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# Preliminary Staff Report: Government Sponsored Enterprises and the Financial Crisis (Draft)

United States: Financial Crisis Inquiry Commission (FCIC)

Financial Crisis Inquiry Commission

# *Preliminary Staff Report*

## GOVERNMENT SPONSORED ENTERPRISES AND THE FINANCIAL CRISIS

APRIL 7, 2010

This preliminary staff report is submitted to the Financial Crisis Inquiry Commission (FCIC) and the public for information, review, and comment. Comments can be submitted through the FCIC's website, www.fcic.gov.

This document has not been approved by the Commission.

The report provides background factual information to the Commission on subject matters that are the focus of the FCIC's public hearings on April 7, 8, and 9, 2010. In particular, this report provides information on the Federal National Mortgage Association (Fannie Mae) and the Federal Home Loan Mortgage Corporation (Freddie Mac). Staff will provide investigative findings as well as additional information on these subject matters to the Commission over the course of the FCIC's tenure.

Deadline for Comment: May 15, 2010

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**Government Sponsored Enterprises and the Financial Crisis**

This preliminary staff report provides information on the Federal National Mortgage Association (FNMA or Fannie Mae) and the Federal Home Loan Mortgage Corporation (FHLMC or Freddie Mac), the companies' attributes as government-sponsored enterprises (GSEs), and their linkages to the larger financial system. As losses at the two companies mounted, the government placed Fannie Mae and Freddie Mac into conservatorship on September 6, 2008. At that point the two GSEs together held in portfolio or guaranteed through mortgage-backed securities (MBS) some $5.2 trillion of mortgages,[1] or over 40 percent of the $12 trillion residential mortgage market.

## I. HISTORICAL BACKGROUND: FANNIE MAE AND FREDDIE MAC

The Federal National Mortgage Association (FNMA or Fannie Mae) began as a wholly owned government corporation, a federal agency, chartered by the Reconstruction Finance Corporation in 1938 to purchase loans insured by the Federal Housing Administration (FHA) and thereby provide liquidity to lenders in the mortgage market. In 1968, at the behest of the Johnson Administration, Fannie Mae was chartered by Congress as a GSE, a publicly-traded private corporation; under this charter, Fannie Mae operations were removed from the federal budget. Fannie Mae continued to purchase federally insured mortgages that nondepository lenders originated. A wholly owned government corporation, now the Government National Mortgage Association (Ginnie Mae), remained in the Department of Housing and Urban Development (HUD) to provide special assistance and manage government loan portfolios.[2]

In 1970, at the request of the savings and loan industry, the Congress chartered a second GSE, Freddie Mac, to be a part of the system of organizations that served thrift institutions. The 1970 legislation also authorized Fannie Mae and Freddie Mac to expand its purchases to conventional (non-federally insured) mortgages up to a specified mortgage size (the so-called "conforming loan limit").[3] As Fannie Mae and Freddie Mac turned to the conventional mortgage market, Ginnie Mae became the leading secondary market[4] organization that facilitated funding of federally insured FHA and VA mortgages. It guaranteed MBS backed by

[1] Federal Housing Finance Agency, *2008 Annual Report to Congress*, revised edition, Historical Data Tables, tables 4, 4a, 13, and 13a (figures are for 3Q 2008).
[2] 12USC Sec. 1716(b) and (c).
[3] Bartke, 1972.
[4] The primary mortgage market consists of firms that originate mortgages. The secondary market, by contrast, consists of firms that purchase or securitize mortgages but do not originate them.

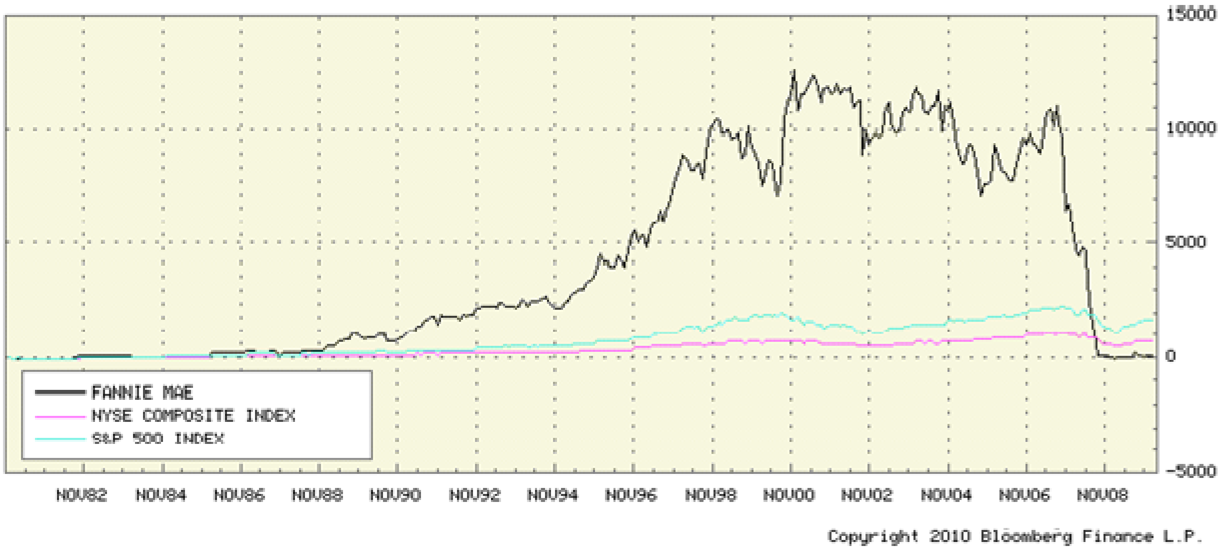
pools of federally insured mortgages that third parties assembled. Ginnie Mae was not authorized to deal in conventional mortgages or to hold a portfolio.[5]

Soon after its creation, Freddie Mac began to securitize the bulk of mortgages that it purchased. By contrast, Fannie Mae purchased mortgages only for its portfolio until 1981, when it began to issue MBS as well.

Shares of Fannie Mae and Freddie Mac trade on the New York Stock Exchange. The figure below shows market returns for Fannie Mae from 1980 compared to two general stock indices.[6] Fannie Mae has the ticker symbol FNM; Freddie Mac is FRE. The next figure shows Freddie Mac returns.

**Figure 1**

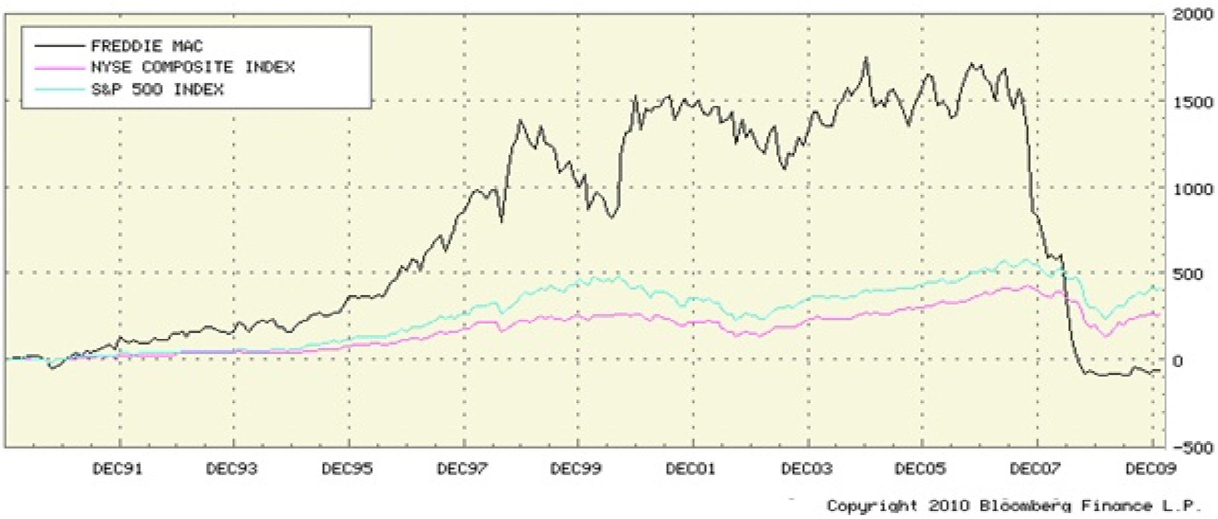
**Fannie Mae Comparative Returns**




[5] Ginnie Mae creates MBS by guaranteeing timely payment of principal and interest on pools of mortgages that others assemble. By contrast, Fannie Mae and Freddie Mac technically purchase mortgages before they securitize them, although the purchase and securitization transactions may occur simultaneously.
[6] Source: Bloomberg

**Figure 2**

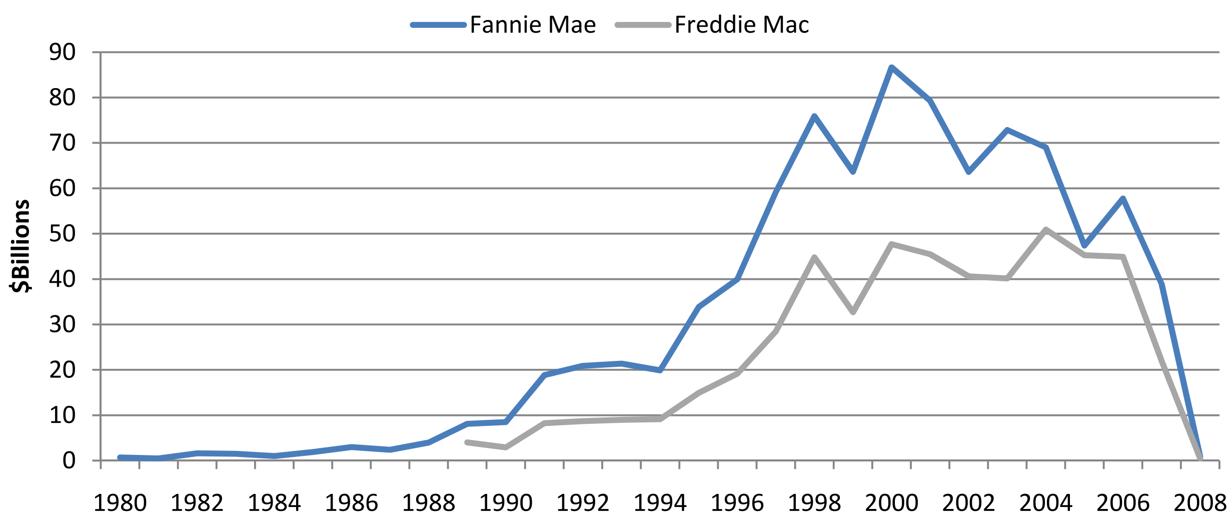
**Freddie Mac Comparative Returns**




Another measure of GSE shareholder value is market capitalization, shown below.

