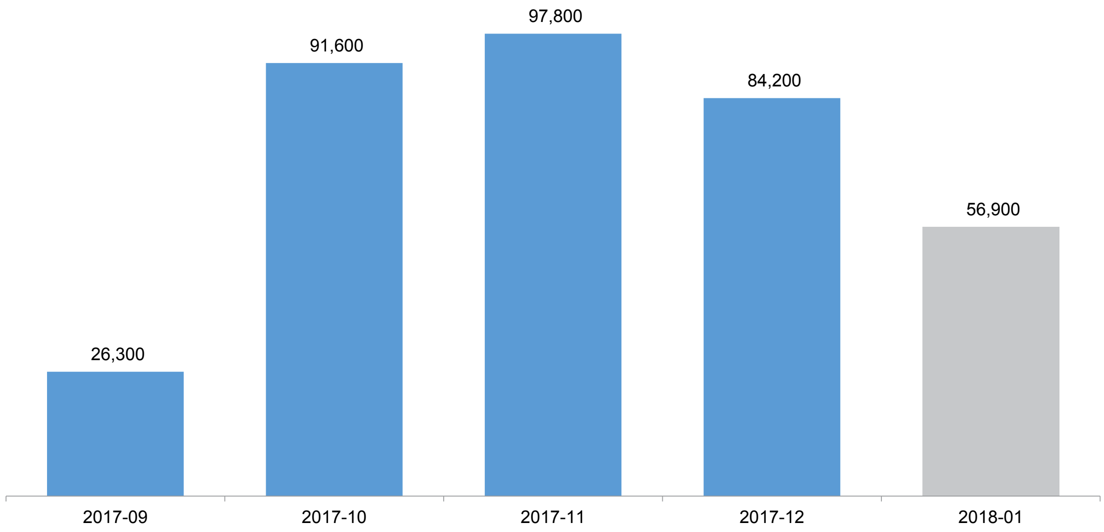
JANUARY FIRST LOOK RELEASE



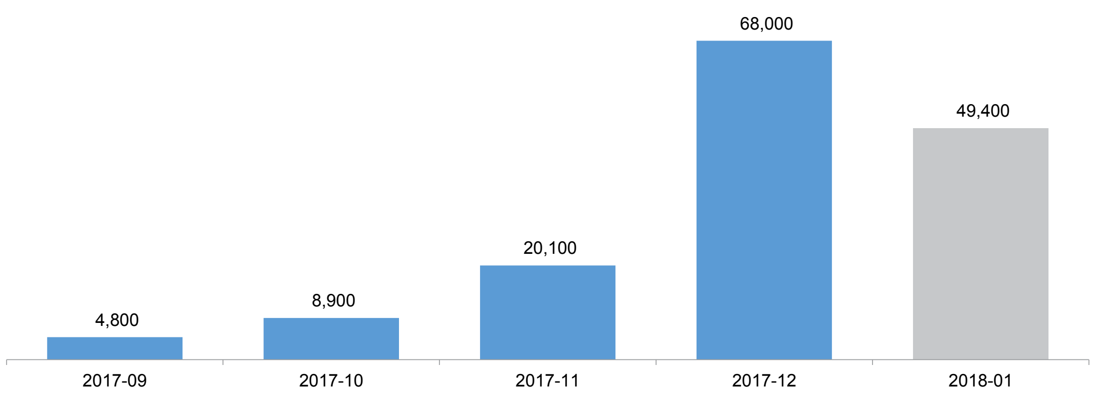
- Puerto Rico's non-current rate (loans 30+ days past due or in active foreclosure) fell to 26.8 percent from over 34 percent in December
- That represented a decline of 31,600 past due mortgages, the vast majority of which (27,300) were hurricane-related delinquencies
- Puerto Rico's non-current rate is now almost identical to that of the areas affected by Hurricane Katrina at a comparable point in time
- This is despite Puerto Rico's noncurrent rate being 4.7 percentage points higher than that of the Katrina region heading into the respective storms

JANUARY FIRST LOOK RELEASE

Hurricane Related Delinquencies - Puerto Rico



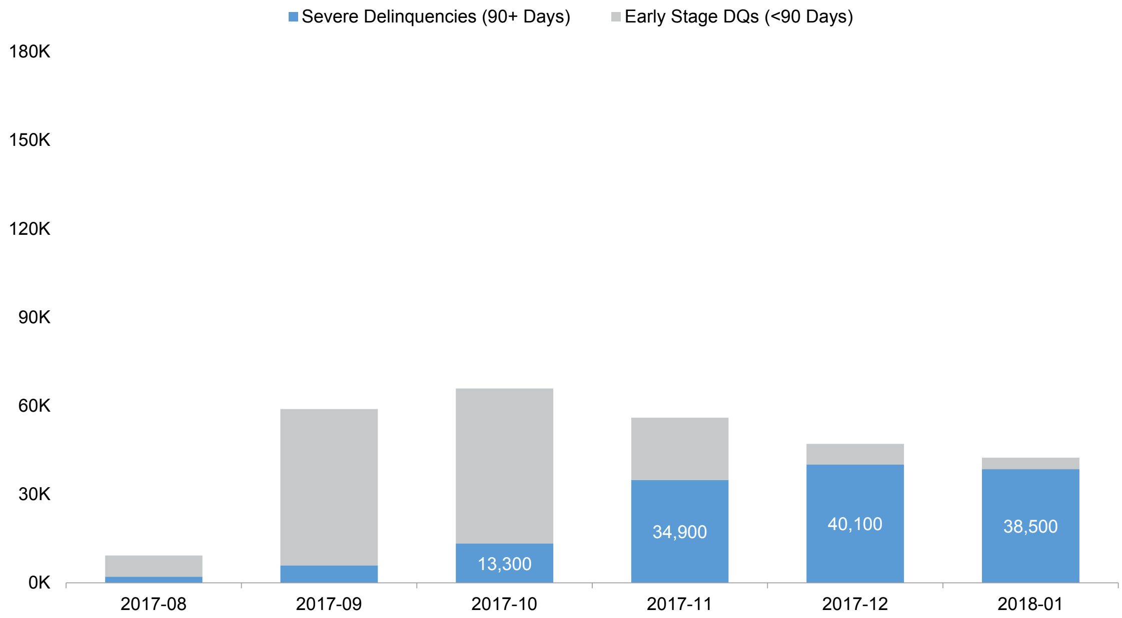
Hurricane Related 90+ Day Delinquencies - Puerto Rico



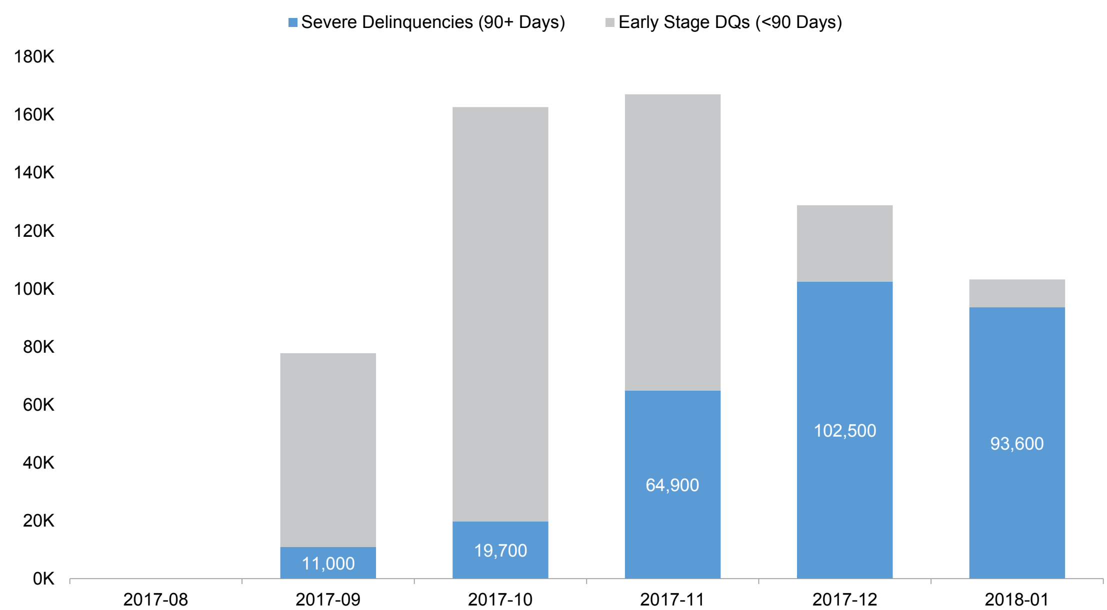
- Approximately 57,000 hurricane-related delinquencies remain in Puerto Rico
- This is a decline from 84,200 one month ago and down from 97,800 at the peak in November
- Of those remaining delinquencies, 49,400 (87 percent) are 90 or more days past due, which is down by nearly 19,000 from one month ago
- This initial decline in severely delinquent loans came a little earlier than expected
- In the same month following Katrina, 90-day delinquencies rose, before subsiding in the following months

