

# The Return of Private Capital

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## Executive Summary

Private investor share of the U.S. mortgage market has declined since the financial crisis; however, private investors hold market risk on more than 75 percent of the stock of residential mortgage debt outstanding (MDO) and stand in first-loss position for credit risk on nearly 50 percent of the stock of single-family MDO.

Private investor share of market risk is expected to grow. However, the share of new mortgage originations for which private investors stand in first-loss position for credit risk, slightly more than 30 percent in 2013, must increase to reverse continuing declines in private share of credit risk on MDO.

In this edition of *Housing Insights*, we examine the level of private capital participation in the mortgage market following the financial and housing crisis. There is a common perception that private capital<sup>1</sup> has exited the mortgage finance market. Although the decline has been real and significant, we find that private market participants remain a significant source of liquidity to the U.S. mortgage market.

In the aftermath of the housing crisis, private market participants reduced investment in the flow of mortgage originations, leading to a decline in private market investment in the stock of residential mortgage debt outstanding (MDO). In particular, the share of first-lien mortgage originations for which private market participants stood in first credit loss position reached a low of 21 percent in 2009.

However, that decline does not tell the full story. The share of new originations with private capital in the first loss position is expanding. It grew to more than 30 percent in 2013, driven by an increase in mortgage loans retained in portfolio by private investors and an expansion in the share of originations with private mortgage insurance.

From a stock perspective, private capital has never gone away. As of Q1 2014, private market participants hold market risk<sup>2</sup> on more than 75 percent of the stock of MDO and credit risk<sup>3</sup> on nearly 50 percent of the stock of single-family MDO<sup>4</sup>.

None of this is to say that the role of private capital in the market today is sufficient. The paper is meant to demonstrate that the story is more nuanced than is generally accepted. Although private investment in credit risk on new mortgage originations has increased, further progress is required to reverse the continuing decline in private capital share of MDO.

## Background

Since the housing crisis, policymakers and market experts have called for greater private capital participation in the mortgage market. In an August 2013 speech, President Obama remarked that “private capital

<sup>1</sup> For the purposes of this article, we adopt the common meaning of private capital investors: federal and state-chartered banks, thrifts, credit unions, insurance companies and REITs, as well as unchartered mortgage investors (e.g. PIMCO) are included among private capital investors. Government agencies and the government sponsored enterprises (GSEs), both pre- and post-conservatorship, are not included among private capital investors. We recognize that some analysts would not consider banks that can fund mortgage investments using FDIC-insured deposits to be private investors.

<sup>2</sup> Market risk for a mortgage investment is the risk that the market value of a mortgage asset will change in response to changes in interest rates and other factors. The holder of market risk on a mortgage loan will generally book the asset on its balance sheet.

<sup>3</sup> Credit risk for a mortgage investment is the risk that the borrower fails to repay the loan as required.

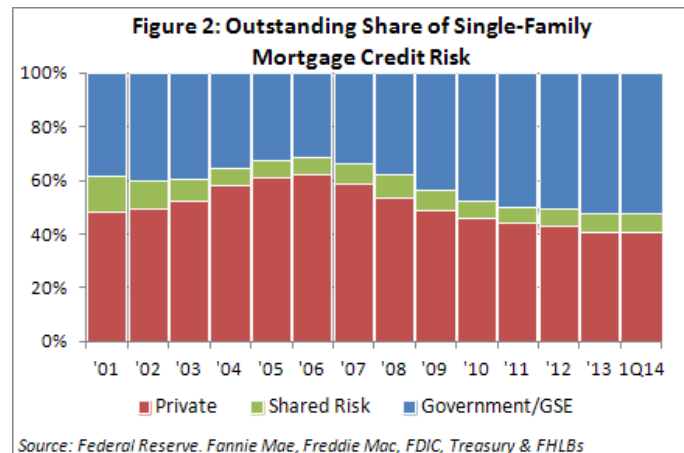
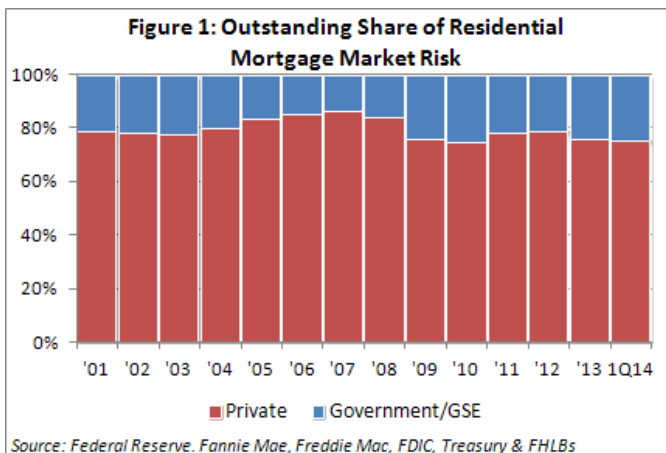
<sup>4</sup> Due to data limitations, we report credit risk for the single-family market and market risk for the residential market.