**Figure 3**

**Fannie Mae/Freddie Mac Market Capitalization**




Source: Federal Housing Finance Agency

Like banks and thrift institutions, and in contrast to usual corporations, GSEs are special-purpose companies that may carry out only those business activities authorized by their enabling legislation. Fannie Mae and Freddie Mac operate under Congressional charters similar in function to a government agency's authorizing legislation. A GSE may engage only in those activities that are expressly authorized by law or that are incidental to those activities.

Among the requirements imposed by the GSEs' charters were requirements to serve the market for low- and moderate-income people and underserved markets. When Fannie Mae became a GSE in 1968 its charter authorized HUD to set affordable housing requirements as a portion of the company's mortgage purchases, "but with reasonable economic return to the corporation." [7] The 1992 Federal Housing Enterprises Financial Safety and Soundness Act authorized the HUD Secretary to set affordable housing goals for Fannie Mae and Freddie Mac "involving a reasonable economic return that may be less than the return earned on other activities."[8] Both Freddie Mac and especially Fannie Mae publicly promoted policies to increase the homeownership rate in the United States.[9]

The 1992 Act established three housing goals,

(1) The Low- and Moderate-Income Housing Goal: loans to borrowers with incomes at or below the median income for the market area in which they live;
(2) The Special Affordable Goal: loans to very low-income borrowers (those with incomes at or below 60 percent of the area median income), or to low-income borrowers living in low-income areas (borrowers with incomes at or below 80 percent of the area median income, living in census tracts in which the median income of households is at or below 80 percent of the area median income);
(3) The Underserved Areas Goal: loans to borrowers living in low-income census tracts (tracts in which the median income of residents is at or below 90 percent of the area median income) or high-minority tracts (tracts in which minorities comprise at least 30 percent of residents, and the median income of residents in the tract does not exceed 120 percent of the area median income).[10]

Acting under authority of the 1992 Act, HUD issued an affordable housing goal regulation in 2004 that for the first time added subgoals and required that a fraction of each goal be met with home-purchase mortgages, as distinguished from refinancings. The 1992 Act calls on HUD to consider a number of factors in setting the goals, including "the need to maintain the

[7] 12 U.S.C. 1723a(h) (amended 1992)
[8] 12 USC Section 1716 (4), available at http://www.law.cornell.edu/uscode/html/uscode12/usc_sec_12_00001716----000-.html.
[9] Johnson, 1996.
[10] See the 1992 Act, sections 1331-1338. The act was amended in 2008. This summary is taken from John C. Weicher, "Civil Rights Issues Emerging from the Mortgage Crisis," presented to the U.S. Commission on Civil Rights, March 20, 2009

sound financial condition of the enterprises."[11] The following table, compiled by John Weicher, former Federal Housing Commissioner, shows how the goals increased from 1993 to 2008.[12] With exceptions, the GSEs met or exceeded their affordable housing goals until 2008, when Fannie Mae met the underserved areas housing goal and both met their special affordable multifamily subgoals.[13]

**Table 1: GSE Affordable Housing Goals Since 1993** *(Share of mortgage purchases)*

| | 1993-1995 | 1996 | 1997-2000 | 2001-2004 | 2005 | 2006 | 2007 | 2008 |
|---|---|---|---|---|---|---|---|---|
| *Low- and Moderate-Income Goal* | 30% | 40% | 42% | 50% | 52% | 53% | 55% | 56% |
| *Special Affordable Goal* | NA* | 12 | 14 | 20 | 22 | 23 | 25 | 27 |
| *Underserved Areas Goal* | 30 | 21 | 24 | 31 | 37 | 38 | 38 | 39 |

Source: Federal Housing Finance Agency
*NA – Not Applicable: goals set in dollar amounts for each GSE rather than percentages. Underserved Areas goal determined on basis of 1990 Census tract geography from 1993 through 2004, and on basis of 2000 Census tract geography from 2005-2008.

Table 1 shows application of the low and moderate-income goal to Fannie Mae and Freddie Mac since 1995.[14] As FHFA explains in a recent report, HUD first determined the fraction of the market associated with mortgage originations, both single-family and multifamily, that would be available to low and moderate-income families. Then HUD deducted the part of that market that consisted of B and C grade mortgages on grounds that these would be too risky for the GSEs to purchase. For years 2000-2004, HUD set the goals at a level so that the GSEs would meet the lower end of that market; for 2005-2008 HUD raised its estimate of market share and also required the GSEs to lead the market. HUD made similar calculations for both of the other goals and, for the regulatory cycle 2005-8, also set a home-purchase subgoal for each of the goals.[15]

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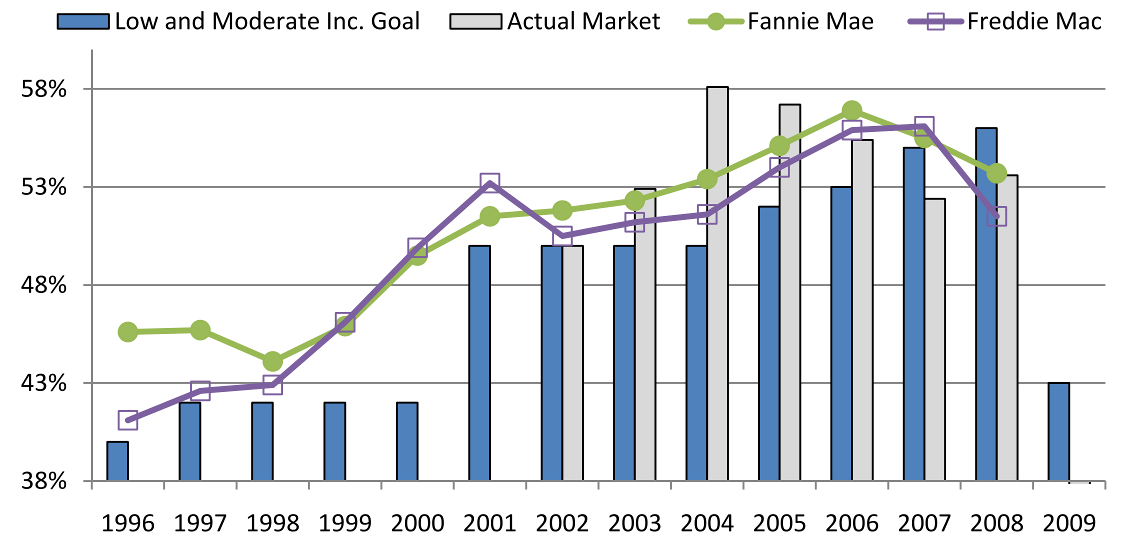
[11] See, e.g., 12 USC 4562(b), amended by HERA in 2008.
[12] Weicher, fn. 9.
[13] Federal Housing Finance Agency, "The Housing Goals of Fannie Mae and Freddie Mac in the Context of the Mortgage Market: 1996 – 2009," Mortgage Market Note 10-2, February 1, 2010. Fannie Mae missed the center cities goal in 1993 and Freddie Mac missed the center cities goal in 1993, 1994, and 1995. The center cities goal was later changed to "underserved areas."There is still debate whether Freddie Mac missed the underserved areas goal in 2002 and in 2005 Fannie Mae missed the low-mod home purchase subgoal, but met the goals per se. In 2008 both GSEs missed their housing goals except that FNMA made the underserved areas goal and both companies met their multifamily subgoals.
[14] Ibid, p. 6.
[15] Ibid., pp. 4-11.

**Figure 4**

**GSE Actual Low and Moderate-Income Goal Performance**




Source: Home Mortgage Disclosure Act and Enterprise data

Until the enactment of the Housing and Economic Recovery Act of 2008 (HERA), HUD possessed few sanctions to enforce the goals. The major sanction was that the HUD Secretary could require a GSE to provide a housing plan that the GSE would apply to ensure that it could meet each goal in the future.[16] However, the GSEs did have reputational risk at stake if they missed achieving a housing goal or subgoal, as they sometimes did. In addition, HUD maintained a dialogue with the GSEs regarding these goals and at times used its authority to modify the application of goals requirements.[17]

The GSEs' statutory charters provide certain advantages (e.g., preferential treatment under tax laws, favorable capital requirements, constraints on the regulator's mandate and authority vs. other institutions' regulators, and protection against other competitors obtaining a comparable charter), and prescribe statutory obligations or limitations (e.g., affordable housing goals, or limits on the size of mortgages that the GSEs may purchase).

[16] See the 1992 Act, section 1336. HERA strengthened the ability of HUD to enforce compliance with the goals.