JANUARY FIRST LOOK RELEASE

Hurricane Related Delinquencies - Texas



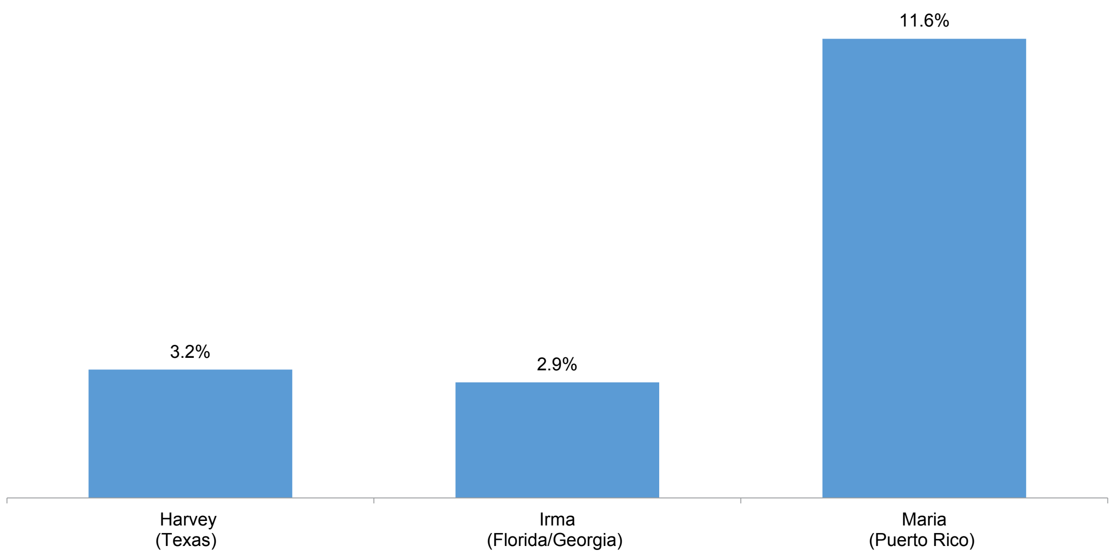
Hurricane Related Delinquencies - Florida & Georgia



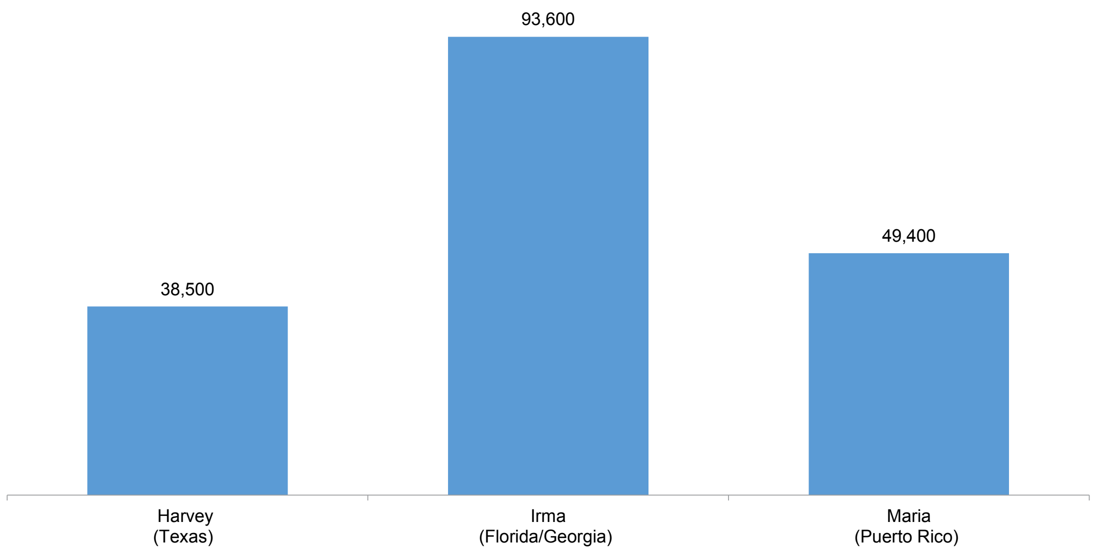
- Overall hurricane-related delinquencies declined 17 percent (>30K loans) from one month ago and have dropped by 83K from the peak of over 225k in October
- Stronger declines were observed in parts of Florida and Georgia impacted by Hurricane Irma than in Harvey-affected areas of Texas
- This is despite delinquencies in these Texas areas peaking a month earlier
- Overall delinquencies dropped by 20% and serious delinquencies (90+ days past due) dropped by 9.0 percent in Irma-affected areas
- Harvey-affected areas saw roughly half those levels of declines; it's too early to be certain, but this may be an early sign of delayed recovery in those areas

JANUARY FIRST LOOK RELEASE

Share of Borrowers 90+ DQ As Result of Hurricane



90+ DQs Attributed to Each Hurricane as of Jan 2018

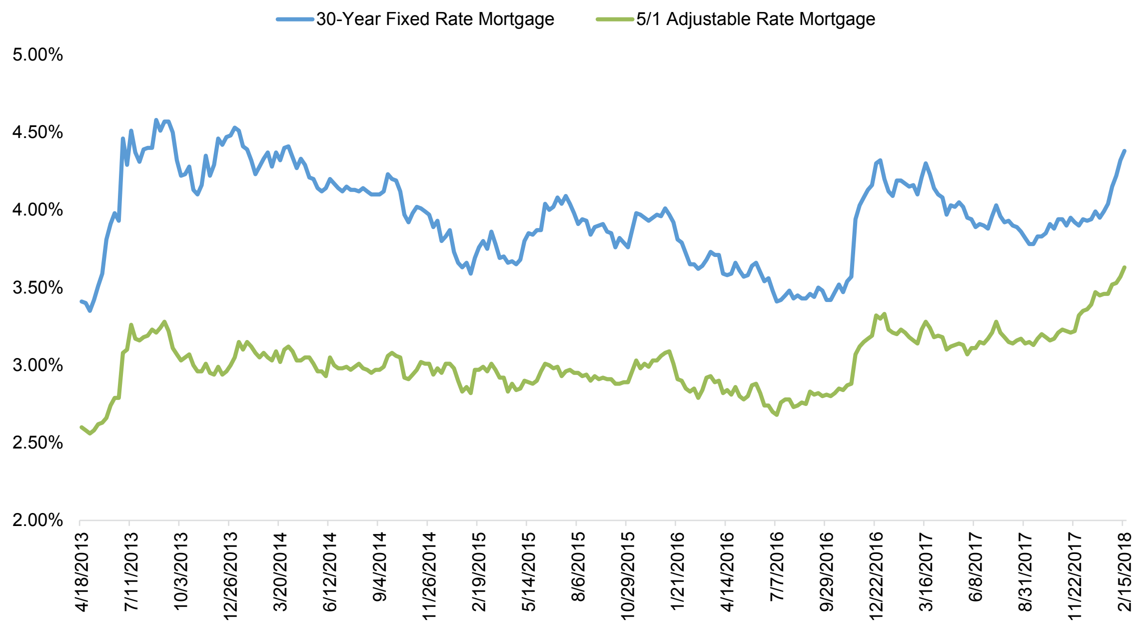


- A slightly larger share of borrowers in Harvey's storm path remain 90+ days delinquent (3.2 percent) as compared to Irma (2.9 percent)
- Still, Irma areas have nearly 2.5X the number of delinquencies (both early stage and serious) as Harvey-affected areas and nearly 2x that seen in Puerto Rico
- Puerto Rico has seen the largest per capita impact; over 11 percent of borrowers are seriously delinquent due to Maria (and Irma)
- 132K loans remain seriously delinquent in the mainland U.S. as a result of hurricanes Harvey and Irma
- Another 49K Puerto Rican mortgages remain 90+ days past due, for a total of over 181K+ serious delinquencies remaining from the 2017 hurricane season
- Roughly half of remaining hurricane-related serious delinquencies are in Florida alone

EARLY-2018 RATE INCREASE IMPACTS

Here, we examine the effect recent interest rate spikes have had on the mortgage market. In particular, we see how the 43 BPS increase in rates over just the first six weeks of 2018 has changed the size and make-up of the population of remaining refinance candidates. 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.