should take a bigger role in the mortgage market.”<sup>5</sup> Similarly, proposed housing finance reform legislation from both sides of the aisle has had an explicit objective to increase private capital investment in mortgage loans.

We can divide mortgage risk into two categories: market risk and credit risk. Private capital share in market risk for mortgage loans declined 11 percentage points following the crisis, but private capital investors remain the holder of market risk for an estimated \$8.3 trillion in residential mortgage loans, more than 75 percent of total residential MDO (see Figure 1). In addition, private capital share of market risk is expected to increase as government sponsored enterprise (GSE) mortgage portfolios continue to decline and the Federal Reserve “tapers” its purchases of mortgage assets<sup>6</sup>.

Those arguing for an increase in private capital investment in the mortgage market are referring generally to private capital investment in mortgage credit risk. A recent research report from analysts at Goldman Sachs implies that private capital participation in the mortgage market remains very low: “Mortgages implicitly or explicitly guaranteed by the government are 90 percent of all loans originated, compared to two thirds before the crisis.”<sup>7</sup> However, we estimate that private investors hold all credit risk on approximately 20 percent of the unpaid principal balance of mortgage originations since 2009 that they have elected to retain on balance sheet. In addition, we take an alternative approach to assessing private capital share of mortgage credit risk by measuring the share of the market with private capital standing in first-loss position<sup>8</sup>.

Private capital investment in mortgage credit risk peaked in the mid-2000’s, but has declined following the crisis (see Figure 2). Nonetheless, at year-end 2013, private capital stood in first-loss position for an estimated \$4.7 trillion, or 47 percent, of single-family MDO.



The decline in private capital investment in credit risk has been the result of a decline in investment in the flow of new mortgages. Many industry leaders and market experts believe the current level of government involvement in newly originated mortgage credit risk is unhealthy and unsustainable.

This report will focus on private capital investment in newly originated mortgage credit risk. Private capital invests in mortgage credit in three ways:

- **investment or retention of whole loans** in the portfolios of financial institutions;
- **investment in structured transactions or private-label securities (PLS)** backed by mortgage assets; and

<sup>5</sup> [Remarks by the President on Responsible Homeownership](#); August 6, 2013.

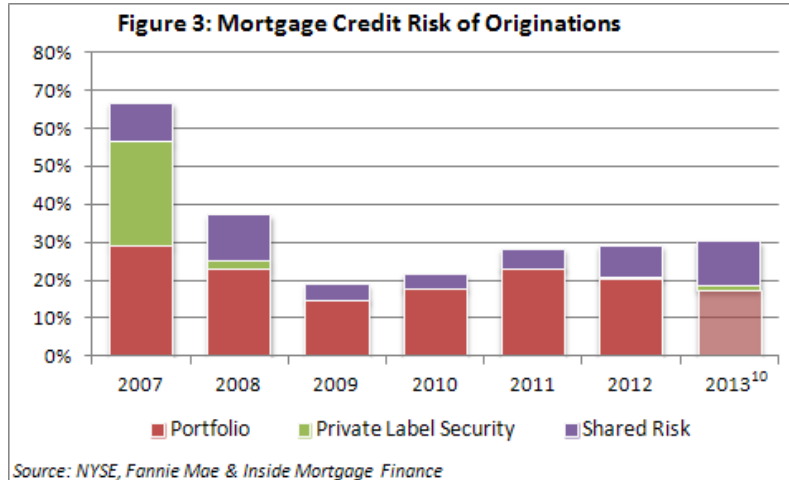
<sup>6</sup> After “tapering” is completed, we expect the Fed to continue purchasing mortgage assets for some time at the pace required to replace paydowns of its existing portfolio.

<sup>7</sup> Goldman Sachs; *The Mortgage Analyst*, May 22, 2014.

<sup>8</sup> Private market participants and the government or GSEs share credit risk on a significant volume of mortgage loans. The party required to bear initial credit losses stands in first-loss position.

