HOUSING FINANCE POLICY CENTER

HOUSING FINANCE AT A GLANCE

A MONTHLY CHARTBOOK

February 2016

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ABOUT THE CHARTBOOK

The Housing Finance Policy Center's (HFPC) mission is to produce analyses and ideas that promote sound public policy, efficient markets, and access to economic opportunity in the area of housing finance. *At A Glance*, a monthly chartbook and data source for policymakers, academics, journalists, and others interested in the government's role in mortgage markets, is at the heart of this mission.

We welcome feedback from our readers on how we can make At A Glance a more useful publication. Please email any comments or questions to ataglance@urban.org.

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INTRODUCTION

FHFA Director's speech at the Bipartisan Policy Center

On February 18th, FHFA director Melvin Watt gave a speech updating on the conservatorships of Fannie Mae and Freddie Mac. The most noteworthy aspect of the Director's speech was his concern about the dangers of protracted conservatorships. According to Director Watt, "the most serious risk" faced by the GSEs is "lack of capital." The terms of Treasury department's Preferred Stock Purchase Agreement (PSPA) require the GSE capital buffers to shrink gradually, reaching zero by 2018. This means that any quarterly loss at either Fannie Mae or Freddie Mac starting 2018 would trigger a draw, which would then reduce the remaining PSPA commitment amount. Because PSPA commitment would be the only source of loss absorption buffer for the GSEs after 2018, reduction in the outstanding commitment would eventually increase investor worries about the creditworthiness of GSE-guaranteed mortgage-backed securities and hurt mortgage market liquidity. Equally important, the Director pointed out, future draws could lead to a hastily adopted legislative solution which could harm the mortgage market in the long run.

We don't expect Director Watt's "call to action" to have much near term practical impact. While the Director's concern about the reduction in PSPA commitment is valid, we note that Fannie Mae and Freddie Mac still have a combined remaining commitment of $259 billion ($118 and $141 respectively), suggesting sufficient government backing for the time being. Additionally, future draws are likely to be smaller because of mandated reductions in the size of the investment portfolios – the main source of earnings volatility for the GSEs. In the near term, the much more significant risk is that a draw by either GSE could thrust the GSE reform debate back into the political arena, perhaps dramatically.

Updated GSE representation and warranty framework

The FHFA recently announced the implementation of an Independent Dispute Resolution (IDR) process for resolving repurchase disputes between GSEs and lenders. Available for loans delivered to Fannie Mae and Freddie Mac on or after Jan. 1, 2016, this program will allow lenders to take unresolved loan-level disputes to a neutral third party after attempts to resolve the dispute mutually have been exhausted. In the past, Fannie and Freddie had the final say in the resolution process, contributing to lender uncertainty and the imposition of credit overlays. The IDR is the final piece of the new GSE Representation and Warranty framework originally announced by FHFA in 2012.

INSIDE THIS ISSUE

- Both Fannie Mae and MBA revised up their mortgage origination predictions for 2016, primarily due to lower projected interest rates (page 12)
- Fannie Mae and Freddie Mac finished 2015 with portfolios well below 2015 cap and just above the 2016 cap (page 19)
- Guaranty fees declined in the last quarter of 2015 (page 20)
- Agency gross issuance totaled $91 billion in January 2016, a slight increase YOY (page 30)
- The Fed's absorption of agency gross issuance rose to 30 percent in January 2016 (pages 31)
- FHA led the expansion in mortgage insurance activity in 2015, despite the decline in the fourth quarter (page 32)
- Special quarterly feature includes GSE default, composition, loss severity, and repurchase indicators (pages 34-41)

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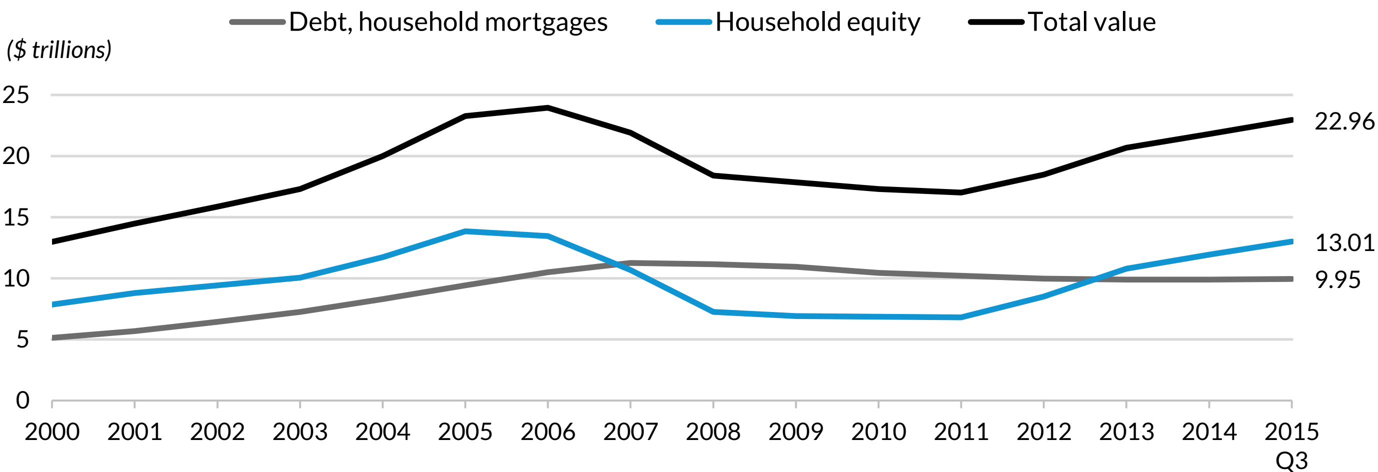
MARKET SIZE OVERVIEW

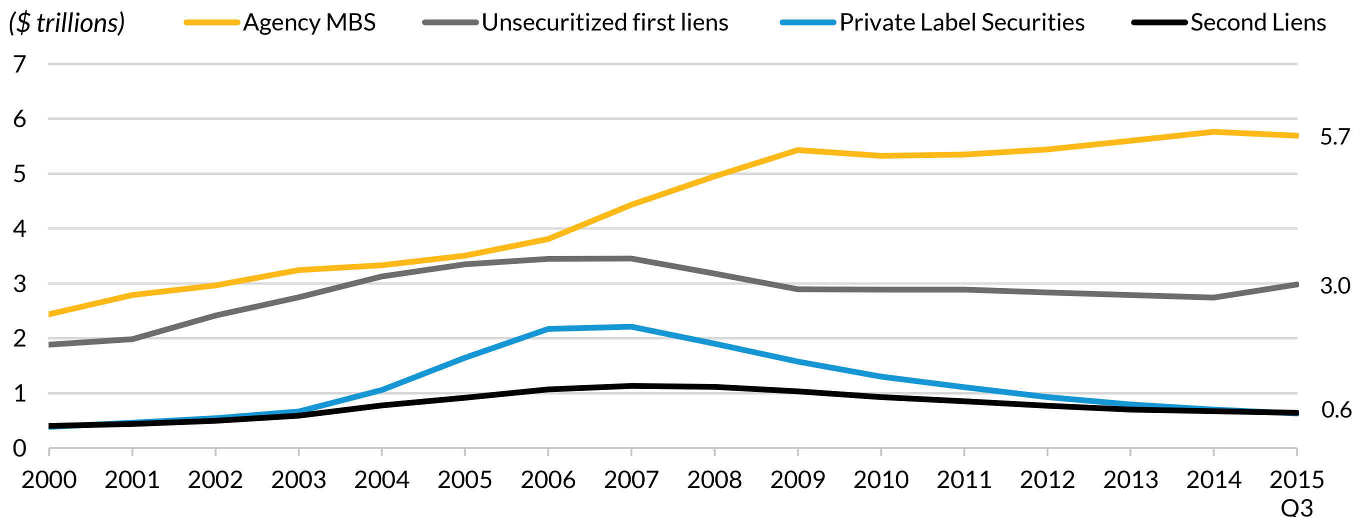
The Federal Reserve's Flow of Funds report has consistently indicated an increasing total value of the housing market driven by growing household equity in each quarter of the past 2 years, and the trend continued according to the latest data, covering Q3 2015. Total debt and mortgages increased slightly to $9.95 trillion, while household equity increased by 3 percent to $13.01 trillion, bringing the total value of the housing market to $22.96 trillion. Agency MBS make up 57.2 percent of the total mortgage market, private-label securities make up 6.4 percent, and unsecuritized first liens at the GSEs, commercial banks, savings institutions, and credit unions make up 29.9 percent. Second liens comprise the remaining 6.5 percent of the total.

Value of the US Housing Market



Sources: Federal Reserve Flow of Funds and Urban Institute.

Size of the US Residential Mortgage Market



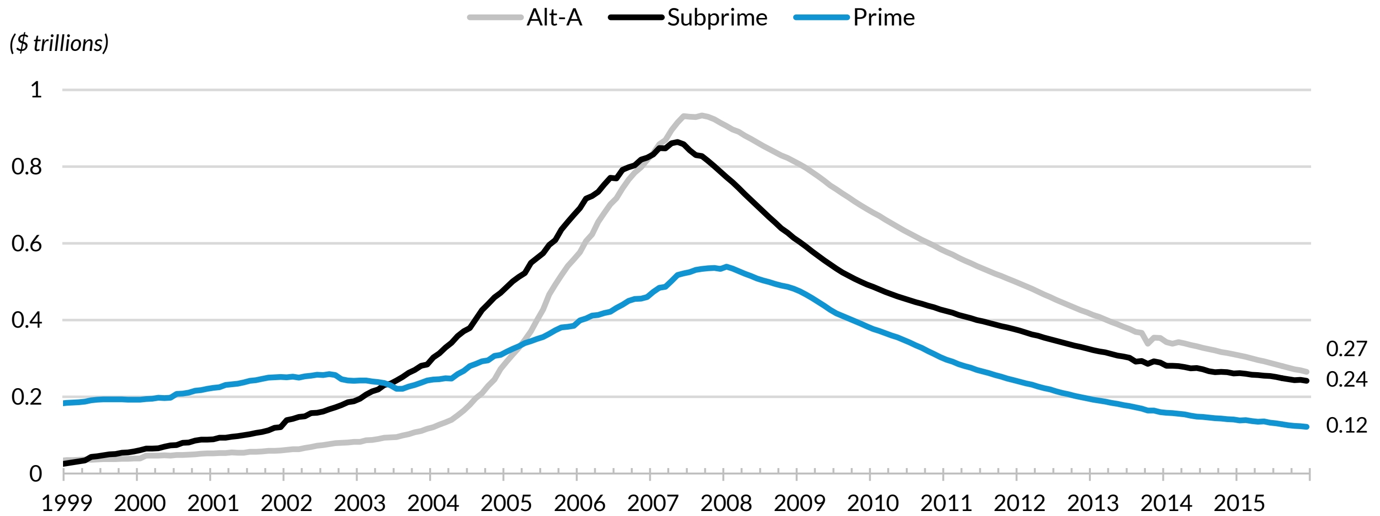
Sources: Federal Reserve Flow of Funds, Inside Mortgage Finance, Fannie Mae, Freddie Mac, eMBS and Urban Institute.
Note: Unsecuritized first liens includes loans held by commercial banks, GSEs, savings institutions, and credit unions.

OVERVIEW

MARKET SIZE OVERVIEW

As of December 2015, debt in the private-label securitization market totaled $628 billion and was split among prime (19.3 percent), Alt-A (42.2 percent), and subprime (38.4 percent) loans. In January 2016, outstanding securities in the agency market totaled $5.82 trillion and were 45.1 percent Fannie Mae, 27.6 percent Freddie Mac, and 27.2 percent Ginnie Mae.

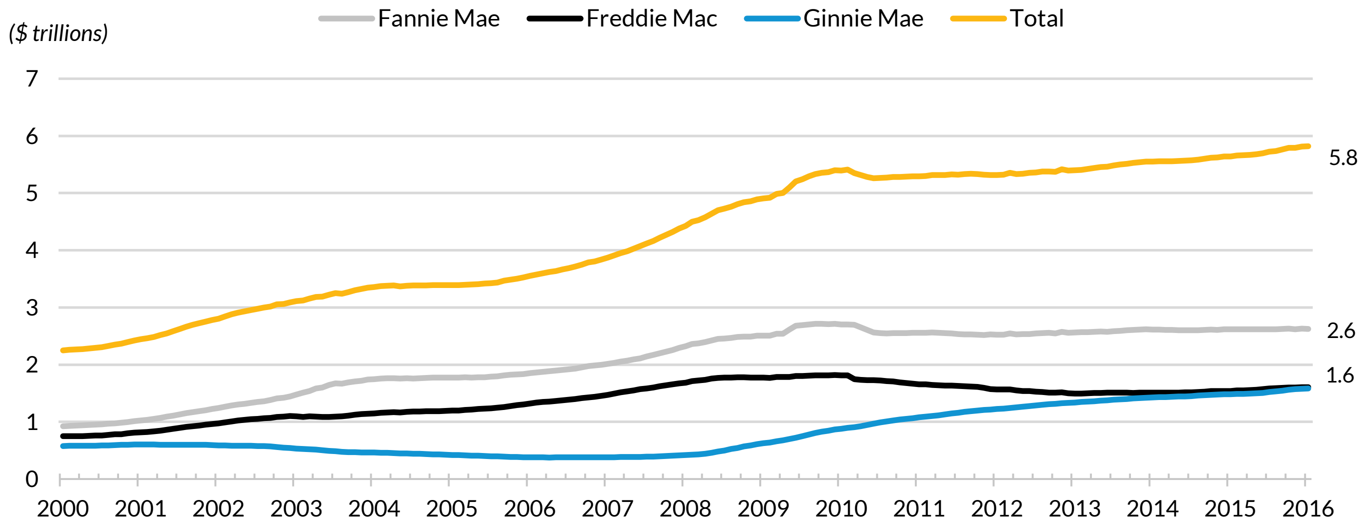
Private-Label Securities by Product Type



Sources: CoreLogic and Urban Institute.

December 2015

Agency Mortgage-Backed Securities



January 2016

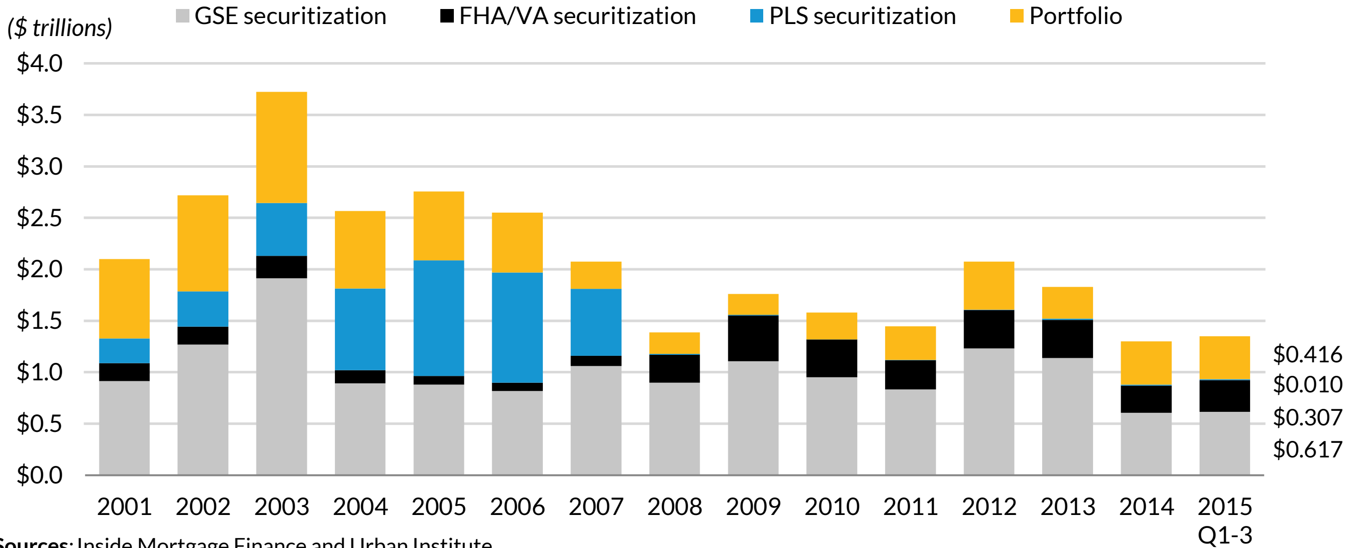
Sources: eMBS and Urban Institute.

OVERVIEW

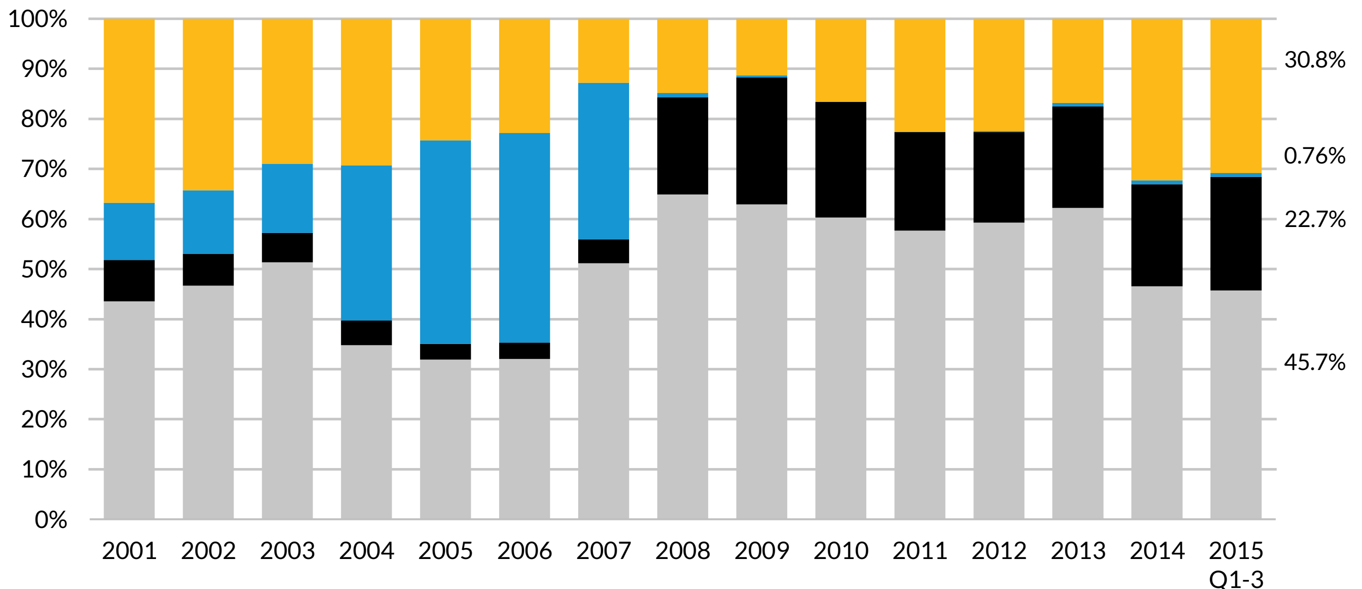
ORIGINATION VOLUME AND COMPOSITION

First Lien Origination Volume

First lien originations in first three quarters of 2015 totaled approximately $1,350 billion. The share of portfolio originations was 31 percent, while the GSE share dropped to 46 percent from 47 last year, reflecting a small loss of market share to FHA due to the FHA premium cut. FHA/VA originations account for another 23 percent, and the private label originations were about 0.8 percent.



Sources: Inside Mortgage Finance and Urban Institute.

