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.

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We welcome your feedback. Please send any comments or questions to ataglance@urban.org.
We discuss some of the major transitions affecting housing finance as the nation finally escapes the doldrums of winter: the release of a new GSE reform bill, the potential extension of the Mortgage Debt Relief Act, the winding down of the landmark National Mortgage Settlement, and several market trends affecting the industry and borrowers.

**Policymakers are busy**

In mid-March Congress took steps to extend the Mortgage Forgiveness Debt Relief Act (which we argue could benefit millions of homeowners), and Sens. Johnson (D – SD) and Crapo (R – ID) released a discussion draft of their GSE reform bill (scheduled for markup at the end of April). The draft bill is a positive step in what will be a multiyear effort to reform the housing finance system, but two key areas merit further consideration. In a new commentary, we argue that the suggested dual system for private capital will lead to market uncertainty and instability, and that the affordability provisions are not likely to function as envisioned. We also offer some recommendations to address these shortcomings in an otherwise well designed proposal.

**The National Mortgage Settlement Concludes**

Efforts to reform the housing finance system have received significant attention, but the conclusion of the largest joint state-federal civil settlement in US history occurred with less fanfare. In 2012, five servicers and the Department of Justice, Department of Housing and Urban Development, and 49 states’ Attorney Generals reached a $25 billion settlement over questionable mortgage servicing practices. As of mid-March, the servicers (Bank of America, Citigroup, JPMorgan Chase, Rescap/Ally, and Wells Fargo) had completed their consumer debt relief obligations, disbursing over $50 billion in gross relief to over 600,000 families. In a new commentary, we examine each servicer’s strategy in providing relief, consider how their actions were influenced by settlement incentives, and make suggestions to improve future settlements.

**Purchases can’t happen without loans**

Despite increased confidence about the real estate market (as shown by stronger home prices, page 17) and relatively low interest rates, purchase originations are dipping, a troubling sign for the broader recovery. As measured by average purchase loan credit scores, which have risen from 680 to 734 over the past 13 years (page 14), access to credit has tightened, and will likely remain tight without intervention. In a recent commentary, we analyzed the link between declining credit access and the drop in purchase mortgages. By our calculations, with 2001 credit availability standards in effect, an additional 1.2 million loans annually would have been originated in recent years. We also find that the decrease in purchase originations has been uneven across race, ethnicity and geography (page 15).

More clarity on reps and warrants will likely go a long way towards expanding credit availability. While we continue to hope that the new FHFA leadership will take steps to provide this clarity, we discuss here the positive sign that FHA has actually committed to doing so in a reconsideration of its indemnification policies.

As we take steps towards a new housing finance system, we hope this Chartbook and other research products from the Housing Finance Policy Center will provide readers with the depth of knowledge to inform evidence-based, well-reasoned decision-making. 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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Home values continue to improve, with the Q4 2013 Fed Flow of Funds data indicating an increase in the total value of the US residential 1-4 unit housing market to $20.41 trillion, from $20.04 trillion in Q3 2013. Just under half of the market, $9.86 trillion, is mortgage debt, a very slight downtick from the previous quarter. Agency MBS make up 56.2 percent of the total, private-label securities make up 8.0 percent, and unsecuritized first liens at commercial banks, savings institutions, and credit unions make up 23.6 percent. Second liens and GSE loans in portfolio comprise the remaining 7.1 and 5.0 percent of the total, respectively.

**Value of the US Housing Market**

*as of Q4 2013*

- **Equity**: $10,552 trillion
- **Debt, Household Mortgages**: $9,863 trillion

**Sources**: Federal Reserve Flow of Funds and Urban Institute.

**Size of the US Residential Mortgage Market**

*as of Q4 2013*

- **Unsecuritized first liens at commercial banks, savings institutions, credit unions**: $2.350 trillion
- **Fannie and Freddie loans in portfolio**: $0.496 trillion
- **Agency MBS**: $5.521 trillion
- **Private-label securities**: $0.793 trillion
- **Second liens**: $0.704 trillion

**Sources**: Federal Reserve Flow of Funds, Fannie Mae, Freddie Mac and Urban Institute.
As of February 2014, debt in the private-label securitization market is split among prime (20.2 percent), Alt-A (43.6 percent), and subprime (36.2 percent) loans. The agency market, as of Q4 2013, is 46.8 percent Fannie Mae, 28.0 percent Freddie Mac, and 25.2 percent Ginnie Mae outstanding securities.

**Private Label Securities**
*as of February 2014; dollars in trillions*

- Prime, 157.1 trillions
- Alt-A, 338.4 trillions
- Subprime, 281.2 trillions

**Agency Mortgage-Backed Securities**
*as of Q4 2013; dollars in trillions*

- Fannie Mae, $2.595 trillion
- Freddie Mac, $1.548 trillion
- Ginnie Mae, $1.398 trillion

Sources: CoreLogic and Urban Institute.

Sources: Fannie Mae, Freddie Mac, Ginnie Mae and Urban Institute.
First Lien Origination Volume

First lien originations in 2013 totaled $1.83 trillion, just short of 2012’s $2.12 trillion due to the impact of higher rates. Private label originations, at $13.1 billion, were more than double their 2012 total of $6 billion.

Sources: Inside Mortgage Finance and Urban Institute.

First Lien Origination Share

The GSE share of first lien originations is in line with post-crisis levels, now sitting at 60.6 percent. Likewise, FHA and VA continue to hold a much larger share than in pre-crisis years, with 19.7 percent of the market. The private label share has increased but remains less than one percent.

Sources: Inside Mortgage Finance and Urban Institute.
Adjustable rate mortgages (ARM) accounted for as much as 29 percent of all new originations during the peak of the recent housing bubble in 2005 (top chart). They fell to a historic low of 1 percent in 2009, and now consist of 6 percent of total originations. Fifteen-year fixed-rate mortgages (FRM), predominantly a refinance product, comprise 17 percent of new originations. If we exclude refinances (bottom chart), the share of 30-year FRMs in January 2014 stood at 87 percent, 15-year FRMs at 6 percent, and ARMs at 6 percent.

Sources: CoreLogic Prime Servicing and Urban Institute.
Agency/Non-Agency Share of Residential MBS Issuance

Non-agency single-family MBS issuance has hovered at or below 2 percent of total issuance since early 2011, and this share is even lower if re-REMICs are excluded. In the first quarter of 2014, total non-agency issuance was $4.3 billion, only half of the volume at the same point in 2013.

Sources: Inside Mortgage Finance and Urban Institute.
Note: Year-to-datefigures as of March 2014.

Non-Agency MBS Issuance

Sources: Inside Mortgage Finance and Urban Institute.

Non-Agency Securitization 2.0

Sources: Inside Mortgage Finance and Urban Institute.
Note: Monthly figures equal total non-agency MBS issuance minus Re-REMIC issuance.
Agency issuance continues declining, totaling $191.0 billion in Q1 2014, compared to $466.6 billion for the same quarter a year ago. In March 2014, refinances were 49 and 53 percent of the GSEs’ business, slightly down from the 3-month average of 53 and 56 percent. The Ginnie Mae market has always been more purchase-driven, with refinance volume down to 26.7 percent in March 2014.

**At-Issuance Balance**

Sources: eMBS and Urban Institute.
Note: Annualized figure based on data from March 2014.

**Percent Refi at Issuance**

Sources: eMBS, Freddie Mac PMMS and Urban Institute.
Note: Based on at-issuance loan balance.
The sharp drop in mortgage originations in Q4 2013, combined with higher interest rates in the second half of 2013 and the Fed tapering, has led the MBA, Fannie Mae, and Freddie Mac to lower their 2014 estimates for origination activity. This reflects lower estimates on the refinance percentage, at 39 percent for 2014, down sharply from around 50 percent in Q4 2013 and over 60 percent for full year 2013. Housing activity is expected to pick up further in 2014, with both housing starts and existing home sales up increasing.