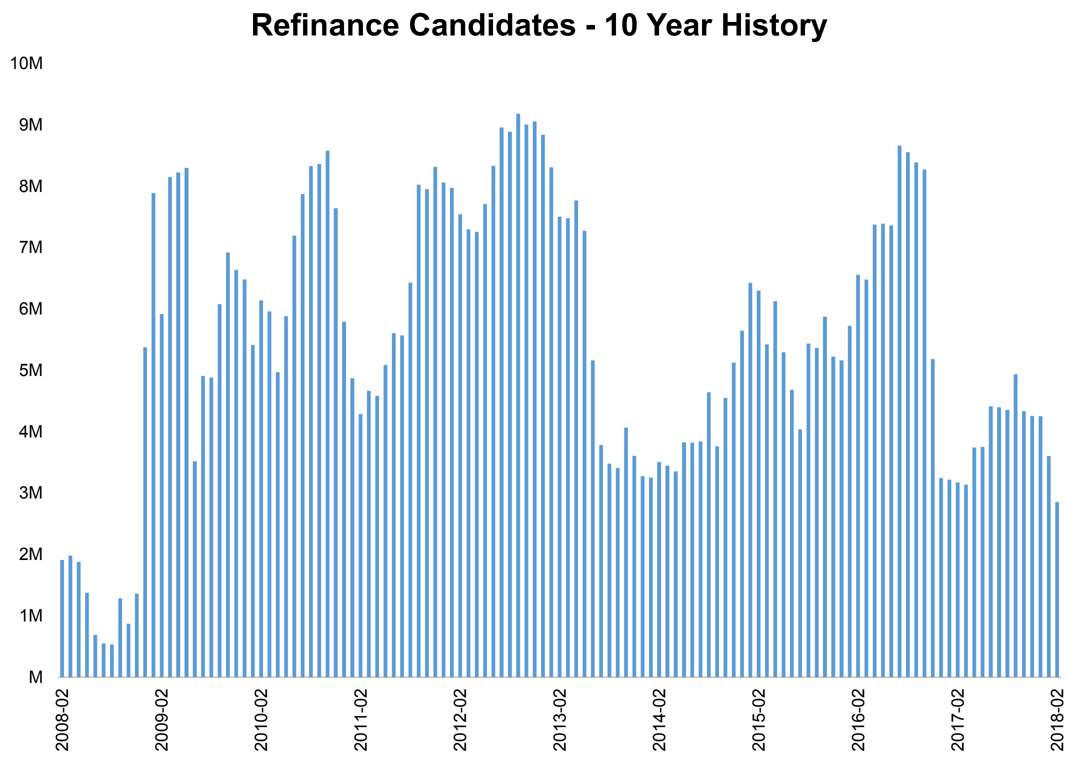
Primary Mortgage Market Survey - Freddie Mac

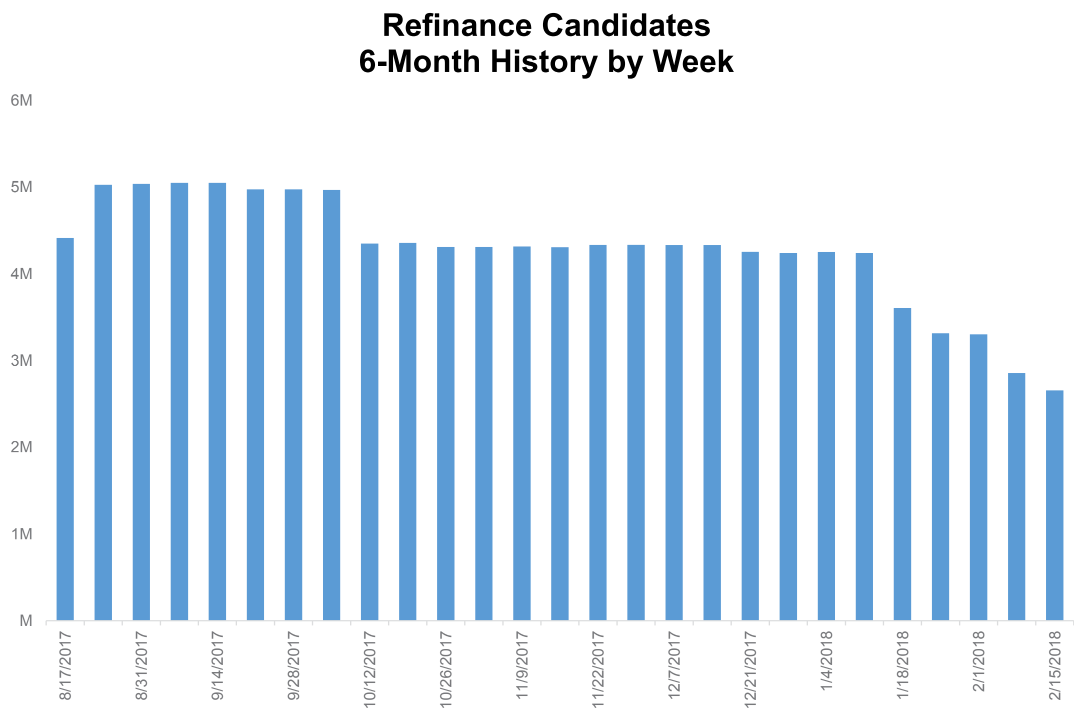


Source: Freddie Mac Primary Mortgage Market Survey®

- According the the Freddie Mac Primary Mortgage Market Survey®, the average rate on a 30-year fixed mortgage increased by 43BPS from January 4th through February 15th
- The 4.38 percent 30-year fixed rate average seen in mid-February is the highest since April 2014
- Increases have also been observed in the introductory rate for 5/1 ARMs, a trend which began prior to the rise in the 30-year fixed rate
- Though rates on 5/1 ARMs are up 47 BPS since mid-October, the delta between fixed and ARM products has increased to 75BPS, the highest in over two years
- Given this increasing delta and the tightening of affordability from rising interest rates, it would not be surprising to see the ARM share of mortgage lending rise
- Rising interest rates and increasing deltas between fixed and ARM product offerings have historically tended to spur ARM origination activity