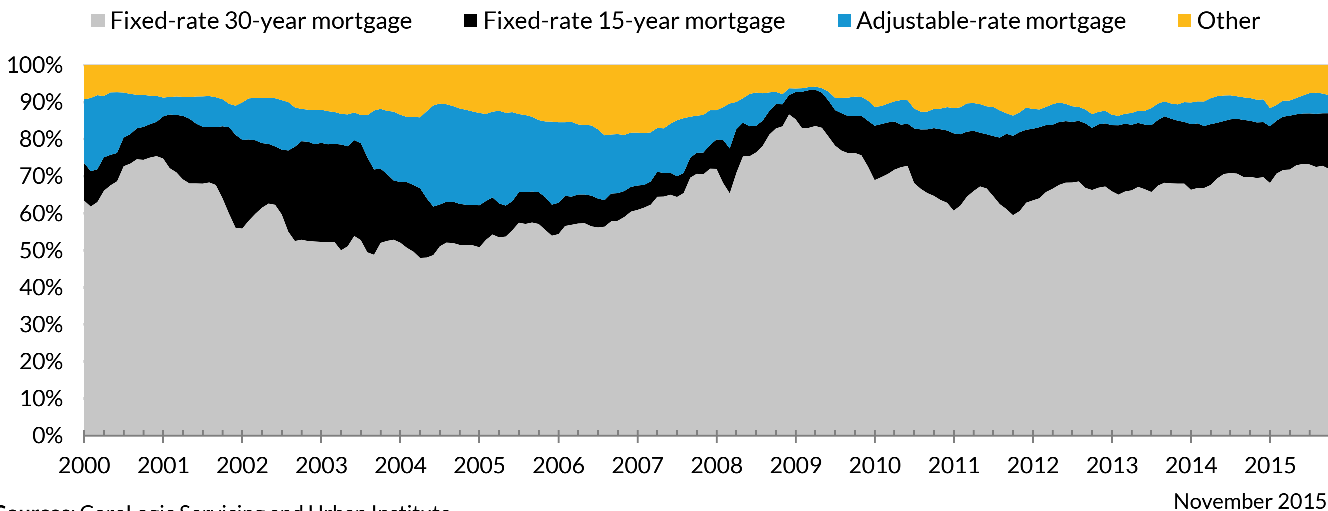


Sources: Inside Mortgage Finance and Urban Institute.

MORTGAGE ORIGINATION PRODUCT TYPE

Adjustable-rate mortgages (ARMs) accounted for as much as 27 percent of all new originations during the peak of the recent housing bubble in 2004 (top chart). They fell to a historic low of 1 percent in 2009, and then slowly grew to a high of 7.2 percent in May 2014. Since then they began to edge down again to 4.3 percent of total originations in November 2015. 15-year fixed-rate mortgages (FRMs), predominantly a refinance product, comprise 15.8 percent of new originations. If we exclude refinances (bottom chart), the share of 30-year FRMs in November 2015 stood at 88.4 percent, 15-year FRMs at 5.8 percent, and ARMs at 4.2 percent.

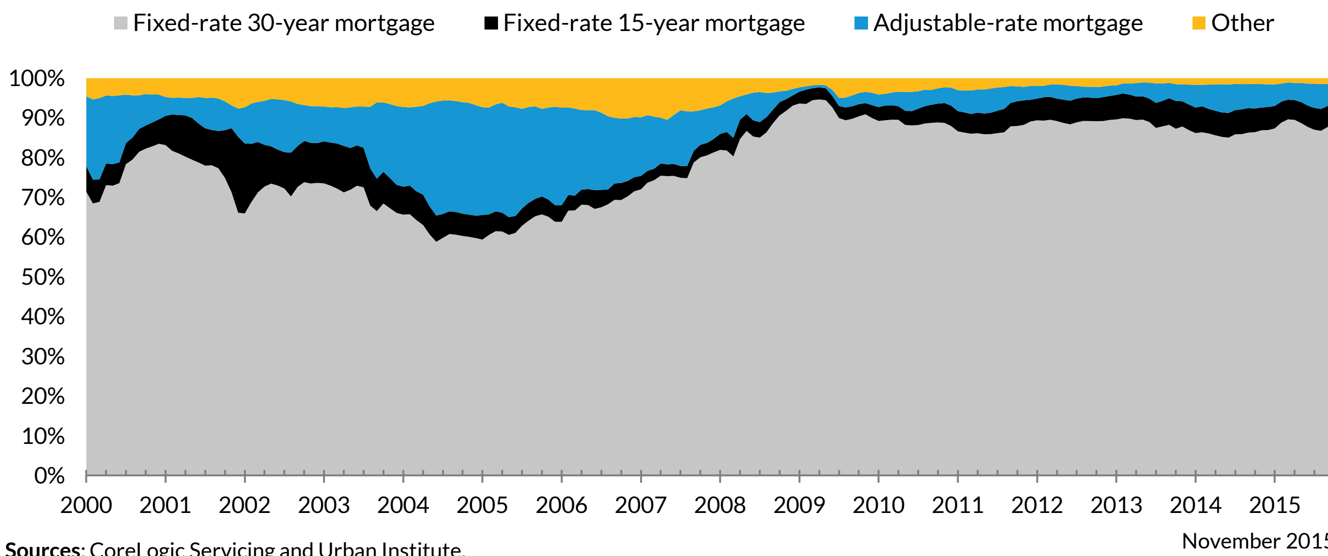
All Originations



Sources: CoreLogic Servicing and Urban Institute.

November 2015

Purchase Loans Only



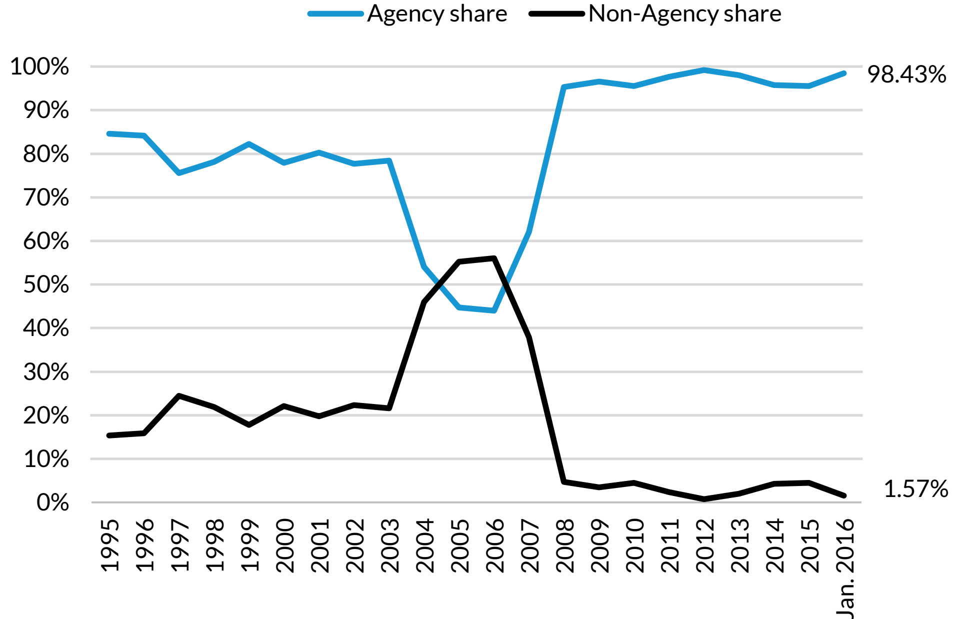
Sources: CoreLogic Servicing and Urban Institute.

November 2015

SECURITIZATION VOLUME AND COMPOSITION

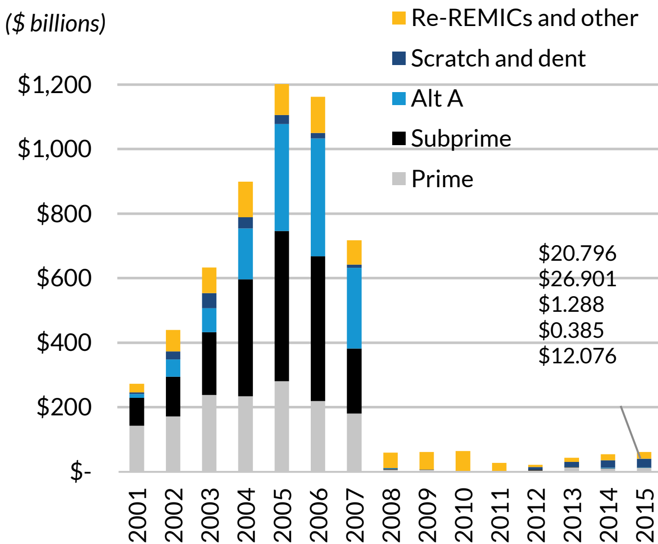
Agency/Non-Agency Share of Residential MBS Issuance

The non-agency share of mortgage securitizations in the first month of 2016 is 1.6%, compared to 4.5% in 2015 and 4.3% in 2014. The volume of prime securitizations in 2015 totaled $12.1 billion, exceeding 2014's $9.6 billion. However, this is tiny compared to pre-crises levels. To put in the perspective, in 2001, prime origination totaled $142 billion.



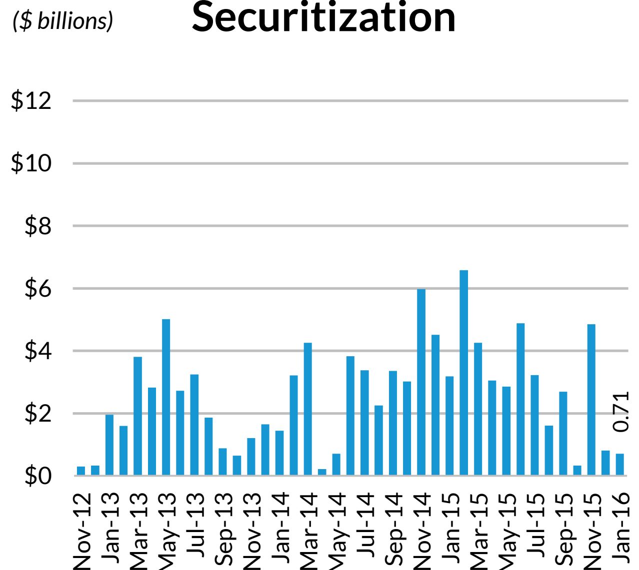
Sources: Inside Mortgage Finance and Urban Institute.

Non-Agency MBS Issuance



Sources: Inside Mortgage Finance and Urban Institute.

Monthly Non-Agency Securitization

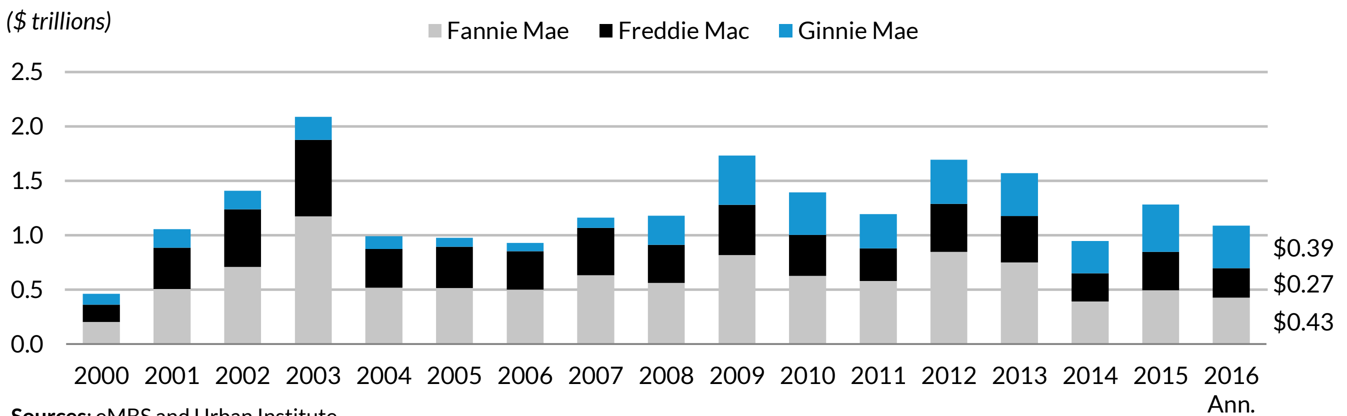


Sources: Inside Mortgage Finance and Urban Institute.
Note: Monthly figures equal total non-agency MBS issuance minus Re-REMIC issuance.

OVERVIEW
AGENCY ACTIVITY: VOLUMES AND PURCHASE/ REFI COMPOSITION

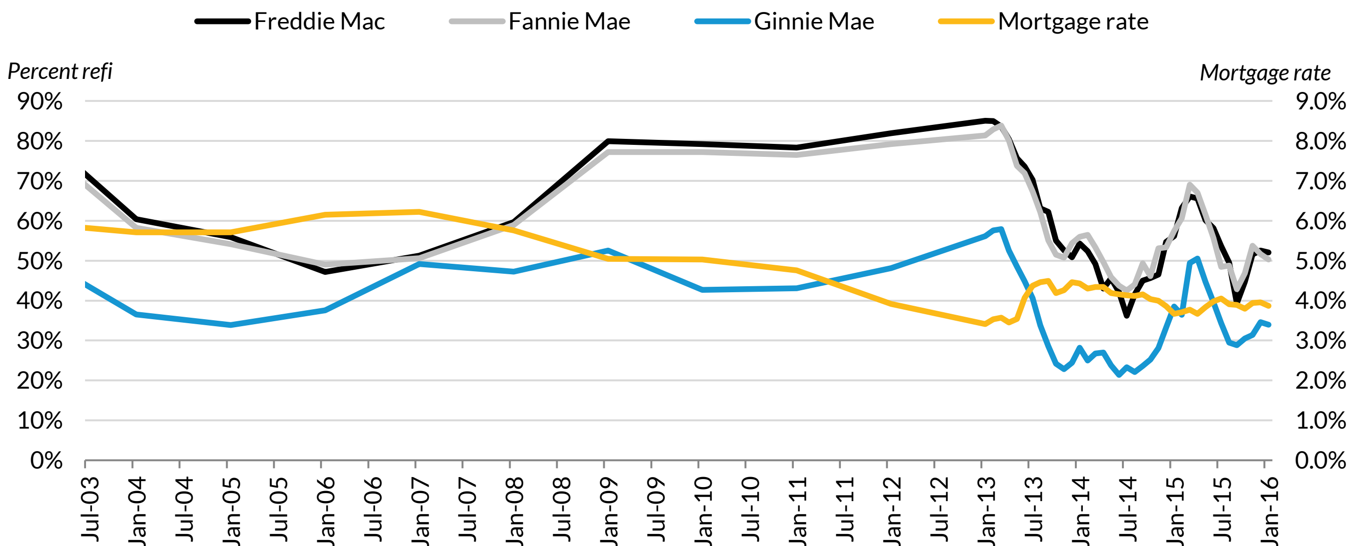
Agency issuance totaled $90.6 billion in the first month of 2016, up from $87.2 billion for the same month a year ago. In January 2016, refinances remained high at 52 and 50 percent of the Freddie Mac's and Fannie Mae's business, respectively, reflecting recent small declines in mortgage rates. The GNMA response to interest rate changes in 2015, both increases and decreases, has been somewhat larger than the GSE response, due to the 50 bps cut in the FHA premium in January 2015. The Ginnie Mae refinance volume stood at 34 percent in January 2016, down since April 2015 but sill high relative to the past two years.

Agency Gross Issuance



Sources: eMBS and Urban Institute.
Note: Annualized figure based on data from January 2016.

Percent Refi at Issuance



Sources: eMBS and Urban Institute.
Note: Based on at-issuance balance.

STATE OF THE MARKET

MORTGAGE ORIGINATION PROJECTIONS

Fannie Mae and MBA have increased their predictions of origination volume for 2016, though the change was most dramatic for Fannie Mae. Fannie Mae anticipates a total of $1,508 billion (up from $1,396 billion) of origination, while MBA predicts $1,380 billion (up from $1,320 billion). Similarly, they have also increased their estimates of refinance share, a reflection of lower interest rate projections for 2016. Freddie Mac projections for origination volume and refinance share have remained constant. Fannie, Freddie and the MBA all forecast housing starts and new home sales in 2016 to be substantially higher than 2015.

Total Originations and Refinance Shares

Period	Originations ($ billions)			Refi Share (%)		
	Total, FNMA estimate	Total, FHLMC estimate	Total, MBA estimate	FNMA estimate	FHLMC estimate	MBA estimate
2016 Q1	323	320	320	46	48	44
2016 Q2	411	460	372	35	35	31
2016 Q3	404	420	367	34	30	27
2016 Q4	370	380	321	35	28	31
2017 Q1	306	380	280	39	27	32
2017Q2	391	400	361	29	25	24
2017Q3	386	350	354	28	23	22
2017 Q4	354	330	315	28	22	25
FY 2013	1866	1925	1845	60	59	60
FY 2014	1301	1350	1261	40	42	40
FY 2015	1690	1750	1486	47	48	45
FY 2016	1508	1580	1380	37	35	33
FY 2017	1438	1460	1309	31	24	25

Sources: Mortgage Bankers Association, Fannie Mae, Freddie Mac and Urban Institute.
Note: Shaded boxes indicate forecasted figures. All figures are estimates for total single-family market. Column labels indicate source of estimate. Regarding interest rates, the yearly averages for 2013, 2014, 2015, and 2016 were 4.0%, 4.2%, 3.9% and 4.1%, respectively. For 2016, Fannie Mae, Freddie Mac, and MBA project rates of 3.8%, 4.3%, and 4.3%, respectively. For 2017, their respective projections are 3.9%, 4.9%, and 4.9%.

Housing Starts and Homes Sales

Year	Housing Starts, thousands			Home Sales. thousands				
	Total, FNMA estimate	Total, FHLMC estimate	Total, MBA estimate	Total, FNMA estimate	Total, FHLMC estimate	Total, MBA estimate	Existing, MBA estimate	New, MBA Estimate
FY 2013	925	920	930	5519	5520	5505	5073	432
FY 2014	1003	1000	1001	5377	5380	5360	4920	440
FY 2015	1111	1110	1105	5761	5710	5710	5214	496
FY 2016	1233	1310	1230	5960	5920	6163	5580	583
FY 2017	1355	1510	1359	6147	6160	6432	5767	665

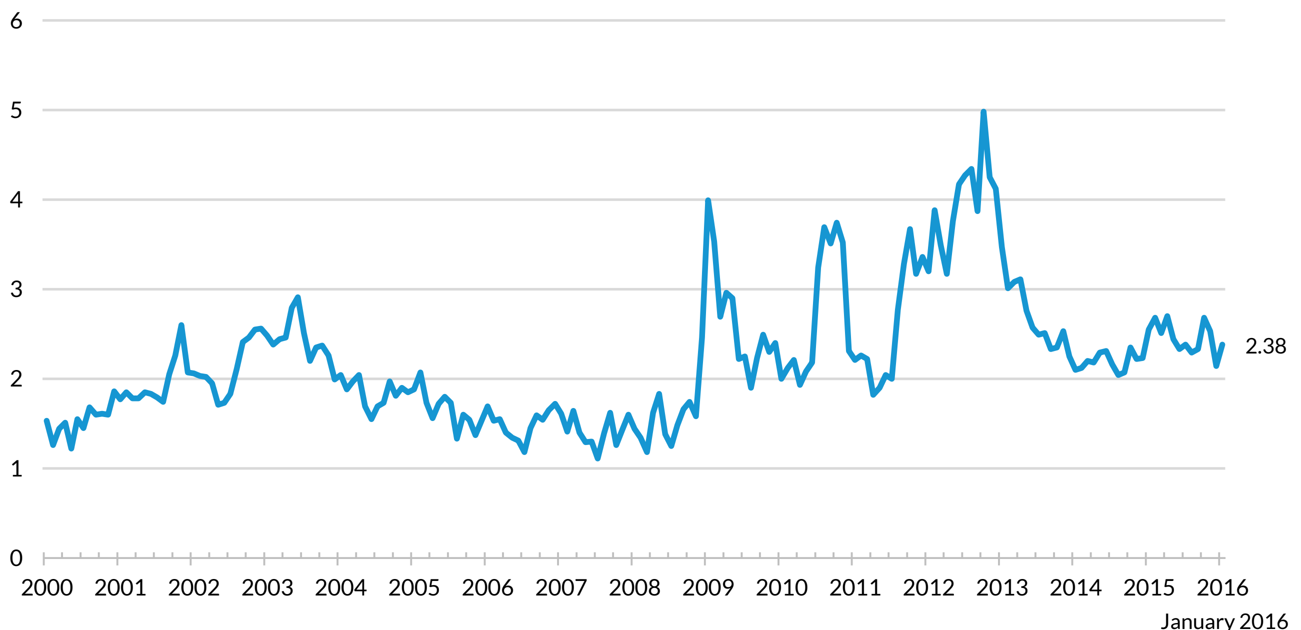
Sources: Mortgage Bankers Association, Fannie Mae, Freddie Mac and Urban Institute.
Note: Shaded boxes indicate forecasted figures. All figures are estimates for total single-family market; column labels indicate source of estimate.