### Total Originations and Refinance Shares

<table>
<thead>
<tr>
<th>Period</th>
<th>Total, FNMA estimate</th>
<th>Total, FHLMC estimate</th>
<th>Total, MBA estimate</th>
<th>Refi Share (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>FNMA estimate</td>
<td>FHLMC estimate</td>
<td>MBA estimate</td>
<td></td>
</tr>
<tr>
<td>2013 Q1</td>
<td>516</td>
<td>540</td>
<td>524</td>
<td>73</td>
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<tr>
<td>2013 Q2</td>
<td>559</td>
<td>560</td>
<td>537</td>
<td>65</td>
</tr>
<tr>
<td>2013 Q3</td>
<td>440</td>
<td>450</td>
<td>401</td>
<td>56</td>
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<td>2013 Q4</td>
<td>308</td>
<td>350</td>
<td>293</td>
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<td>2014 Q1</td>
<td>227</td>
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<td>226</td>
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<td>2014 Q2</td>
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<td>425</td>
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<td>2014 Q4</td>
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<td>2015 Q1</td>
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<tr>
<td>2015 Q2</td>
<td>322</td>
<td>375</td>
<td>314</td>
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<tr>
<td>2015 Q3</td>
<td>318</td>
<td>295</td>
<td>318</td>
<td>26</td>
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<tr>
<td>2015 Q4</td>
<td>289</td>
<td>210</td>
<td>190</td>
<td>27</td>
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<tr>
<td>FY 2011</td>
<td>1496</td>
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<td>1436</td>
<td>66</td>
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<td>FY 2012</td>
<td>2153</td>
<td>2122</td>
<td>2044</td>
<td>72</td>
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<td>FY 2013</td>
<td>1823</td>
<td>1900</td>
<td>1755</td>
<td>62</td>
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<tr>
<td>FY 2014</td>
<td>1209</td>
<td>1350</td>
<td>1080</td>
<td>39</td>
</tr>
<tr>
<td>FY 2015</td>
<td>1181</td>
<td>1180</td>
<td>1219</td>
<td>28</td>
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</tbody>
</table>

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. The yearly averages for interest rates in 2011, 2012, and 2013 were 4.5, 3.7, and 4.0, respectively. The projected average annual rates for 2014 and 2015 range from 4.8 to 4.9, and 5.2 to 5.6, respectively.

### Housing Starts and Home Sales

<table>
<thead>
<tr>
<th>Year</th>
<th>Total, FNMA estimate</th>
<th>Total, FHLMC estimate</th>
<th>Total, MBA estimate</th>
<th>Home Sales</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>FNMA estimate</td>
<td>FHLMC estimate</td>
<td>MBA estimate</td>
<td>Existing, MBA estimate</td>
</tr>
<tr>
<td>FY 2011</td>
<td>609</td>
<td>610</td>
<td>612</td>
<td>4566</td>
</tr>
<tr>
<td>FY 2012</td>
<td>781</td>
<td>780</td>
<td>783</td>
<td>5028</td>
</tr>
<tr>
<td>FY 2013</td>
<td>927</td>
<td>930</td>
<td>931</td>
<td>5518</td>
</tr>
<tr>
<td>FY 2014</td>
<td>1100</td>
<td>1100</td>
<td>1023</td>
<td>5658</td>
</tr>
<tr>
<td>FY 2015</td>
<td>1356</td>
<td>1400</td>
<td>1194</td>
<td>6022</td>
</tr>
</tbody>
</table>

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.
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 mortgage interest rates have risen 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 rising steadily over the past few years, the so-called primary-secondary spread has become a very imperfect measure to compare profitability across time.

This 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.

**Originator Profitability and Unmeasured Costs (OPUC)**


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.
Access to credit has become extremely limited and continues to tighten, especially for borrowers with low FICO scores. The 10th percentile of FICO scores on new originations, which represents the lower bound of creditworthiness needed to qualify for a mortgage, stood at 657 as of January 2014. Prior to the housing crisis, this threshold held steady in the low 600s. LTV levels at origination remain relatively high, averaging 86.4, which reflects the large number of FHA purchase originations.

**Borrower FICO Score at Origination Month**

**Combined LTV at Origination**

Sources: CoreLogic Prime Servicing and Urban Institute.

*Note: Purchase-only 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 765, while in San Antonio-New Braunfels, TX it is 718. Across all MSAs, lower average FICO scores tend to be correlated with high average LTVs, as these MSAs rely heavily on FHA/VA financing.

**Origination FICO and LTV by MSA**

**Sources:** CoreLogic Prime Servicing as of January 2014 and Urban Institute.

**Note:** Purchase-only loans.
National Housing Affordability Over Time

The maximum affordable price is the house price that a family can afford based on the following assumptions: 20 percent down payment, monthly payment of 28 percent of median family income (US Census), Freddie Mac prevailing rate for 30-year fixed-rate mortgage, and property tax and insurance at 1.75 percent of housing value. The chart shows that home prices are very affordable by historical standards, and even if interest rates rose to 6 percent, affordability would be at the long term historical average level nationwide.

Sources: CoreLogic, US Census, Freddie Mac and Urban Institute.

Affordability Adjusted for MSA-Level DTI

Sources: CoreLogic, US Census, Freddie Mac and Urban Institute calculations based on NAR methodology.

Note: Affordability index is calculated relative to home prices in 2000-03. A ratio above 1 indicates higher affordability in January 2014 than in 2000-03.
National Year-Over-Year HPI Growth

The strong year-over-year house price growth through 2013 has continued for the beginning of 2014, as indicated by both the repeated sales HPI from CoreLogic and hedonic index from Zillow.

Changes in CoreLogic HPI for Top MSAs

Despite rising 23.5 percent from the trough, national house prices still must grow 20.3 percent to reach peak pre-crisis levels. At the MSA level, three of the top 15 MSAs have reached their peak HPI—Houston, TX; Dallas, TX; and Denver, CO. One MSA particularly hard hit by the boom and bust—Riverside, CA—would need to rise more than 50 percent to return to its peak.

<table>
<thead>
<tr>
<th>MSA</th>
<th>2000 to peak</th>
<th>Peak to trough</th>
<th>Trough to current</th>
<th>% Rise needed to achieve peak</th>
</tr>
</thead>
<tbody>
<tr>
<td>United States</td>
<td>99.4</td>
<td>-32.7</td>
<td>23.5</td>
<td>20.3</td>
</tr>
<tr>
<td>New York-Jersey City-White Plains NY-NJ</td>
<td>116.8</td>
<td>-20.0</td>
<td>16.0</td>
<td>7.8</td>
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<tr>
<td>Los Angeles-Long Beach-Glendale CA</td>
<td>182.1</td>
<td>-39.3</td>
<td>36.9</td>
<td>20.4</td>
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<td>Chicago-Naperville-Arlington Heights IL</td>
<td>65.7</td>
<td>-36.5</td>
<td>14.3</td>
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<tr>
<td>Atlanta-Sandy Springs-Roswell GA</td>
<td>40.6</td>
<td>-33.7</td>
<td>28.8</td>
<td>17.1</td>
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<td>Washington-Arlington-Alexandria DC-VA-MD-WV</td>
<td>160.5</td>
<td>-33.6</td>
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<td>Houston-The Woodlands-Sugar Land TX</td>
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<tr>
<td>Phoenix-Mesa-Scottsdale AZ</td>
<td>126.2</td>
<td>-52.9</td>
<td>45.9</td>
<td>45.4</td>
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<td>Riverside-San Bernardino-Ontario CA</td>
<td>194.6</td>
<td>-53.4</td>
<td>41.3</td>
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<td>Dallas-Plano-Irving TX</td>
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<td>19.3</td>
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<td>Minneapolis-St. Paul-Bloomington MN-WI</td>
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<td>18.8</td>
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<td>Seattle-Bellevue-Everett WA</td>
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<tr>
<td>Anaheim-Santa Ana-Irvine CA</td>
<td>163.0</td>
<td>-37.2</td>
<td>33.7</td>
<td>19.1</td>
</tr>
</tbody>
</table>

Sources: CoreLogic HPIs as of February 2014 and Urban Institute.

Note: This table includes the largest 15 Metropolitan areas by mortgage count.
**Negative Equity Share**

With housing prices appreciating through 2013, residential properties in negative equity (LTV greater than 100) as a share of all residential properties with a mortgage has dropped to 13.3 percent. Residential properties in near negative equity (LTV between 95 and 100) comprise another 3.3 percent.

![Graph showing percentage of loans in negative equity and near negative equity from 2009 to 2013.](image)

*Sources: CoreLogic and Urban Institute.*

*Note: CoreLogic negative equity rate is the percent of all residential properties with a mortgage above 100 percent current LTV. Loans near negative equity refer to loans above 95 percent LTV.*

**Loans in Serious Delinquency**

Serious delinquencies and foreclosures continue to decline with the housing recovery, but remain quite high relative to the early 2000s.