[17] For example, "In April 2008 HUD determined that the Low- and Moderate-Income Home Purchase Subgoal for 2007 (47 percent) and the Special Affordable Home Purchase Subgoal for 2007 (18 percent) were not feasible, and the Department notified Fannie Mae and Freddie Mac of its determination in letters dated April 24, 2008." Paul Manchester, Federal Housing Finance Agency, "Overview of the GSEs' Housing Goal Performance, 2000-2007."

While GSEs lacked a full-faith-and-credit government guarantee, their obligations generally traded at narrow spreads above Treasuries and below the level of AAA-rated securities. The government had reinforced a perception of an implicit federal guarantee when it acted to support another GSE, the Farm Credit System, when this GSE declared in 1985 that it could not meet its obligations. The federal government stepped in and provided funding through an organization called the Farm Credit System Financial Assistance Corporation. Similarly, the government arranged for support of the Financing Corporation, an organization that issued obligations with the attributes of GSE obligations, when its viability was in doubt in 1996.[18]

GSEs possess an unusual organizational structure, with both private ownership and public purposes. Dan Mudd, Fannie Mae's CEO in September 2008, testified in December 2008 that, "Events have shown how difficult it is to balance financial, capital, market, housing, shareholder, bondholder, homeowner, private, and public interests in a crisis of these proportions."[19] Freddie Mac's CEO, Richard Syron, spoke in August 2008 about the difficulty of trying to balance the company's obligations to shareholders with its public mission. Syron said that the tension made his job almost impossible.[20]

## II. THE ROLE OF FANNIE MAE AND FREDDIE MAC IN THE MORTGAGE MARKET

Under their charters, Fannie Mae and Freddie Mac were limited to purchasing mortgages up to a specified size that would adjust each year according to an index of house prices. This size limit was known as the "conforming loan limit."[21] Mortgages eligible for purchase by Fannie Mae and Freddie Mac were known as "conforming mortgages." Because institutions frequently sought to sell their mortgages to Fannie Mae and Freddie Mac, for many years the GSEs influenced credit standards by specifying the characteristics of loans that they would purchase. In the mid-1990s, both Fannie Mae and Freddie Mac adopted automated underwriting systems to ensure that they dealt in mortgages that met Fannie Mae's and Freddie Mac's criteria, including credit criteria. Underwriting is important as a way for a lender to assess the risk of particular loans that it funds and to set prices for funding those loans. These criteria include, but are not limited to, the borrower's FICO score, loan-to-value

[18] The government created the Financing Corporation in 1987 to provide off-budget financial assistance to the Federal Savings and Loan Insurance Corporation. See 12 USC Sec 1441. Initially, the Financing Corporation was funded by assessments on the Federal Home Loan Banks. The Deposit Insurance Funds Act of 1996 (DIFA) authorized the Financing Corporation to obtain funds from the private sector by assessing federally insured deposits. See, Federal Deposit Insurance Corporation, "FICO Assessments," available at http://www.fdic.gov/deposit/insurance/risk/assesrte.html
[19] Daniel H. Mudd, "The Role of Fannie Mae and Freddie Mac in the Financial Crisis," Statement before the House Committee on Oversight and Government Reform Hearing, December 9, 2008.
[20] Jeffrey H. Birnbaum and David S. Hilzenrath, "Freddie CEO Feels Strain of Firm's Twin Missions," Washington Post, August 6, 2008, p. D01.
[21] In the year 2000 the conforming loan limit was $252,700 for a one-unit single-family home. By 2007 the limit had grown to $417,000. For 2009 the limit was raised to $729,750 for high-cost area. Federal Housing Finance Agency, *2008 Annual Report to Congress*, revised edition, p. 144.

ratio of the property, the borrower's debt-to-income ratio, appraised value of the property, and type of mortgage.

As can be seen in the two figures below, the two GSEs would either hold mortgages in portfolio or securitize them into mortgage-backed securities (MBS). When GSEs purchased mortgages for portfolio, they held them on their balance sheets as investments and funded these purchases by issuing debt. In general, when a company holds mortgages or other assets in portfolio it bears the credit risk, interest rate risk, and management and operations risk of holding those assets. In return, a company can earn money from the spread between its funding costs and returns on the assets that it holds.

**Figure 5**

**Portfolio (purchase)**

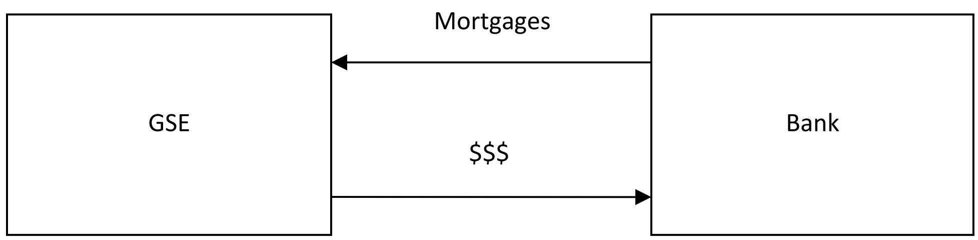
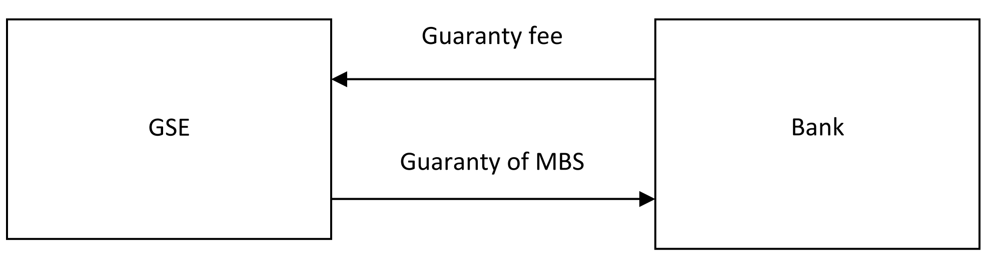



**Figure 6**

**MBS (swap)**



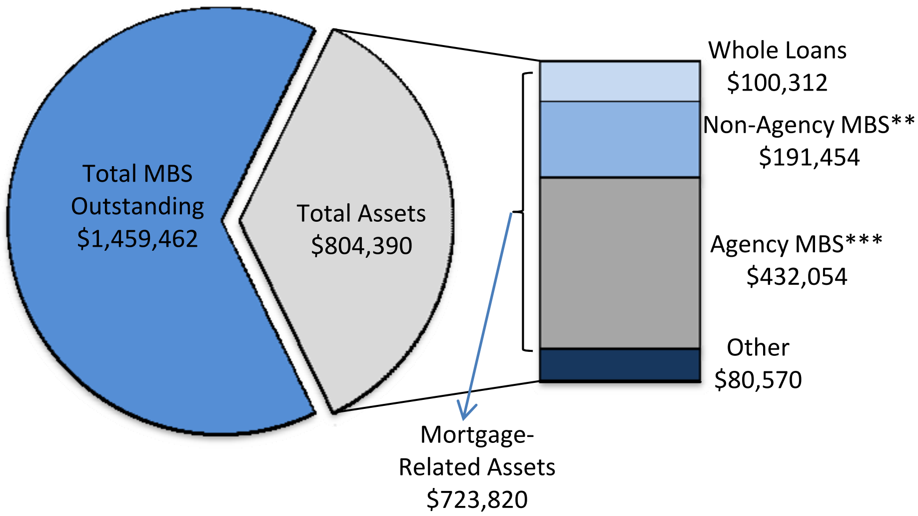
The GSEs did a large part of their business securitizing mortgages into MBS and guaranteeing these mortgages against default risk. These transactions were usually "swap" transactions, where the mortgages were never held on the GSEs' balance sheets. When a GSE issues and guarantees MBS, the GSE bears the credit risk (and the associated management and operations risk) but shifts the interest rate risk, and the associated returns, to investors in the MBS. An MBS represents an undivided interest in a pool of mortgage loans. [22]

A lender that held a portfolio of mortgages would obtain a GSE guarantee for the mortgages and thus convert them to MBS. The GSE guarantee assumed the credit risk of that pool of mortgages, which increased the market value of the pool. As a result of the GSE guarantee, the institution holding the MBS faced lower capital requirements.[23] In addition, the MBS, with perceived high credit quality, is more liquid than the underlying mortgages. The GSE charge a fee for the securitization, called a guaranty fee (or "g-fee" in industry parlance). The GSE would set the g-fee based on a variety of factors including the volume of mortgages that a particular lender would provide to the GSE and the underlying risk of the pool of mortgages. The g-fee averaged 22 basis points in 2007 and rose to 25 basis points in 2008. [24] As can be seen in the figures below, in the third quarter of 2008, both Fannie Mae and Freddie Mac securitized many more mortgages than they funded on their balance sheets.

[22] The GSEs also could create MBS from loans they held in portfolio.
[23] For example, under Basel I total capital required for an agency MBS was 1.6%, versus 4% on whole loans.
[24] A basis point is one one-hundreth of a percentage point. The GSEs assessed both an up-front g-fee and a g-fee that the holder paid for the life of the MBS.