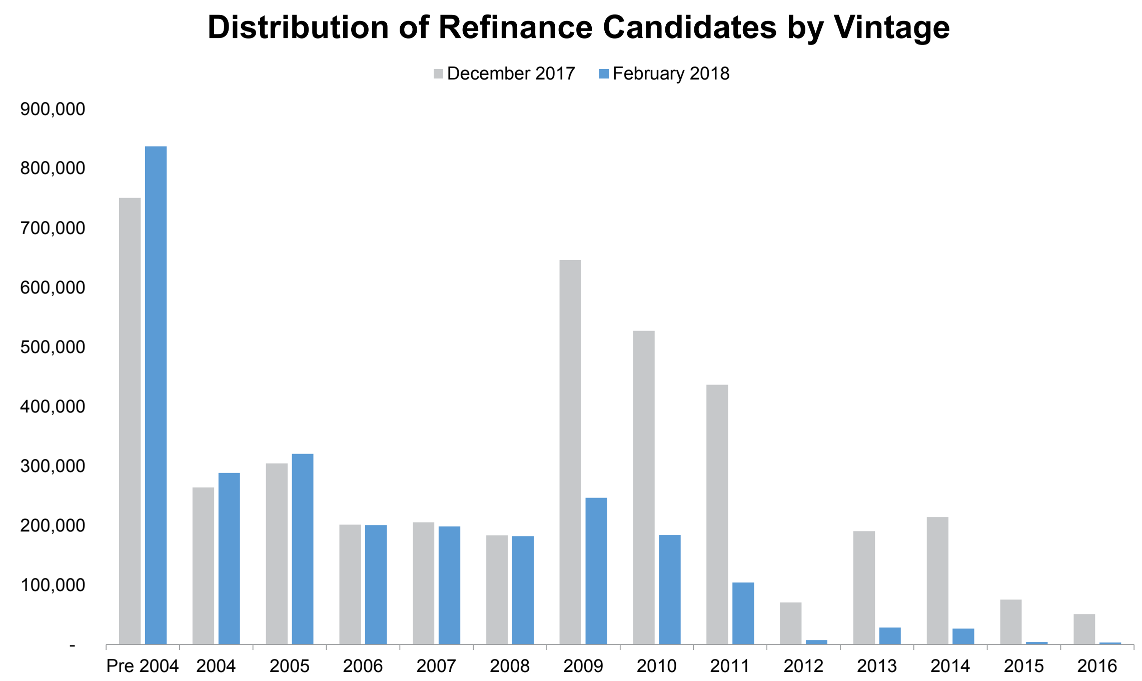
EARLY-2018 RATE INCREASE IMPACTS





- » Closing out a very steady second half of the year, the population of refinance candidates varied by less than 3.0 percent (<120K) over the final 12 weeks of 2017
- » However, the recent spike in interest rates cut the population of borrowers with an interest rate incentive to refinance by nearly 40 percent in 40 days
- » Approximately 1.4 million borrowers lost the interest rate incentive to refinance in just the first six weeks of 2018
- » 2.65 million potential candidates could still both benefit from and likely qualify for a refinance at today's rates
- » That is the smallest this population has been since late 2008, prior to the initial decline in rates during the recession
- » Though the population is only 10 percent off its February 2017 mark, rate/term refinance production could see a more significant impact than this might suggest due to increasing burnout in the market
- » A corresponding drop in the average credit score of refinance originations is typically observed when rates rise

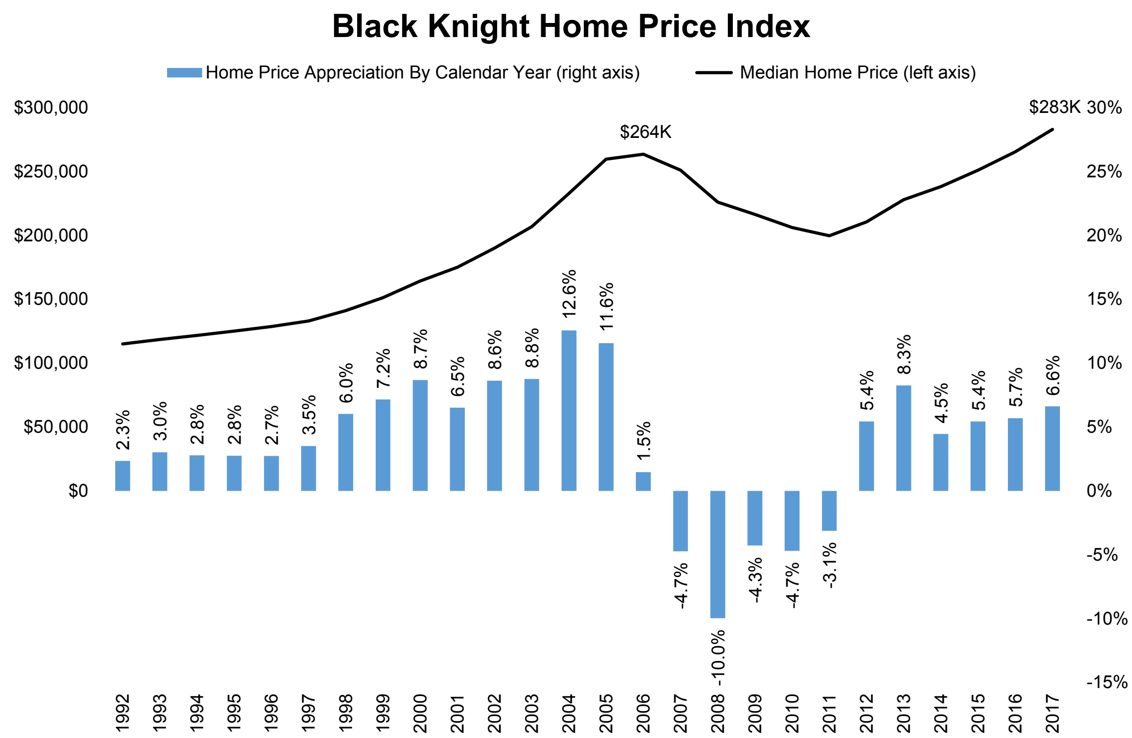
EARLY-2018 RATE INCREASE IMPACTS



- Virtually all of the decline in potential refinance candidates was among 2009 and later vintages
- Fewer than 100K traditional refinance candidates (720+ credit score, <80 percent loan-to-value (LTV) ratio) remain in 2012 and later vintages
- 2009–2011 and 2013-2014 vintages are likely to see dampened prepayment rates after seeing the heaviest declines in candidates over the past two months
- Surprisingly, despite recent interest rate rises, the number of candidates in older vintages has remained steady, even increasing in some cases
- Custom loan terms or term reduction refinances will likely continue to be popular products among remaining candidates in seasoned mortgages
- While cash-outs will likely continue to dominate the shrinking refinance market, the market share for borrowers looking to remove mortgage insurance has room for growth
- Looking at borrowers with rate incentive but who fall outside broad-based eligibility criteria, it becomes apparent that easing credit score requirements would drive a larger increase in the population than easing LTV requirements

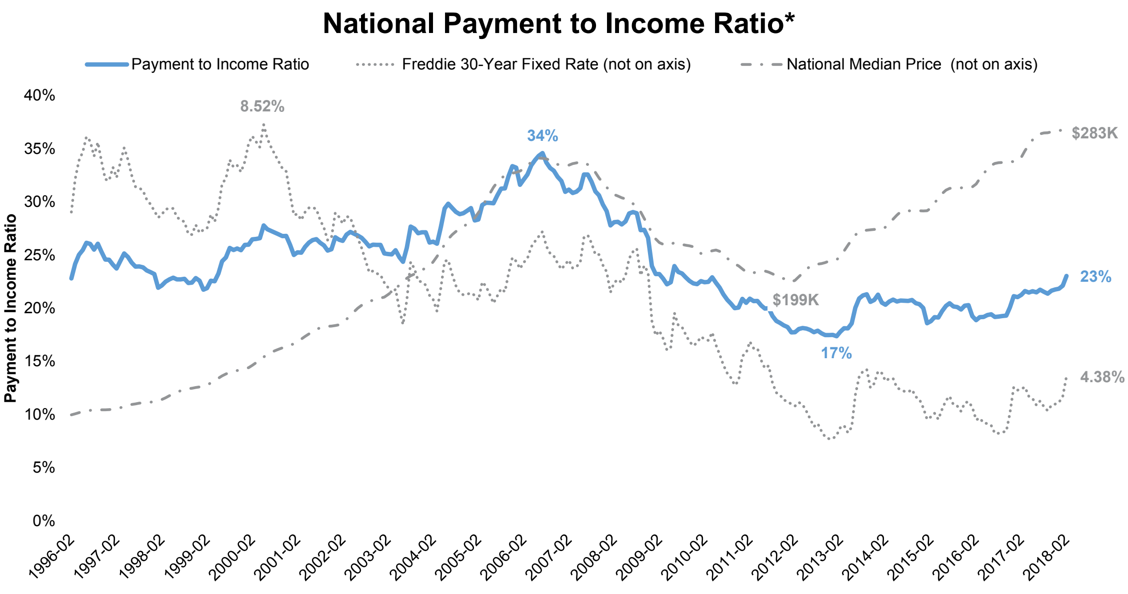
HOME PRICE & AFFORDABILITY UPDATE

Here, using 2017 year-end home price appreciation metrics as our starting point, we provide an update on home affordability. Specifically, we examine how rising home prices coupled with interest rate increases have affected the national affordability landscape. This information has been compiled from the Black Knight Home Price Index and the company's McDash loan-level mortgage performance database. You may click on each chart to see its contents in high-resolution.