![Graph showing percentage of loans 90 days or more delinquent, in foreclosure, and in 90 days or more delinquent or in foreclosure from 2000 to 2013.](image)

*Sources: Mortgage Bankers Association and Urban Institute.*
Under conservatorship, both Fannie Mae and Freddie Mac have shrunk their portfolios and shifted their mix of assets, as the agency MBS share is shrinking more rapidly than the less liquid assets (mortgage loans and non-agency MBS). Agency MBS now comprises 26.9 percent of the Fannie portfolio and 39.5 percent of the Freddie portfolio. Both GSEs are within easy reach of their year-end portfolio cap of $469.6 billion, with Freddie already below it.

**Fannie Mae Mortgage-Related Investment Portfolio Composition**

Current size: $471.4 billion  
Current cap: $469.625 billion  
Shrinkage year-over-year: 22%

![Fannie Mae Portfolio Composition Graph](image1)

Sources: Fannie Mae and Urban Institute.

**Freddie Mac Mortgage-Related Investment Portfolio Composition**

Current size: $442.2 billion  
Current cap: $469.625 billion  
Shrinkage year-over-year: 18.5%

![Freddie Mac Portfolio Composition Graph](image2)

Sources: Freddie Mac and Urban Institute
Effective Guarantee Fees

Fannie’s effective g-fees dipped very slightly, to 57.4 bps in Q4 from 58.7 bps in Q3. This is a serious increase over 2012 (39.9 bps) and 2011 (28.8 bps), which in combination with other factors has been instrumental in the GSEs’ strong profits. Fannie’s 2014 loan-level price adjustments (LLPAs) are shown in the second table. The 25 basis point Adverse Market Delivery Charge has been added to these upfront numbers. G-fees and LLPAs were scheduled to increase in January, but with the arrival of FHFA Director Mel Watt, we expect these to remain constant as Watt considers the impact of future pricing changes.

Fannie Mae Upfront Loan-Level Price Adjustments (LLPAs)

<table>
<thead>
<tr>
<th>Credit Score</th>
<th>LTV</th>
<th>≤60</th>
<th>60.01 – 70</th>
<th>70.01 – 75</th>
<th>75.01 – 80</th>
<th>80.01 – 85</th>
<th>85.01 – 90</th>
<th>90.01 – 95</th>
</tr>
</thead>
<tbody>
<tr>
<td>&gt; 740</td>
<td>0.000%</td>
<td>0.250%</td>
<td>0.250%</td>
<td>0.500%</td>
<td>0.500%</td>
<td>0.500%</td>
<td>0.500%</td>
<td>0.500%</td>
</tr>
<tr>
<td>720 – 739</td>
<td>0.000%</td>
<td>0.250%</td>
<td>0.500%</td>
<td>0.750%</td>
<td>0.750%</td>
<td>0.750%</td>
<td>0.750%</td>
<td>0.750%</td>
</tr>
<tr>
<td>700 – 719</td>
<td>0.000%</td>
<td>0.750%</td>
<td>1.000%</td>
<td>1.250%</td>
<td>1.250%</td>
<td>1.250%</td>
<td>1.250%</td>
<td>1.250%</td>
</tr>
<tr>
<td>680 – 699</td>
<td>0.250%</td>
<td>0.750%</td>
<td>1.500%</td>
<td>2.000%</td>
<td>1.750%</td>
<td>1.500%</td>
<td>1.500%</td>
<td>1.500%</td>
</tr>
<tr>
<td>660 – 679</td>
<td>0.250%</td>
<td>1.250%</td>
<td>2.250%</td>
<td>2.750%</td>
<td>3.000%</td>
<td>2.500%</td>
<td>2.500%</td>
<td>2.500%</td>
</tr>
<tr>
<td>640 – 659</td>
<td>0.750%</td>
<td>1.500%</td>
<td>2.750%</td>
<td>3.250%</td>
<td>3.500%</td>
<td>3.000%</td>
<td>3.000%</td>
<td>3.000%</td>
</tr>
<tr>
<td>620 – 639</td>
<td>0.750%</td>
<td>1.750%</td>
<td>3.250%</td>
<td>3.250%</td>
<td>3.500%</td>
<td>3.500%</td>
<td>3.500%</td>
<td>3.500%</td>
</tr>
<tr>
<td>&lt; 620</td>
<td>0.750%</td>
<td>1.750%</td>
<td>3.250%</td>
<td>3.250%</td>
<td>3.500%</td>
<td>3.500%</td>
<td>3.500%</td>
<td>3.500%</td>
</tr>
</tbody>
</table>

Product Feature (Cumulative)

<table>
<thead>
<tr>
<th>Feature</th>
<th>LTV</th>
<th>≤60</th>
<th>60.01 – 70</th>
<th>70.01 – 75</th>
<th>75.01 – 80</th>
<th>80.01 – 85</th>
<th>85.01 – 90</th>
<th>90.01 – 95</th>
</tr>
</thead>
<tbody>
<tr>
<td>Investment Property</td>
<td>1.750%</td>
<td>1.750%</td>
<td>1.750%</td>
<td>3.000%</td>
<td>3.750%</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>2-unit property</td>
<td>1.000%</td>
<td>1.000%</td>
<td>1.000%</td>
<td>1.000%</td>
<td>1.000%</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>2-4 unit property</td>
<td>1.000%</td>
<td>1.000%</td>
<td>1.000%</td>
<td>1.000%</td>
<td>1.000%</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>Condominiums</td>
<td>0.000%</td>
<td>0.000%</td>
<td>0.000%</td>
<td>0.750%</td>
<td>0.750%</td>
<td>0.750%</td>
<td>0.750%</td>
<td>0.750%</td>
</tr>
</tbody>
</table>

Sources: Fannie Mae and Urban Institute.

Note: Adverse Market Delivery Charge (AMDC) of 0.250% has been added to the LLPA numbers in the matrix by LTV and credit score. Freddie Mac charges very comparable LLPAs.
### Fannie Mae: Connecticut Avenue Securities (CAS) 2013-C01 | October 24, 2013

<table>
<thead>
<tr>
<th>Class</th>
<th>Amount ($ millions)</th>
<th>Tranche Thickness (%)</th>
<th>CE (%)</th>
<th>Rating</th>
<th>Initial Spread (bps)</th>
</tr>
</thead>
<tbody>
<tr>
<td>A-H</td>
<td>$25,953.7</td>
<td>97</td>
<td>3</td>
<td>NR</td>
<td>-</td>
</tr>
<tr>
<td>M-1, M-1H, Total</td>
<td>$337.5, $23.7, $361.2</td>
<td>1.26, 0.09, 1.35</td>
<td>1.65</td>
<td>F: BBB-sf</td>
<td>200</td>
</tr>
<tr>
<td>M-2, M-2H, Total</td>
<td>$337.5, $23.7, $361.2</td>
<td>1.26, 0.09, 1.35</td>
<td>0.30</td>
<td>NR</td>
<td>525</td>
</tr>
<tr>
<td>B-H</td>
<td>$80.3</td>
<td>0.30</td>
<td>0</td>
<td>NR</td>
<td>-</td>
</tr>
</tbody>
</table>

**Reference Pool Size** $26,756.4

### Fannie Mae: CAS 2014-C01 | January 14, 2014

<table>
<thead>
<tr>
<th>Class</th>
<th>Amount ($ millions)</th>
<th>Tranche Thickness (%)</th>
<th>CE (%)</th>
<th>Rating</th>
<th>Initial Spread (bps)</th>
</tr>
</thead>
<tbody>
<tr>
<td>A-H</td>
<td>$28.4</td>
<td>97</td>
<td>3</td>
<td>NR</td>
<td>-</td>
</tr>
<tr>
<td>M-1, M-1H, Total</td>
<td>$375, $20.7, $395.7</td>
<td>1.28, 0.07, 1.35</td>
<td>1.65</td>
<td>F: BBB-sf; M: Baa2</td>
<td>160</td>
</tr>
<tr>
<td>M-2, M-2H, Total</td>
<td>$375, $20.7, $395.7</td>
<td>1.28, 0.07, 1.35</td>
<td>0.30</td>
<td>NR</td>
<td>440</td>
</tr>
<tr>
<td>B-H</td>
<td>$87.9</td>
<td>0.30</td>
<td>0</td>
<td>NR</td>
<td>-</td>
</tr>
</tbody>
</table>