**Figure 8**

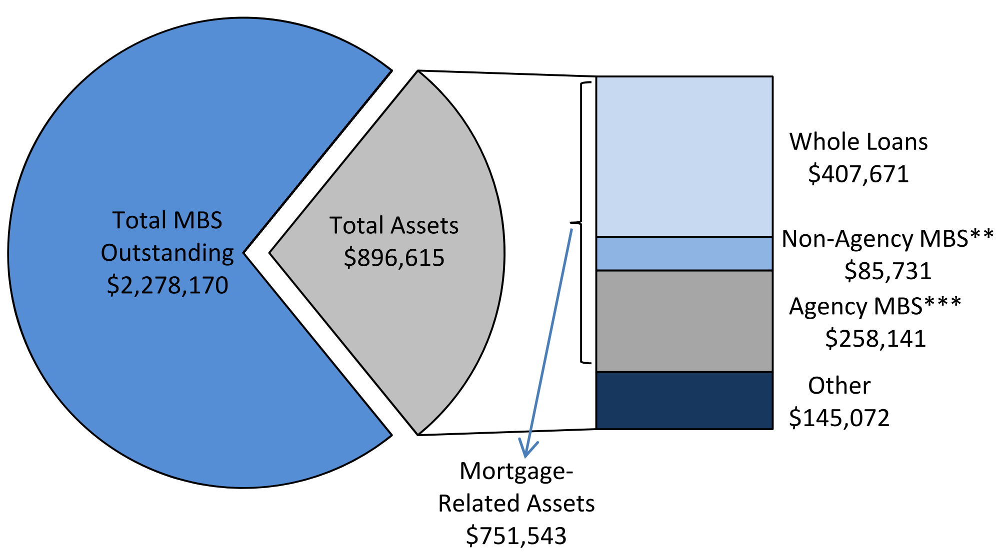
## Assets and Mortgage Backed Securities: Freddie Mac*




* Figures are for Q3 2008, in millions. **Represents private-label securities. ***Includes: Fannie Mae, Freddie Mac and Ginnie Mae.
Source: Federal Housing Finance Agency

**Figure 7**

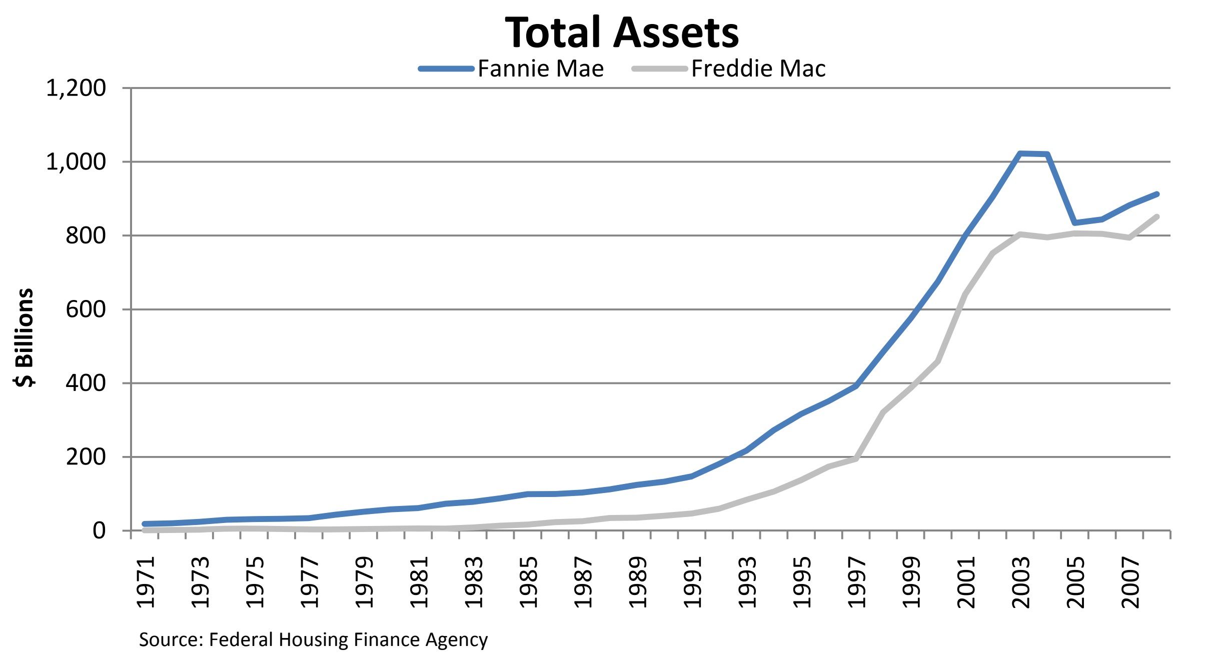
## Assets and Mortgage Backed Securities: Fannie Mae*




* Figures are for Q3 2008, in millions. **Represents private-label securities. ***Includes: Fannie Mae, Freddie Mac and Ginnie Mae.
Source: Federal Housing Finance Agency

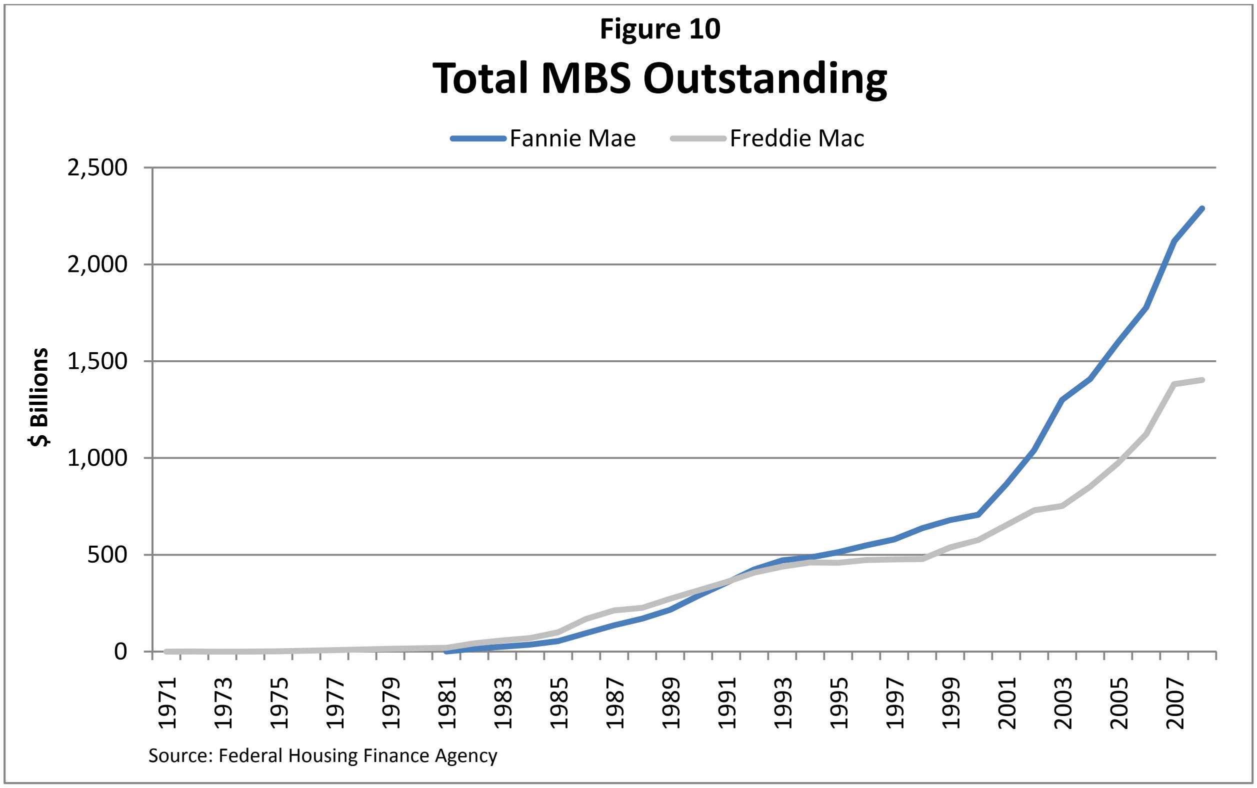
Fannie Mae and Freddie Mac grew rapidly from 1970 through the boom in mortgage refinancing in 2003. Figure 9 shows the two companies' assets held in portfolio, which are funded by issuing debt.

**Figure 9**




The GSE portfolios stopped growing in 2004 in part as a result of consent agreements with their regulator, the Office of Federal Housing Enterprise Oversight (OFHEO) that were imposed after accounting irregularities (discussed below) came to light.

Figure 10 shows the growth of the two companies in terms of the total volume of guaranteed MBS that were held outside of the GSEs' own portfolio. These MBS are referred to as "MBS outstanding". The consent agreements with OFHEO did not cap the companies' MBS business.

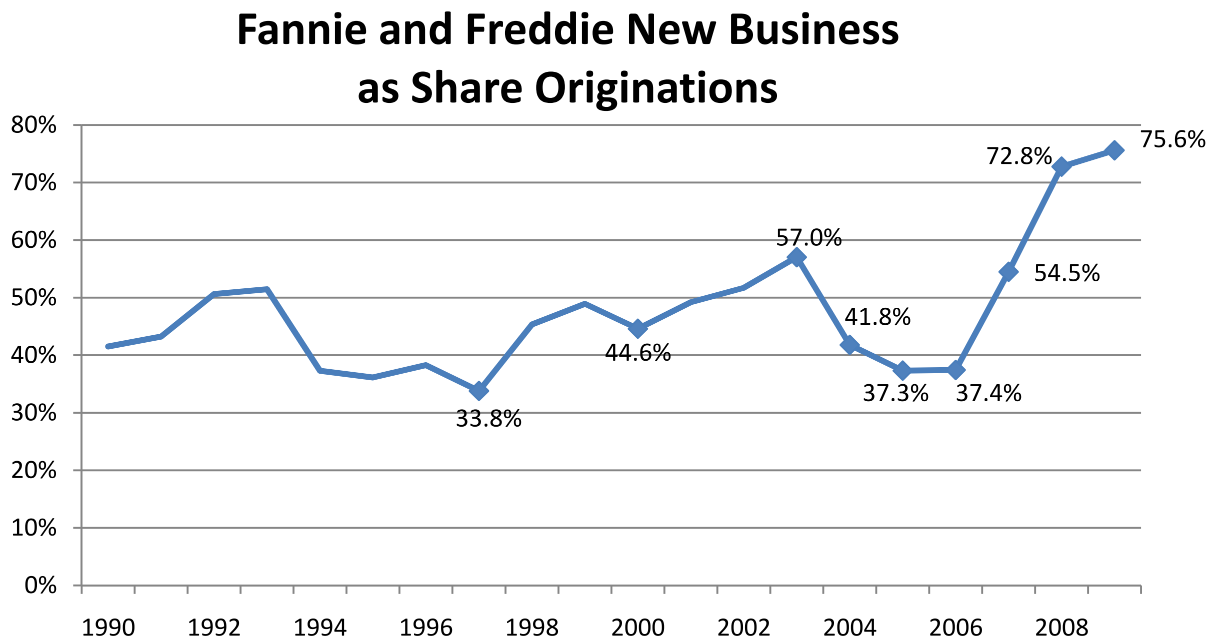



Fannie Mae is the largest of the GSEs. At the end of September 2008 the company had outstanding $831 billion of debt obligations and $2.28 trillion of MBS. By comparison, Freddie Mac, the second-largest GSE, had $784 billion of debt obligations and $1.46 trillion of MBS outstanding.[25]