ORIGINATOR PROFITABILITY

When originator profitability is high, mortgage rates tend to be less responsive to the general level of interest rates, as originators are capacity-constrained. When originator profitability is low, mortgage rates are far more responsive to the general level of interest rates. As interest rates have risen from the lows in 2012, and fewer borrowers find it economical to refinance, originator profitability is lower. Originator profitability is often measured as the spread between the rate the borrower pays for the mortgage (the primary rate) and the yield on the underlying mortgage-backed security in the secondary market (the secondary rate). However, with guarantee fees up dramatically from 2011 levels, the so-called primary-secondary spread has become a very imperfect measure to compare profitability across time.

The measure used here, Originator Profitability and Unmeasured Costs (OPUC), is formulated and calculated by the Federal Reserve Bank of New York. It looks at the price at which the originator actually sells the mortgage into the secondary market and adds the value of retained servicing (both base and excess servicing, net of g-fees) as well as points paid by the borrower. This measure was in the narrow range of 2.04 to 2.70 since 2014, and stood at 2.38 in January 2016.

Originator Profitability and Unmeasured Costs

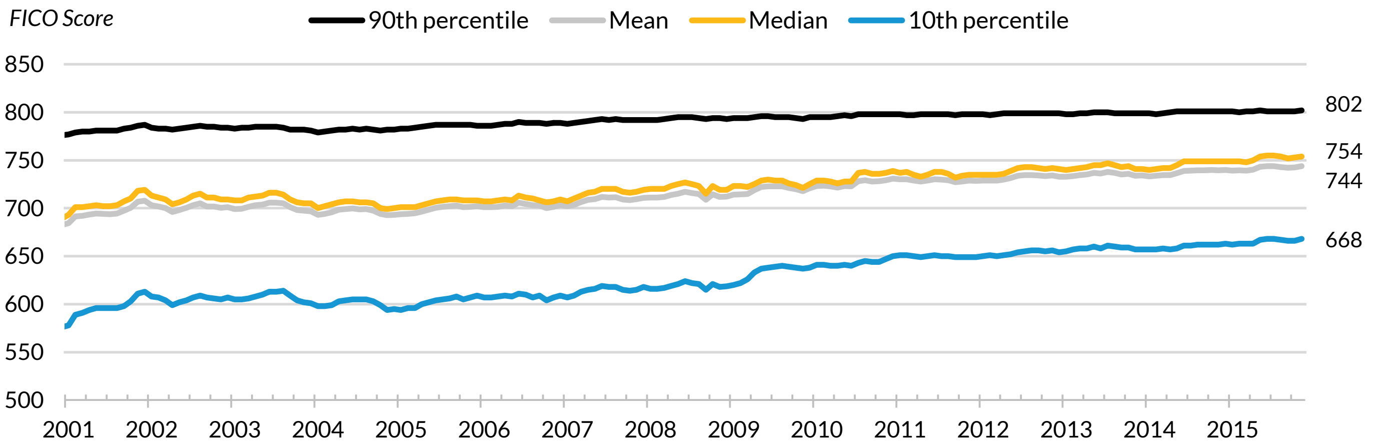


Sources: Federal Reserve Bank of New York, updated monthly and available at this link: http://www.ny.frb.org/research/epr/2013/1113fust.html and Urban Institute.
Note: OPUC stands for "originator profits and unmeasured costs" as discussed in Fuster et al. (2013). The OPUC series is a monthly (4-week moving) average.

CREDIT AVAILABILITY FOR PURCHASE LOANS

Access to credit has become extremely tight, especially for borrowers with low FICO scores. The mean and median FICO scores on new originations have both drifted up about 42 and 46 points over the last decade. The 10th percentile of FICO scores, which represents the lower bound of creditworthiness needed to qualify for a mortgage, stood at 668 as of November 2015. Prior to the housing crisis, this threshold held steady in the low 600s. LTV levels at origination remain relatively high, averaging 84, which reflects the large number of FHA purchase originations.

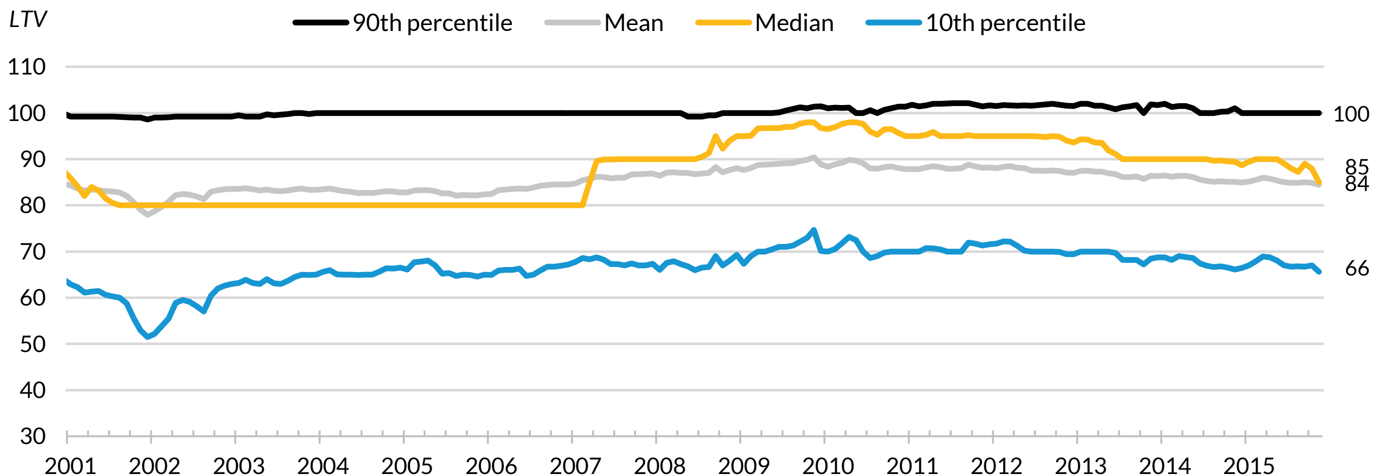
Borrower FICO Score at Origination



November 2015

Sources: CoreLogic Servicing and Urban Institute.
Note: Purchase-only loans.

Combined LTV at Origination

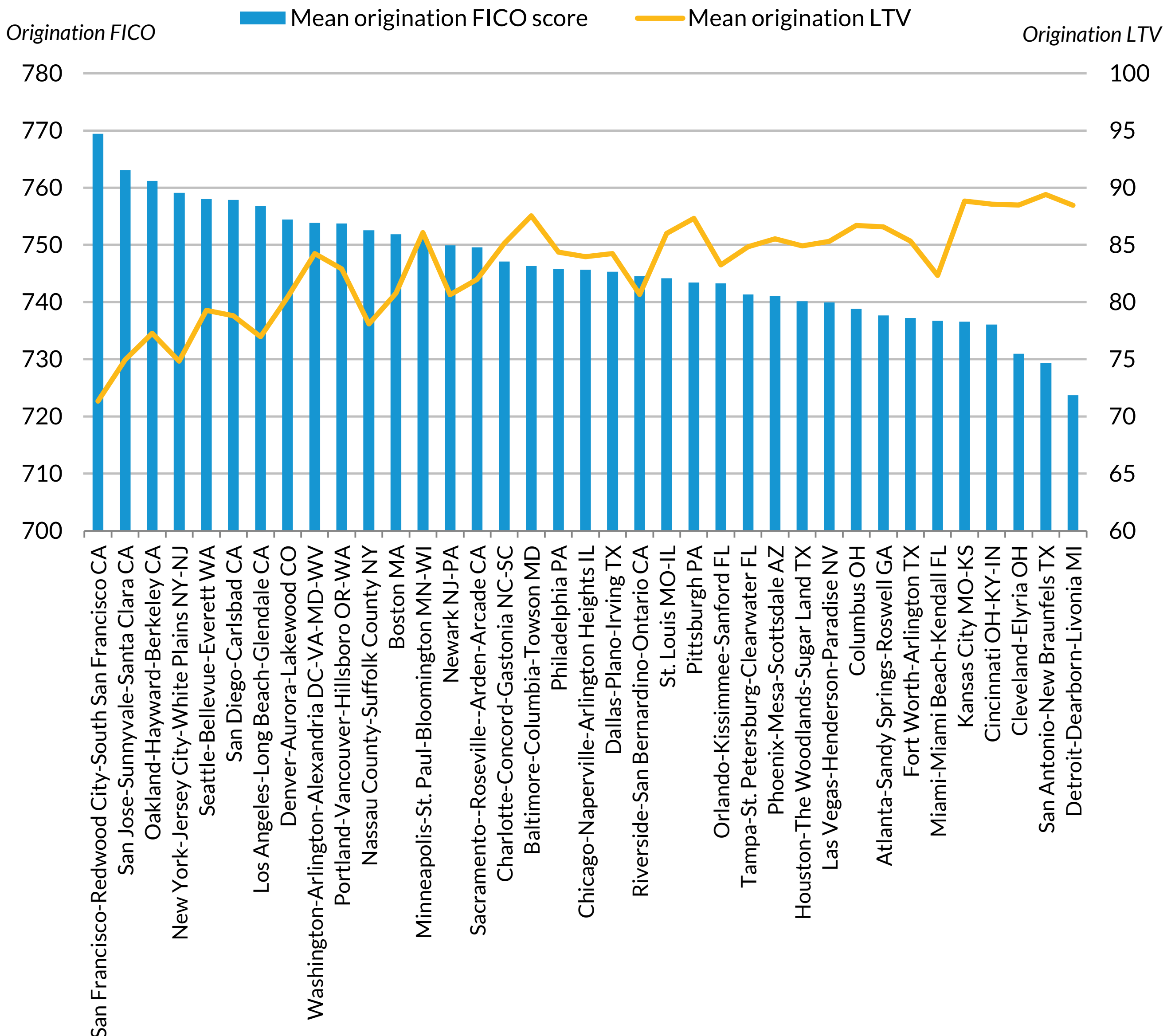


Sources: CoreLogic Servicing and Urban Institute.
Note: Purchase-only loans.

November 2015

CREDIT AVAILABILITY FOR PURCHASE LOANS

Credit has been tight for all borrowers with less-than-stellar credit scores, but there are significant variations across MSAs. For example, the mean origination FICO for borrowers in San Francisco- Redwood City- South San Francisco, CA is 769, while in Detroit-Dearborn-Livonia, MI it is 724. Across all MSAs, lower average FICO scores tend to be correlated with high average LTVs, as these MSAs rely heavily on FHA/VA financing.



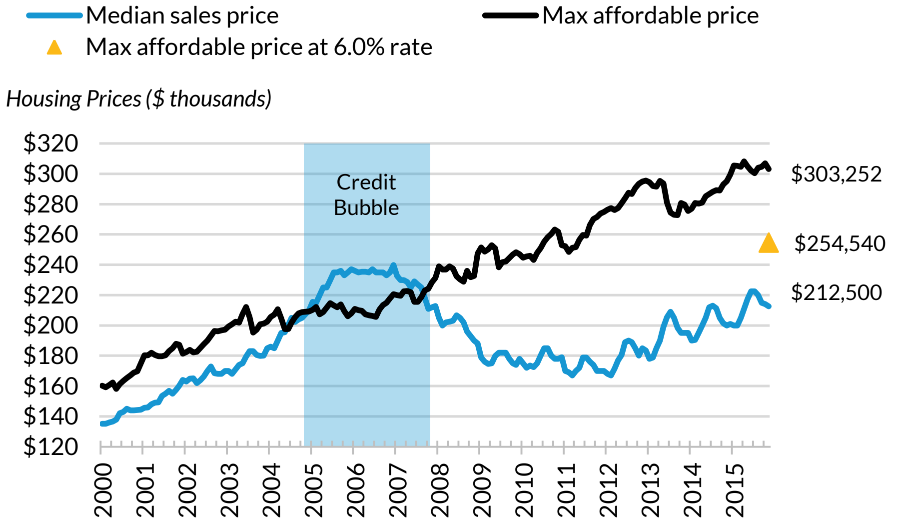
Sources: CoreLogic Servicing as of November 2016 and Urban Institute.
Note: Purchase-only loans.

HOUSING AFFORDABILITY

National Housing Affordability Over Time

Home prices are still very affordable by historical standards, despite increases over the last three years. Even if interest rates rose to 6 percent, affordability would be at the long term historical average. The bottom chart shows that some areas are much more affordable than others.

Sources: CoreLogic, US Census, Freddie Mac and Urban Institute.
Note: The maximum affordable price is the house price that a family can afford putting 20 percent down, with a monthly payment of 28 percent of median family income, at the Freddie Mac prevailing rate for 30-year fixed-rate mortgage, and property tax and insurance at 1.75 percent of housing value.



November 2015

Affordability Adjusted for MSA-Level DTI

Ratio

1.4
1.3
1.2
1.1
1
0.9
0.8
0.7

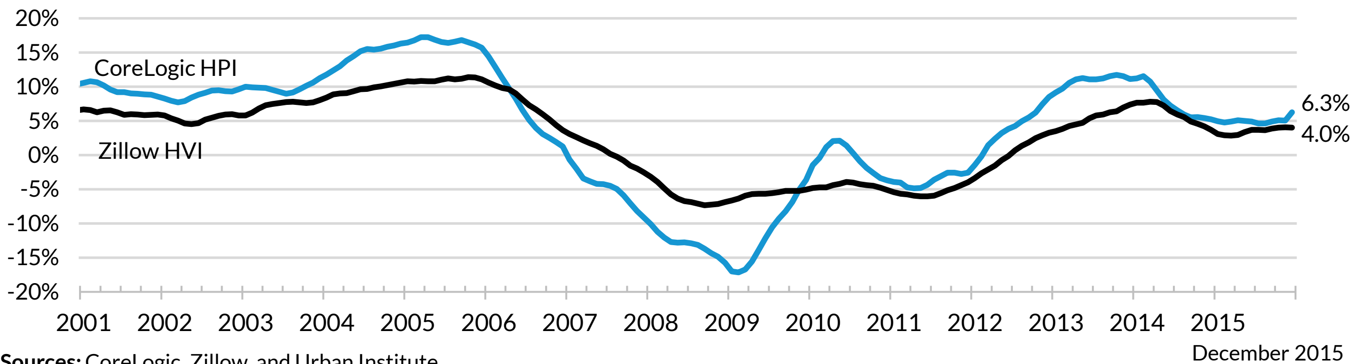
San Francisco-Redwood City-South San Francisco CA
San Jose-Sunnyvale-Santa Clara CA
Los Angeles-Long Beach-Glendale CA
Washington-Arlington-Alexandria DC-VA-MD-WV
Portland-Vancouver-Hillsboro OR-WA
Miami-Miami Beach-Kendall FL
Seattle-Bellevue-Everett WA
Philadelphia PA
Oakland-Hayward-Berkeley CA
New York-Jersey City-White Plains NY-NJ
Phoenix-Mesa-Scottsdale AZ
Dallas-Plano-Irving TX
San Diego-Carlsbad CA
Riverside-San Bernardino-Ontario CA
Detroit-Dearborn-Livonia MI
Denver-Aurora-Lakewood CO
Orlando-Kissimmee-Sanford FL
Fort Worth-Arlington TX
Sacramento--Roseville--Arcade CA
Boston MA
Atlanta-Sandy Springs-Roswell GA
Charlotte-Concord-Gastonia NC-SC
San Antonio-New Braunfels TX
Tampa-St. Petersburg-Clearwater FL
Baltimore-Columbia-Towson MD
Houston-The Woodlands-Sugar Land TX
Minneapolis-St. Paul-Bloomington MN-WI
Nassau County-Suffolk County NY
Newark NJ-PA
St. Louis MO-IL
Kansas City MO-KS
Las Vegas-Henderson-Paradise NV
Chicago-Naperville-Arlington Heights IL
Pittsburgh PA
Columbus OH
Cincinnati OH-KY-IN
Cleveland-Elyria OH

Sources: CoreLogic, US Census, Freddie Mac and Urban Institute calculations based on NAR methodology.
Note: Index is calculated relative to home prices in 2000-03. A ratio above 1 indicates higher affordability in November 2015 than in 2000-03.

HOME PRICE INDICES

National Year-Over-Year HPI Growth

The strong year-over-year house price growth through 2013 has slowed somewhat since 2014, as indicated by both the repeat-sales index from CoreLogic and hedonic index from Zillow.



Sources: CoreLogic, Zillow, and Urban Institute.

Changes in CoreLogic HPI for Top MSAs

Despite rising 36 percent from the trough, national house prices still must grow 8 percent to reach pre-crisis peak levels. At the MSA level, four of the top 15 MSAs have reached their peak HPI– Houston, TX; Dallas, TX; Seattle, WA and Denver, CO. Two MSAs particularly hard hit by the boom and bust– Phoenix, AZ and Riverside, CA– would need to rise 33 and 37 percent to return to peak levels, respectively.

MSA	HPI changes (%)			% Rise needed to achieve peak
	2000 to peak	Peak to trough	Trough to current	
United States	98.4	-32.0	35.8	8.2
New York-Jersey City-White Plains NY-NJ	113.6	-19.8	21.6	2.6
Los Angeles-Long Beach-Glendale CA	180.7	-38.7	52.6	7.0
Chicago-Naperville-Arlington Heights IL	64.8	-36.2	21.5	28.9
Atlanta-Sandy Springs-Roswell GA	40.7	-33.1	45.3	2.9
Washington-Arlington-Alexandria DC-VA-MD-WV	158.9	-33.1	31.3	13.8
Houston-The Woodlands-Sugar Land TX	44.7	-12.8	37.3	-16.5
Phoenix-Mesa-Scottsdale AZ	126.4	-52.5	58.0	33.2
Riverside-San Bernardino-Ontario CA	194.3	-53.1	56.4	36.5
Dallas-Plano-Irving TX	38.3	-13.4	38.6	-16.7
Minneapolis-St. Paul-Bloomington MN-WI	73.7	-30.2	29.5	10.6
Seattle-Bellevue-Everett WA	93.6	-31.4	48.3	-1.8
Denver-Aurora-Lakewood CO	36.7	-14.3	50.7	-22.6
Baltimore-Columbia-Towson MD	128.5	-25.7	7.0	25.8
San Diego-Carlsbad CA	148.0	-37.9	45.4	10.7
Anaheim-Santa Ana-Irvine CA	161.8	-36.7	44.9	9.1

Sources: CoreLogic HPIs as of December 2015 and Urban Institute.
Note: This table includes the largest 15 Metropolitan areas by mortgage count.