**Reference Pool Size** $29,308.7

### Freddie Mac: Structured Agency Credit Risk (STACR) Debt Notes, Series 2013-DN1 | July 24, 2013

<table>
<thead>
<tr>
<th>Class</th>
<th>Amount ($ millions)</th>
<th>Tranche Thickness (%)</th>
<th>CE (%)</th>
<th>Rating</th>
<th>Initial Spread (bps)</th>
</tr>
</thead>
<tbody>
<tr>
<td>A-H</td>
<td>$21,906.8</td>
<td>97</td>
<td>3</td>
<td>NR</td>
<td>-</td>
</tr>
<tr>
<td>M-1, M-1H, Total</td>
<td>$250.0, $54.9, $304.9</td>
<td>1.26, 0.09, 1.35</td>
<td>1.65</td>
<td>NR</td>
<td>340</td>
</tr>
<tr>
<td>M-2, M-2H, Total</td>
<td>$250.0, $54.9, $304.9</td>
<td>1.26, 0.09, 1.35</td>
<td>0.30</td>
<td>NR</td>
<td>715</td>
</tr>
<tr>
<td>B-H</td>
<td>$67.8</td>
<td>0.30</td>
<td>0</td>
<td>NR</td>
<td>-</td>
</tr>
</tbody>
</table>

**Reference Pool Size** $22,584.4

### Freddie Mac: STACR Debt Notes, Series 2013-DN2 | November 12, 2013

<table>
<thead>
<tr>
<th>Class</th>
<th>Amount ($ millions)</th>
<th>Tranche Thickness (%)</th>
<th>CE (%)</th>
<th>Rating</th>
<th>Initial Spread (bps)</th>
</tr>
</thead>
<tbody>
<tr>
<td>A-H</td>
<td>$34,267.5</td>
<td>97</td>
<td>3</td>
<td>NR</td>
<td>-</td>
</tr>
<tr>
<td>M-1, M-1H, Total</td>
<td>$245.0, $125.9, $370.9</td>
<td>0.69, 0.36, 1.05</td>
<td>1.95</td>
<td>F: BBB-sf; M: Baa1</td>
<td>145</td>
</tr>
<tr>
<td>M-2, M-2H, Total</td>
<td>$385.0, $197.9, $582.9</td>
<td>1.09, 0.56, 1.65</td>
<td>0.30</td>
<td>NR</td>
<td>425</td>
</tr>
<tr>
<td>B-H</td>
<td>$106.0</td>
<td>0.30</td>
<td>0</td>
<td>NR</td>
<td>-</td>
</tr>
</tbody>
</table>

**Reference Pool Size** $35,327.3

### Freddie Mac: STACR Debt Notes, Series 2014-DN1 | February 6, 2014

<table>
<thead>
<tr>
<th>Class</th>
<th>Amount ($ millions)</th>
<th>Tranche Thickness (%)</th>
<th>CE (%)</th>
<th>Rating</th>
<th>Initial Spread (bps)</th>
</tr>
</thead>
<tbody>
<tr>
<td>A-H</td>
<td>$30,980.8</td>
<td>95.5</td>
<td>4.50</td>
<td>NR</td>
<td>-</td>
</tr>
<tr>
<td>M-1, M-1H, Total</td>
<td>$155.6, $84.4, $240.0</td>
<td>0.65, 0.35, 1.00</td>
<td>3.50</td>
<td>M: A1(sf); K: A(sf)</td>
<td>- 100</td>
</tr>
<tr>
<td>M-2, M-2H, Total</td>
<td>$233.4, $126.6, $360.0</td>
<td>0.97, 0.53, 1.50</td>
<td>2</td>
<td>M: Baa1(sf); K: Baa1(sf)</td>
<td>- 220</td>
</tr>
<tr>
<td>M-3, M-3H, Total</td>
<td>$264.5, $143.5, $408.0</td>
<td>1.10, 0.60, 1.70</td>
<td>0.30</td>
<td>NR</td>
<td>- NR</td>
</tr>
<tr>
<td>B-H</td>
<td>$87.9</td>
<td>0.30</td>
<td>0</td>
<td>NR</td>
<td>-</td>
</tr>
</tbody>
</table>

**Reference Pool Size** $32,076.8

### Freddie Mac: STACR Debt Notes, Series 2014-DN2 | April 2, 2014

<table>
<thead>
<tr>
<th>Class</th>
<th>Amount ($ millions)</th>
<th>Tranche Thickness (%)</th>
<th>CE (%)</th>
<th>Rating</th>
<th>Initial Spread (bps)</th>
</tr>
</thead>
<tbody>
<tr>
<td>A-H</td>
<td>$26,880.4</td>
<td>95.5</td>
<td>4.5</td>
<td>NR</td>
<td>-</td>
</tr>
<tr>
<td>M-1, M-1H, Total</td>
<td>$230.0, $51.5, $281.5</td>
<td>0.82, 0.18, 1.00</td>
<td>3.5</td>
<td>F: Asf; K: A(sf)</td>
<td>85</td>
</tr>
<tr>
<td>M-2, M-2H, Total</td>
<td>$345.0, $77.2, $422.2</td>
<td>1.23, 0.27, 1.50</td>
<td>2</td>
<td>F: BBB (sf); K: BBB (sf)</td>
<td>165</td>
</tr>
<tr>
<td>M-3, M-3H, Total</td>
<td>$391.0, $87.5, $478.5</td>
<td>1.39, 0.31, 1.70</td>
<td>0.30</td>
<td>NR</td>
<td>360</td>
</tr>
<tr>
<td>B-H</td>
<td>$84.4</td>
<td>0.30</td>
<td>0</td>
<td>NR</td>
<td>-</td>
</tr>
</tbody>
</table>

**Reference Pool Size** $28,146.98

---

**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. Under “Ratings,” “F” = Fitch, “M” = Moody’s, and “K” = Kroll Bond Ratings.”
Serious delinquency rates at the GSEs continue to decline as the legacy portfolio is resolved and the pristine, post-2009 book of business exhibits very low default rates. As of January 2014, 2.27 percent of the Fannie portfolio and 2.29 percent of the Freddie portfolio were seriously delinquent, down from 3.13 percent and 3.15 percent a year earlier, respectively.

**Serious Delinquency Rates—Fannie Mae**

![Graph of Fannie Mae's serious delinquency rates]

**Serious Delinquency Rates—Freddie Mac**

![Graph of Freddie Mac's serious delinquency rates]

Sources: Fannie Mae and Urban Institute.
Serious delinquencies for FHA and GSE single-family loans continue to decline with the housing recovery, but remain quite high relative to 2005-2007. FHA delinquencies are declining from a much higher relative starting point. GSE multifamily delinquencies are also declining, although they never reached problematic levels, even at the height of the crisis.

### Serious Delinquency Rates—Single-Family Loans

<table>
<thead>
<tr>
<th></th>
<th>FHA</th>
<th>Fannie Mae</th>
<th>Freddie Mac</th>
</tr>
</thead>
<tbody>
<tr>
<td>2005</td>
<td>7.28%</td>
<td>2.39%</td>
<td>2.38%</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th></th>
<th>Fannie Mae</th>
<th>Freddie Mac</th>
</tr>
</thead>
<tbody>
<tr>
<td>2014</td>
<td>0.11%</td>
<td>0.05%</td>
</tr>
</tbody>
</table>

Sources: Fannie Mae, Freddie Mac and Urban Institute. 
Note: Serious delinquency is defined as 60 days or more past due.
The Home Affordable Refinance Program (HARP) refinances have begun to slow. 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. Despite these factors, HARP recently crossed a milestone of 3 million refinances since Q2 2009, accounting for about 16 percent of all GSE refinances in this period. As a result of the large volume of refi activity, the pool of eligible loans remaining is now much lower.

