# FEDERAL HOUSING FINANCE AGENCY OFFICE OF INSPECTOR GENERAL

# Fannie Mae and Freddie Mac: Where the Taxpayers' Money Went



WHITE PAPER: WPR-2012-02 DATED: May 24, 2012



# FEDERAL HOUSING FINANCE AGENCY OFFICE OF INSPECTOR GENERAL

# AT A GLANCE

## Fannie Mae and Freddie Mac: Where the Taxpayers' Money Went

# Why FHFA-OIG Did This Evaluation

On July 30, 2008, the Housing and Economic Recovery Act (HERA) was enacted for the purpose of strengthening the regulation of the Federal National Mortgage Association (Fannie Mae) and the Federal Home Loan Mortgage Corporation (Freddie Mac) (collectively, the Enterprises). Six weeks later, the Enterprises entered conservatorships overseen by the newly created Federal Housing Finance Agency (FHFA). Shortly thereafter, the U.S. Department of the Treasury (Treasury) began making quarterly investments in the Enterprises to prevent their insolvency because they were rapidly losing billions of dollars. By the end of 2011, U.S. taxpayers had invested nearly \$185 billion in Fannie Mae and Freddie Mac.

Questions have arisen regarding why Fannie Mae and Freddie Mac required such federal intervention, how the Enterprises have used Treasury's extraordinary investment, and who may have benefited from it. In this white paper, FHFA's Office of Inspector General (FHFA-OIG) attempts to answer these and other questions relating to Treasury's investments in the Enterprises. Understanding the answers to these questions will be important for policy makers as they determine the future of the Enterprises and more generally the nation's housing and related financial markets.

#### Discussion

When U.S. housing prices stopped their rapid rise and began declining nationwide in 2006-2007, homeowners started defaulting on their mortgages at accelerating rates. At that time, Fannie Mae and

Freddie Mac owned or guaranteed mortgages worth more than \$5 trillion, nearly half of the U.S. mortgage market. They did not have adequate capital reserves to continue operating in the face of the growing losses on their mortgage portfolios.

In September 2008, the Enterprises entered conservatorships overseen by FHFA, and, to prevent their insolvency, Treasury began making quarterly capital contributions to each institution. This money has been used primarily to cover losses stemming from single-family mortgage loans that the Enterprises had acquired from 2004 through 2008. In addition, but to a lesser extent, Treasury's investments have covered payments of dividends to Treasury as well as losses from investments and other expenses.

Without assistance from Treasury, the Enterprises likely would not have been able to repay their debts or honor their mortgage-backed securities (MBS) guarantees. Further, they would have been unable to finance new mortgages or create new MBS, two of the cornerstones of the U.S. housing finance system.

#### Conclusion

U.S. government intervention protected the numerous creditors — both domestic and foreign — who had purchased bonds and MBS issued by Fannie Mae and Freddie Mac. Allowing the Enterprises to meet their debt and guarantee obligations enabled them to continue to support the secondary market. However, the cost of rescuing the Enterprises has been high, with total Treasury support for the Enterprises currently expected to range from a quarter to a third of a trillion dollars.

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# **ABBREVIATIONS**

Fannie Mae	Federal National Mortgage Association
FHFA	Federal Housing Finance Agency
FHFA-OIG	Federal Housing Finance Agency Office of Inspector General
Freddie Mac	Federal Home Loan Mortgage Corporation
Ginnie Mae	
HERA	
MBS	
PSPAs	Senior Preferred Stock Purchase Agreements
RMBS	Residential Mortgage-Backed Securities
Treasury	U.S. Department of the Treasury

## Federal Housing Finance Agency Office of Inspector General

Washington, DC

## **PREFACE**

FHFA-OIG was established by HERA,<sup>1</sup> which amended the Inspector General Act of 1978.<sup>2</sup> FHFA-OIG is authorized to conduct audits, investigations, and other studies of the programs and operations of FHFA; to recommend policies that promote economy and efficiency in the administration of such programs and operations; and to prevent and detect fraud and abuse in them. This white paper provides an overview of the purposes of the government's extraordinary investments in the Enterprises; the uses to which the proceeds of such investments have been applied; and the prospects for repayment of the government's investments.