- 2017 saw calendar-year growth of 6.6 percent, up from 5.7 percent in 2016, a 90 BPS acceleration in the annual rate of appreciation in the past 12 months
- The annual rate of appreciation jumped by nearly 20BPS in December alone
- 2017's 6.6 percent growth rate was the highest of any year since 2013, and well above the 25 year average of 3.8 percent
- The annual rate of home price appreciation declined for 16 consecutive months in late 2013 through 2014; it has now accelerated in 30 of the past 36 months, including each of the last five months of 2017
- The median home in the US increased in value by $17,570 in 2017 (the largest rise by dollar amount since 2006), hitting a new all-time high ($283k to end the year)
- The median home value is now 5.8 percent ($15,400) higher than at the peak of the market in 2006
- $17,570 marks the third highest rise by dollar amount for the median home price since Black Knight began collecting the data in 1991, behind only 2005 and 2006

HOME PRICE & AFFORDABILITY UPDATE

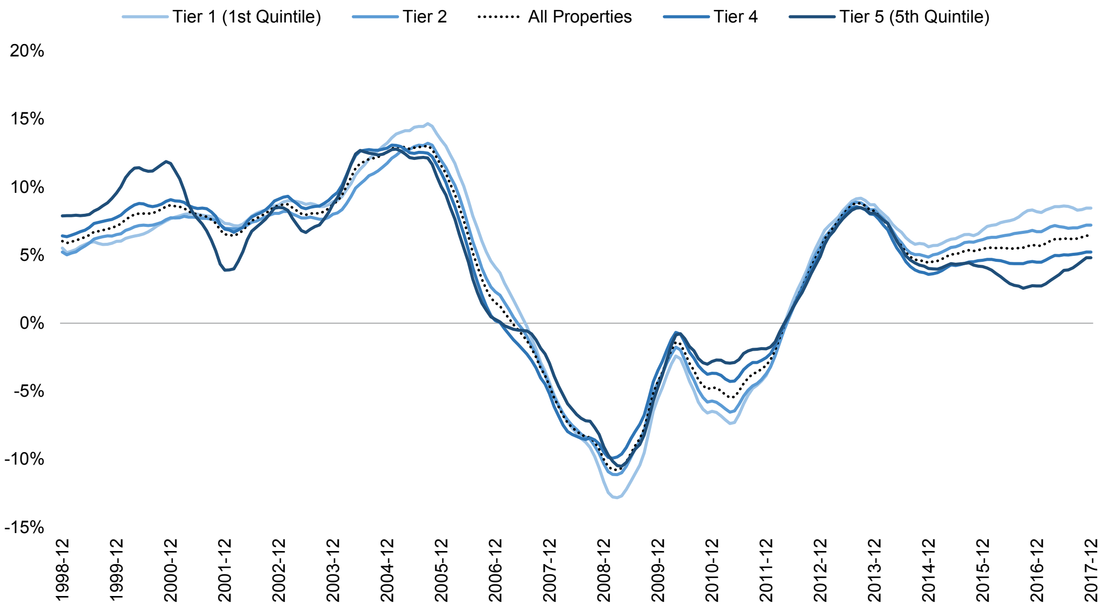


*The National Payment to Income Ratio is the % of the median household income needed to purchase the median home using an 80% LTV 30-year fixed rate mortgage at the FHLMC 30-year rate.

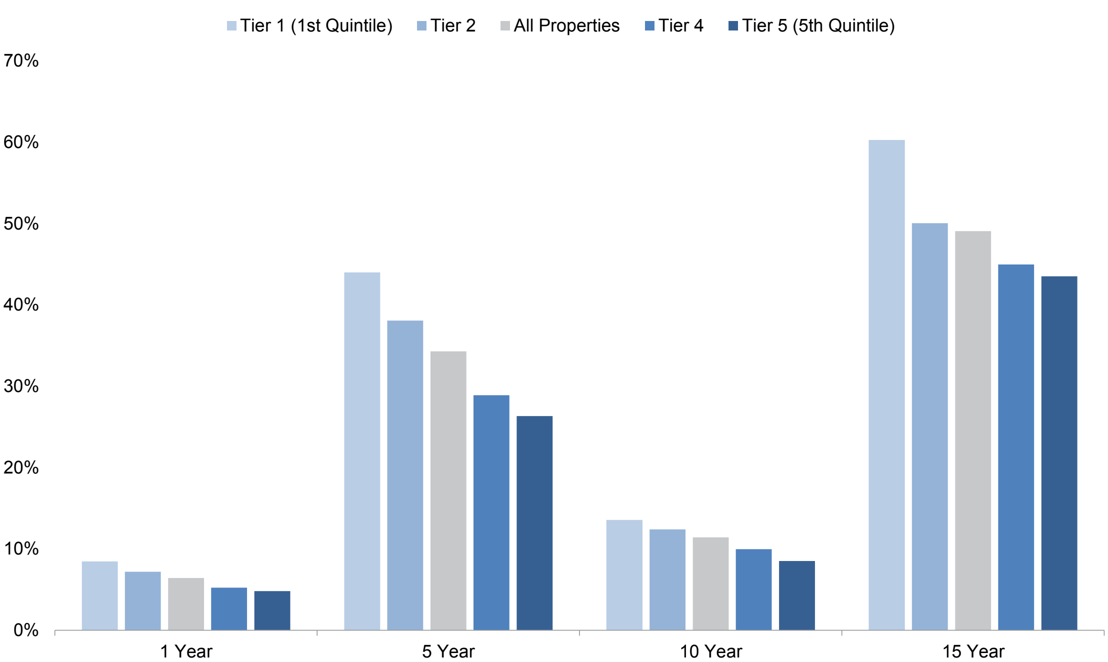
- Recent rate jumps coupled with climbing home prices have increased the cost to purchase the median home by $67/month (+6 percent) over the past six weeks
- Overall, it costs $1,141 in monthly principal and interest to purchase the median home using a 30-year fixed mortgage with 20 percent down, the largest monthly payment required since late 2008
- It currently takes 23 percent of the median income to purchase the median home, the highest share since 2009
- However, overall affordability remains better than long-term historical averages, even taking the recent rate jump into consideration
- Purchasing the median home requires one percent less of the median income than 1995-1999, three percent less than 2000-2003 (before the sharp run-up in home prices) and two percent below those combined benchmarks (1995-2003)
- Average incomes are more than 20 percent higher today than in 2006 (according to the Census Bureau) and interest rates 2.3 percent lower
- As such, affordability remains much better than at the pre-recession peak, even though today's home prices have surpassed 2006 levels
- Assuming all else remains equal, to return to 2006 affordability levels, interest rates would have to climb north of 8.0 percent or the median home price increase to $420K