### Total HARP Refinance Volume

![Graph showing Total HARP Refinance Volume](image)

**Sources:** FHFA Refinance Report and Urban Institute.

### HARP Refinances

<table>
<thead>
<tr>
<th></th>
<th>January 2014</th>
<th>Year-to-date 2014</th>
<th>Inception to date</th>
<th>2013</th>
<th>2012</th>
<th>2011</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total refinances</td>
<td>138,329</td>
<td>138,329</td>
<td>19,010,580</td>
<td>4,081,911</td>
<td>4,750,530</td>
<td>3,229,066</td>
</tr>
<tr>
<td>Total HARP refinances</td>
<td>29,974</td>
<td>29,974</td>
<td>3,087,933</td>
<td>892,914</td>
<td>1,074,769</td>
<td>400,024</td>
</tr>
<tr>
<td>Share 80–105 LTV</td>
<td>69.6%</td>
<td>69.6%</td>
<td>69.8%</td>
<td>56.4%</td>
<td>56.4%</td>
<td>85.0%</td>
</tr>
<tr>
<td>Share 105–125 LTV</td>
<td>18.1%</td>
<td>18.1%</td>
<td>17.2%</td>
<td>22.4%</td>
<td>22.4%</td>
<td>15.0%</td>
</tr>
<tr>
<td>Share &gt;125 LTV</td>
<td>12.4%</td>
<td>12.4%</td>
<td>13.0%</td>
<td>21.2%</td>
<td>21%</td>
<td>0%</td>
</tr>
<tr>
<td>All other streamlined</td>
<td>29,029</td>
<td>29,029</td>
<td>3,282,227</td>
<td>735,210</td>
<td>729,235</td>
<td>785,049</td>
</tr>
</tbody>
</table>

**Sources:** FHFA Refinance Report and Urban Institute.
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 1,310,109 eligible loans, but 38 percent are out-of-the-money because the closing cost would exceed the long-term savings, leaving 817,931 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 7,273,054 loans in this category, 5,238,345 are in-the-money.

More than half the GSE book of business was originated after the cutoff date. Of these loans, 2,494,188 meet the other HARP criteria, but 87 percent are out-of-the-money, leaving only 323,188 loans that, if there was a change in the eligibility date, would be potential HARP candidates at current interest rate levels. If the cutoff date was moved forward one year, 131,842 of the 323,188 borrowers would potentially qualify. Between 51 and 68 percent of these additional borrowers have already been HARP'ed once. If the cut-off date were moved forward two years, 234,931 of the 323,188 borrowers would potentially qualify.

## Loans Meeting HARP Pay History Requirements

<table>
<thead>
<tr>
<th>LTV category</th>
<th>In-the-money</th>
<th>Out-of-the-money</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre-June 2009</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>≤80</td>
<td>5,238,345</td>
<td>2,034,709</td>
<td>7,273,054</td>
</tr>
<tr>
<td>&gt;80</td>
<td>817,931</td>
<td>492,178</td>
<td>1,310,109</td>
</tr>
<tr>
<td>Total</td>
<td>6,056,275</td>
<td>2,526,888</td>
<td>8,583,163</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>LTV category</th>
<th>In-the-money</th>
<th>Out-of-the-money</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Post-June 2009</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>≤80</td>
<td>1,085,751</td>
<td>10,621,326</td>
<td>11,707,077</td>
</tr>
<tr>
<td>&gt;80</td>
<td>323,188</td>
<td>2,171,000</td>
<td>2,494,188</td>
</tr>
<tr>
<td>Total</td>
<td>1,408,939</td>
<td>12,792,326</td>
<td>14,201,265</td>
</tr>
</tbody>
</table>

**Sources:** CoreLogic prime servicing data as of January 2014.

**Note:** Figures are scaled up from source data by a factor of 1/0.65 to account for data coverage. Striped box indicates HARP-eligible loans that are in-the-money.
New HAMP trial mods have tapered off as new defaults have declined. Meanwhile, modification success rates are improving, so the number of new permanent modifications remains fairly stable, at around 13,000 in February 2014. We would expect new permanent mods to begin to taper off in the months ahead, due to sharp declines in new defaults.

**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.
The share of principal reduction modifications peaked at 20 percent in December 2012 before dropping in 2013. This is to be expected, as increasing home prices have increased equity, reducing the need for principal reduction and making such modifications less likely to be net-present-value positive. Portfolio loans are the most likely candidates for principal reduction, followed by private investor loans, because the GSEs and FHA/VA generally do not allow this type of modification. We expect that Mel Watt will consider whether to allow principal reductions on GSE loans later in the year.

Changes in Loan Terms for Modifications

<table>
<thead>
<tr>
<th></th>
<th>9/30/12</th>
<th>12/31/12</th>
<th>03/31/13</th>
<th>6/30/13</th>
<th>9/30/13</th>
<th>12/31/13</th>
<th>One quarter % change</th>
<th>One year % change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Capitalization</td>
<td>88.2</td>
<td>84.6</td>
<td>79.3</td>
<td>81.7</td>
<td>83.6</td>
<td>87.2</td>
<td>4.3</td>
<td>3.0</td>
</tr>
<tr>
<td>Rate Reduction</td>
<td>77.1</td>
<td>73.3</td>
<td>80.1</td>
<td>81.0</td>
<td>78.9</td>
<td>76.7</td>
<td>-2.8</td>
<td>4.7</td>
</tr>
<tr>
<td>Rate Freeze</td>
<td>7.1</td>
<td>3.9</td>
<td>3.7</td>
<td>5.2</td>
<td>5.5</td>
<td>7</td>
<td>28.4</td>
<td>77.9</td>
</tr>
<tr>
<td>Term Extension</td>
<td>64.9</td>
<td>58.9</td>
<td>60.3</td>
<td>67.7</td>
<td>69.3</td>
<td>75.9</td>
<td>9.6</td>
<td>28.9</td>
</tr>
<tr>
<td>Principal Reduction</td>
<td>17.2</td>
<td>20.0</td>
<td>15.2</td>
<td>12.2</td>
<td>13.6</td>
<td>10.5</td>
<td>-22.5</td>
<td>-47.4</td>
</tr>
<tr>
<td>Principal Deferral</td>
<td>19.0</td>
<td>20.5</td>
<td>18.2</td>
<td>20.5</td>
<td>25.3</td>
<td>30.6</td>
<td>20.9</td>
<td>49.3</td>
</tr>
<tr>
<td>Not Reported*</td>
<td>0.4</td>
<td>1.1</td>
<td>0.6</td>
<td>1.4</td>
<td>2.2</td>
<td>0.7</td>
<td>-68.1</td>
<td>-37.8</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th></th>
<th>Fannie Mae</th>
<th>Freddie Mac</th>
<th>Government-guaranteed</th>
<th>Private Investor</th>
<th>Portfolio</th>
<th>Overall</th>
</tr>
</thead>
<tbody>
<tr>
<td>Capitalization</td>
<td>96.3</td>
<td>97.5</td>
<td>61.9</td>
<td>93.6</td>
<td>94.2</td>
<td>87.2</td>
</tr>
<tr>
<td>Rate reduction</td>
<td>61.6</td>
<td>79.5</td>
<td>91.0</td>
<td>73.6</td>
<td>75.0</td>
<td>76.7</td>
</tr>
<tr>
<td>Rate freeze</td>
<td>14.3</td>
<td>3.9</td>
<td>3.2</td>
<td>4.6</td>
<td>9.2</td>
<td>7.0</td>
</tr>
<tr>
<td>Term extension</td>
<td>92.1</td>
<td>94.4</td>
<td>94.8</td>
<td>26.6</td>
<td>62.9</td>
<td>75.9</td>
</tr>
<tr>
<td>Principal reduction</td>
<td>0.4</td>
<td>0.2</td>
<td>0.2</td>
<td>19.9</td>
<td>38.4</td>
<td>10.5</td>
</tr>
<tr>
<td>Principal deferral</td>
<td>24.0</td>
<td>34.2</td>
<td>35.0</td>
<td>33.3</td>
<td>25.9</td>
<td>30.6</td>
</tr>
<tr>
<td>Not reported*</td>
<td>1.5</td>
<td>0.2</td>
<td>0.3</td>
<td>1.1</td>
<td>0.5</td>
<td>0.7</td>
</tr>
</tbody>
</table>

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).
Total modifications (HAMP and proprietary) are now roughly equal to total liquidations. Hope Now reports show 6,999,353 borrowers have received a modification since Q3 2007, compared with 7,030,315 liquidations in the same period. We expect to see sharp declines in both liquidation and modification activity in 2014. In February, foreclosure sales and short sales both dropped to new monthly lows of 36,396 and 10,884, respectively.