The figure below shows the GSEs' market share in terms of new business as share of originations.[26] Market share (percentage numbers in the figure) grew until 2003, then fell, and then began growing in 2006. High market share increased the liquidity of GSE-related assets by making it easier for the private sector to trade in the secondary market. As a result, high market share lowered the GSEs' funding costs and raised the value of GSE MBS.

[25] Figures on MBS outstanding come from the Federal Housing Finance Agency *2008 Annual Report to Congress*, revised edition; figures on debt outstanding come from FNMA 10-Q for 3Q 2008, p. 142 and FHLMC 10-Q for 3Q 2008, p. 112.
[26] This figure uses data from the Federal Housing Finance Agency (FHFA). A similar figure appears in James B. Lockhart, "FHFA's First Anniversary and the Challenges Ahead," FHFA, July 30, 2009.

**Figure 11**




Source: Federal Housing Finance Agency

The Fannie Mae and Freddie Mac charter acts specify that, when the GSEs purchase loans with a loan-to-value (LTV) ratio above 80 percent, the mortgage must have private mortgage insurance or otherwise provide protection against default. Generally, the GSEs set limits for the maximum LTV on loans that they would deal in. Over the years, the GSEs relaxed their underwriting standards. For example, Fannie Mae purchased some home purchase mortgages (i.e., excluding mortgages from refinancing) with a loan-to-value (LTV) ratio of above 95 percent. These purchases increased from 3.3 percent of Fannie Mae's total purchases of home purchase loans in 1997 to 4.4 percent in 2000 to 14.1 percent in 2004 and 26.0 percent in 2007. For Freddie Mac the comparable figures are 1.1 percent in 1997, 6.1 percent in 2000, 6.4 percent in 2004, and 19.3 percent in 2007.[27]

As discussed in preliminary staff report titled "The Mortgage Crisis," loans with risk characteristics such as higher LTVs and lower credit scores default more often than otherwise similar loans with lower LTVs and higher credit scores. For example, nearly 50 percent of loans were delinquent in subprime and alt-A MBS as of December 2009 that have LTVs equal to or greater than 90 percent and credit scores below 660. To compare, about 35 percent of loans were delinquent in subprime and alt-A MBS that have LTVs equal to or greater than 90 percent and credit scores *above* 660. Similarly, using a dataset on mortgages

[27] HUD Office of Policy Development and Research, "Profiles of GSE Mortgage Purchases In 1999 And 2000," April 2002; "The GSEs' Funding Of Affordable Loans: A 2000 Update," April 2002; "Profiles Of GSE Mortgage Purchases in 2001 – 2004," April 2008; "Profiles Of GSE Mortgage Purchases in 2005 – 2007," September 2008.

that greatly overlaps with GSE mortgages (but is somewhat riskier and performs somewhat worse) referred to GSE/other, about 20 percent of these GSE/other loans were delinquent that have LTVs equal to or greater than 90 percent and credit scores below 660. To compare, about 10 percent of these GSE/other loans were delinquent that have LTVs equal to or greater than 90 percent and credit scores *above* 660. Nearly 25 percent of the loans in GSE/other have LTVs greater than or equal to 90 percent or credit scores less than 660.

Fannie Mae and Freddie Mac increased their purchase of higher-risk mortgages after 2005. For example, Fannie Mae's 2007 10 K filing states:

> "[w]e are experiencing high serious delinquency rates and credit losses across our conventional single-family mortgage credit book of business, especially for loans to borrowers with low credit scores and loans with high loan-to-value ("LTV") ratios. In addition, in 2007 we experienced particularly rapid increases in serious delinquency rates and credit losses in some higher risk loan categories, such as alt-A loans, adjustable-rate loans, interest-only loans, negative amortization loans, loans made for the purchase of condominiums and loans with second liens. Many of these higher risk loans were originated in 2006 and the first half of 2007."[28]

In 2007, Freddie Mac similarly reported:

> "[t]he proportion of higher risk mortgage loans that were originated in the market during the last four years increased significantly. We have increased our securitization volume of non-traditional mortgage products, such as interest-only loans and loans originated with less documentation in the last two years in response to the prevalence of these products within the origination market. Total non-traditional mortgage products, including those designated as alt-A and interest-only loans, made up approximately 30 percent and 24 percent of our single-family mortgage purchase volume in the years ended December 31, 2007 and 2006, respectively."[29]

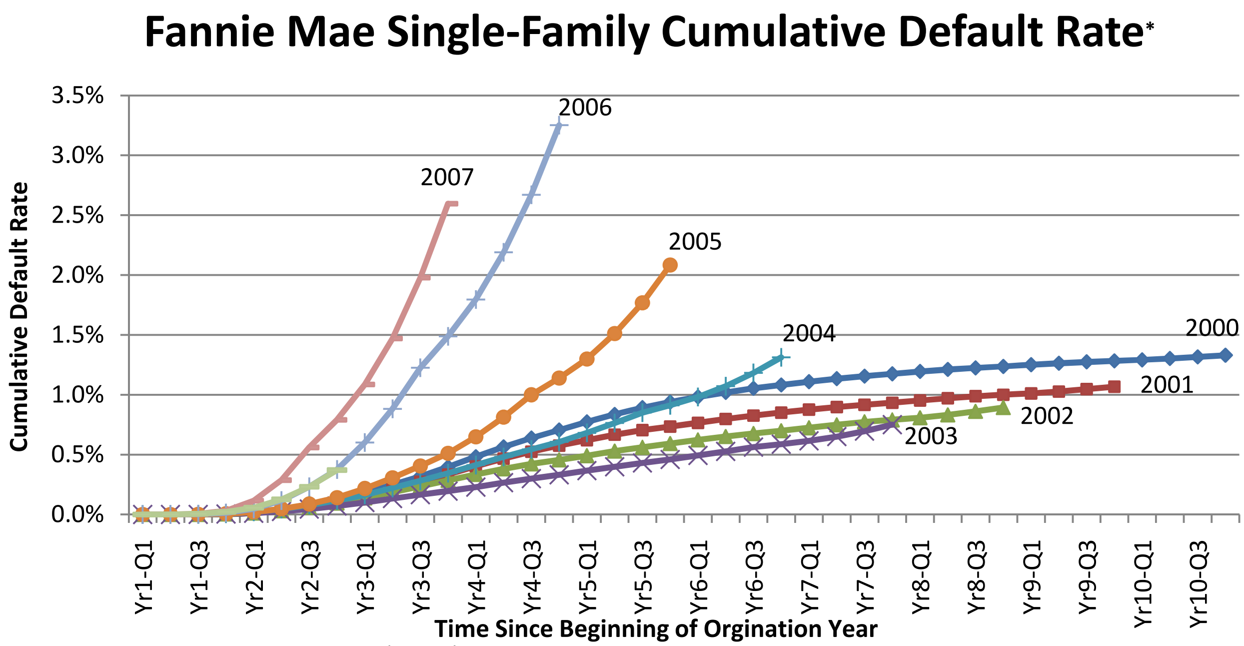
When purchasing some higher risk loans, the GSEs also might purchase or require credit enhancements, such as mortgage insurance, pool insurance, or lender recourse, to provide added credit protection.

The GSEs took much higher losses on put into their guarantee book of business in 2005, 2006, and 2007, compared to earlier years. This is seen in the figure below from the Fannie Mae 2009 Credit Supplement, issued February 26, 2010. The figure shows cumulative default rates by mortgage origination year. Data in the figure below include loan

[28] Fannie Mae, 2007 Annual Report, p. 24.
[29] Freddie Mac Information Statement and Annual Report for 2007, p. 13.

foreclosures, preforeclosure sales, and deeds in lieu of foreclosure by year of origination.[30] Note that losses from earlier years, especially 2000-2004, are masked by the appreciation in home prices which often allowed homeowners to sell their homes or refinance rather than default on their mortgages. While home prices were rising homeowners had an opportunity to sell their homes rather than default on their mortgages; as home prices began to decline, a sale frequently became impractical because the home came to be worth less than the value of the outstanding mortgage.

Figure 12




Source: Fannie Mae 2009 Credit Supplement
*Overall Originations from 2000 through 2009 Q4

The table below shows detailed data on Fannie Mae's credit guarantee book of business, mortgages it places in portfolio and mortgages guaranteed in MBS from 2004 to 2008.

30 Overall, 1.07% of Fannie Mae loans in portfolio or in MBS were in the process of default in 2009. Across all Fannie Mae mortgages at the end of 2009, 5.38% of mortgages were at least 90 days delinquent. Of these, 57% were over 180 days past due.