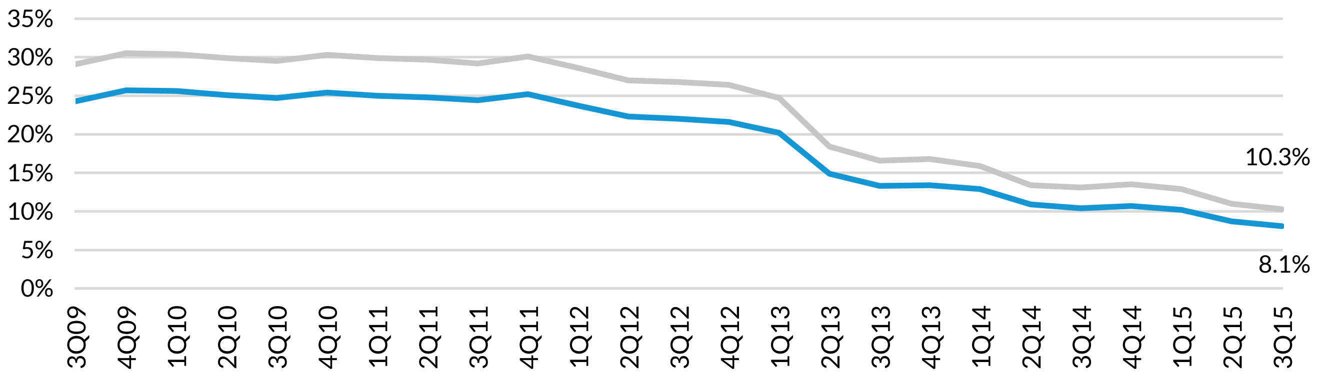
STATE OF THE MARKET

NEGATIVE EQUITY & SERIOUS DELINQUENCY

Negative Equity Share

Negative equity   Near or in negative equity

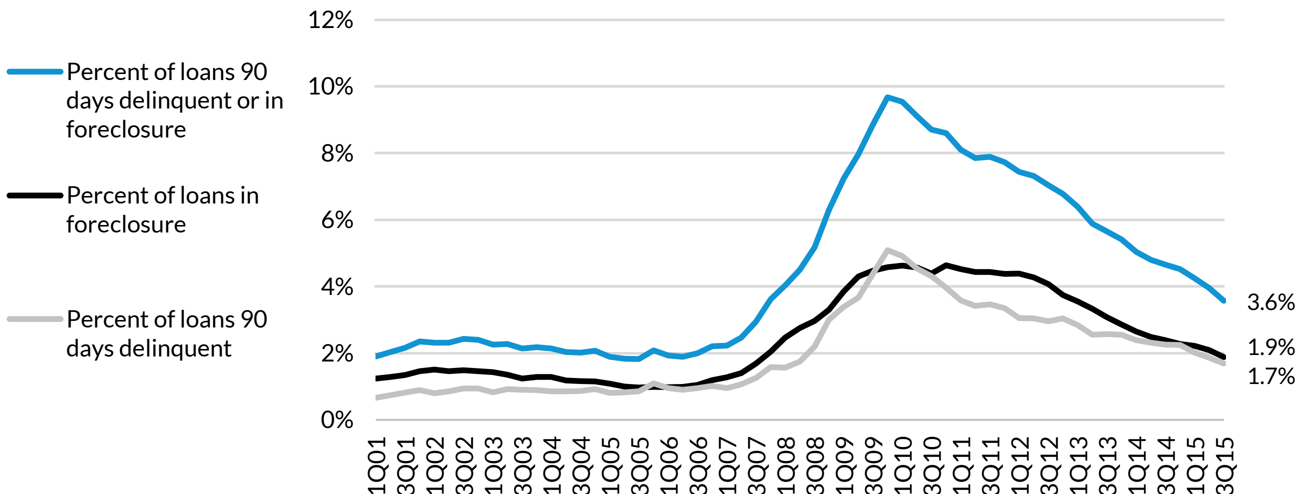
With housing prices continuing to appreciate, residential properties in negative equity (LTV greater than 100) as a share of all residential properties with a mortgage have dropped to 8.1 percent as of Q3 2015. Residential properties in near negative equity (LTV between 95 and 100) comprise another 2.2 percent.



Sources: CoreLogic and Urban Institute.
Note: CoreLogic negative equity rate is the percent of all residential properties with a mortgage in negative equity. Loans with negative equity refer to loans above 100 percent LTV. Loans near negative equity refer to loans above 95 percent LTV.

Loans in Serious Delinquency/Foreclosure

Serious delinquencies and foreclosures continue to decline with the housing recovery, but remain quite high relative to the early 2000s. Loans 90 days delinquent or in foreclosure totaled 3.6 % in the third quarter of 2015, down from 4.7% for the same quarter a year earlier.



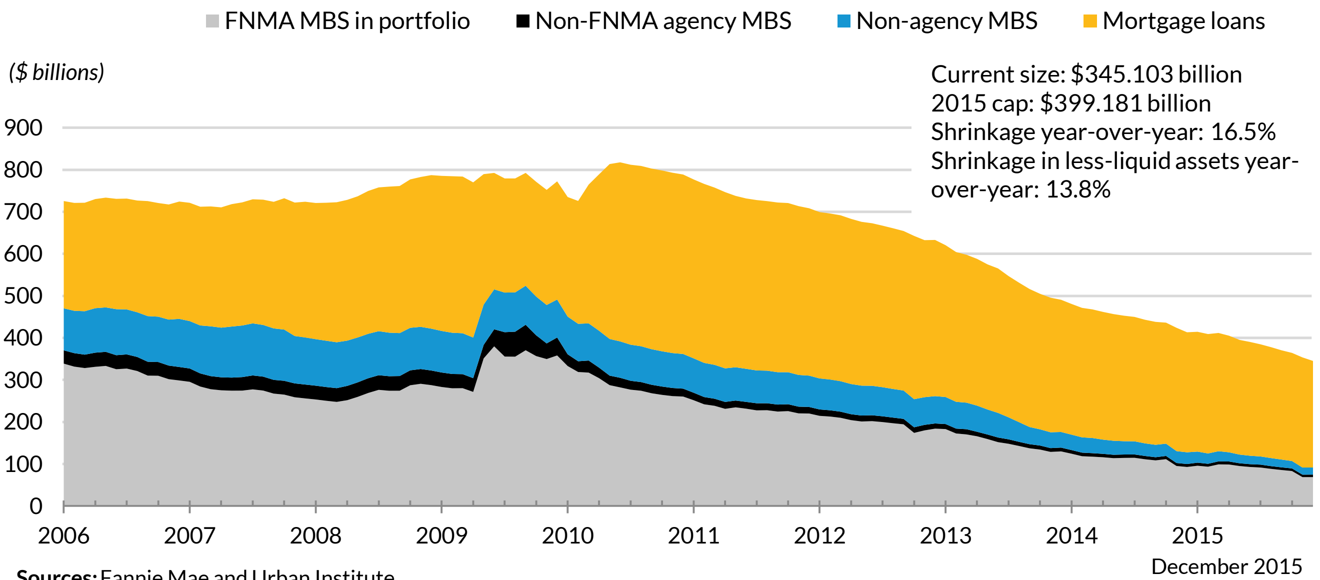
Sources: Mortgage Bankers Association and Urban Institute.

GSES UNDER CONSERVATORSHIP

GSE PORTFOLIO WIND-DOWN

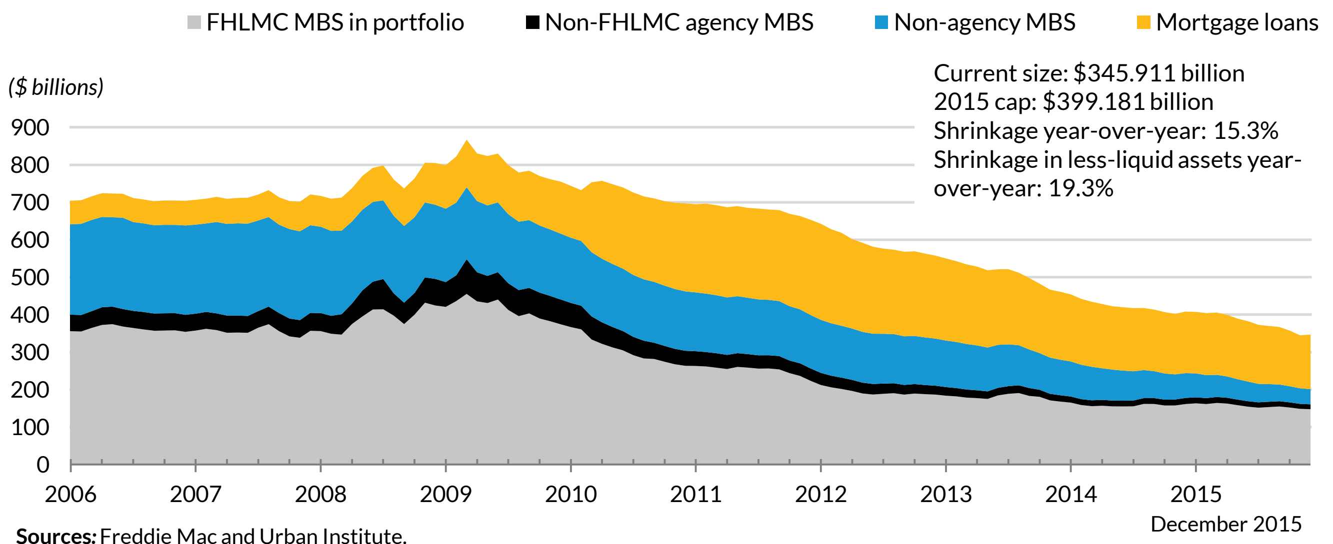
In December 2015, the portfolio size for both GSEs were well below the 2015 cap and the GSEs continue to reduce their portfolio size. Relative to December 2014, Fannie contracted by 16.5 percent, and Freddie Mac by 15.3 percent. They are shrinking their less liquid assets (mortgage loans and non-agency MBS) at close to the same pace, or even more rapidly, than they are shrinking their entire portfolios.

Fannie Mae Mortgage-Related Investment Portfolio Composition



Sources: Fannie Mae and Urban Institute.

Freddie Mac Mortgage-Related Investment Portfolio Composition



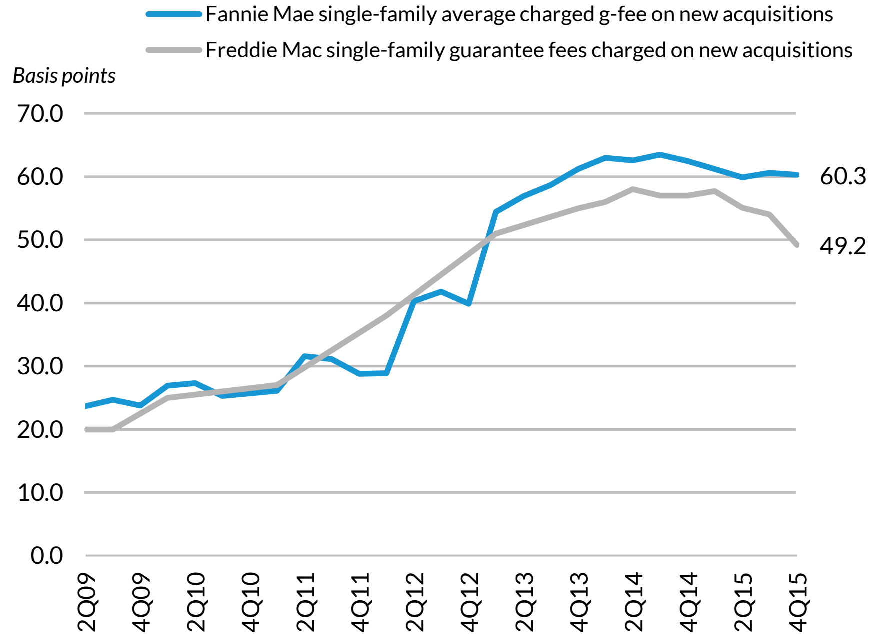
Sources: Freddie Mac and Urban Institute.

GSES UNDER CONSERVATORSHIP

EFFECTIVE GUARANTEE FEES AND GSE RISK-SHARING TRANSACTIONS

Guarantee Fees Charged on New Acquisitions

Fannie's average charged g-fee on new single-family originations fell slightly to 60.3 bps in Q4 2015, down from 60.6 bps in the previous quarter. During the same time period, Freddie's fee fell to 49.2 bps from 54.0 bps. This is still a marked increase over 2012 and 2011, and has contributed to the GSEs' profits. Fannie's new Loan-Level Price Adjustments (LLPAs), effective as of September 2015, are shown in the second table. The Adverse Market Delivery Charge (AMDC) of 0.25 percent is eliminated, and LLPAs for some borrowers are slightly increased to compensate for the revenue lost from the AMDC. As a result, the new LLPAs are expected to have a modest impact on GSE pricing.



Sources: Fannie Mae, Freddie Mae and Urban Institute.

Fannie Mae Upfront Loan-Level Price Adjustments (LLPAs)

	LTV							
Credit Score	≤60	60.01 – 70	70.01 – 75	75.01 – 80	80.01 – 85	85.01 – 90	90.01 – 95	95.01 – 97
> 740	0.00%	0.25%	0.25%	0.50%	0.25%	0.25%	0.25%	0.75%
720 – 739	0.00%	0.25%	0.50%	0.75%	0.50%	0.50%	0.50%	1.00%
700 – 719	0.00%	0.50%	1.00%	1.25%	1.00%	1.00%	1.00%	1.50%
680 – 699	0.00%	0.50%	1.25%	1.75%	1.50%	1.25%	1.25%	1.50%
660 – 679	0.00%	1.00%	2.25%	2.75%	2.75%	2.25%	2.25%	2.25%
640 – 659	0.50%	1.25%	2.75%	3.00%	3.25%	3.75%	2.75%	2.75%
620 – 639	0.50%	1.50%	3.00%	3.00%	3.25%	3.25%	3.25%	3.50%
< 620	0.50%	1.50%	3.00%	3.00%	3.25%	3.25%	3.25%	3.75%
Product Feature (Cumulative)								
High LTV	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Investment Property	2.125%	2.125%	2.125%	3.375%	4.125%	N/A	N/A	N/A

Sources: Fannie Mae and Urban Institute.
Note: For whole loans purchased on or after September 1, 2015, or loans delivered into MBS pools with issue dates on or after September 1, 2015.

GSE RISK-SHARING TRANSACTIONS: CAS AND STACR

Fannie and Freddie have participated in back-end credit risk transfer deals with capital market participants since 2013. In addition to CAS and STACR transactions detailed below, GSEs are laying off back-end credit risk on reinsurers, and have done some front-end risk sharing arrangements with originators. In 2015, the FHFA scorecard had called for Fannie Mae and Freddie Mac to lay off at least $150 billion and $120 billion, respectively, in at least two types of transactions. Both GSEs more than met their goals, with Fannie laying off $187 billion and Freddie laying off $210 billion. The new 2016 scorecard expresses the goal as 90 percent of newly acquired loans in categories targeted for transfer. Fannie Mae's CAS issuances now cover 18.38% of its outstanding single family guarantees, while Freddie's STACR issuances now cover 26.49% of its outstanding single family guarantees.

Fannie Mae – Connecticut Avenue Securities (CAS)

Date	*Transaction*	*Reference Pool Size ($ m)*	*Amount Issued ($m)*	*% of Reference Pool Covered*
October 2013	CAS 2013 – C01	$26,756	$675	2.5%
January 2014	CAS 2014 – C01	$29,309	$750	2.6%
May 2014	CAS 2014 – C02	$60,818	$1,600	2.6%
July 2014	CAS 2014 – C03	$78,234	$2,050	2.6%
November 2014	CAS 2014 – C04	$58,873	$1,449	2.5%
February 2015	CAS 2015 – C01	$50,192	$1,469	2.9%
May 2015	CAS 2015 – C02	$45,009	$1,449	3.2%
June 2015	CAS 2015 – C03	$48,326	$1,100	2.3%
October 2015	CAS 2015 – C04	$43,599	$1,446	3.3%
February 2016	CAS 2016 – C01	$28,882	$945	3.3%
Fannie Mae Total Reference Collateral		**$513,597**	**$12,932**	**2.5%**
Percent of Fannie Mae's Total Book of Business		**18.38%**		

Freddie Mac – Structured Agency Credit Risk (STACR)

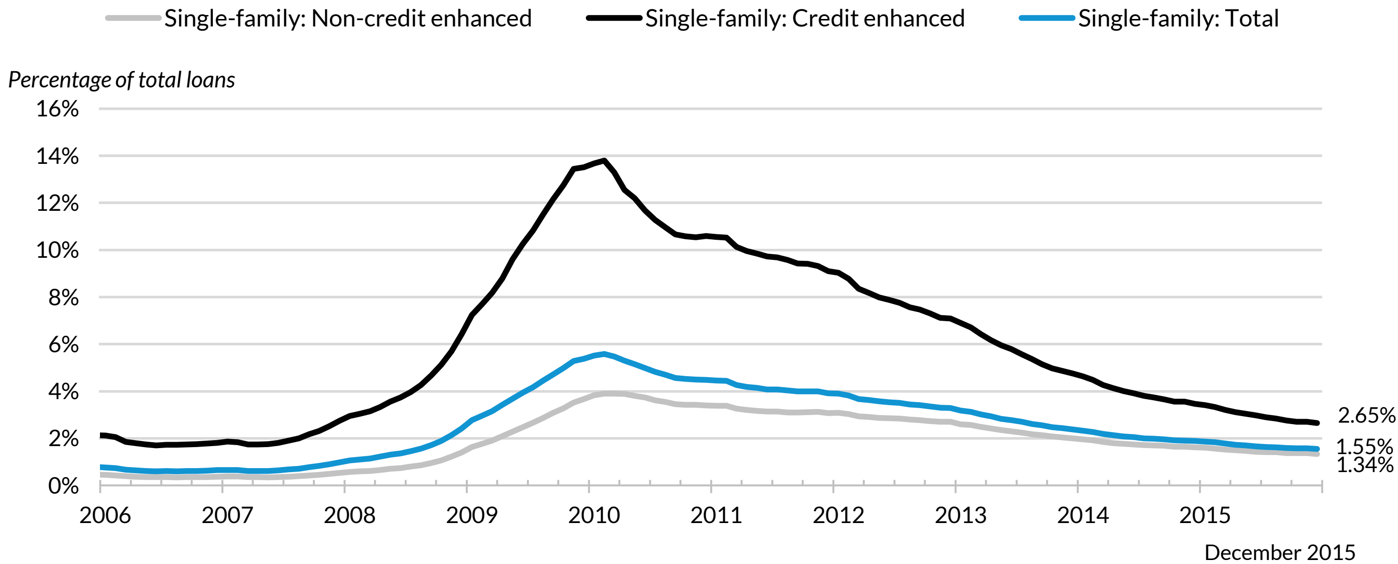
Date	*Transaction*	*Reference Pool Size ($ m)*	*Amount Issued ($m)*	*% of Reference Pool Covered*
July 2013	STACR Series 2013 – DN1	$22,584	$500	2.2%
November 2013	STACR Series 2013 – DN2	$35,327	$630	1.8%
February 2014	STACR Series 2014 – DN1	$32,077	$1,008	3.1%
April 2014	STACR Series 2014 – DN2	$28,147	$966	3.4%
August 2014	STACR Series 2014 – DN3	$19,746	$672	3.4%
August 2014	STACR Series 2014 – HQ1	$9,975	$460	4.6%
September 2014	STACR Series 2014 – HQ2	$33,434	$770	2.3%
October 2014	STACR Series 2014 – DN4	$15,741	$611	3.9%
October 2014	STACR Series 2014 – HQ3	$8,001	$429	5.4%
February 2015	STACR Series 2015 – DN1	$27,600	$880	3.2%
March 2015	STACR Series 2015 – HQ1	$16,552	$860	5.2%
April 2015	STACR Series 2015 – DNA1	$31,876	$1,010	3.2%
May 2015	STACR Series 2015 – HQ2	$30,325	$426	1.4%
June 2015	STACR Series 2015 – DNA2	$31,986	$950	3.0%
September 2015	STACR Series 2015 – HQA1	$19,377	$872	4.5%
November 2015	STACR Series 2015 – DNA3	$34,706	$1,070	3.1%
December 2015	STACR Series 2015 – HQA2	$17,100	$590	3.5%
January 2016	STACR Series 2015 – DNA1	$35,700	$996	2.8%
Freddie Mac Total Reference Collateral		**$450,253**	**$13,700**	**3.0%**
Percent of Freddie Mac's Total Book of Business		**26.49%**		

Sources: Fannie Mae, Freddie Mac and Urban Institute.
Note: Classes A-H, M-1H, M-2H, and B-H are reference tranches only. These classes are not issued or sold. The risk is retained by Fannie Mae and Freddie Mac. "CE" = credit enhancement.