HOME PRICE & AFFORDABILITY UPDATE

Annual Rate of Home Price Appreciation by Price Tier

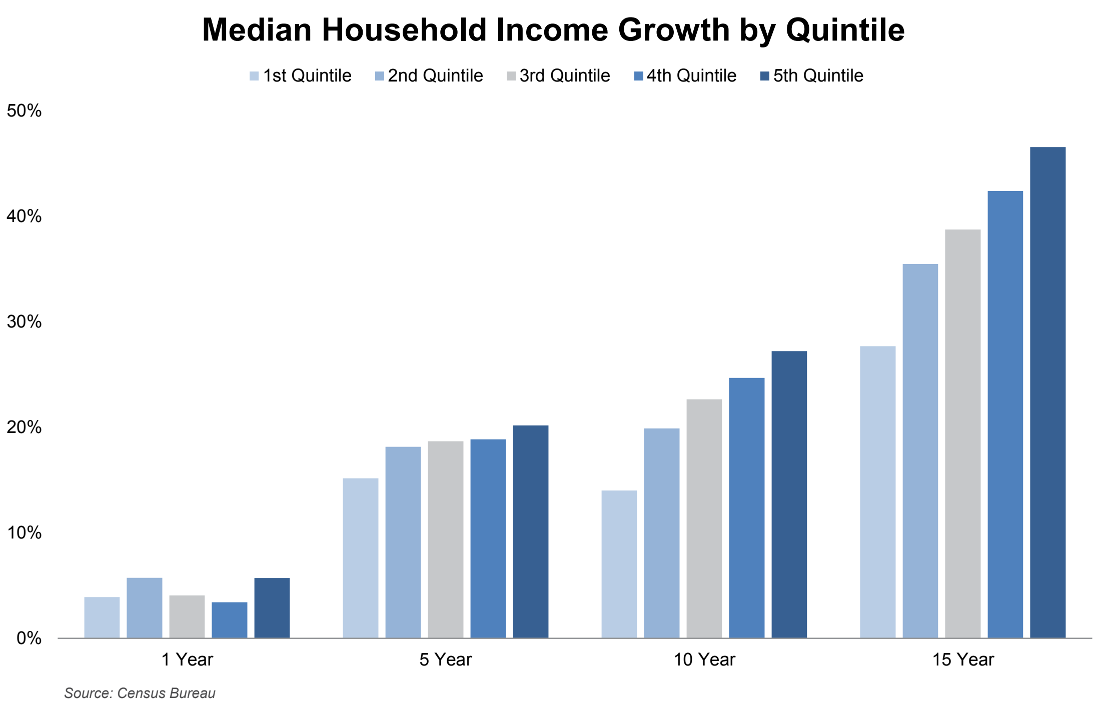


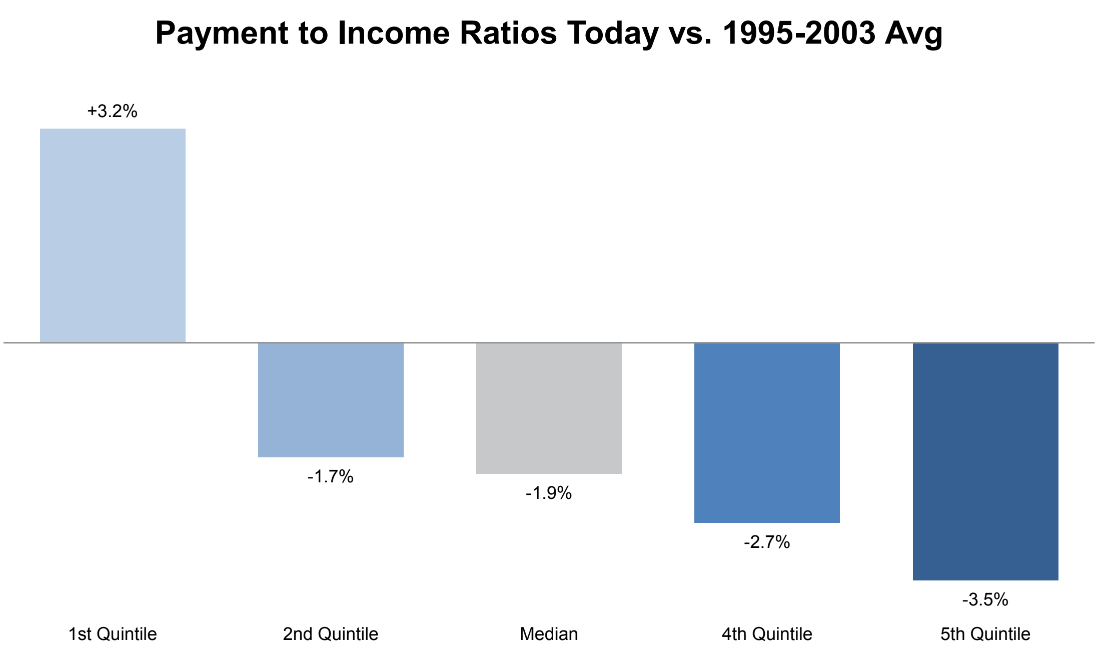
Home Price Appreciation by Price Tier (Quintile)



- » Rising interest rates may put more pressure on borrowers with below average incomes buying below average priced homes
- » Affordability is lower in those segments compared to long-term benchmarks, and rising interest rates put more strain on affordability
- » The annual rate of appreciation on Tier 1 properties (lowest 20 percent by price) is 1.9 percent higher than the overall market average
- » Although the margin has declined in recent months, as of December 2017, the Tier 1 annual rate of appreciation was 75 percent higher than that of Tier 5 (a difference of 3.6 percent)
- » Tier 1 home prices have now been the fastest-appreciating quintile nationally for 67 consecutive months
- » The same trend holds true in 45 of 50 states and 90 of the nation's largest 100 metro areas
- » Larger overall increases in value among lower-priced homes is not just a recent trend, though; the same dynamic is observed when looking back over the past 15 years

HOME PRICE & AFFORDABILITY UPDATE

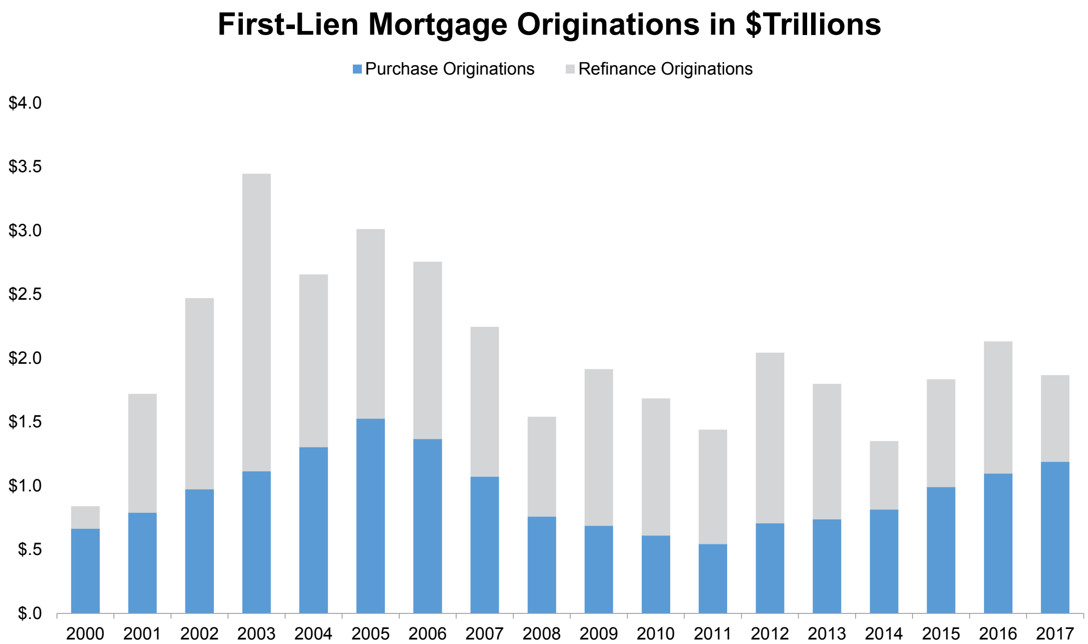


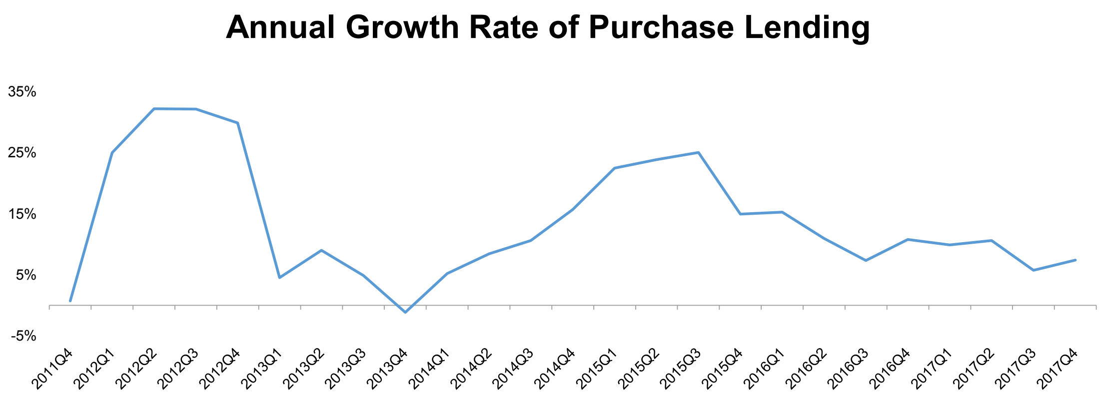


- While the nearly 50 percent increase in the median home price over the past 15 years has significantly outpaced the approximately 40 percent growth in the median income, lower interest rates today have more than offset that difference
- However, according to Census Bureau data, income growth in the lower quintiles has not kept up with the higher ends of the market
- As shown in this simple analysis matching income level to price tier, the lower the quintile, the closer affordability is to long term norms
- For those in the first quintile of incomes, buying in the first quintile of home prices would require 3.2 percent more of available income today than historic norms
- Given the disproportionate appreciation of low priced homes as compared to income growth, affordability at the lower end of the market remains a challenge
- Recent affordability reductions from higher rates could put more pressure on lower income buyers by increasing competition for lower priced homes, as borrowers' overall buying power is diminished