## Table 2: Fannie Mae Purchases of Non-Traditional Single Family Mortgages

| Fannie Mae SF Book Trends $(B) | 2004 $ Acquired | 2004 % of Total | 2004 SF Book $ | 2004 % SF Book | 2004 % Tot Cap | 2005 $ Acquired | 2005 % of Total | 2005 SF Book $ | 2005 % SF Book | 2005 % Tot Cap |
|---|---|---|---|---|---|---|---|---|---|---|
| *Total* | $568.8 | 100% | $1,951.3 | 100% | | $524.2 | 100% | $2,016.6 | 100% | |
| ALT-A | $67.6 | 11.9% | $147.2 | 8% | 418% | $84.7 | 16.2% | $181.1 | 9% | 452% |
| CLTV > 95% | $30.9 | 5.4% | $60.8 | 3% | 173% | $39.0 | 7.4% | $81.0 | 4% | 202% |
| DTI > 50% | $85.9 | 15.1% | $234.2 | 12% | 665% | $77.6 | 14.8% | $250.1 | 12% | 624% |
| FICO < 660 | $97.3 | 17.1% | $303.5 | 16% | 862% | $84.0 | 16.0% | $296.5 | 15% | 740% |
| Interest Only (IO) | $28.5 | 5.0% | $35.9 | 2% | 102% | $52.7 | 10.1% | $74.7 | 4% | 186% |
| Non-Full Doc | $101.2 | 17.8% | $232.9 | 12% | 662% | $110.2 | 21.0% | $278.8 | 14% | 695% |
| Total Capital | $35.2 | | | | | $40.1 | | | | |

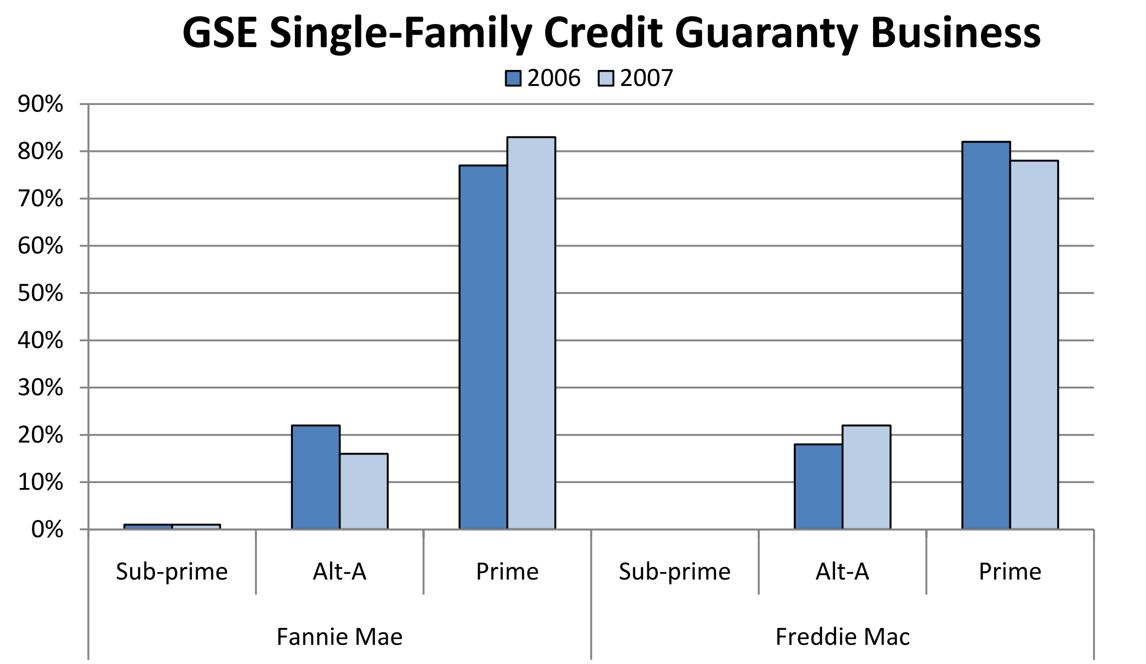
| Fannie Mae SF Book Trends $(B) | 2006 $ Acquired | 2006 % of Total | 2006 SF Book $ | 2006 % SF Book | 2006 % Tot Cap | 2007 $ Acquired | 2007 % of Total | 2007 SF Book $ | 2007 % SF Book | 2007 % Tot Cap |
|---|---|---|---|---|---|---|---|---|---|---|
| *Total* | $515.8 | 100% | $2,189.1 | 100% | | $643.8 | 100% | $2,512.5 | 100% | |
| ALT-A | $112.8 | 21.9% | $249.0 | 11% | 583% | $107.6 | 16.7% | $313.5 | 12% | 644% |
| CLTV > 95% | $64.8 | 12.6% | $129.2 | 6% | 303% | $97.1 | 15.1% | $206.3 | 8% | 424% |
| DTI > 50% | $80.5 | 15.6% | $286.8 | 13% | 672% | $117.2 | 18.2% | $359.3 | 14% | 738% |
| FICO < 660 | $89.9 | 17.4% | $320.5 | 15% | 751% | $115.6 | 18.0% | $377.2 | 15% | 775% |
| Interest Only (IO) | $78.2 | 15.2% | $133.5 | 6% | 313% | $97.6 | 15.2% | $207.3 | 8% | 426% |
| Non-Full Doc | $143.9 | 27.9% | $365.3 | 17% | 856% | $199.3 | 31.0% | $503.4 | 20% | 1035% |
| Total Capital | $42.7 | | | | | $48.6 | | | | |

| Fannie Mae SF Book Trends $(B) | 2008 $ Acquired | 2008 % of Total | 2008 SF Book $ | 2008 % SF Book | 2008 % Tot Cap |
|---|---|---|---|---|---|
| *Total* | $557.2 | 100% | $2,713.5 | 100% | |
| ALT-A | $17.4 | 3.1% | $291.2 | 11% | 868% |
| CLTV > 95% | $23.3 | 4.2% | $206.3 | 8% | 615% |
| DTI > 50% | $99.7 | 17.9% | $412.5 | 15% | 1229% |
| FICO < 660 | $47.3 | 8.5% | $377.3 | 14% | 1125% |
| Interest Only (IO) | $31.4 | 5.6% | $211.6 | 8% | 631% |
| Non-Full Doc | $87.1 | 15.6% | $523.2 | 19% | 1559% |
| Total Capital | $33.6 | | | | |

Source: Fannie Mae 2009 Credit Supplement

The figure below shows the GSEs' single-family guarantee book of business broken down by prime, subprime, and alt-A loans, as defined by the GSEs.[31] While the GSEs historically had not characterized this book of business as either prime or subprime, in recent years they began characterizing these loans as prime, subprime, and alt-A. There is no consistent definition in the mortgage industry of the terms 'subprime' and 'alt-A.' Figure 13 is based on definitions that Fannie Mae and Freddie Mac use in their public disclosures.

**Figure 13**




Source: Federal Home Loan Mortgage Corporation 2008 Form 10-K, Federal National Mortgage Association 2007 Form 10-K

NOTE: The two companies define subprime and alt-A as these were reported by originators, according to whether the originator specializes in subprime lending, or according to other criteria.

## III. GOVERNMENT OVERSIGHT OF FANNIE MAE AND FREDDIE MAC

The Housing and Economic Recovery Act of 2008 (HERA), which became law on July 30, 2008, shortly before Fannie Mae and Freddie Mac went into government conservatorship, created a new regulator, the Federal Housing Finance Agency (FHFA). Until then the supervision of Fannie Mae and Freddie Mac was divided between the Office of Federal Housing Enterprise Oversight (OFHEO), a financial soundness regulator, and the Department of Housing and Urban Development, which supervised the GSEs' achievement of affordable housing goals and compliance with fair housing laws. In 1992, OFHEO had been created as a

[31] Fannie Mae and Freddie Mac define their Credit Guarantee Business as including the credit risk that they take on the mortgages that they purchase for portfolio plus the mortgages that they securitize into MBS.

regulator with a lesser mandate and much weaker legal authority than the Federal Reserve, Office of the Comptroller of the Currency, and FDIC possess vis-à-vis banks that they regulate or the Office of Thrift Supervision (OTS) vis-à-vis thrift institutions.[32]

As one example of weakness, OFHEO was limited in the discretion that it could exercise to increase capital requirements for Fannie Mae and Freddie Mac. The minimum capital standards were set by law at 2.5 percent of on-balance sheet assets and 0.45 percent of off-balance sheet guarantees.[33] The law also prescribed parameters for the GSEs' risk-based capital.[34] These specified the parameters under which credit risk and interest rate risk could be used to calculate the level of risk-based capital required for the two GSEs. The risk-based capital test generated values below the statutory minimums, which became the binding capital requirements on the two enterprises. As a result of the statutory prescriptions, the two GSEs operated with significant leverage: For Fannie Mae, the ratio of core capital to total assets plus MBS outstanding amounted to around 1.5 percent for year-end 2007; for Freddie Mac it was around 1.7 percent.[35] By contrast, a commercial bank or thrift institution would be subject to capital requirements at least twice as high.

Having lower capital standards allows a firm to maintain a lower cost structure than would be possible with greater capital. Also, because profits are spread across a smaller volume of shares, returns to shareholders are potentially much greater than would be possible with greater capital. Both companies enjoyed high returns on equity. From 1990 to 2007 each company reported a return on equity of over 20 percent in 13 years. Fannie Mae's return reached a peak of 39.8 percent in 2001; Freddie Mac's peaked at 47.2 percent in 2002.