GSES UNDER CONSERVATORSHIP
SERIOUS DELINQUENCY RATES

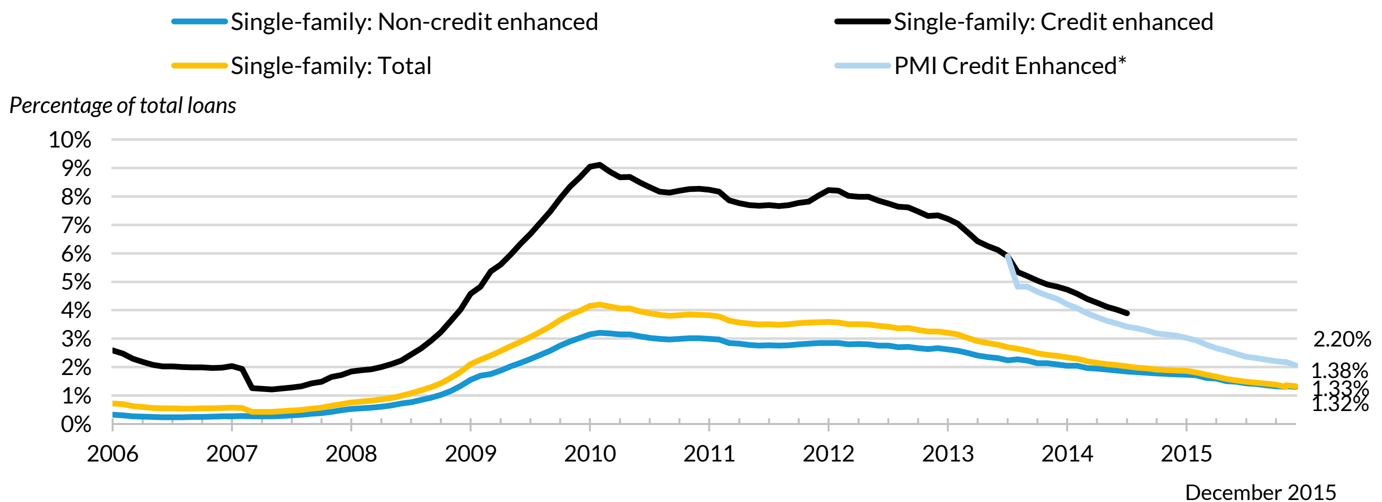
Serious delinquency rates of GSE loans continue to decline as the legacy portfolio is resolved and the pristine, post-2009 book of business exhibits very low default rates. As of December 2015, 1.55 percent of the Fannie portfolio and 1.32 percent of the Freddie portfolio were seriously delinquent, down from 1.89 percent for Fannie and 1.88 percent for Freddie in December 2015.

Serious Delinquency Rates–Fannie Mae



Sources: Fannie Mae and Urban Institute.

Serious Delinquency Rates–Freddie Mac

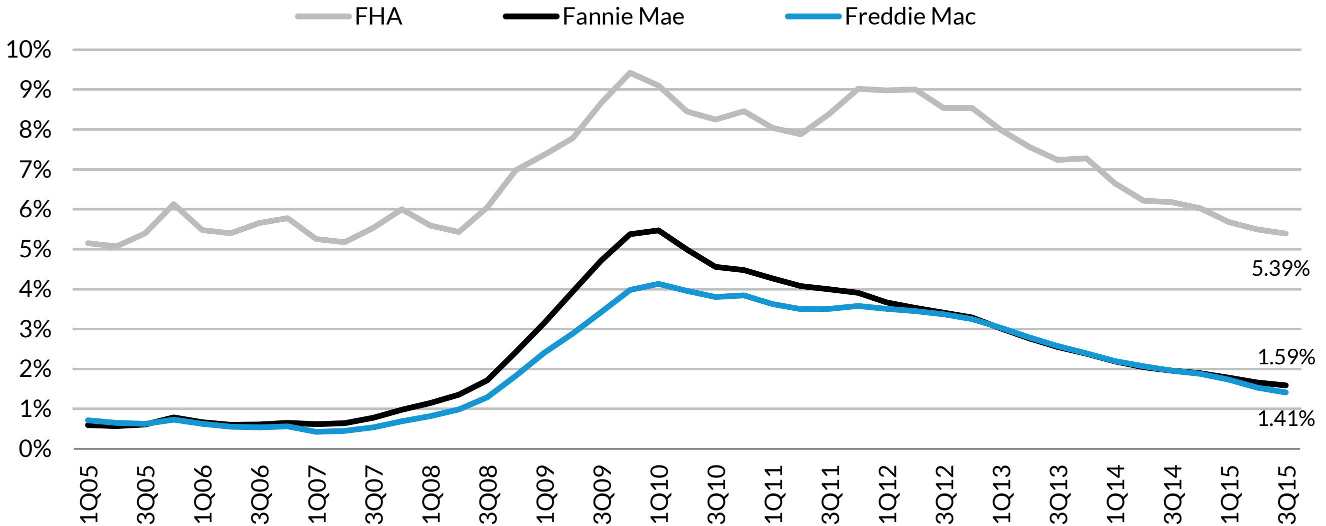


Sources: Freddie Mac and Urban Institute.
Note*: Following a change in Freddie reporting in September 2014, we switched from reporting credit enhanced delinquency rates to PMI credit enhanced delinquency rates.

SERIOUS DELINQUENCY RATES

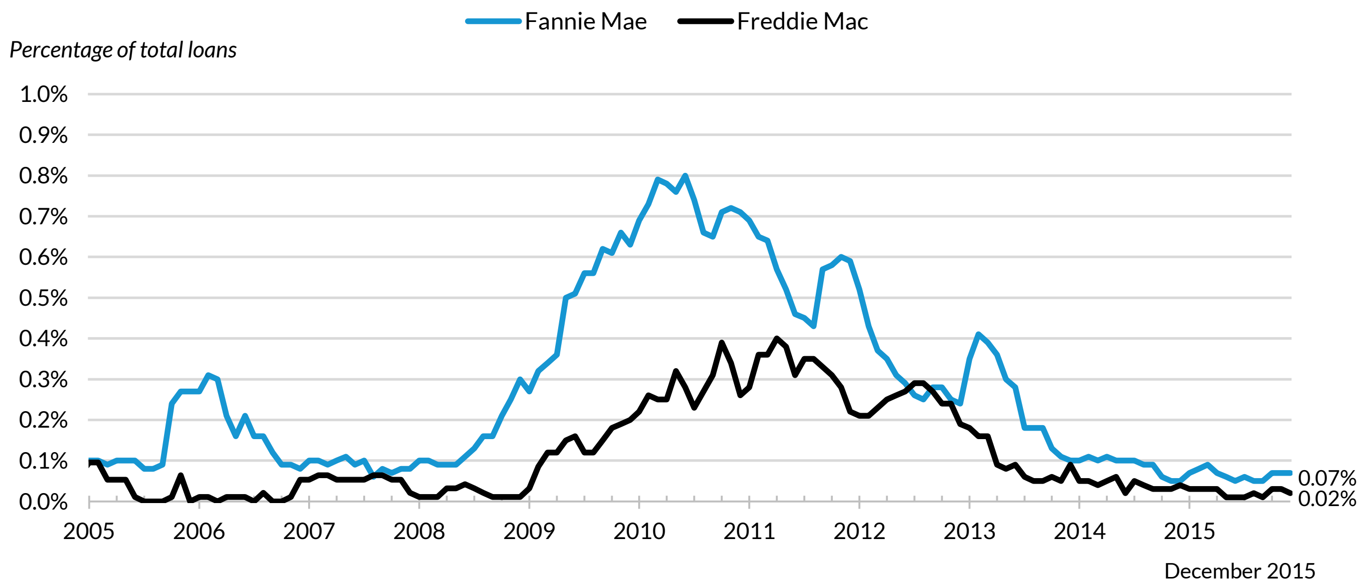
Serious delinquencies for FHA and GSE single-family loans continue to decline. GSE delinquencies remain higher relative to 2005-2007, while FHA delinquencies (which are much higher than their GSE counterparts) are now at levels similar to 2005-2007. GSE multifamily delinquencies have declined to pre-crisis levels, though they did not reach problematic levels even in the worst years.

Serious Delinquency Rates–Single-Family Loans



Sources: Fannie Mae, Freddie Mac, MBA Delinquency Survey and Urban Institute.
Note: Serious delinquency is defined as 90 days or more past due or in the foreclosure process.

Serious Delinquency Rates–Multifamily GSE Loans

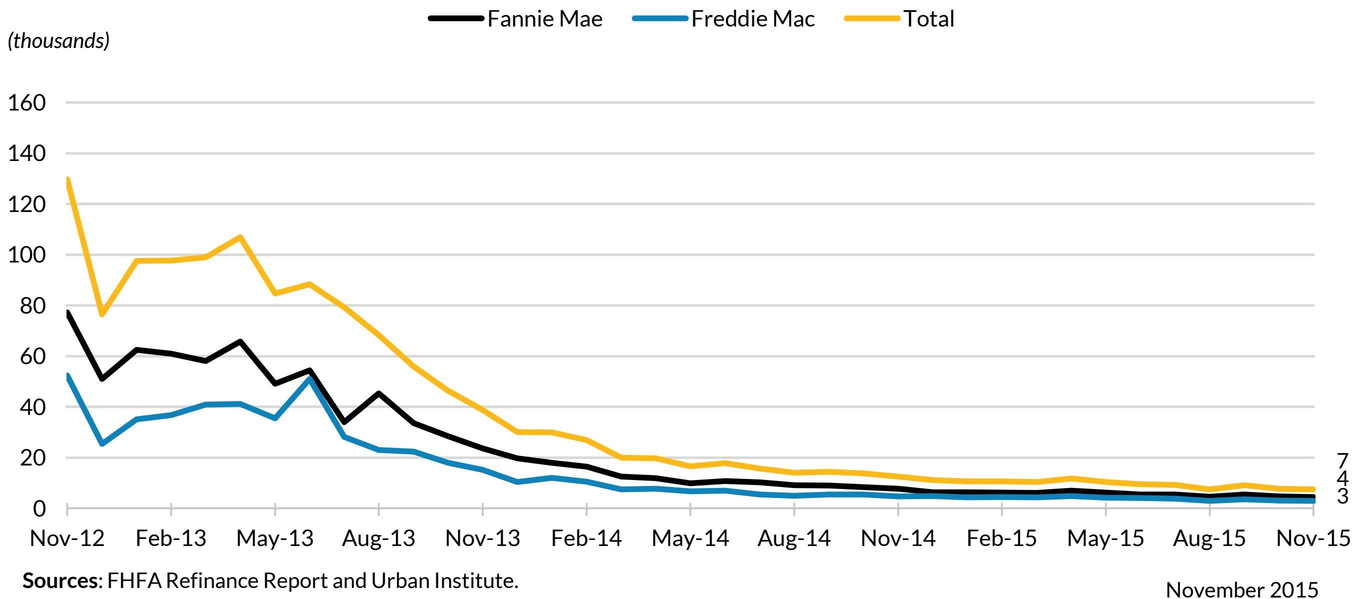


Sources: Fannie Mae, Freddie Mac and Urban Institute.
Note: Multifamily serious delinquency rate is the unpaid balance of loans 60 days or more past due, divided by the total unpaid balance.

GSES UNDER CONSERVATORSHIP
REFINANCE ACTIVITY

The Home Affordable Refinance Program (HARP) refinances have slowed considerably. Two factors are responsible for this: (1) higher interest rates, leaving fewer eligible loans where refinancing is economically advantageous (in-the-money), and (2) a considerable number of borrowers who have already refinanced. Since the program's Q2 2009 inception, HARP refinances total 3.4 million, accounting for 15 percent of all GSE refinances in this period.

Total HARP Refinance Volume



Sources: FHFA Refinance Report and Urban Institute.

November 2015

HARP Refinances

	November 2015	Year-to-date 2015	Inception to date	2014	2013	2012
Total refinances	146,664	1,948,323	22,357,361	1,536,788	4,081,911	4,750,530
Total HARP refinances	7,446	104,235	3,374,680	212,488	892,914	1,074,769
Share 80–105 LTV	77.3%	76.4%	70.1%	72.5%	56.4%	56.4%
Share 105–125 LTV	15.4%	15.6%	17.2%	17.2%	22.4%	22.4%
Share >125 LTV	7.3%	8.0%	12.7%	10.3%	21.2%	21%
All other streamlined refinances	15,276	190,888	3,712,123	268,026	735,210	729,235

Sources: FHFA Refinance Report and Urban Institute.

GSES UNDER CONSERVATORSHIP

GSE LOANS: POTENTIAL REFINANCES

To qualify for HARP, a loan must be originated before the June 2009 cutoff date, have a marked-to-market loan-to-value (MTM LTV) ratio above 80, and have no more than one delinquent payment in the past year and none in the past six months. There are 434,706 eligible loans, but 42 percent are out-of-the-money because the closing cost would exceed the long-term savings, leaving 252,940 loans where a HARP refinance is both permissible and economically advantageous for the borrower. Loans below the LTV minimum but meeting all other HARP requirements are eligible for GSE streamlined refinancing. Of the 5,459,037 loans in this category, 4,496,058 are in-the-money.

More than 75 percent of the GSE book of business that meets the pay history requirements was originated after the June, 2009 cutoff date. FHFA Director Mel Watt announced in May 2014 that they are not planning to extend the cutoff date. On May 8, 2015 Director Watt extended the deadline for the HARP program for an additional year, until the end of 2016.

Total loan count	27,069,657
Loans that do not meet pay history requirement	1,276,653
Loans that meet pay history requirement:	25,793,005
Pre-June 2009 origination	5,893,743
Post-June 2009 origination	19,899,262

Loans Meeting HARP Pay History Requirements

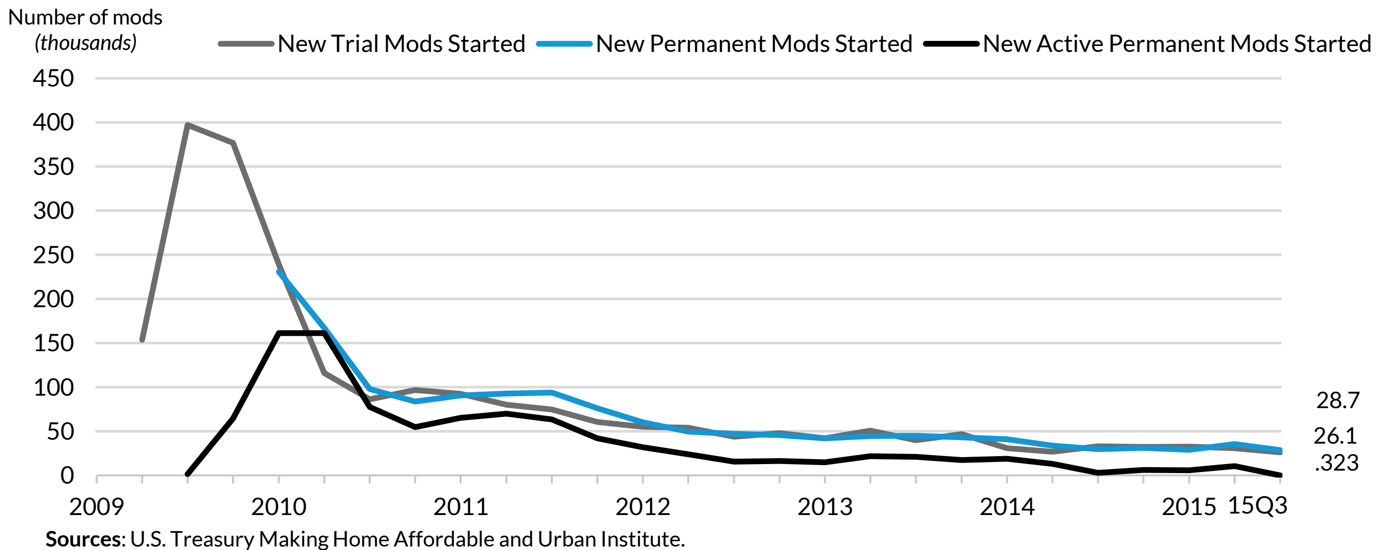
Pre-June 2009			
LTV category	*In-the-money*	*Out-of-the-money*	*Total*
≤80	4,496,058	962,979	5,459,037
>80	252,940	181,766	434,706
Total	4,748,998	1,144,745	5,893,743
Post-June 2009			
LTV category	*In-the-money*	*Out-of-the-money*	*Total*
≤80	3,745,989	13,307,451	17,053,440
>80	820,036	2,025,786	2,845,822
Total	4,566,024	15,333,237	19,899,262

Sources: CoreLogic Prime Servicing as of December 2015 and Urban Institute.
Note: Figures are scaled up from source data to account for data coverage of the GSE active loan market (based on MBS data from eMBS). Shaded box indicates HARP-eligible loans that are in-the-money.

MODIFICATION ACTIVITY
HAMP ACTIVITY

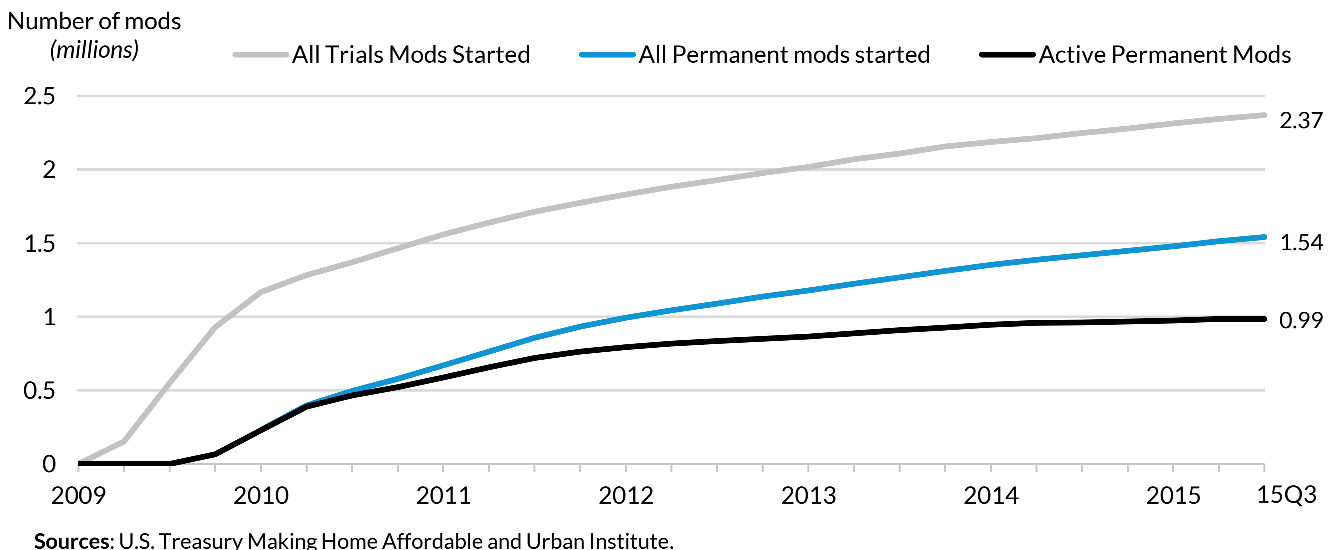
In the third quarter of 2015, both new HAMP trial mods and new permanent mods exhibited their lowest quarterly total ever at 26,107 and 28,748, respectively. Cumulative permanent HAMP mods started now total 1.54 million. New active permanent mods experienced even sharper decline to 323 in Q3 2015, compared to 3,200 the same quarter a year ago. As a result, active permanent mods have remained constant at 0.99 million.