- **risk sharing with the GSEs** through risk sharing agreements such as mortgage insurance and purchase or sale of credit-tranched mortgage-related securities<sup>9</sup>.

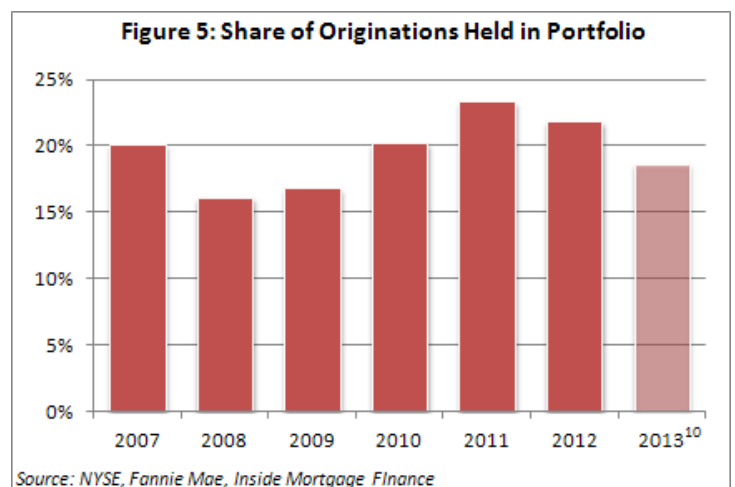
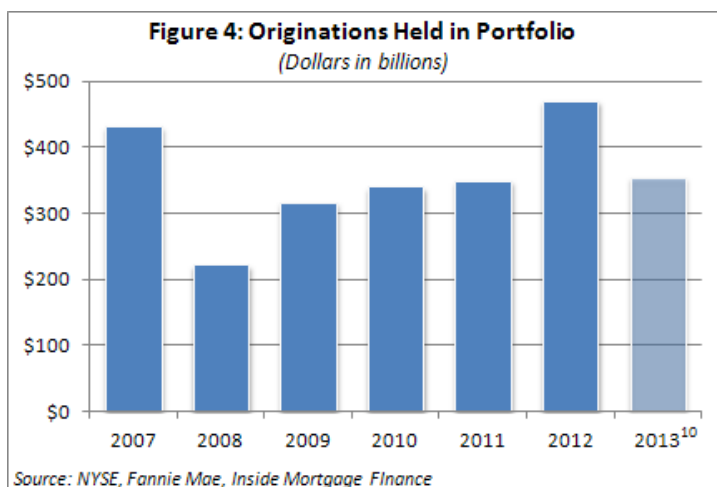
Figure 3 measures the share of newly originated first-lien mortgage loans for which private capital investors take credit risk using each of the three methods mentioned above.



Following the housing boom years of the mid-2000s, private capital share of newly originated mortgage credit risk declined dramatically, reaching a low point in 2009. The share of mortgage originations with private capital standing in first-loss position exceeded 60 percent prior to the crisis period, but declined to a low of 21 percent following the crisis. However, since 2009, private capital investment has grown to stand in first-loss position for more than 30 percent<sup>10</sup> of 2013 originations.

## Investment or Retention of Whole Loans

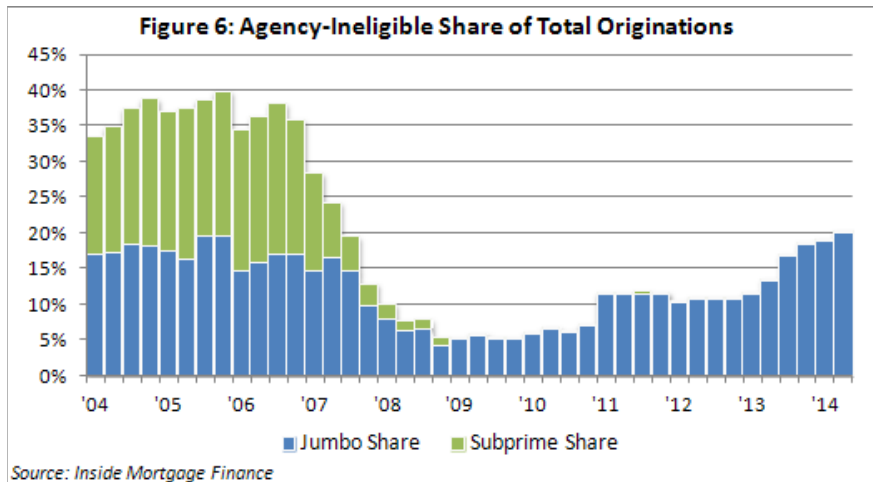
As seen in Figure 3, the market turned in 2009, led by an increase in the volume and share of originations retained as whole loans on lender balance sheets (see Figures 4 and 5).