OFHEO also lacked statutory authority in other areas. It did not possess the range of enforcement authority available to bank and thrift regulators and had no authority to place a GSE into receivership, which would close down the company. Unlike bank and thrift regulators, OFHEO was funded through the appropriations process.[36] OFHEO had about 60 people at its inception in 1992[37] and roughly 250 people in 2008[38] to supervise two

[32] See, e.g., Kenneth H. Bacon, "Privileged Position: Fannie Mae Expected to Escape Attempt at Tighter Regulation," *Wall Street Journal*, June 19, 1992, p. A1.
[33] The law prescribed that Fannie Mae and Freddie Mac should hold minimum capital of 2.5 percent of on-balance sheet assets and 0.45 percent of off-balance sheet guarantees. 12 USC Sec. 4612(a) available at http://www.law.cornell.edu/uscode/html/uscode12/usc_sec_12_00004612----000-.html
[34] 1992 Federal Housing Enterprises Financial Safety and Soundness Act, Sec. 1361
[35] FHFA 2008 report to Congress, pp. 121 and 138 (Tables 9 and 18, "Capital"), second column from right.
[36] Among other documented occasions, OFHEO reported that Fannie Mae attempted to use the appropriations process to force a change in OFHEO leadership and interfere with OFHEO's special examination of Fannie Mae. Office of Federal Housing Enterprise Oversight, *Report of the Special Examination of Fannie Mae*, May 2006, p. 276. Available at http://www.fhfa.gov/webfiles/747/FNMSPECIALEXAM.pdf
[37] Source: FHFA oral information. The OFHEO 1997 annual report, available at http://www.fhfa.gov/webfiles/1270/ar1997.pdf,
States (p. 39) that the agency had 72 employees; earlier reports are not easily available.
[38] Source: FHFA oral information.

companies that, by 2008, together funded over $5 trillion of mortgages. Proportionate to its size in the marketplace, this was a far smaller workforce than was possessed by the federal bank regulators to oversee major financial institutions.

ACCOUNTING PROBLEMS AT THE GSEs

Freddie Mac revealed in 2003 that the company had improperly managed earnings.[39] In 2004 OFHEO conducted an investigation and found that Fannie Mae had overstated its earnings by billions of dollars.[40] OFHEO's examinations of both companies found deficiencies such as staff shortages in key parts of the company and that senior officials lacked requisite experience. Freddie Mac's outside auditor stated that Freddie Mac's CFO, "had little knowledge of GAAP, financial accounting, or disclosure rules, and that he was deeply involved in the transactions that have given rise to the restatement."[41] Fannie Mae's board commissioned former Senator Warren Rudman and his law firm to investigate. Among their findings was that the head of internal audit had no experience or formal training as an auditor and the company's controller was not a certified public accountant. [42]

Both companies had to engage in an expensive multi-year effort to restate their books and rebuild their internal controls. Top management at both GSEs, including CEOs, CFOs, and many other top officers, changed after the internal control failures came to light. OFHEO negotiated consent agreements with both companies that imposed temporary increases in capital requirements and imposed portfolio limits.[43]

## IV. FANNIE MAE AND FREDDIE MAC AND THE FINANCIAL SYSTEM

A review of linkages, between Fannie Mae and Freddie Mac on the one hand and the larger financial system on the other, should begin with the companies' scale and their market shares. Together, the two companies purchased $1.2 trillion of mortgages and $300 billion of mortgage-related securities in 2007 alone.[44] That year, Fannie Mae issued $630 billion of

[39] Office of Federal Housing Enterprise Oversight, *Report of the Special Examination of Freddie Mac*, 2003. The report uses the term "improper management of earnings." OFHEO found that, "By 1999 Freddie Mac had established a practice of engaging in transactions for the express purpose of managing its reported earnings and other measures of financial performance included in the financial statements of the Enterprise. Freddie Mac used several strategies to shift earnings into future reporting periods, reflecting the proclivity of management to increase operations risk in the quest for more stable earnings." Ibid. p. ii. Freddie Mac revealed the issue to OFHEO, which then conducted its own investigation."
[40] Office of Federal Housing Enterprise Oversight, *Report of Findings to Date: Special Examination of Fannie Mae, September 17, 2004,* available at http://www.fhfa.gov/webfiles/748/FNMfindingstodate17sept04.pdf
[41] OFHEO, *Report of the Special Examination of Freddie Mac*, 2003, p. 91.
[42] Paul, Weiss, Rifkind, Wharton & Garrison LLP, "Report to the Special Review Committee of the Board of Directors of Fannie Mae, 2006, pp. 464, 506.
[43] OFHEO 2006 Annual report, p. 5; http://www.fhfa.gov/webfiles/1221/annualreport2006.pdf
[44] FHFA 2008 Annual Report (rev) tables 1 and 10.

mortgage-backed securities and $1.7 trillion in short-term and long-term debt obligations.[45] Freddie Mac issued $471 billion of MBS and $790 billion of debt.[46]

Linkages relate to the unusual attributes of GSE securities that allow them to be eligible for investment similar to investments in Treasuries or other securities backed by the full-faith-and-credit of the government. Among other attributes, their securities are deemed government securities for purposes of the Securities Exchange Act of 1934 and eligible for unlimited investment by federally insured banks and other depository institutions.[47] In 2004, the FDIC issued a report that noted that holdings of GSE securities by FDIC-insured institutions exceeded 11 percent of assets and constituted much more than the average capitalization of those institutions. The report added:

> "Large concentrations at FDIC-insured institutions in investments that are directly issued or guaranteed by the GSEs have led some observers to view the banking industry as particularly vulnerable to erosion in the benefits of GSE status. Insured institutions hold almost $300 billion, or roughly 17 percent, of the $1.8 trillion Fannie Mae and Freddie Mac direct obligations outstanding and nearly $770 billion, or about 40 percent, of the $1.9 trillion Fannie Mae and Freddie Mac mortgage pools outstanding."[48]

The government provided an effective guarantee of GSE debt and MBS after September 7, 2008, discussed below. This guarantee extended to outstanding subordinated debt. However, the government let preferred stockholders, including community banks and others, take losses. In addition, the government took warrants to purchase 79.9 percent of common stock, which greatly reduces the value of currently outstanding common stock.

## V. THE INSOLVENCY OF FANNIE MAE AND FREDDIE MAC

The financial soundness of the GSEs has been the subject of debate between many prominent critics and the GSEs themselves for years. In the 1980s and 1990s, some observers worried that exposure to interest rate movements might make the GSEs insolvent. The GSEs

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45 Fannie Mae Form 10-K for the Year 2007, p. 95.

46 Freddie Mac, "Debt Issuance by Trade Date," available at http://www.freddiemac.com/debt/data/cgi-bin/debtissuance.cgi?order=TD.

47 Thus, in reviewing the failure of a national bank in 2009 primarily because of its investments in GSE preferred stock, the Treasury Department's Office of Inspector General stated that, "All things considered, we believe that [the bank] acted in good faith when it invested in the GSE securities. Additionally, we have no reason to fault OCC's supervision of the institution as it relates to [the bank's] investment practices. Current law and regulatory standards permit banks to purchase GSE securities without limitation." Office of Inspector General, Department of the Treasury, "Safety and Soundness: Material Loss Review of National Bank of Commerce," OIG-09-042, August 6, 2009, p. 2.

48 Federal Deposit Insurance Corporation, "Assessing the Banking Industry's Exposure to an Implicit Government Guarantee of GSEs," (footnotes omitted), March 1, 2004 (revised April 14, 2004), available at http://www.fdic.gov/bank/analytical/fyi/2004/030104fyi.html.

borrowed shorter term than the term of the mortgages they funded, making them vulnerable to changes in the relative interest rates of short-term versus long-term assets. Indeed, such interest rate risk had been a major factor in the failure of hundreds of savings and loan associations. Similarly, in 1981 movements in short versus long-term interest rates resulted in Fannie Mae having a negative net worth on a market-value basis. In response, Fannie Mae's regulator at the time, HUD, liberalized the GSE's capital requirements.

Credit risk turned out to be the most significant factor for both GSEs. As noted above, Fannie Mae's 2007 Form 10-K Annual Report stated that the company was taking significant credit losses on its mortgage business, and especially on loans with higher risk characteristics.[49] Freddie Mac similarly reported that:

> "We expect that our realized credit losses will continue to increase, which will adversely affect the profitability of our Single-family Guarantee segment. We expect the increase will be largely driven by the credit characteristics of loans originated in 2006 and 2007, which are generally of lower credit quality than loans underlying our issuances in prior years. In addition, the average management and guaranty fees on our 2007 issuances did not keep pace with the increase in expected default costs on the underlying loans."[50]

Fannie Mae and Freddie Mac also had purchased increasing volumes of private-label mortgage securities (PLS). PLS are securities issued by private companies other than the GSEs backed by pools of mortgages. While Fannie Mae's holdings of PLS before 2004 had never exceeded $50 billion at any one time, that year PLS holdings increased to over $100 billion, and amounted to $86 billion at the end of the third quarter 2008, 2.8 percent of their book of business. Freddie Mac held $166 billion of PLS in 2004 and $191 billion at the end of the third quarter 2008, 8.9 percent of their book of business. [51]

In some years, the increase in the dollar value of subprime PLS held by the GSEs was significant compared to the overall increase in subprime PLS outstanding in the market. Former Chairman of the Federal Reserve Alan Greenspan estimates that in 2002 the GSEs' increase in holdings of subprime PLS accounted for only 7.6 percent of $75 billion in net new subprime PLS outstanding. This amount grew to 41.0 percent in 2003 and 39.0 percent in 2004 before declining to 12.8 percent in 2005. In 2006, total subprime PLS outstanding grew by $161 billion, while the amount of subprime PLS held by the GSEs *shrank* by $10 billion. [2]

[49] Fannie Mae, 2007 Form 10-K, p. 24.
[50] Freddie Mac 2007 Information Statement and Annual Report to Stockholders, p. 33.
[51] Federal Housing Finance Agency, *2008 Annual Report to Congress*, revised edition, pp. 116 and 132.
[2] Alan Greenspan, "The Crisis," second draft, Exhibit 5, March 9, 2010.