### Loan Modifications and Liquidations

![Loan Modifications and Liquidations graph](image)

- **HAMP mods**
- **Proprietary mods**
- **Liquidations**

Sources: Hope Now Reports and Urban Institute.

Note: Liquidations includes both foreclosure sales and short sales. Annualized figure based on data from February 2014.

### Cumulative Modifications and Liquidations

![Cumulative Modifications and Liquidations graph](image)

- **HAMP mods**
- **Proprietary mods**
- **Liquidations**

Sources: Hope Now Reports and Urban Institute.

Note: Liquidations includes both foreclosure sales and short sales. Year-to-date figure as of February 2014.
Redefault rates have come down across each sector, especially on private-label modifications. Government-guaranteed mortgages have much higher redefault rates than other product types.

### Redefault Rate 12 Months after Modification

**Sources:** OCC Mortgage Metrics Report for the Fourth Quarter of 2013 and Urban Institute.

### Redefault Rate 24 Months after Modification

**Sources:** OCC Mortgage Metrics Report for the Fourth Quarter of 2013 and Urban Institute.
AGENCY ISSUANCE

AGENCY GROSS AND NET ISSUANCE

While newly issued agency securities (agency gross issuance) were robust in 2013, a large share was driven by refinancing, which has fallen off with rising interest rates. Agency gross issuance totaled 55.4 billion in March 2014, a 63.1 percent decline year-over-year. Net issuance, which excludes repayments, prepayments, and refinances on outstanding mortgages, remains low and dominated by Ginnie Mae. This is unsurprising, given the increased role of FHA and VA during the crisis.

### Agency Gross Issuance

<table>
<thead>
<tr>
<th>Year</th>
<th>GSEs</th>
<th>Ginnie Mae</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>2000</td>
<td>$360.6</td>
<td>$102.2</td>
<td>$462.8</td>
</tr>
<tr>
<td>2001</td>
<td>$885.1</td>
<td>$171.5</td>
<td>$1,056.6</td>
</tr>
<tr>
<td>2002</td>
<td>$1,238.9</td>
<td>$169.0</td>
<td>$1,407.9</td>
</tr>
<tr>
<td>2003</td>
<td>$1,874.9</td>
<td>$213.1</td>
<td>$2,088.0</td>
</tr>
<tr>
<td>2004</td>
<td>$872.6</td>
<td>$119.2</td>
<td>$991.9</td>
</tr>
<tr>
<td>2005</td>
<td>$893.9</td>
<td>$81.4</td>
<td>$975.3</td>
</tr>
<tr>
<td>2006</td>
<td>$853.0</td>
<td>$76.7</td>
<td>$929.7</td>
</tr>
<tr>
<td>2007</td>
<td>$1,066.2</td>
<td>$94.9</td>
<td>$1,161.1</td>
</tr>
<tr>
<td>2008</td>
<td>$911.4</td>
<td>$267.6</td>
<td>$1,179.0</td>
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<tr>
<td>2009</td>
<td>$1,280.0</td>
<td>$451.3</td>
<td>$1,731.3</td>
</tr>
<tr>
<td>2010</td>
<td>$1,003.5</td>
<td>$390.7</td>
<td>$1,394.3</td>
</tr>
<tr>
<td>2011</td>
<td>$879.3</td>
<td>$315.3</td>
<td>$1,194.7</td>
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<tr>
<td>2012</td>
<td>$1,288.8</td>
<td>$405.0</td>
<td>$1,693.8</td>
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<tr>
<td>2013</td>
<td>$1,176.6</td>
<td>$393.6</td>
<td>$1,570.1</td>
</tr>
<tr>
<td>2014 YTD</td>
<td>132.8</td>
<td>58.3</td>
<td>191.0</td>
</tr>
<tr>
<td>2014 (Ann.)</td>
<td>531.0</td>
<td>233.2</td>
<td>764.2</td>
</tr>
</tbody>
</table>

### Agency Net Issuance

<table>
<thead>
<tr>
<th>Year</th>
<th>GSE</th>
<th>Ginnie Mae</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>2000</td>
<td>$159.8</td>
<td>$29.3</td>
<td>$189.1</td>
</tr>
<tr>
<td>2001</td>
<td>$367.8</td>
<td>-$9.9</td>
<td>$357.9</td>
</tr>
<tr>
<td>2002</td>
<td>$357.6</td>
<td>-$51.2</td>
<td>$306.4</td>
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<tr>
<td>2003</td>
<td>$335.0</td>
<td>-$77.6</td>
<td>$257.4</td>
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<tr>
<td>2004</td>
<td>$83.3</td>
<td>-$40.1</td>
<td>$43.2</td>
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<td>$174.4</td>
<td>-$42.2</td>
<td>$132.1</td>
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<tr>
<td>2006</td>
<td>$313.6</td>
<td>$0.3</td>
<td>$313.8</td>
</tr>
<tr>
<td>2007</td>
<td>$514.7</td>
<td>$30.9</td>
<td>$545.5</td>
</tr>
<tr>
<td>2008</td>
<td>$314.3</td>
<td>$196.4</td>
<td>$510.7</td>
</tr>
<tr>
<td>2009</td>
<td>$249.5</td>
<td>$257.4</td>
<td>$506.8</td>
</tr>
<tr>
<td>2010</td>
<td>-$305.5</td>
<td>$198.2</td>
<td>-$107.3</td>
</tr>
<tr>
<td>2011</td>
<td>-$133.4</td>
<td>$149.4</td>
<td>$16.0</td>
</tr>
<tr>
<td>2012</td>
<td>-$46.5</td>
<td>$118.4</td>
<td>$71.9</td>
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<tr>
<td>2013</td>
<td>$66.5</td>
<td>$85.8</td>
<td>$152.3</td>
</tr>
<tr>
<td>2014 YTD</td>
<td>-$6.7</td>
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<td>$5.2</td>
</tr>
<tr>
<td>2014 (Ann.)</td>
<td>-$26.80</td>
<td>47.48</td>
<td>$20.68</td>
</tr>
</tbody>
</table>

Sources: eMBS and Urban Institute.
Note: Dollar amounts are in billions.
Year-to-date figure as of March 2014
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, and that share declined to 25 percent in 2013. It should begin to rise as we move from a refinance market to a purchase market. March 2014 showed a Ginnie Mae share of 30.1 percent.

Fed Absorption of Agency Gross Issuance

In 2013, the Fed absorbed nearly 50 percent of the year’s gross issuance. The impact of Fed tapering began to show in February, when total Fed purchases were $43.5 billion, down from $55.2 billion a month earlier (Fed purchases include pay downs, as well as net new purchases). In March, total Fed purchases remained flat at $44.45 billion, while the gross issuance declined 16 percent to 55.4 billion, resulting in 80 percent Fed absorption of gross issuance, up from February’s 66 percent.

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

Private mortgage insurers lost market share to FHA and VA in the crisis. With the recovery and higher FHA insurance premiums, the private MI share is increasing, albeit slowly. In 4Q13, private insurers held 41.3 percent of the market, up from 21 percent in 1Q11 but significantly down from their nearly 80 percent share in 2005-2007.

- VA
- FHA
- Total private primary MI

Sources: Inside Mortgage Finance and Urban Institute.

MI Market Share

Sources: Inside Mortgage Finance and Urban Institute.
The table below charts the history of FHA mortgage insurance premiums since 2001. Note that the most recent change increased the annual premium by 10 bps, from 1.25 to 1.35 percent, and kept the upfront premium at 1.75 percent for mortgages with balances less than $625,500. Annual premiums have more than doubled since 2008, as the FHA has worked to shore up its finances.

### FHA MI Premiums for Typical Purchase Loan

<table>
<thead>
<tr>
<th>Case number date</th>
<th>Upfront mortgage insurance premium (UFMIP) paid</th>
<th>Annual mortgage insurance premium (MIP)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1/1/2001 - 7/13/2008</td>
<td>150</td>
<td>50</td>
</tr>
<tr>
<td>7/14/2008 - 9/30/2008*</td>
<td>175</td>
<td>55</td>
</tr>
<tr>
<td>10/4/2010 - 4/17/2011</td>
<td>100</td>
<td>90</td>
</tr>
<tr>
<td>4/18/2011 - 4/8/2012</td>
<td>100</td>
<td>115</td>
</tr>
<tr>
<td>4/9/2012 - 6/10/2012</td>
<td>175</td>
<td>125</td>
</tr>
<tr>
<td>6/11/2012 - 3/31/2013*</td>
<td>175</td>
<td>125</td>
</tr>
<tr>
<td>4/1/2013 - presentb</td>
<td>175</td>
<td>135</td>
</tr>
</tbody>
</table>

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 the FHA used a risk based FICO/LTV matrix for MI. This table assumes the average FICO for 2008 purchase originations, ~630.
* Applies to purchase loans less than or equal to $625,500. Those over that amount have an annual premium of 150 bps.
* Applies to purchase loans less than or equal to $625,500. Those over that amount have an annual premium of 155 bps.