<sup>9</sup> Includes mortgage insurance, recourse, and credit-risk transfer securities. In addition, the GSEs have taken credit risk from private market participants through long-term standby commitments and investments in credit-tranched PLS.

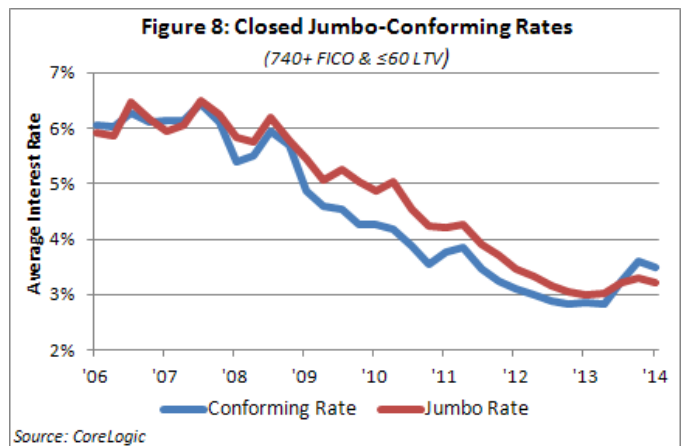
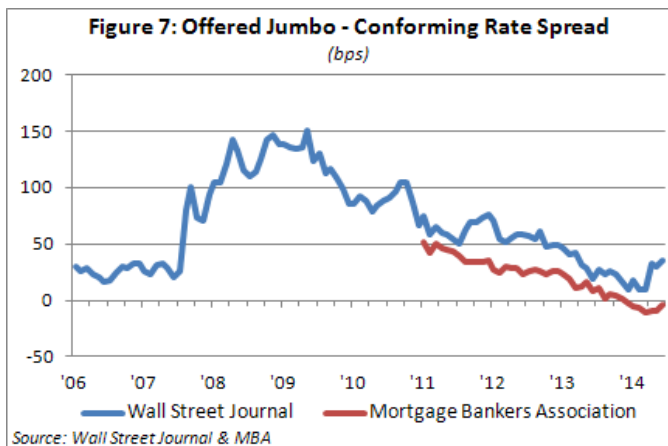
<sup>10</sup> 2013 figures are subject to revision following release of Home Mortgage Disclosure Act (HMDA) data.

One indication of an increased supply of mortgage credit from private investors has been the growing share of mortgage originations of loans that are ineligible<sup>11</sup> for sale to the GSEs and Ginnie Mae. The ineligible share of mortgage originations dwindled to as low as 5 percent in 2009, but has since climbed to 20 percent in the second quarter of 2014 (see Figure 6). Because these loans must find a home on private investor balance sheets, an increase in originations indicates an increase in private investor appetite for mortgage credit risk.



Another more recent indication of improving private investor appetite for mortgage credit risk has been the decline in mortgage rates offered for jumbo loans relative to the rates offered for conforming loans. For many years prior to the crisis, the spread between mortgage rates for jumbo and conforming loans oscillated in a narrow range, typically between 25 and 35 basis points. Following the crisis, the jumbo-conforming spread widened to as much as 150 basis points (see Figure 7). Then, between 2009 and 2013, jumbo-conforming spreads tightened, partly driven by increases in the credit guaranty fees charged by the GSEs that lenders included in conforming mortgage rates offered to borrowers. Beginning in 2011, there has been a strong, negative correlation of -91 percent between guaranty fee changes and the jumbo-conforming spread.

However, guaranty fee changes cannot explain the additional decline and inversion of the jumbo-conforming spread that occurred in the latter half of 2013 and into 2014 (see Figure 8). During this period, lenders originated jumbo loans that were retained on balance sheet<sup>12</sup> with a lower yield than conforming loans, which also could have been retained on balance sheet. Additionally, in a low rate environment in which banks have excess capital, yield-producing assets with exceptional credit characteristics, such as recently originated conforming mortgage loans, become even more attractive.