2017 ORIGINATIONS

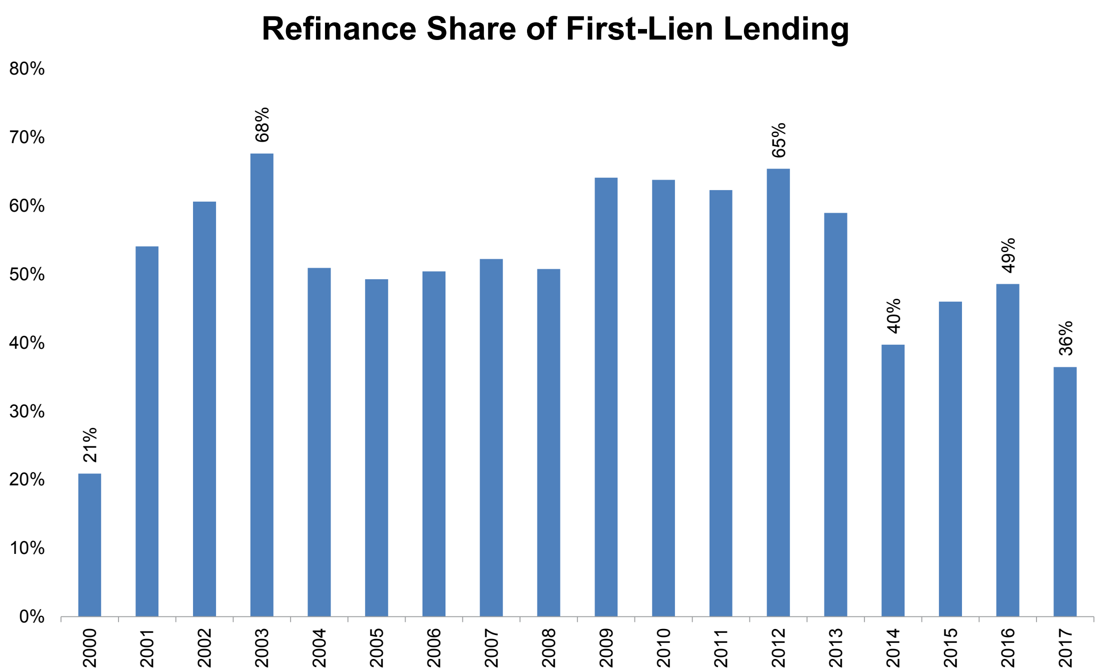
With full year-end data now in, here we review 2017 mortgage originations volumes and make-up and compare these to historical levels. This information has been compiled from Black Knight's McDash loan-level mortgage performance database. You may click on each chart to see its contents in high-resolution.

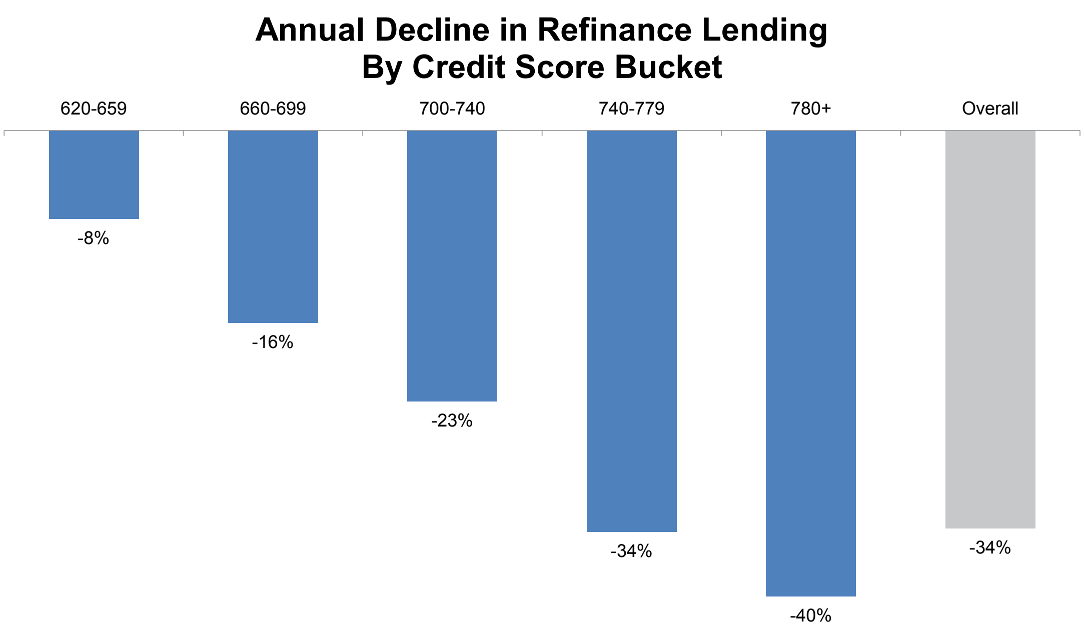




- Purchase originations saw a 7.4 percent increase in Q4 2017 from one year prior and overall growth of 8.3 percent for the year
- Despite the highest level of purchase lending since 2006, total origination volumes for 2017 fell 12 percent from 2016 due to declining refinance origination volumes
- Refinance lending declined significantly in 2017, falling 29 percent by number of loans and total volume down by $355 billion, a 34 percent year-over-year decline
- Refinance volumes did rebound slightly in both Q3 and Q4 after hitting a three-year low in Q2 2017
- This marks the lowest annual volume of refinance originations since 2014 and the second lowest annual total in 17 years
- Should interest rates remain steady, or continue to rise, a further decline in 2018 refinance originations is likely
- $1.19T in purchase loans and $681B in refinance loans were originated in 2017 for a total of $1.87T in total first lien originations
- Despite growth in each of the past six years and 25 of the past 26 quarters, purchase lending is still 22 percent below 2005 peaks
- Over 40 percent fewer purchase loans were originated in 2017 than in 2005

2017 ORIGINATIONS





Figures above are a comparison of total dollars lent via first lien refinance transactions in 2017 vs 2016

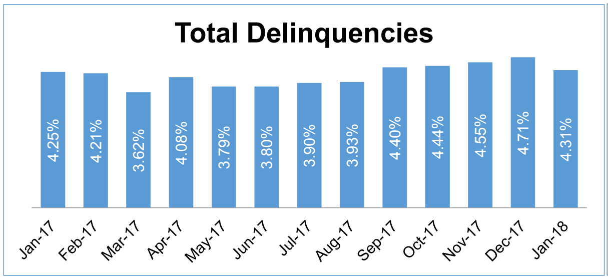
- Refinances accounted for 36 percent of total origination volume in 2017, the lowest share in 17 years
- Q2 marked the calendar year low, as the refinance share fell to fewer than 30 percent of originations, as well as the lowest single quarter since Q4 2000
- Declines in refinance originations were more pronounced in higher credit score buckets, which is the source of the bulk of existing refinance volume
- Refinance originations to borrowers with 780+ credit scores declined by 40 percent, while those at the lowest end (<660) were down by only 8.0 percent
- In addition, 2017 saw a six point overall reduction in the average refinance credit score (737 in 2017 vs. 743 in 2016)
- Lower average credit scores among refinance loans along with an above-average share of purchase originations will likely have a dampening effect on 2017 vintage mortgage performance as compared to other post crisis-vintages