New HAMP Modifications



Sources: U.S. Treasury Making Home Affordable and Urban Institute.

Cumulative HAMP Modifications



Sources: U.S. Treasury Making Home Affordable and Urban Institute.

MODIFICATION ACTIVITY

MODIFICATION BY TYPE OF ACTION AND BEARER OF RISK

The share of modifications that received principal reductions fell to 8.1 percent in Q3 2015, after its sharp increase from 6.6 percent in Q4 2014 to 14.7 percent in Q1 2015. There are two reasons for this decline. First, a lower share (1.4 percent) of government loans are now getting principal reductions, down from 5.8 percent in the first quarter of 2015. Second, the share of portfolio loans receiving principal reductions has decreased significantly, from 50.3 percent in Q1 2015 to 29.2 percent in Q3 2015. The GSEs generally do not allow principal reduction modifications; the FHFA is studying whether a change in this policy is warranted.

Changes in Loan Terms for Modifications

	Modification Quarter						One quarter % change	One year % change
	14Q2	14Q3	14Q4	15Q1	15Q2	15Q3		
Capitalization	58.7	71	84	88.8	89.9	88.2	-1.9	24.3
Rate reduction	71.9	66.4	65	68.1	68.8	69.2	0.6	4.2
Rate freeze	7.2	7.6	8.4	7.5	7.6	10.3	35.6	35.9
Term extension	84.5	82.4	84.3	85.3	82.0	85.8	4.6	4.2
Principal reduction	5	6.9	6.6	14.7	10	8.1	-19	17.3
Principal deferral	11.5	16	10.5	9.9	9.8	10.4	6.8	-34.8
Not reported*	0.7	0.5	0.4	0.4	0.4	0.4	-1.7	-28.3

Sources: OCC Mortgage Metrics Report for the Third Quarter of 2015 and Urban Institute.
Note: This table presents modifications of each type as a share of total modifications. Columns sum to over 100% because loans often receive modifications with multiple features.
*Processing constraints at some servicers prevented them from reporting specific modified term(s).

Type of Modification Action by Investor and Product Type

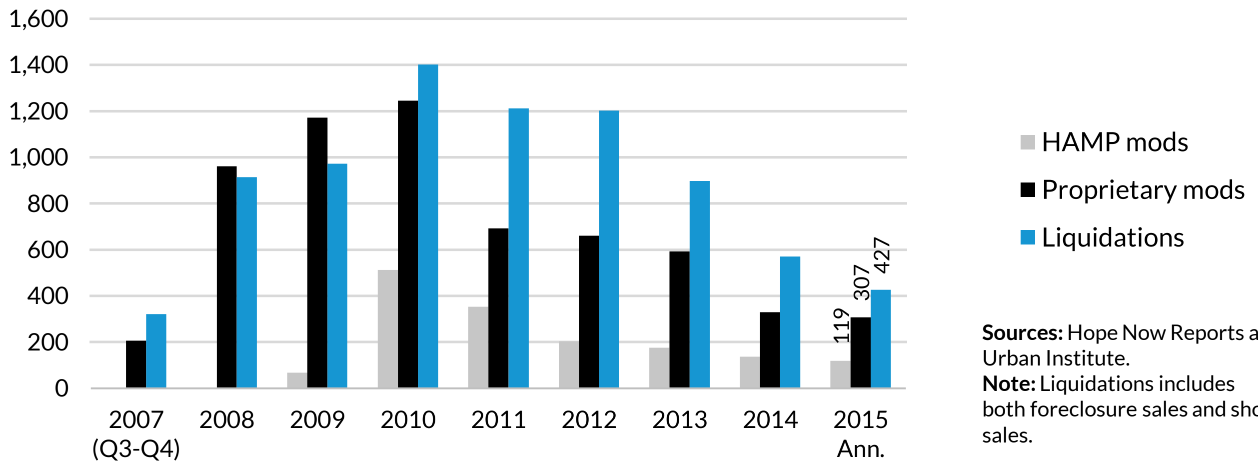
	Fannie Mae	Freddie Mac	Government-guaranteed	Private Investor	Portfolio	Overall
Capitalization	98.6%	98.7%	76.8%	92.9%	96.1%	88.2%
Rate reduction	41.5%	14.7%	86.4%	73.1%	72.5%	69.2%
Rate freeze	19.9%	14.6%	3.4%	19.1%	9.3%	10.3%
Term extension	96.4%	97.1%	97.9%	42.3%	62.9%	85.8%
Principal reduction	0.1%	0.1%	1.4%	25.1%	29.2%	8.1%
Principal deferral	15.9%	12.6%	0.3%	26.3%	19.1%	10.4%
Not reported*	0.01%	0.03%	0.2%	1.2%	0.8%	0.4%

Sources: OCC Mortgage Metrics Report for the Third Quarter of 2015 and Urban Institute.
Note: This table presents modifications of each type as a share of total modifications. Columns sum to over 100% because loans often receive modifications with multiple features.
*Processing constraints at some servicers prevented them from reporting specific modified term(s).

MODIFICATIONS AND LIQUIDATIONS

Total modifications (HAMP and proprietary) are now roughly equal to total liquidations. Hope Now reports show 7,701,105 borrowers have received a modification since Q3 2007, compared with 7,884,822 liquidations in the same period. Modification activity slowed significantly in 2014 and remained level in 2015, averaging 34,895 monthly through November. Liquidations have continued to decline, averaging 35,580 per month over this period compared to 47,515 per month in 2014.

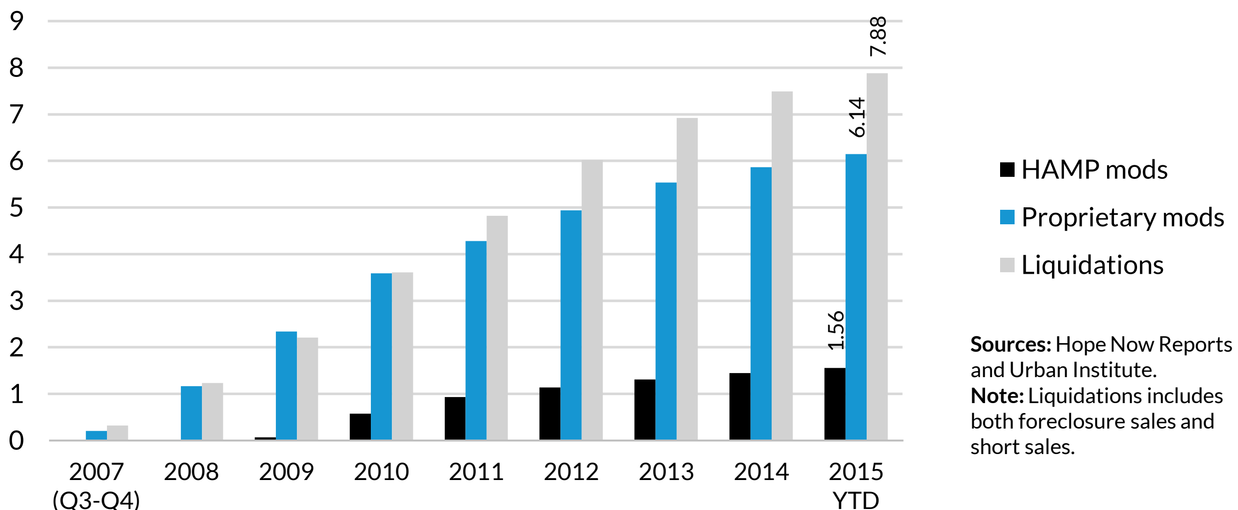
Loan Modifications and Liquidations



Sources: Hope Now Reports and Urban Institute.
Note: Liquidations includes both foreclosure sales and short sales.

November 2015

Cumulative Modifications and Liquidations



Sources: Hope Now Reports and Urban Institute.
Note: Liquidations includes both foreclosure sales and short sales.

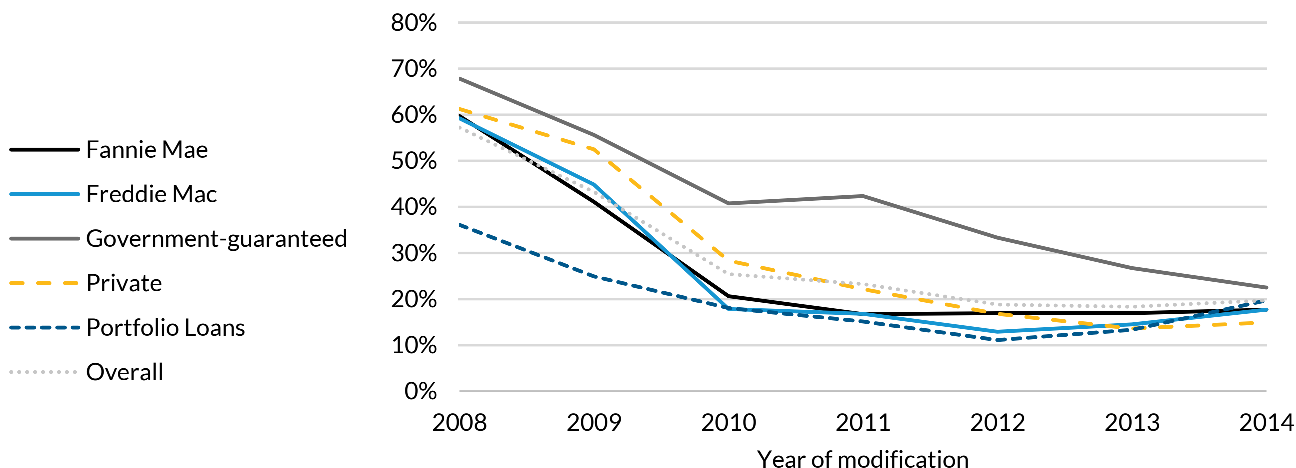
November 2015

MODIFICATION ACTIVITY

MODIFICATION REDEFAULT RATES BY BEARER OF THE RISK

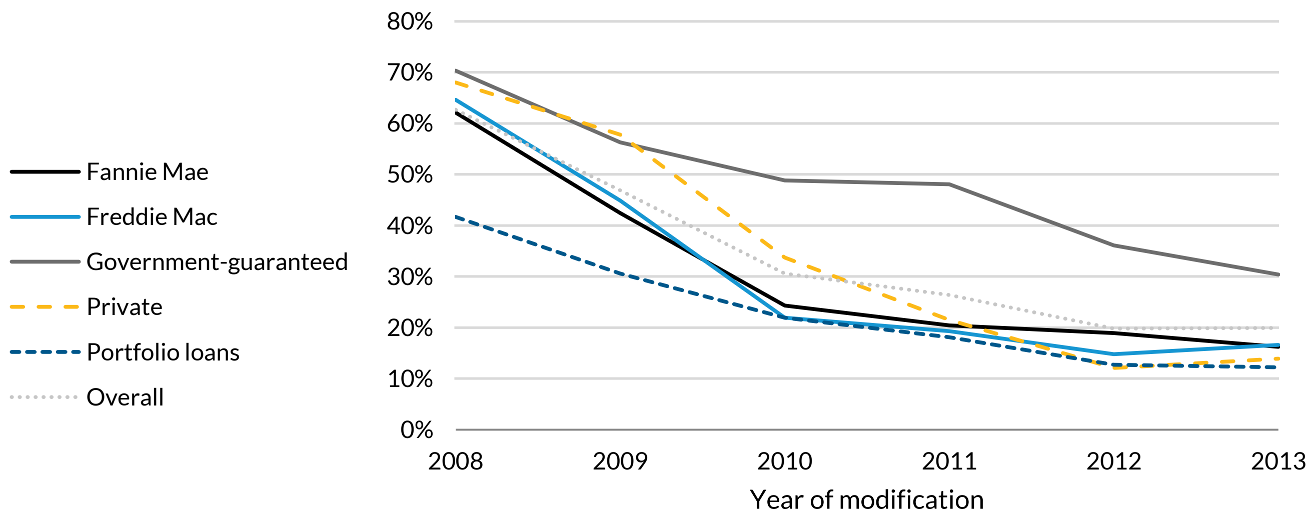
Redefault rates on modified loans have come down dramatically from 2008 to 2014. For the period as a whole, the steepest drops have been on private label modifications. More recently, there have been sharp declines in the redefault rates on government-guaranteed modifications, although this product type still has higher redefault rates than others.

Redefault Rate 12 Months after Modification



Sources: OCC Mortgage Metrics Report for the Third Quarter of 2015 and Urban Institute.

Redefault Rate 24 Months after Modification



Sources: OCC Mortgage Metrics Report for the Third Quarter of 2015 and Urban Institute.

AGENCY GROSS AND NET ISSUANCE

The low mortgage rates and reduced FHA premiums have resulted in agency gross issuance of $90.7 billion in the first month of 2016, a 4 percent increase year-over-year. Net issuance (which excludes repayments, prepayments, and refinances on outstanding mortgages) remains low.

Agency Gross Issuance

Issuance Year	GSEs	Ginnie Mae	Total
2000	$360.6	$102.2	$462.8
2001	$885.1	$171.5	$1,056.6
2002	$1,238.9	$169.0	$1,407.9
2003	$1,874.9	$213.1	$2,088.0
2004	$872.6	$119.2	$991.9
2005	$894.0	$81.4	$975.3
2006	$853.0	$76.7	$929.7
2007	$1,066.2	$94.9	$1,161.1
2008	$911.4	$267.6	$1,179.0
2009	$1,280.0	$451.3	$1,731.3
2010	$1,003.5	$390.7	$1,394.3
2011	$879.3	$315.3	$1,194.7
2012	$1,288.8	$405.0	$1,693.8
2013	$1,176.6	$393.6	$1,570.1
2014	$650.9	$296.3	$947.2
2015	$845.7	$436.3	$1,282.0
2016 YTD	$58.1	$32.5	$90.6
%Change year-over-year	20.4%	50.4%	29.7%
2016 Ann.	$697.1	$389.8	$1,086.8

Agency Net Issuance

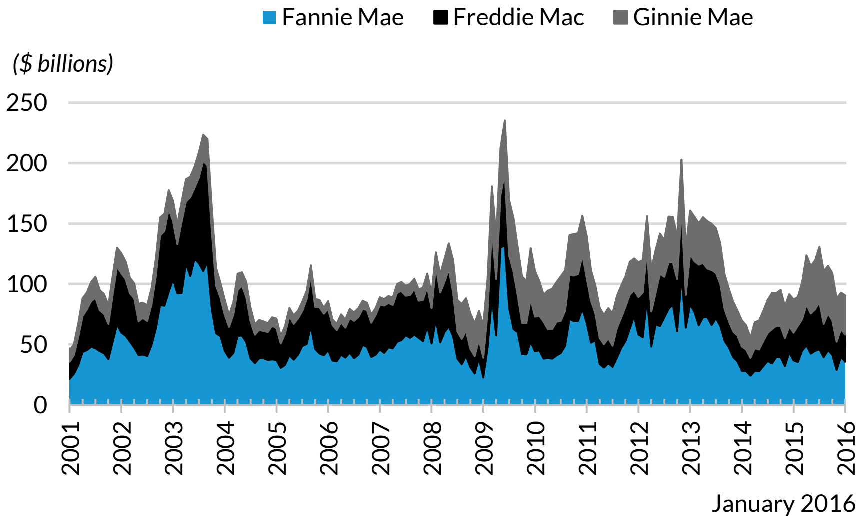
Issuance Year	GSEs	Ginnie Mae	Total
2000	$159.8	$29.3	$189.1
2001	$367.8	-$9.9	$357.9
2002	$357.6	-$51.2	$306.4
2003	$335.0	-$77.6	$257.4
2004	$83.3	-$40.1	$43.2
2005	$174.4	-$42.2	$132.1
2006	$313.6	$0.3	$313.8
2007	$514.7	$30.9	$545.5
2008	$314.3	$196.4	$510.7
2009	$249.5	$257.4	$506.8
2010	-$305.5	$198.2	-$107.3
2011	-$133.4	$149.4	$16.0
2012	-$46.5	$118.4	$71.9
2013	$66.5	$85.8	$152.3
2014	$30.3	$59.8	$90.1
2015	$75.0	$94.5	$169.5
2016 YTD	$0.4	$7.1	$7.6
%Change year-over-year	-237.6%	208.5%	281.8%
2016 Ann.	$5.4	$85.4	$90.7

Sources: eMBS and Urban Institute.
Note: Dollar amounts are in billions. Annualized figure based on data from January 2016.

AGENCY GROSS ISSUANCE & FED PURCHASES

Monthly Gross Issuance

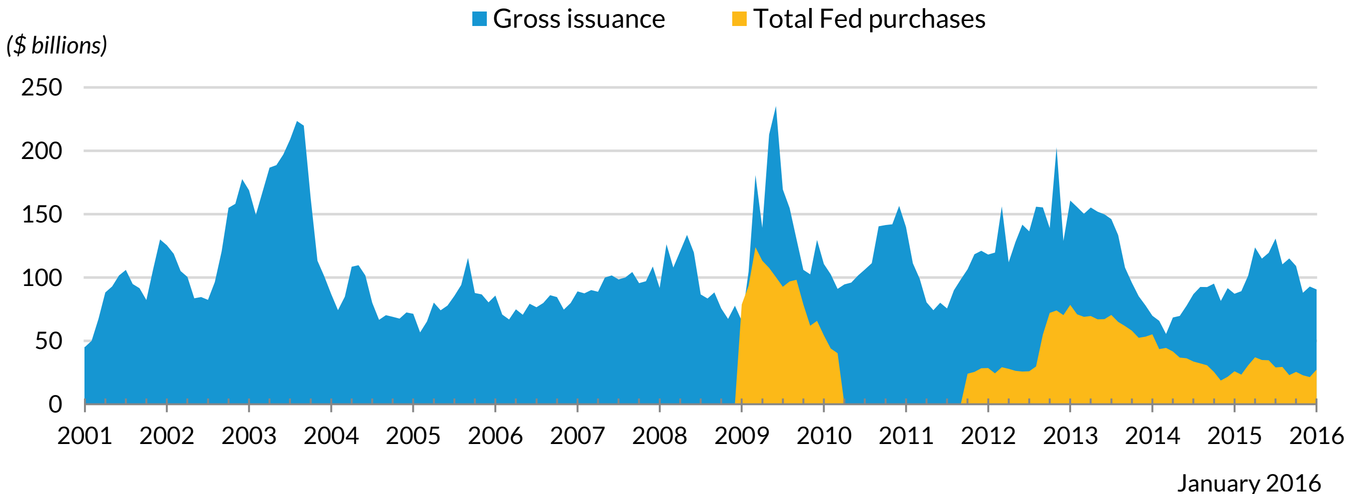
While government and GSE lending have dominated the mortgage market since the crisis, there has been a change in the mix. The Ginnie Mae share reached a peak of 28 percent of total agency issuance in 2010, declined to 25 percent in 2013, and has bounced back sharply since then. The Ginnie Mae issuance stood at 36 percent in January 2016, as the FHA refinance activity surged with the reduction in the FHA insurance premium.