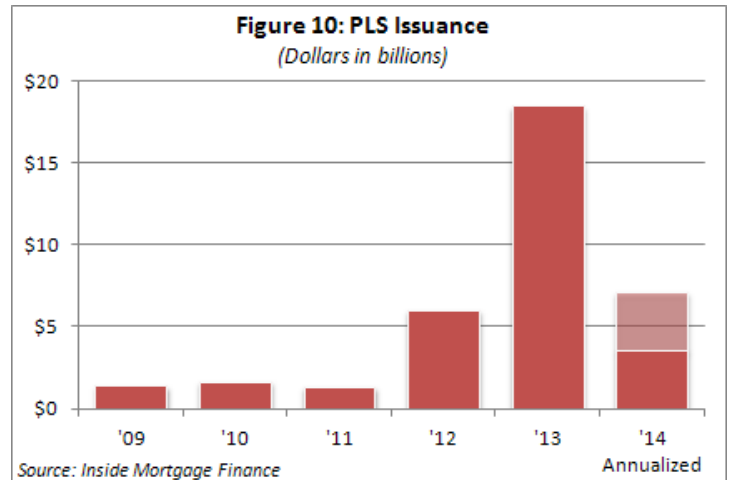
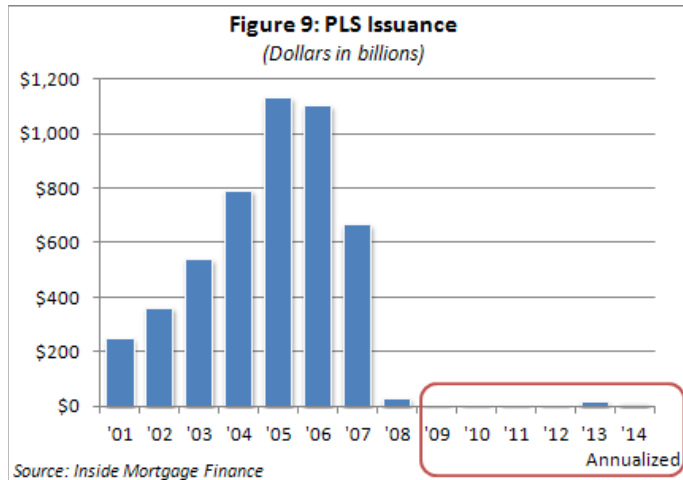
<sup>11</sup> Ineligible loans include jumbo (mortgages that exceed the legislated purchase limits of the GSEs) and subprime mortgages, as well as certain product types ineligible for Qualified Mortgage designation in 2014.

<sup>12</sup> According to Inside Mortgage Finance, the securitization rate of prime jumbo loans has been 5 percent or less since 2009.

## Investment in Structured Transactions or PLS

Private-label mortgage-related securities (PLS) issuance peaked at \$1.1 trillion in 2005 (see Figure 9). PLS issuance showed signs of re-emergence in early 2013, but issuance has declined in 2014 (see Figure 10).

Jumbo mortgages were the primary collateral for 2013 PLS issuance<sup>13</sup>. Thirty-one jumbo deals totaling \$13.1 billion were issued in 2013, compared to nine deals totaling \$3.5 billion in 2012. The 2013 increase in jumbo-backed PLS issuance, 270 percent, far outpaced the increase in jumbo mortgage originations, 21 percent<sup>14</sup>.



The momentum that drove 2013 PLS offerings to the highest level in four years, however, fizzled out in the fourth quarter of 2013 and remained absent through the first several months of 2014. The economics of PLS issuance declined during 2013 as issuance appears to have exceeded the depth of the investor market for mortgage assets in PLS form. Currently, many banks appear to prefer holding whole loans rather than PLS. Whole loan assets can be accounted for at historical cost while PLS assets must be marked-to-market, which introduces earnings volatility. Also, impending Basel III risk-based capital requirements will generally treat whole loans more favorably than credit-tranched PLS securities.

In 2014, institutions that led the securitization resurgence have often decided in favor of whole loan sales that have provided better economics than PLS issuance.

- Shellpoint Partners withdrew a planned PLS issuance in October 2013 in favor of whole loan sales that provided better economics.
- In the first quarter of 2014, Redwood Trust sold \$722 million of mortgages in whole loan form and securitized \$347 million of mortgages. In the first quarter of 2013, Redwood sold \$25 million of mortgages in whole-loan form and securitized \$2.24 billion of mortgages. Management points to poor spreads on AAA-rated PLS tranches as the reason for their short-term focus on whole-loan transactions<sup>15</sup>.