As subprime delinquencies increased, both GSEs took significant losses on their PLS holdings. The GSEs' total capital was small compared to these losses, which had a large impact on the GSEs' net worth.[52]

In March 2008, OFHEO liberalized capital constraints on Fannie Mae and Freddie Mac. In return for agreements by both GSEs to raise capital, OFHEO slightly reduced the amount of the temporary increase in capital requirements from 30 percent over the initial requirement to 20 percent. As a result, OFHEO estimated, the GSEs could purchase up to an additional $200 billion of mortgages from the troubled mortgage market.[53] Fannie Mae raised capital in response to the agreement, but Freddie Mac did not.

The insolvency of Fannie Mae and Freddie Mac followed the failure of mortgage lenders, including Countrywide Financial Corporation and IndyMac Bank, which the market had earlier considered to be successful. As loan losses grew among mortgage lenders, market participants raised questions about the soundness of Fannie Mae and Freddie Mac. One reflection of market concerns was a fall in stock prices. Fannie Mae common shares fell from a high of $70.57 in the third quarter 2007 to $7.04, the closing price on Friday, September 5, 2008. Between the end of 2007 and the third quarter of 2008, Fannie Mae stock dropped from $39 billion in market capitalization to $1.6 billion. For Freddie Mac the drop was from $22 billion to $1.1 billion.[54]

GSE borrowing costs, i.e., yields on their debt, also rose significantly, despite the long-standing perception that the federal government stood behind the debt obligations of the GSEs – the so called implicit guarantee. This was manifested in widening credit spreads on Fannie Mae 5-year benchmark debt over the 5-year Treasury curve beginning in the December 2007 quarter. As the following figure shows, spreads widened to a maximum of 101 basis points in September 2008 compared to 40 basis points in the prior year. The result of this increase in spreads was to reduce the value of the GSE debt that was so widely held.

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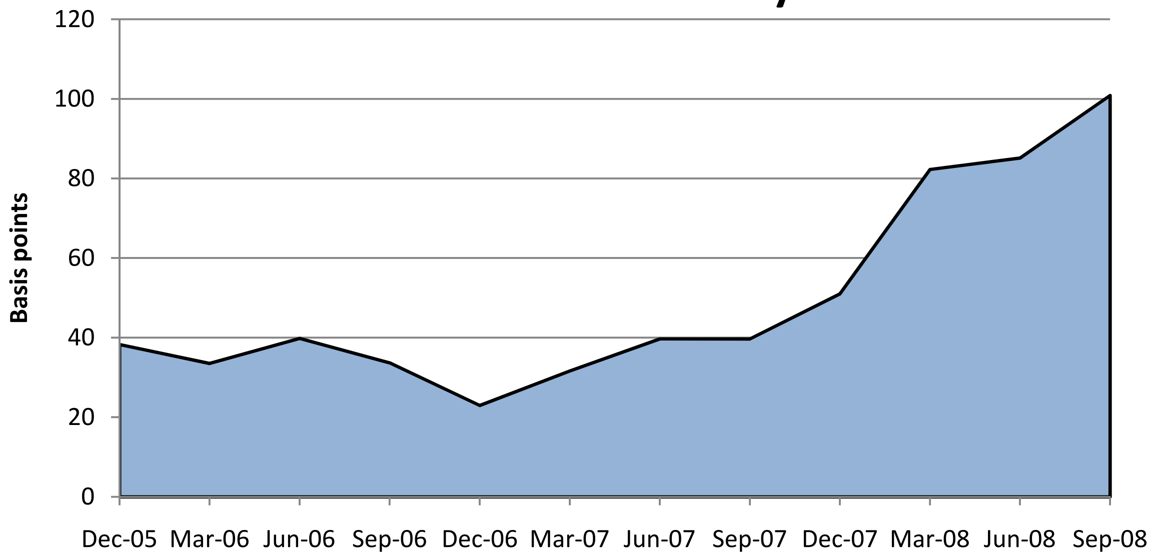
[52] Fannie Mae had $56 billion of total capital in mid-2008; Freddie Mac had $43 billion. Ibid. pp. 121 and 138.
[53] OFHEO news release, "OFHEO, Fannie Mae and Freddie Mac Announce Initiative to Increase Mortgage Market Liquidity," March 19, 2008.
[54] Federal Housing Finance Agency, *2008 Annual Report to Congress*, revised edition, pp. 121 and 138.

**Figure 14**

**Spread Between Fannie Mae 5-Year Debt and 5-Year Treasury**




Source: Bloomberg, Lp

The cost of five-year protection on Fannie Mae debt was also negatively affected; credit default swap (CDS) prices on Fannie Mae 5-year debt rose from a low of 6.30 basis points on December 13, 2006, to a high of 87.58 basis points on March 11, 2008[55]. All things equal, rising cost of protection in the CDS market signifies growing investor concern about credit risk and possible default by the issuer.

Starting in the second half of 2008, there was a significant shortening of maturities of debt that the two companies could issue to fund their immense mortgage portfolios.[56] As Freddie Mac explained:

> "There were many factors contributing to the reduced demand for our debt securities in the capital markets, including continued severe market disruptions, market concern about our capital position and the future of our business (including its future profitability, future structure, regulatory actions, and agency status) and the extent of U.S. government support for our debt securities..."[57]

[55] Data on Fannie Mae credit spreads and CDS prices are taken from Bloomberg.
[56] Fannie Mae Form 10-K for the year 2008, p. 150; Freddie Mac Form 10-K for the year 2008, pp. 1-2.
[57] Freddie Mac, Ibid. p. 1.

## Conservatorship

The FHFA had authority to place Fannie Mae and Freddie Mac into conservatorship. In announcing that FHFA was placing the two companies into conservatorship, FHFA Director James Lockhart pointed to safety and soundness issues, including current capitalization, current market conditions, the financial performance and condition of each company, the inability of the companies to fund themselves according to normal practices and prices, and the critical importance of each company in supporting the residential mortgage market.[58]

In concert with the Treasury Department and Federal Reserve, FHFA replaced the CEOs of each company and appointed itself the conservator. The powers of the company's directors, officers, and shareholders legally transferred to the designated conservator. As conservator, the agency's obligation was "to establish control and oversight of a Company to put it in a sound and solvent condition."[59]

The Treasury Department committed to provide support to ensure that holders of Fannie Mae's and Freddie Mac's debt and MBS would be paid as the obligations became due. In return, Treasury entered into a Senior Preferred Stock Purchase Agreement and obtained warrants to purchase 79.9 percent of each company's outstanding common stock. Initially, Treasury's commitment was capped at $100 billion for each company. Treasury increased its commitment to $200 billion per company on February 18, 2009,[60] and on December 24, 2009, the Treasury made the commitment open-ended through the end of 2012. By the end of 2009, Fannie Mae and Freddie Mac had drawn down $111 billion under the terms of the plan announced initially on September 7, 2008.[61]

The government also provided other support as well. As of the end of 2009, Treasury had purchased a total of $220.8 billion of Fannie Mae and Freddie Mac MBS and the Federal Reserve had purchased another $1.1 trillion of their MBS plus $132 billion of their debt.[62]

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[58] Statement of FHFA Director James Lockhart, September 7, 2008, available at http://www.treas.gov/press/releases/reports/fhfa_statement_090708hp1128.pdf.
[59] FHFA, "Questions and Answers on Conservatorship," September 7, 2008, available at http://www.treas.gov/press/releases/reports/fhfa_consrv_faq_090708hp1128.pdf.
[60] Statement by Secretary Tim Geithner on Treasury's Commitment to Fannie Mae and Freddie Mac, February 18, 2009, available at http://www.financialstability.gov/latest/tg32.html.
[61] "Data as of February 25, 2010 on Treasury and Federal Reserve Purchase Programs for GSE and Mortgage-Related Securities," available at http://ofheo.gov/webfiles/15460/TreasFED02252010.pdf.
[62] Federal Housing Finance Agency, "U.S. Treasury Support for Fannie Mae and Freddie Mac," Mortgage Market Note 10-1, January 20, 2010, available at http://www.fhfa.gov/webfiles/15362/MMNote_10-1_revision_of_MMN_09-1A_01192010.pdf.

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## Table of Acronyms and Abbreviations

| | |
|---|---|
| 1992 Act | Federal Housing Enterprises Financial Safety and Soundness Act of 1992 |
| CDS | credit default swap |
| CEO | chief executive officer |
| CFO | chief financial officer |
| FDIC | Federal Deposit Insurance Corporation |
| FHA | Federal Housing Administration |
| FHFA | Federal Housing Finance Agency |
| FHLMC | Federal Home Loan Mortgage Corporation (Freddie Mac) |
| FNMA | Federal National Mortgage Association (Fannie Mae) |
| GAAP | Generally Accepted Accounting Principles |
| GNMA | Government National Mortgage Association (Ginnie Mae) |
| GSE | government sponsored enterprise |
| HERA | Housing and Economic Recovery Act of 2008 |
| HUD | U.S. Department of Housing and Urban Development |
| LTV | loan-to-value ratio |
| MBS | mortgage-backed security |
| OCC | Office of the Comptroller of the Currency |
| OFHEO | Office of Federal Housing Enterprises Oversight |
| PLS | private-label mortgage securities |