Sources: eMBS, Federal Reserve Bank of New York, and Urban Institute.

Fed Absorption of Agency Gross Issuance

In October 2014, the Fed ended its purchase program, but continued buying at a much reduced level, reinvesting funds from pay downs on mortgages and agency debentures into the mortgage market. Since then, the Fed's absorption of gross issuance has been between 20 and 30 percent. In January 2016, total Fed purchase rose to $27 billion, yielding Fed absorption of gross issuance of 30 percent, up from 23 percent last month.

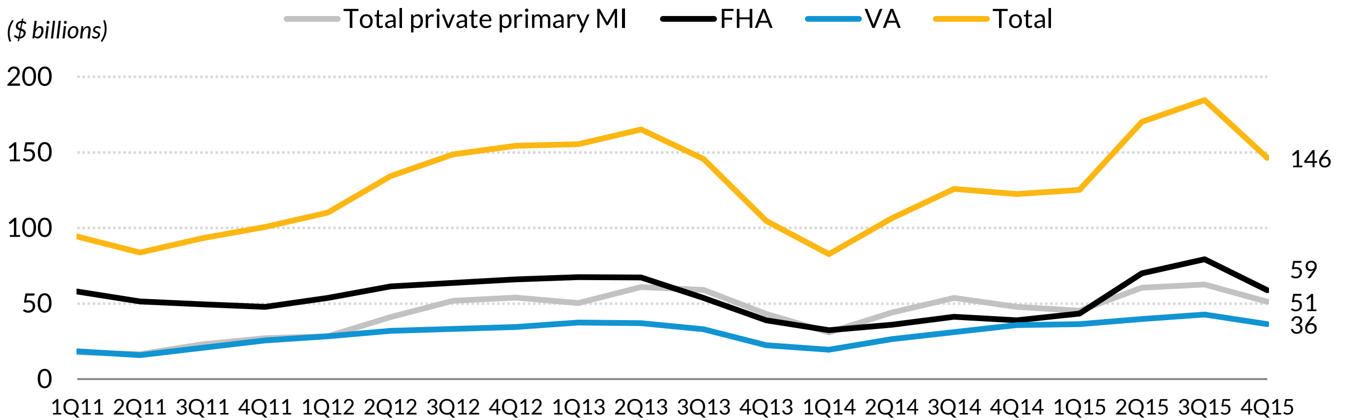


Sources: eMBS, Federal Reserve Bank of New York and Urban Institute.

AGENCY ISSUANCE
MORTGAGE INSURANCE ACTIVITY

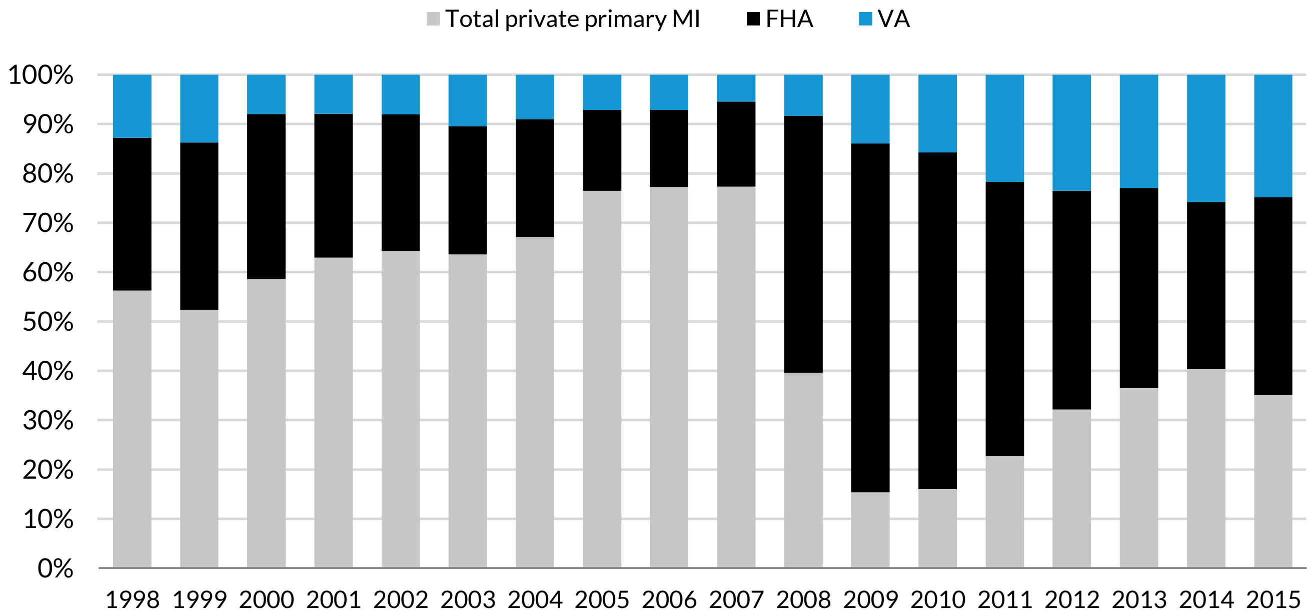
MI Activity

In 2015 Q4, mortgage insurance activity via the FHA, VA and private insurers declined sharply to $146.4 billion, down from last quarter's $184.7 billion but still up 20 percent year over year from the same quarter in 2014. In 2015, while all three MI channels experienced growth, FHA led the pack, bolstered by lower premiums. FHA's market share stands at 40 percent in 2015, compared to the private insurance market's 35 percent. VA lending achieved the agency's highest annual origination volume on record.



Sources: Inside Mortgage Finance and Urban Institute.

MI Market Share



Sources: Inside Mortgage Finance and Urban Institute.

MORTGAGE INSURANCE ACTIVITY

FHA premiums rose significantly in the years following the housing crash, with annual premiums rising 170% from 2008 to 2013 as FHA worked to shore up its finances. In a move announced by President Obama just after the new year, annual premiums were cut by 50 bps. We expect this reduction to significantly mitigate FHA's problem of adverse selection, in which lower-FICO borrowers disproportionately gravitate to FHA financing over GSE with PMI. As shown in the bottom table, a borrower putting 3.5% down will now find FHA more economical regardless of their FICO score.

FHA MI Premiums for Typical Purchase Loan

Case number date	Upfront mortgage insurance premium (UFMIP) paid	Annual mortgage insurance premium (MIP)
1/1/2001 - 7/13/2008	150	50
7/14/2008 - 4/5/2010*	175	55
4/5/2010 - 10/3/2010	225	55
10/4/2010 - 4/17/2011	100	90
4/18/2011 - 4/8/2012	100	115
4/9/2012 - 6/10/2012	175	125
6/11/2012 - 3/31/2013[a]	175	125
4/1/2013 – 1/25/2015[b]	175	135
Beginning 1/26/2015[c]	175	85

Sources: Ginnie Mae and Urban Institute.
Note: A typical purchase loan has an LTV over 95 and a loan term longer than 15 years. Mortgage insurance premiums are listed in basis points.
* For a short period in 2008 the FHA used a risk based FICO/LTV matrix for MI.
[a] Applies to purchase loans less than or equal to $625,500. Those over that amount have an annual premium of 150 bps.
[b] Applies to purchase loans less than or equal to $625,500. Those over that amount have an annual premium of 155 bps.
[c] Applies to purchase loans less than or equal to $625,500. Those over that amount have an annual premium of 105 bps.

Initial Monthly Payment Comparison: FHA vs. PMI

Assumptions	
Property Value	$250,000
Loan Amount	$241,250
LTV	96.5
Base Rate	
Conforming	3.89%
FHA	3.50%

FICO	620 - 639	640 - 659	660 - 679	680 - 699	700 - 719	720 - 739	740 - 759	760 +
FHA MI Premiums								
FHA UFMIP	1.75	1.75	1.75	1.75	1.75	1.75	1.75	1.75
FHA MIP	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85
PMI								
GSE LLPA*	3.75	3.00	2.50	1.75	1.75	1.25	1.00	1.00
PMI Annual MIP	1.48	1.48	1.48	1.31	1.31	1.10	1.10	1.05
Monthly Payment								
FHA	$1,273	$1,273	$1,273	$1,273	$1,273	$1,273	$1,273	$1,273
PMI	$1,533	$1,512	$1,498	$1,442	$1,442	$1,386	$1,379	$1,369
PMI Advantage	($260)	($239)	($225)	($169)	($169)	($113)	($106)	($96)

Sources: Genworth Mortgage Insurance, Ginnie Mae and Urban Institute.
Note: Mortgage insurance premiums listed in percentage points. Grey shade indicates FHA monthly payment is more favorable. The PMI monthly payment calculation does not include special programs like Fannie Mae's MyCommunitMortgage (MCM) and Freddie Mac's Home Possible (HP), both offer more favorable rates for low- to moderate-income borrowers.
LLPA= Loan Level Price Adjustment, described in detail on page 20.

SPECIAL FEATURE: LOAN LEVEL GSE CREDIT DATA

FANNIE MAE COMPOSITION

Since 2008, the composition of loans purchased by Fannie Mae has shifted towards borrowers with higher FICO scores. For example, 69.7 percent of loans originated from 2011 to 2014 were for borrowers with FICO scores above 750, compared to 40.7 percent of borrowers in 2007 and 36.6 percent from 1999-2004.

Balance on 30-year, Fixed-rate, Full-doc, Amortizing Loans

Origination Year	Origination FICO	LTV				Total
		≤70	70 to 80	80 to 90	>90	
1999-2004	≤700	9.4%	15.0%	4.5%	4.5%	33.4%
	700 to 750	9.2%	14.2%	3.4%	3.2%	30.0%
	>750	15.5%	16.1%	2.7%	2.3%	36.6%
	Total	34.0%	45.3%	10.6%	10.0%	100.0%
2005	≤700	12.6%	15.5%	3.4%	2.3%	33.8%
	700 to 750	9.8%	13.3%	2.1%	1.4%	26.6%
	>750	17.4%	18.6%	2.1%	1.4%	39.6%
	Total	39.7%	47.5%	7.7%	5.1%	100.0%
2006	≤700	12.7%	16.1%	3.5%	2.2%	34.5%
	700 to 750	8.9%	13.5%	2.2%	1.3%	25.9%
	>750	15.8%	20.1%	2.4%	1.4%	39.7%
	Total	37.3%	49.8%	8.1%	4.9%	100.0%
2007	≤700	10.8%	15.1%	5.3%	3.1%	34.3%
	700 to 750	7.8%	12.5%	3.0%	1.7%	25.0%
	>750	15.2%	20.1%	3.3%	2.0%	40.7%
	Total	33.8%	47.7%	11.6%	6.8%	100.0%
2008	≤700	7.6%	7.2%	2.9%	2.0%	19.7%
	700 to 750	7.8%	11.9%	4.1%	2.7%	26.4%
	>750	19.0%	25.7%	5.8%	3.4%	53.9%
	Total	34.4%	44.7%	12.7%	8.1%	100.0%
2009-2010	≤700	3.6%	2.9%	0.3%	0.2%	6.9%
	700 to 750	8.2%	10.8%	1.7%	0.8%	21.5%
	>750	32.3%	33.5%	4.0%	1.7%	71.5%
	Total	44.1%	47.2%	6.0%	2.7%	100.0%
2011-2014	≤700	2.7%	4.1%	0.9%	1.3%	9.0%
	700 to 750	5.5%	9.6%	2.6%	3.6%	21.3%
	>750	23.9%	31.5%	6.9%	7.3%	69.7%
	Total	32.1%	45.2%	10.4%	12.3%	100.0%
Total		**35.5%**	**46.0%**	**9.8%**	**8.7%**	**100.0%**

Sources: Fannie Mae and Urban Institute.
Note: Fannie Mae loan level credit data includes loans originated from Q1 1999 to Q4 2014. The percentages are weighted by origination balance.

SPECIAL FEATURE: LOAN LEVEL GSE CREDIT DATA

FANNIE MAE DEFAULT RATE

While the composition of Fannie Mae loans originated in 2007 was similar to that of 2004 and earlier vintage years, 2007 loans experienced a much higher default rate due to the sharp drop in home values in the recession. Originations from 2009 and later have pristine credit characteristics and a more favorable home price environment, contributing to very low default rates.

Default Rate on 30-year, Fixed-rate, Full-doc, Amortizing Loans

Origination Year	Origination FICO	LTV				Total
		≤70	70 to 80	80 to 90	>90	
1999-2004	≤700	3.6%	4.5%	5.9%	6.9%	4.7%
	700 to 750	1.1%	1.8%	2.8%	2.9%	1.9%
	>750	0.4%	0.8%	1.5%	1.7%	0.7%
	Total	1.5%	2.3%	3.8%	4.4%	2.4%
2005	≤700	13.4%	17.0%	19.6%	21.3%	16.2%
	700 to 750	6.2%	9.5%	12.4%	13.0%	8.7%
	>750	2.1%	4.4%	7.0%	8.0%	3.7%
	Total	6.7%	9.9%	14.1%	15.3%	9.3%
2006	≤700	17.8%	22.0%	25.3%	26.9%	21.1%
	700 to 750	8.4%	13.0%	15.7%	16.4%	11.8%
	>750	2.9%	5.7%	8.9%	9.3%	4.9%
	Total	9.2%	13.0%	17.8%	19.1%	12.3%
2007	≤700	19.1%	23.0%	30.3%	30.7%	23.6%
	700 to 750	8.2%	13.1%	18.8%	18.2%	12.6%
	>750	2.7%	5.6%	10.7%	10.6%	5.2%
	Total	9.2%	13.1%	21.7%	21.6%	13.4%
2008	≤700	13.9%	16.6%	22.7%	22.7%	17.1%
	700 to 750	4.8%	7.7%	12.5%	12.2%	8.1%
	>750	1.2%	2.7%	6.1%	6.7%	2.8%
	Total	4.8%	6.2%	11.9%	12.5%	7.0%
2009-2010	≤700	3.4%	4.3%	4.3%	5.4%	3.9%
	700 to 750	0.8%	1.6%	2.1%	2.6%	1.4%
	>750	0.2%	0.5%	0.9%	1.2%	0.4%
	Total	0.6%	1.0%	1.4%	1.9%	0.9%
2011-2014	≤700	0.6%	0.8%	0.6%	0.7%	0.7%
	700 to 750	0.2%	0.2%	0.3%	0.3%	0.2%
	>750	0.0%	0.1%	0.1%	0.1%	0.1%
	Total	0.1%	0.2%	0.2%	0.3%	0.2%
Total		**2.1%**	**3.1%**	**5.0%**	**4.4%**	**3.0%**

Sources: Fannie Mae and Urban Institute.
Note: Fannie Mae loan level credit data includes loans originated from Q1 1999 to Q4 2014, with performance information on these loans through 3Q2015. Default is defined as more than six months delinquent or disposed of via short sales, third-party sales, deeds-in-lieu of foreclosure, or real estate owned (REO acquisitions).

SPECIAL FEATURE: LOAN LEVEL GSE CREDIT DATA
FREDDIE MAC COMPOSITION

Since 2008, the composition of loans purchased by Freddie Mac has shifted towards borrowers with higher FICO scores. For example, 65.2 percent of loans originated from 2011 to 2014 were for borrowers with FICO scores above 750, compared to 38.9 percent of borrowers in 2007 and 33.9 percent from 1999-2004.

Balance on 30-year, Fixed-rate, Full-doc, Amortizing Loans

Origination Year	Origination FICO	LTV				Total
		≤70	70 to 80	80 to 90	>90	
1999-2004	≤700	8.1%	16.3%	5.2%	5.2%	34.7%
	700 to 750	9.3%	15.9%	3.3%	2.9%	31.3%
	>750	14.4%	15.7%	2.2%	1.7%	33.9%
	Total	31.7%	47.8%	10.6%	9.8%	100.0%
2005	≤700	10.6%	17.0%	3.4%	2.9%	33.9%
	700 to 750	9.4%	15.4%	2.0%	1.6%	28.4%
	>750	15.8%	18.8%	1.7%	1.4%	37.7%
	Total	35.8%	51.2%	7.0%	5.9%	100.0%
2006	≤700	10.1%	17.3%	3.4%	3.2%	34.0%
	700 to 750	8.3%	16.1%	1.9%	1.5%	27.9%
	>750	14.4%	20.7%	1.7%	1.3%	38.1%
	Total	32.8%	54.1%	7.1%	6.0%	100.0%
2007	≤700	9.2%	15.5%	4.6%	4.8%	34.0%
	700 to 750	7.5%	14.3%	2.6%	2.6%	27.0%
	>750	14.4%	19.5%	2.5%	2.5%	38.9%
	Total	31.1%	49.4%	9.7%	9.9%	100.0%
2008	≤700	7.3%	8.7%	3.1%	2.1%	21.3%
	700 to 750	9.2%	13.1%	3.7%	2.4%	28.3%
	>750	21.6%	21.5%	4.7%	2.6%	50.4%
	Total	38.1%	43.3%	11.5%	7.1%	100.0%
2009-2010	≤700	3.9%	3.2%	0.3%	0.2%	7.7%
	700 to 750	9.3%	11.9%	1.7%	0.9%	23.8%
	>750	32.5%	31.0%	3.6%	1.4%	68.5%
	Total	45.8%	46.1%	5.6%	2.5%	100.0%
2011-2014	≤700	3.3%	3.9%	0.9%	1.3%	9.5%
	700 to 750	6.9%	11.7%	2.8%	4.0%	25.3%
	>750	22.3%	30.4%	5.9%	6.6%	65.2%
	Total	32.6%	45.9%	9.7%	11.8%	100.0%
Total		**35.1%**	**47.7%**	**9.0%**	**8.3%**	**100.0%**

Sources: Freddie Mac and Urban Institute.
Note: Freddie Mac loan level credit data includes loans originated from Q1 1999 to Q4 2014. The percentages are weighted by origination balance. The Freddie Mac analysis included mortgages with original terms of 241-420 months, to be consistent with Fannie Mae data, which contained only 30-year mortgages.

SPECIAL FEATURE: LOAN LEVEL GSE CREDIT DATA

FREDDIE MAC DEFAULT RATE

While the composition of Freddie Mac loans originated in 2007 was similar to that of 2004 and earlier vintage years, 2007 loans experienced a much higher default rate due to the sharp drop in home values in the recession. Originations from 2009 and later have pristine credit characteristics and a more favorable home price environment, contributing to very low default rates.