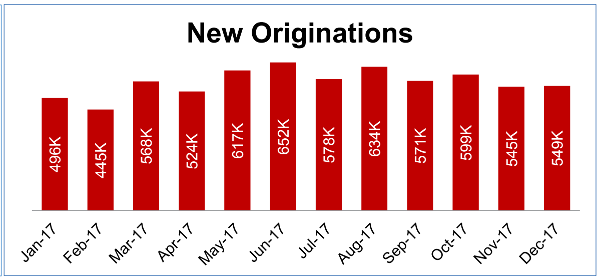
APPENDIX

» January 2018 Data Summary

	Jan-18	Monthly Change	YTD Change	Yearly Change
Delinquencies	4.31%	-8.57%	0.00%	1.31%
Foreclosure	0.66%	1.84%	0.00%	-30.35%
Foreclosure Starts	62,300	40.00%	0.00%	-11.51%
Seriously Delinquent (90+) or in Foreclosure	2.04%	-1.15%	0.00%	-9.32%
New Originations (data as of Dec-17)	549K	0.6%	0.0%	-16.4%

	Jan-18	Dec-17	Nov-17	Oct-17	Sep-17	Aug-17	Jul-17	Jun-17	May-17	Apr-17	Mar-17	Feb-17	Jan-17
Delinquencies	4.31%	4.71%	4.55%	4.44%	4.40%	3.93%	3.90%	3.80%	3.79%	4.08%	3.62%	4.21%	4.25%
Foreclosure	0.66%	0.65%	0.66%	0.68%	0.70%	0.76%	0.78%	0.81%	0.83%	0.85%	0.88%	0.93%	0.94%
Foreclosure Starts	62,300	44,500	47,800	50,200	45,200	54,700	53,300	56,500	55,800	52,800	60,300	57,900	70,400
Seriously Delinquent (90+) or in Foreclosure	2.04%	2.06%	1.97%	1.84%	1.83%	1.85%	1.87%	1.90%	1.93%	2.00%	2.05%	2.19%	2.25%
New Originations		549K	545K	599K	571K	634K	578K	652K	617K	524K	568K	445K	496K





APPENDIX

Month	TOTAL ACTIVE COUNT	30 DAYS	60 DAYS	90+ DAYS	FC	Total Non-Current	FC Starts	Average Days Delinquent for 90+	Average Days Delinquent for FC	Ratio of 90+ to FC
1/31/2000	40,192,541	1,176,769	296,820	374,724	234,074	2,082,387	55,426	241	331	160.1%
1/31/2001	42,340,690	1,321,334	346,119	438,737	223,602	2,329,792	63,753	211	304	196.2%
1/31/2002	43,454,963	1,353,355	380,012	515,985	340,401	2,589,754	90,160	219	289	151.6%
1/31/2003	44,275,177	1,331,861	365,393	494,180	344,037	2,535,471	101,211	231	297	143.6%
1/31/2004	44,769,847	1,186,809	352,515	501,740	321,294	2,362,357	77,360	269	344	156.2%
1/31/2005	47,706,128	1,197,062	339,920	458,719	276,745	2,272,446	50,922	242	324	165.8%
1/31/2006	50,900,620	1,242,434	387,907	542,378	258,613	2,431,332	76,477	207	308	209.7%
1/31/2007	53,900,458	1,425,030	468,441	551,439	393,973	2,838,883	117,419	203	267	140.0%
1/31/2008	55,478,782	1,743,420	676,266	950,639	813,560	4,183,885	195,033	190	256	116.8%
1/31/2009	55,788,441	2,001,314	932,436	1,878,981	1,321,029	6,133,760	250,621	193	323	142.2%
1/31/2010	55,098,009	1,945,589	903,778	2,972,983	2,068,572	7,890,922	292,308	253	418	143.7%
1/31/2011	53,861,778	1,750,601	746,634	2,078,130	2,245,250	6,820,615	277,374	333	527	92.6%
1/31/2012	52,687,781	1,592,463	652,524	1,796,698	2,205,818	6,247,503	223,394	395	666	81.5%
1/31/2013	51,229,692	1,464,583	587,661	1,551,415	1,742,689	5,346,348	156,654	460	803	89.0%
1/31/2014	50,380,779	1,341,074	529,524	1,278,955	1,213,046	4,362,599	97,467	486	935	105.4%
1/31/2015	50,412,744	1,238,453	465,849	1,060,002	884,901	3,649,204	93,280	509	1,031	119.8%
1/31/2016	50,541,353	1,298,682	444,594	831,284	659,237	3,233,797	71,900	495	1,047	126.1%
1/31/2017	50,871,357	1,108,712	389,768	663,521	480,598	2,642,599	70,357	454	1,013	138.1%
1/31/2018	51,155,753	1,083,162	412,676	706,623	336,613	2,539,074	62,312	364	932	209.9%

» Loan counts and average days delinquent

APPENDIX

» State-by-state rankings by non-current loan population

State		Del %	FC %	Non-Curr %	Yr/Yr Change in NC%
National		4.3%	0.66%	5.0%	-4.5%
MS		10.2%	0.8%	11.0%	-3.1%
LA	*	8.1%	1.2%	9.3%	-4.5%
FL	*	7.3%	1.1%	8.3%	39.3%
AL		6.9%	0.5%	7.5%	-5.6%
WV		6.4%	0.7%	7.2%	-7.4%
TX		6.3%	0.4%	6.7%	11.9%
ME	*	4.8%	1.7%	6.5%	-12.0%
AR		5.9%	0.6%	6.5%	-5.3%
IN	*	5.5%	0.9%	6.4%	-7.1%
RI		5.3%	1.0%	6.3%	-9.8%
PA	*	5.3%	1.0%	6.3%	-7.4%
OK	*	5.2%	1.0%	6.2%	-7.9%
NY	*	4.2%	1.9%	6.2%	-14.8%
GA		5.6%	0.4%	6.1%	-5.1%
DE	*	5.0%	1.0%	6.0%	-9.4%
NJ	*	4.4%	1.5%	5.9%	-21.2%
CT	*	4.8%	1.1%	5.9%	-7.9%

State		Del %	FC %	Non-Curr %	Yr/Yr Change in NC%
National		4.3%	0.66%	5.0%	-4.5%
SC	*	5.0%	0.7%	5.8%	-10.2%
TN		5.4%	0.3%	5.7%	-9.4%
MD	*	4.9%	0.8%	5.7%	-7.1%
OH	*	4.6%	0.9%	5.5%	-9.1%
NM	*	4.1%	1.1%	5.1%	-11.8%
NC		4.5%	0.4%	5.0%	-9.9%
VT	*	3.8%	1.2%	5.0%	-7.0%
KS	*	4.4%	0.6%	5.0%	-6.6%
KY	*	4.2%	0.8%	4.9%	-8.1%
HI	*	3.2%	1.8%	4.9%	-13.3%
IL	*	4.0%	0.8%	4.8%	-9.2%
MA		3.9%	0.8%	4.6%	-13.3%
MO		4.2%	0.4%	4.6%	-9.0%
MI		4.2%	0.3%	4.5%	-4.2%
WI	*	3.6%	0.7%	4.2%	-9.8%
NH		3.7%	0.4%	4.1%	-7.2%
IA	*	3.5%	0.6%	4.1%	-7.6%

State		Del %	FC %	Non-Curr %	Yr/Yr Change in NC%
National		4.3%	0.66%	5.0%	-4.5%
NV		3.0%	0.9%	3.9%	-13.6%
WY		3.4%	0.4%	3.9%	-9.0%
VA		3.6%	0.3%	3.8%	-8.6%
AK		3.3%	0.4%	3.7%	7.2%
NE	*	3.3%	0.3%	3.6%	-5.9%
DC		2.6%	0.9%	3.5%	-24.6%
AZ		2.9%	0.3%	3.2%	-6.5%
UT		2.7%	0.3%	2.9%	-14.9%
SD	*	2.3%	0.5%	2.8%	-8.1%
CA		2.5%	0.2%	2.7%	-12.0%
MT		2.3%	0.4%	2.7%	-6.7%
MN		2.4%	0.2%	2.6%	-6.5%
ID		2.3%	0.3%	2.6%	-13.7%
WA		2.1%	0.4%	2.5%	-19.9%
OR		2.0%	0.4%	2.4%	-21.0%
ND	*	1.8%	0.6%	2.4%	3.5%
CO		1.9%	0.2%	2.1%	-12.3%

** - Indicates Judicial State*

DISCLOSURES

Please refer to the links below for specific disclosures relating to Product Definitions, Metrics Definitions and Extrapolation Methodology.

>> PRODUCT DEFINITIONS
>> METRICS DEFINITIONS
>> EXTRAPOLATION METHODOLOGY