### Initial Monthly Payment Comparison: FHA vs. PMI

<table>
<thead>
<tr>
<th>Property Value</th>
<th>$250,000</th>
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</thead>
<tbody>
<tr>
<td>Loan Amount</td>
<td>$237,500</td>
</tr>
<tr>
<td>LTV</td>
<td>95</td>
</tr>
<tr>
<td>Base Rate</td>
<td></td>
</tr>
<tr>
<td>Conforming</td>
<td>4.36%</td>
</tr>
<tr>
<td>FHA</td>
<td>4.00%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>FHA MI Premiums</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>FHA UFMIP</td>
<td>1.75</td>
<td>1.75</td>
<td>1.75</td>
<td>1.75</td>
<td>1.75</td>
<td>1.75</td>
<td>1.75</td>
<td>1.75</td>
</tr>
<tr>
<td>FHA MIP*</td>
<td>1.30</td>
<td>1.30</td>
<td>1.30</td>
<td>1.30</td>
<td>1.30</td>
<td>1.30</td>
<td>1.30</td>
<td>1.30</td>
</tr>
<tr>
<td>PMI</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>GSE AMDC &amp; LLP</td>
<td>3.50</td>
<td>3.00</td>
<td>2.50</td>
<td>1.50</td>
<td>1.25</td>
<td>0.75</td>
<td>0.50</td>
<td>0.50</td>
</tr>
<tr>
<td>PMI Annual MIP</td>
<td>1.15</td>
<td>1.15</td>
<td>1.15</td>
<td>0.89</td>
<td>0.89</td>
<td>0.62</td>
<td>0.62</td>
<td>0.54</td>
</tr>
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</table>

<table>
<thead>
<tr>
<th>Monthly Payment</th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>FHA</td>
<td>$1,411</td>
<td>$1,411</td>
<td>$1,411</td>
<td>$1,411</td>
<td>$1,411</td>
<td>$1,411</td>
<td>$1,411</td>
<td>$1,411</td>
</tr>
<tr>
<td>PMI</td>
<td>$1,511</td>
<td>$1,497</td>
<td>$1,482</td>
<td>$1,402</td>
<td>$1,395</td>
<td>$1,327</td>
<td>$1,320</td>
<td>$1,305</td>
</tr>
</tbody>
</table>

| PMI Advantage   | ($100)    | ($86)     | ($71)     | $9        | $16       | $84       | $91       | $106  |

Sources: Genworth Mortgage Insurance, Ginnie Mae and Urban Institute.

Note: Mortgage insurance premiums listed in percentage points. LLPA= Loan Level Price Adjustment, described in detail on page 20. FHA MIP=1.3 percent for <95 LTV mortgages. Orange shade indicates FHA monthly payment is more favorable, while light blue indicates PMI is more favorable.
Since 2008, the composition of loans purchased by Fannie Mae has shifted towards borrowers with higher FICO scores. For example, 70 percent of loans originated from 2011 to Q1 2013 were for borrowers with FICO scores above 750, compared to 36.3 percent of borrowers in 2007 and 32.4 percent from 1999-2004.

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

<table>
<thead>
<tr>
<th>Origination Year</th>
<th>Origination FICO</th>
<th>LTV</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>≤70%</td>
<td>70 to 80%</td>
<td>80 to 90%</td>
</tr>
<tr>
<td>1999-2004</td>
<td>≤700</td>
<td>10.3%</td>
<td>16.8%</td>
</tr>
<tr>
<td></td>
<td>700 to 750</td>
<td>9.6%</td>
<td>14.4%</td>
</tr>
<tr>
<td></td>
<td>&gt;750</td>
<td>14.1%</td>
<td>14.1%</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>34.0%</td>
<td>45.3%</td>
</tr>
<tr>
<td>2005</td>
<td>≤700</td>
<td>13.7%</td>
<td>17.4%</td>
</tr>
<tr>
<td></td>
<td>700 to 750</td>
<td>10.0%</td>
<td>13.5%</td>
</tr>
<tr>
<td></td>
<td>&gt;750</td>
<td>15.9%</td>
<td>16.6%</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>39.6%</td>
<td>47.5%</td>
</tr>
<tr>
<td>2006</td>
<td>≤700</td>
<td>13.7%</td>
<td>18.2%</td>
</tr>
<tr>
<td></td>
<td>700 to 750</td>
<td>9.1%</td>
<td>13.8%</td>
</tr>
<tr>
<td></td>
<td>&gt;750</td>
<td>14.3%</td>
<td>17.8%</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>37.1%</td>
<td>49.8%</td>
</tr>
<tr>
<td>2007</td>
<td>≤700</td>
<td>11.6%</td>
<td>17.0%</td>
</tr>
<tr>
<td></td>
<td>700 to 750</td>
<td>8.0%</td>
<td>12.8%</td>
</tr>
<tr>
<td></td>
<td>&gt;750</td>
<td>13.8%</td>
<td>17.8%</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>33.4%</td>
<td>47.6%</td>
</tr>
<tr>
<td>2008</td>
<td>≤700</td>
<td>8.3%</td>
<td>8.2%</td>
</tr>
<tr>
<td></td>
<td>700 to 750</td>
<td>8.3%</td>
<td>12.8%</td>
</tr>
<tr>
<td></td>
<td>&gt;750</td>
<td>17.5%</td>
<td>23.7%</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>34.1%</td>
<td>44.7%</td>
</tr>
<tr>
<td>2009-2010</td>
<td>≤700</td>
<td>4.0%</td>
<td>3.2%</td>
</tr>
<tr>
<td></td>
<td>700 to 750</td>
<td>9.0%</td>
<td>11.9%</td>
</tr>
<tr>
<td></td>
<td>&gt;750</td>
<td>31.1%</td>
<td>32.2%</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>44.1%</td>
<td>47.4%</td>
</tr>
<tr>
<td>2011-1Q13</td>
<td>≤700</td>
<td>2.9%</td>
<td>3.6%</td>
</tr>
<tr>
<td></td>
<td>700 to 750</td>
<td>6.9%</td>
<td>10.5%</td>
</tr>
<tr>
<td></td>
<td>&gt;750</td>
<td>27.7%</td>
<td>31.8%</td>
</tr>
<tr>
<td></td>
<td>Total</td>
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<td>45.9%</td>
</tr>
</tbody>
</table>

**Total** 36.9% 46.2% 9.4% 7.5% 100.0%

**Sources:** Fannie Mae and Urban Institute.

**Note:** Fannie Mae loan level credit data includes loans originated from Q1 1999 to Q1 2013. The percentages are weighted by origination balance.
As you can see from the previous page, the 2007 vintage year had a similar composition to the 2004 and earlier vintage years, but a much higher default rate due to a very unfavorable environment for home prices. Recent originations, 2009 and later, have both pristine composition and a favorable home price environment, contributing to very low default rates.

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

<table>
<thead>
<tr>
<th>Origination Year</th>
<th>Origination FICO</th>
<th>LTV</th>
<th>Total</th>
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<tbody>
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<td></td>
<td>≤700</td>
<td>70 to 80</td>
<td>80 to 90</td>
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<tr>
<td>1999-2004</td>
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<tr>
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<td>0.8%</td>
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<td></td>
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<td>2.4%</td>
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<td>14.4%</td>
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<td>21.7%</td>
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<td>15.7%</td>
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<tr>
<td>2008</td>
<td>13.6%</td>
<td>17.1%</td>
<td>24.5%</td>
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<td>13.7%</td>
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<tr>
<td>2009-2010</td>
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<tr>
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Sources: Fannie Mae and Urban Institute.