Default Rate on 30-year, Fixed-rate, Full-doc, Amortizing Loans

Origination Year	Origination FICO	LTV				Total
		≤70	70 to 80	80 to 90	>90	
1999-2004	≤700	3.4%	4.8%	7.0%	7.6%	5.2%
	700 to 750	1.2%	2.0%	3.2%	3.3%	2.0%
	>750	0.4%	1.0%	1.7%	2.1%	0.8%
	Total	1.4%	2.6%	4.7%	5.4%	2.7%
2005	≤700	11.7%	16.0%	19.0%	20.5%	15.3%
	700 to 750	5.6%	9.2%	12.2%	12.6%	8.4%
	>750	1.9%	4.4%	7.0%	8.1%	3.6%
	Total	5.8%	9.7%	14.2%	15.5%	9.0%
2006	≤700	15.4%	20.5%	23.7%	26.2%	19.8%
	700 to 750	7.8%	12.4%	14.9%	15.0%	11.3%
	>750	2.6%	5.8%	8.7%	9.3%	4.9%
	Total	7.9%	12.5%	17.7%	19.7%	11.8%
2007	≤700	16.4%	21.9%	27.6%	30.2%	22.3%
	700 to 750	7.6%	13.2%	17.6%	17.9%	12.5%
	>750	2.6%	6.2%	10.0%	11.2%	5.4%
	Total	7.9%	13.2%	20.3%	22.1%	13.1%
2008	≤700	12.7%	16.5%	22.7%	21.8%	16.6%
	700 to 750	4.5%	8.1%	12.6%	11.3%	7.8%
	>750	1.3%	3.2%	6.6%	6.2%	2.9%
	Total	4.3%	7.4%	12.9%	12.6%	7.2%
2009-2010	≤700	2.8%	4.0%	4.4%	4.6%	3.4%
	700 to 750	0.7%	1.6%	1.8%	2.2%	1.3%
	>750	0.2%	0.5%	1.0%	1.1%	0.4%
	Total	0.5%	1.0%	1.4%	1.8%	0.8%
2011-2014	≤700	0.4%	0.4%	0.3%	0.4%	0.4%
	700 to 750	0.1%	0.1%	0.2%	0.2%	0.1%
	>750	0.0%	0.0%	0.1%	0.1%	0.0%
	Total	0.1%	0.1%	0.1%	0.2%	0.1%
Total		**2.3%**	**4.1%**	**6.3%**	**6.4%**	**3.9%**

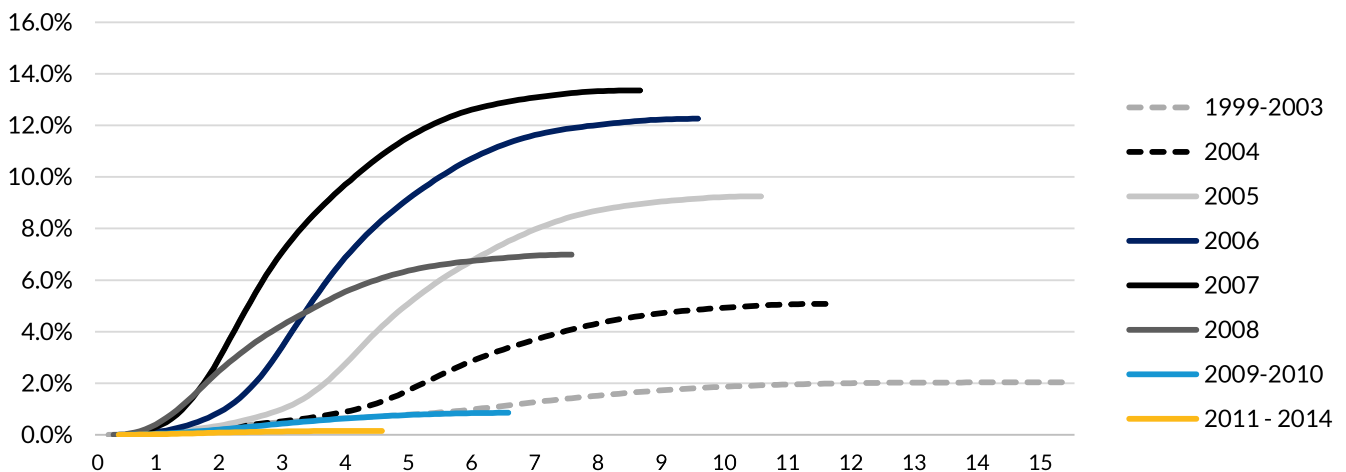
Sources: Freddie Mae and Urban Institute.
Note: Freddie Mac loan level credit data includes loans originated from Q1 1999 to Q4 2014, with performance information on these loans through Q2 2015. Default is defined as six months delinquent or disposed of via short sales, third-party sales, deeds-in-lieu of foreclosure, or real estate owned (REO acquisitions). The Freddie Mac analysis included mortgages with original terms of 241-420 months, to be consistent with Fannie Mae data, which contained only 30-year mortgages.

SPECIAL FEATURE: LOAN LEVEL GSE CREDIT DATA

DEFAULT RATE BY VINTAGE

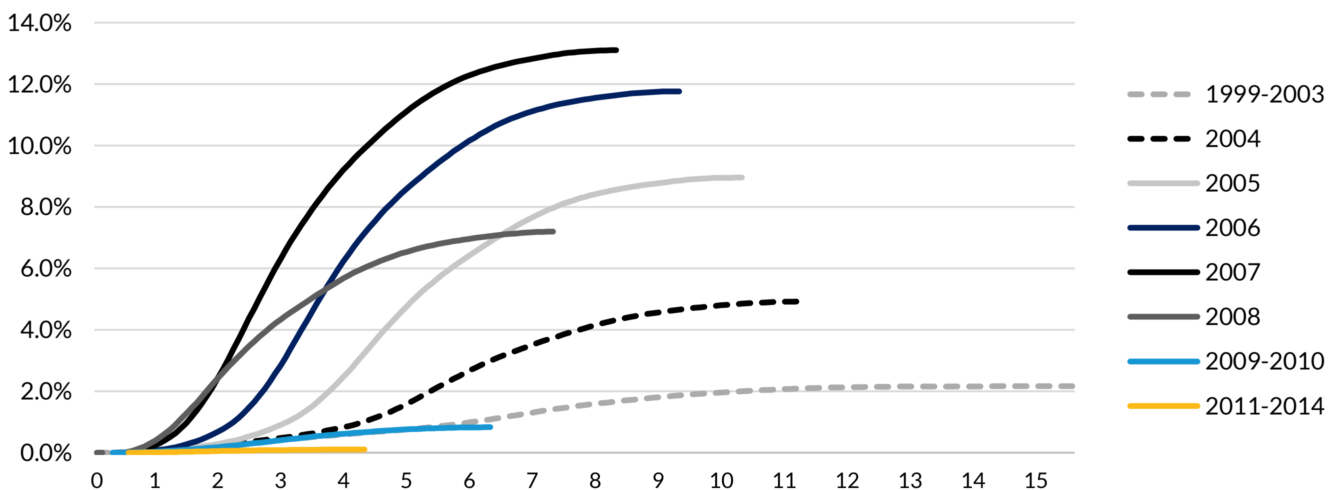
With cleaner books of business and the housing recovery underway, default rates for the GSEs are much lower than they were just a few years ago. For Fannie Mae and Freddie Mac's 1999-2003 vintages, cumulative defaults total around 2 percent, while cumulate defaults for the 2007 vintage are around 13 percent. For both Fannie Mae and Freddie Mac, cumulative defaults from post-2009 vintages are on pace to fall below pre-2003 levels. For Fannie loans 55 months after origination, the cumulative default rate from 2009-10 and 2011-14 are about 0.72 and 0.15 percent, respectively, compared to the cumulative default rate from 1999-2003 of 0.72 percent. For Freddie loans 52 months after origination, the cumulative default rates total 0.67 percent from 2009-10 and 0.10 percent from 2011-14, compared to the rate from 1999-2003 of 0.65 percent.

Fannie Mae Cumulative Default Rate by Vintage Year



Sources: Fannie Mae and Urban Institute.

Freddie Mac Cumulative Default Rate by Vintage Year



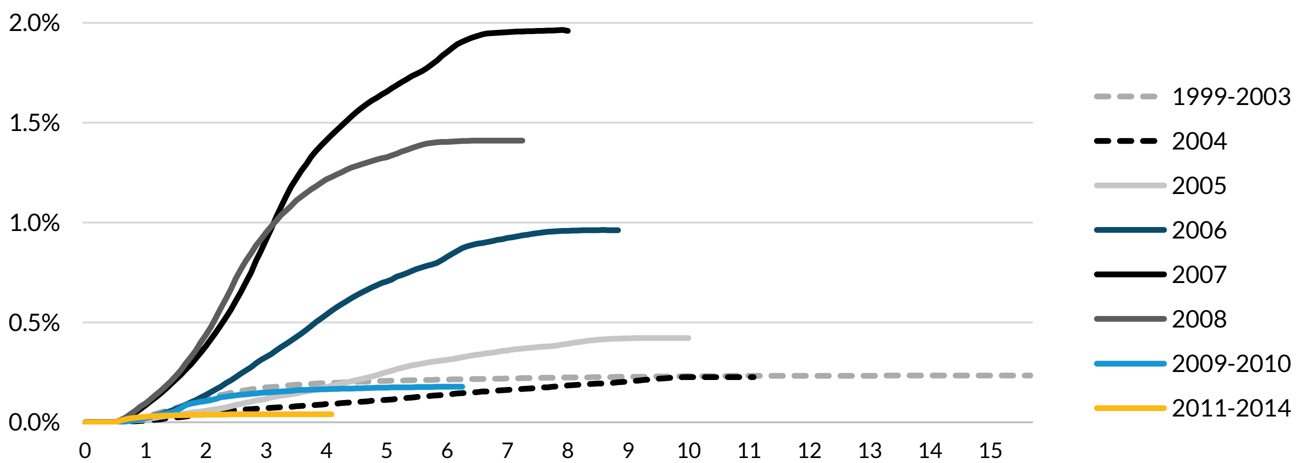
Sources: Freddie Mac and Urban Institute.
Note: The Freddie Mac analysis included mortgages with original terms of 241-420 months, to be consistent with Fannie Mae data, which contained only 30-year mortgages.

SPECIAL FEATURE: LOAN LEVEL GSE CREDIT DATA

REPURCHASE RATE BY VINTAGE

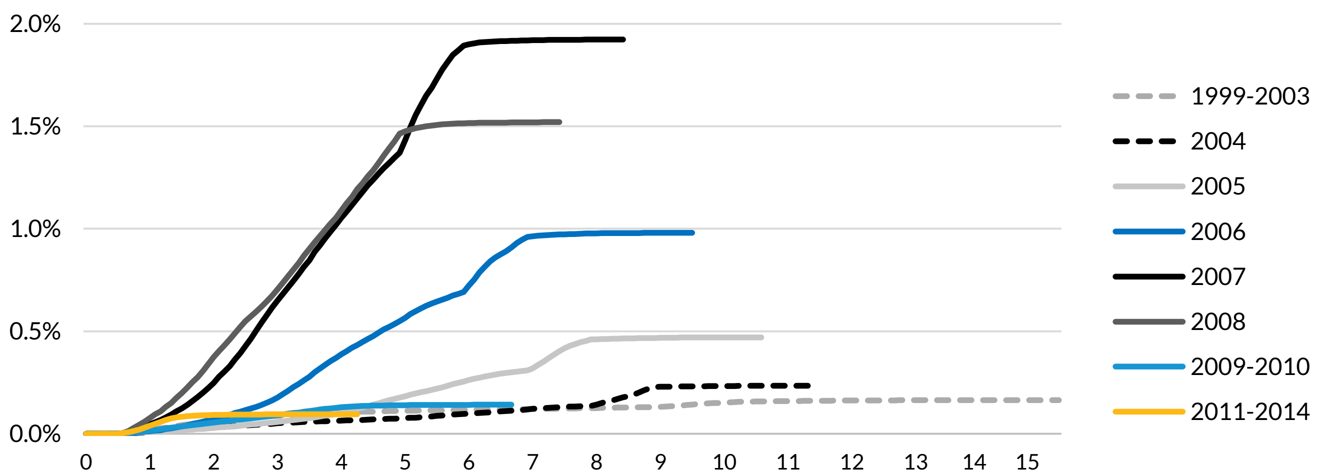
These figures show the cumulative percentage of fixed-rate, full documentation, amortizing 30-year loans of a given vintage that Fannie and Freddie have put back to lenders due to reps and warrants violations. Note that the put-backs are generally quite small, with the exception of the 2006-2008 vintages. These numbers exclude loans put back through global settlements, which are not done at the loan level. Moreover, lenders' attitudes are formed by the total share of put-backs on their books. The database used in this analysis, while very characteristic of new production, excludes many loans that are likely to be put back, including limited documentation loans, non-traditional products (such as interest-only loans), and loans with pool insurance policies.

Fannie Mae Repurchase Rate by Vintage Year



Sources: Fannie Mae and Urban Institute.

Freddie Mac Repurchase Rate by Vintage Year



Sources: Freddie Mac and Urban Institute.
Note: The Freddie Mac analysis included mortgages with original terms of 241-420 months, to be consistent with Fannie Mae data, which contained only 30-year mortgages.

SPECIAL FEATURE: LOAN LEVEL GSE CREDIT DATA
LOSS SEVERITY

Both Fannie Mae and Freddie Mac's credit data now include the status of the loan after it has experienced a credit event (default). A credit event is defined as a delinquency of 180 days or more, a deed-in-lieu, short sale, foreclosure sale of REO sale. We look at each of the 30-year loans and categorize them as to their present status—for Fannie Mae loans (top table) 19.0 percent are current, 10.9 percent are prepaid, 15.0 percent are still in the pipeline and 55.1 percent have already liquidated (deed-in-lieu, short sale, foreclosure sale, REO sale). Freddie Mac's results (bottom table) are very similar. The right side of both tables shows the severity of all loans that have liquidated, broken down by LTV buckets: total Fannie and Freddie severities are in the 43-45 percent range.

Fannie Mae - Liquidation Rates and Severities for D180+ loans

Year	Paths for D180+ Loans (% of total count)				Severity for Already Liquidated Loans			
	Paths With No Eventual Loss		Paths With Eventual Loss					
	Current	Prepay	Still in the Pipeline	% Already Liquidated Loans	<=60	60-80	>80	Total
1999-2004	15.28%	17.33%	12.80%	54.59%	28.3%	41.3%	24.5%	33.6%
2005	19.43%	6.87%	14.16%	59.55%	37.1%	50.2%	36.6%	46.3%
2006	20.37%	5.56%	13.78%	60.28%	47.0%	55.7%	39.1%	51.6%
2007	22.95%	5.79%	15.08%	56.18%	46.4%	55.6%	38.2%	49.3%
2008	23.90%	7.60%	16.86%	51.64%	42.4%	51.8%	30.7%	42.5%
2009-2010	18.65%	12.30%	26.72%	42.34%	39.2%	43.6%	24.6%	38.7%
2011-2014	15.57%	11.02%	50.74%	22.67%	45.2%	58.2%	45.0%	51.6%
Total	18.97%	10.92%	15.00%	55.11%	40.2%	50.3%	31.8%	43.7%

Freddie Mac - Liquidation Rates and Severities for D180+ loans

Year	Paths for D180+ Loans (% of total count)				Severity for Already Liquidated Loans			
	Paths With No Eventual Loss		Paths With Eventual Loss					
	Current	Prepay	Still In The Pipeline	% Already Liquidated Loans	<=60	60-80	>80	Total
1999-2004	14.25%	14.49%	13.52%	57.74%	24.2%	39.9%	28.4%	34.4%
2005	17.00%	6.29%	14.52%	62.20%	34.4%	48.9%	36.4%	45.2%
2006	17.11%	5.01%	14.00%	63.88%	42.2%	54.1%	38.8%	50.1%
2007	17.97%	4.81%	15.41%	61.81%	44.9%	54.3%	38.6%	48.6%
2008	19.97%	6.74%	18.01%	55.28%	38.4%	50.8%	34.3%	44.1%
2009-2010	15.68%	11.08%	29.13%	44.11%	26.3%	36.3%	17.2%	31.7%
2011-2014	14.89%	10.99%	52.96%	21.16%	11.1%	25.3%	8.4%	17.8%
Total	16.65%	8.44%	15.37%	59.54%	37.1%	49.7%	34.3%	44.3%

Sources: Fannie Mae, Freddie Mac, and Urban Institute.
Note: Fannie Mae loan level credit data includes loans originated from Q1 1999 to Q4 2014, with performance information on these loans through Q3 2015. Freddie Mac loan level credit data includes loans originated from Q1 1999 to Q4 2014, with performance information on these loans through Q2 2015. The Freddie Mac analysis included mortgages with original terms of 241-420 months, to be consistent with Fannie Mae data, which contained only 30-year mortgages.

LOSS COMPONENTS

The tables below show the components of loss among Fannie and Freddie loans that have experienced a loss, broken down by vintage year. Loss is defined as the unpaid principal balance of the loan less proceeds from the sale of the home and any recoveries from mortgage insurance or other items, plus expenses and interest loss. For the entire period, for all Fannie Mae loans that experienced losses (top table) the average severity was 47.3 percent. Approximately 8 percent of the loans that liquidated did not experience a loss. Thus the overall severity was 43.7 percent, the number we saw in the top table of page 40. Freddie Mac numbers in the bottom table are very similar.

Fannie Mae - Loss Component for already liquidated loans

Year	Liquidation with A Positive Loss						
	Mean defaulted UPB ($)	Net sale proceeds / defaulted UPB	Credit Proceeds/ defaulted UPB	Other Proceeds / defaulted UPB	Expenses /defaulted UPB	Interest Loss / defaulted UPB	Severity
1999-2004	109335.05	-67.8%	-8.5%	-1.6%	27.9%	8.3%	42.2%
2005	171456.8	-62.3%	-4.9%	-0.9%	16.8%	8.1%	48.1%
2006	186043.9	-58.1%	-4.8%	-0.9%	14.3%	8.9%	52.6%
2007	195213.86	-57.7%	-7.5%	-1.0%	14.9%	8.9%	50.1%
2008	191937.99	-61.6%	-8.9%	-1.0%	16.6%	8.4%	44.3%
2009-2010	182264.24	-66.3%	-4.2%	-0.6%	15.8%	6.1%	41.7%
2011-2014	151752.92	-44.1%	-4.3%	-0.3%	7.1%	4.4%	60.0%
Total	159239.37	-61.7%	-6.9%	-1.1%	18.0%	8.4%	47.3%

Note: Expenses include Foreclosure cost, repair cost, asset recovery cost, miscellaneous expenses and tax costs.

Freddie Mac - Loss Component for already liquidated loans

Year	Liquidation with A Positive Loss						
	Mean defaulted UPB ($)	Net sale proceeds / defaulted UPB	MI recoveries / defaulted UPB	Non-MI recoveries / defaulted UPB	Expenses / defaulted UPB	Interest Loss/ /defaulted UPB	Severity
1999-2004	114589.42	-69.4%	-9.7%	-2.3%	13.0%	10.3%	41.9%
2005	172734.95	-63.2%	-5.5%	-1.5%	9.0%	9.6%	48.4%
2006	185998.96	-59.4%	-5.3%	-1.4%	8.2%	10.6%	52.7%
2007	188025.67	-58.5%	-8.1%	-1.5%	8.3%	10.8%	51.1%
2008	197133.64	-62.6%	-7.8%	-1.5%	8.3%	10.6%	47.0%
2009-2010	189061.86	-74.2%	-4.0%	-1.4%	8.4%	7.4%	36.2%
2011-2014	158786.66	-78.4%	-7.7%	-1.4%	8.5%	5.5%	26.5%
Total	166108.19	-62.5%	-7.1%	-1.6%	9.3%	10.3%	48.3%

Sources: Fannie Mae, Freddie Mac and Urban Institute.
Note: Fannie Mae loan level credit data includes loans originated from Q1 1999 to Q4 2014, with performance information on these loans through Q3 2015. Freddie Mac loan level credit data includes loans originated from Q1 1999 to Q4 2014, with performance information on these loans through Q2 2015. he Freddie Mac analysis included mortgages with original terms of 241-420 months, to be consistent with Fannie Mae data, which contained only 30-year mortgages.

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