## Risk Sharing with the GSEs

Though less publicized than whole loan portfolio retention and PLS, private market participants also invest in mortgage credit risk through risk sharing agreements with the GSEs. The share of new loan originations with shared risk and private capital standing in first-loss position has increased following the crisis (see Figure 3). The GSEs are generally required by charter to have primary mortgage insurance or other credit enhancement on acquired single-family loans that have a loan-to-value (LTV) ratio in excess of 80 percent<sup>16</sup>. At year-end

<sup>13</sup> PLS deals with an average loan size greater than the general conforming loan limit (\$417,000) are classified as "Jumbo PLS deals".

<sup>14</sup> Inside Mortgage Finance estimates jumbo originations were \$225 billion in 2012 and \$272 billion in 2013.

<sup>15</sup> See Redwood Investor Relations webpage for more information.

<sup>16</sup> Certain loans with an LTV ratio over 80 percent may be acquired under the Home Affordable Refinance Program ("HARP") without credit enhancement.

2013, Fannie Mae and Freddie Mac had laid off credit risk to mortgage insurers that stand in first-loss position on 14 percent of their combined \$4.5 trillion guaranteed books of single-family loans. In other cases, lenders retain credit risk on loans sold to the GSEs via recourse arrangements<sup>17</sup>.

In addition, the GSEs have recently introduced structured Credit Risk Transfer (CRT) transactions that move mortgage credit risk from the GSEs to private investors. Fannie Mae's Connecticut Avenue Securities (CAS) and Freddie Mac's Structured Agency Credit Risk (STACR) deals are structured to enable sale of mezzanine credit tranches while retaining the risk of other losses<sup>18</sup>. The GSE CRT deals have transferred a portion of the credit risk on a total of \$377 billion of mortgage loans since October 2013.

Also, the GSEs engage in transactions that allow lenders to lay off credit risk on mortgage loans that remain on their balance sheets via long-term standby commitments. Fannie Mae held \$15 billion in long-term standby exposure as of 2013. In addition, prior to the crisis, the GSEs acquired senior tranches of PLS that were supported by subordinate tranches held by private market participants standing in first loss position.

## Conclusion

Private capital participation in the mortgage system has declined, but private capital continues to play a substantial role in the marketplace. Private investors hold market risk on an estimated \$8.3 trillion of residential mortgage loans, or more than 75 percent of residential MDO. Private capital investment in mortgage credit risk stands in first-loss position for an estimated \$4.7 trillion of single-family MDO.

In 2013, private capital stood in the first-loss position on more than 30 percent of new mortgage originations, up from a post-recession low of 21 percent. Recent growth in private capital investment in new credit risk has been led by mortgage lenders that are choosing to retain more originations on balance sheet and private mortgage insurers that have increased penetration of the market. Also, recently introduced GSE risk sharing transactions are expected to grow. In contrast, the share of mortgage originations securitized in PLS in recent years remains low.

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Gerry Flood  
Director, Strategic Planning

Patrick Fischetti  
Analyst, Strategic Planning

David Swift  
Analyst, Strategic Planning

Fannie Mae Economic & Strategic  
Research Group

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<sup>17</sup> The GSE charter also provides for participation arrangements, but these are rarely used.

<sup>18</sup> See [link](#) for information regarding the general structure of Fannie Mae's Connecticut Avenue Securities.

## Appendix

Figure A – Outstanding market risk segmented by investor

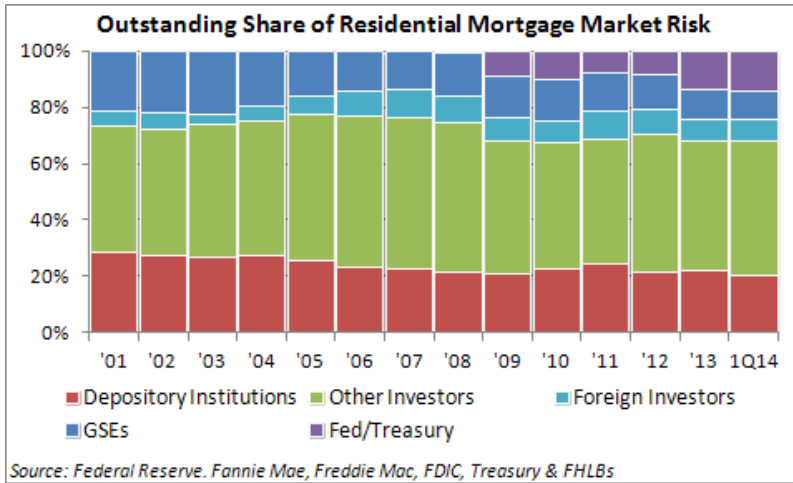


Figure B – Outstanding credit risk segmented by investor