Note: Fannie Mae loan level credit data includes loans originated from Q1 1999 to Q1 2013, with performance information on these loans through Q4 2013. 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).
Since 2008, the composition of loans purchased by Freddie Mac has shifted towards borrowers with higher FICO scores. For example, 70.4 percent of loans originated in 2011 and 2012 were for borrowers with FICO scores above 750, compared to 38.4 percent in 2007 and 33.1 percent from 1999-2004.

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

<table>
<thead>
<tr>
<th>Origination Year</th>
<th>Origination FICO</th>
<th>≤70</th>
<th>70 to 80</th>
<th>80 to 90</th>
<th>&gt;90</th>
<th>Total</th>
</tr>
</thead>
<tbody>
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<td>1999-2004</td>
<td>≤700</td>
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<td>16.6%</td>
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<td>35.5%</td>
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<tr>
<td></td>
<td>700 to 750</td>
<td>8.9%</td>
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<td>3.4%</td>
<td>3.2%</td>
<td>31.4%</td>
</tr>
<tr>
<td></td>
<td>&gt;750</td>
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<td>2005</td>
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<td>10.5%</td>
<td>17.0%</td>
<td>3.4%</td>
<td>3.0%</td>
<td>33.9%</td>
</tr>
<tr>
<td></td>
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<td>9.3%</td>
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<td>2.0%</td>
<td>1.7%</td>
<td>28.5%</td>
</tr>
<tr>
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<td>15.7%</td>
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<td>1.4%</td>
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<td>1.9%</td>
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<td>27.9%</td>
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<tr>
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<td>4.7%</td>
<td>5.1%</td>
<td>34.6%</td>
</tr>
<tr>
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</tr>
<tr>
<td>2008</td>
<td>≤700</td>
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<td>2.3%</td>
<td>21.8%</td>
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<tr>
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<td>28.4%</td>
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<tr>
<td></td>
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<td>21.3%</td>
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<tr>
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<td>23.8%</td>
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<td><strong>100.0%</strong></td>
</tr>
</tbody>
</table>

Sources: Freddie Mac and Urban Institute.

Note: Freddie Mac loan level credit data includes loans originated from Q1 1999 to Q4 2012. The percentages are weighted by origination balance.
As you can see from the previous page, the 2007 vintage year had a similar composition to the 2004 and earlier vintage years, but a much higher default rate due to a very unfavorable environment for home prices. Recent originations, 2009 and later, have both pristine composition and a favorable home price environment, contributing to very low default rates.

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

<table>
<thead>
<tr>
<th>Origination Year</th>
<th>Origination FICO</th>
<th>LTV ≤70</th>
<th>70 to 80</th>
<th>80 to 90</th>
<th>&gt;90</th>
<th>Total</th>
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<tbody>
<tr>
<td></td>
<td>≤700</td>
<td>2.5%</td>
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<tr>
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<td>2.1%</td>
</tr>
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<tr>
<td>2011-2012</td>
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</tr>
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</tr>
<tr>
<td></td>
<td>&gt;750</td>
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<td>0.0%</td>
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<tr>
<td><strong>Total</strong></td>
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<td>3.7%</td>
<td>5.8%</td>
<td>6.5%</td>
<td>3.5%</td>
</tr>
</tbody>
</table>

Sources: Freddie Mae and Urban Institute.
Note: Freddie Mac loan level credit data includes loans originated from Q1 1999 to Q4 2012, with performance information on these loans through Q2 2013. 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).
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 cumulative defaults for the 2007 vintage are above 14 percent and 11 percent respectively. For both Fannie Mae and Freddie Mac, cumulative defaults from 2009-10 and 2011-12 are on pace to fall below pre-2003 levels. For Fannie loans 34 months after origination, the cumulative default rate from 2009-10 and 2011-Q1 2013 are about 0.45 and 0.07 percent, respectively, compared to the cumulative default rate from 1999-2003 of 0.52 percent. For Freddie loans 28 months after origination, the cumulative default rates total 0.21 percent from 2009-10 and 0.04 percent from 2011-12, compared to the rate from 1999-2003 of 0.27 percent.

**Fannie Mae Cumulative Default Rate by Vintage Year**

![Fannie Mae Cumulative Default Rate by Vintage Year graph]

**Freddie Mac Cumulative Default Rate by Vintage Year**

![Freddie Mac Cumulative Default Rate by Vintage Year graph]

**Sources:** Fannie Mae and Urban Institute.

**Note:** Default is defined as more than six months delinquent or disposed of via short sales, third-party sales, deed-in-lieu of foreclosure, or real estate owned (REO acquisitions). Originations for Fannie Mae are included through Q1 2013 and performance through Q4 2013. For Freddie Mac, the updated information includes originations through Q4 2012, with performance on these loans through Q2 2013.
Upcoming Events

May 6 Lunchtime Data Talk—Home Mortgage Disclosure Act Data
Ren Essene and Jessica Russell of the Consumer Finance Protection Bureau will discuss new web-based tools making access and use of HMDA data easier than ever, as well as a proposal to expand the reporting requirements for lenders. Please check our events page for more information as it becomes available.

Commentaries

Johnson Crapo GSE Discussion Draft: A Few Suggestions for Improvement
Authors: Laurie Goodman and Ellen Seidman
Date: April 14, 2014

National Mortgage Settlement: Lessons Learned
Authors: Laurie Goodman and Maia Woluchem
Date: April 14, 2014

OASIS: A securitization Born from MSR Transfers
Authors: Laurie Goodman and Pamela Lee
Date: April 1, 2014

Where Have All the Loans Gone? The Impact of Credit Availability on Mortgage Volume
Authors: Laurie Goodman, Jun Zhu, and Taz George
Date: March 13, 2014

Lifting the Fog around FHA Lending?
Author: Jim Parrott
Date: March 13, 2014

The Mortgage Debt Forgiveness Act Has Expired—Renewal Could Benefit Millions
Authors: Laurie Goodman and Ellen Seidman
Date: February 18, 2014

Single-Family Securitized Financing: A Blueprint for the Future?
Author: Laurie Goodman
Date: January 17, 2014

FHA Loan Limits—What Areas Are the Most Affected?
Authors: Laurie Goodman, Ellen Seidman and Jun Zhu
Date: January 16, 2014

Blog Posts

The re-emerging dominance of private mortgage insurers
Authors: Bing Bai and Laurie Goodman
Date: March 18, 2014

Serious movement on housing finance reform
Authors: Ellen Seidman
Date: March 16, 2014

The housing bust disproportionately hurt minorities
Authors: Laurie Goodman, Jun Zhu, and Taz George
Date: March 14, 2014

Strategic default: how big an issue?
Author: Maia Woluchem
Date: March 12, 2014

Where have all the mortgages gone?
Authors: Laurie Goodman, Jun Zhu, Taz George
Date: March 6, 2014

We’ve mapped America’s rental housing crisis
Author: Erika Poethig
Date: March 3, 2014

Does the mortgage market really need private capital?
Author: Maia Woluchem
Date: February 21, 2014

Mortgage debt forgiveness act renewal could benefit millions
Authors: Laurie Goodman and Ellen Seidman
Date: February 18, 2014
Testimony

**Housing Finance Reform: Fundamentals of Transferring Credit Risk in a Future Housing Finance System**
Author: Laurie Goodman
December 10, 2013

Past Events

**April Lunchtime Data Talk—Counting the Housing Stock with AHS, CPS, ACS, and HVS**
Presenters: Kurt Usowski, Deputy Assistant Secretary for Economic Affairs, HUD; Arthur Cresce, Jr., Assistant Division Chief for Housing Statistics at the U.S. Census Bureau.
April 8, 2014

**March Lunchtime Data Talk—Strategic Default**
Presenters: Paul Willen, Federal Reserve Bank of Boston; Kris Gerardi, Federal Reserve Bank of Atlanta and Michael Bradley, CoreLogic; Amy Crew Cutts, Equifax.
Discussant: Bob Avery, Federal Housing Finance Agency.
March 10, 2014

**Sunset Seminar: Bringing Private Capital Back to the Mortgage Market**
Panelists: Laurie Goodman, Housing Finance Policy Center; Eric Kaplan, Shellpoint Partners; Paul Leonard, Financial Services Roundtable.
Moderator: Faith Schwartz, CoreLogic.
February 18, 2014

**January Lunchtime Data Talk—Multifamily Housing**
Presenters: Jamie Woodwell, Mortgage Bankers Association, and Mark Obrinsky, National Multifamily Housing Council.
January 13, 2014