This white paper was written principally by Senior Investigative Evaluator Bruce McWilliams and Senior Financial Analyst Alan Rhinesmith. Assistant Inspector General for Evaluations David Frost and Senior Financial Analyst Timothy Lee contributed to its completion. FHFA-OIG appreciates the assistance of FHFA and Enterprise staff in completing this paper. It has been distributed to Congress, the Office of Management and Budget, and others and will be posted on FHFA-OIG's website, www.fhfaoig.gov.

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<sup>&</sup>lt;sup>1</sup> Public Law No. 110-289.

<sup>&</sup>lt;sup>2</sup> Public Law No. 95-452.

# **BACKGROUND**

Following an unprecedented rise in housing prices, the housing market began collapsing in late 2006. This had widespread, adverse impacts on those financial institutions heavily concentrated in mortgage financing, such as Fannie Mae and Freddie Mac.

To prevent the Enterprises' insolvency, Treasury invested approximately \$185 billion in them from September 6, 2008 through the end of 2011. Treasury's actions have resulted in controversy and questions have arisen concerning why Fannie Mae and Freddie Mac required such federal intervention, how the Enterprises have used Treasury's extraordinary investment, and who may have benefited from it.

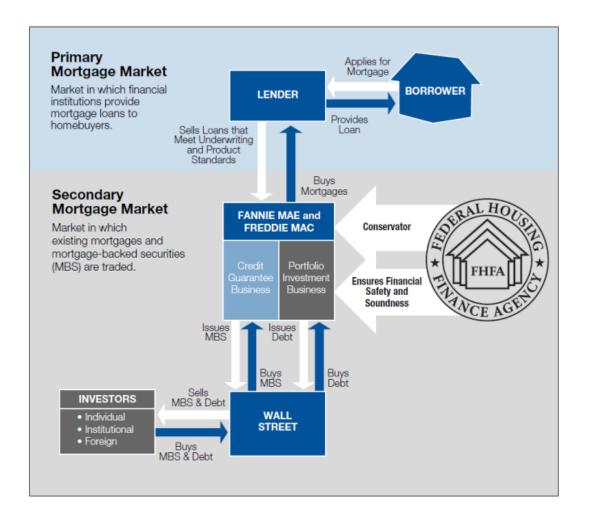
In a nutshell, it is believed that the investment permitted Fannie Mae and Freddie Mac to avoid insolvency, which, given their dominant position in housing finance and the trillions of dollars of securities issued, could have caused the collapse of the U.S. housing finance system. Additional consequences of Treasury's intervention include that the Enterprises' shareholders lost almost all their investments, but the Enterprises' bond holders and investors in guaranteed mortgage-backed securities (MBS) were protected. More importantly, homeowners and other participants in the housing market directly benefited from Treasury's buttressing of the market.

### **About the Enterprises**

Fannie Mae and Freddie Mac provide liquidity to the housing finance system by supporting the secondary mortgage market. The Enterprises purchase residential mortgages that meet their underwriting criteria from loan sellers. The loan sellers can then use the sales proceeds to originate additional mortgages. The Enterprises can hold the mortgages in their own investment portfolios or package them into MBS that are, in turn, sold to investors. For a fee, the Enterprises guarantee the payment of mortgage principal and interest on the MBS they sell.

As depicted in Figure 1, to finance their purchase of billions of dollars of mortgage loans, the Enterprises: (1) borrow funds from large individual, institutional, and foreign investors; and (2) create and sell MBS.

Figure 1: Overview of Enterprises and Role of FHFA<sup>3</sup>



### **Provisions for Loan Losses in the Enterprises' Portfolios**

Inevitably, some homeowners will encounter difficulty making their mortgage payments. If a

homeowner stops making payments, the Enterprise has to account for the revenue shortfall related to an owned- or guaranteed-mortgage. The Enterprises have established special accounts or reserves to cover losses incurred on loans they own in their investment portfolios. They typically contribute to these accounts every quarter. These quarterly contributions to reserves are called **provisions for loan** 

# Provision for Loan and Guarantee Losses

An accounting concept that refers to the reduction of current income to establish a reserve fund for mortgage losses.

<sup>&</sup>lt;sup>3</sup> Source: General Accountability Office, Financial Audit: Federal Housing Finance Agency's Fiscal Years 2011 and 2010 Financial Statements, Nov. 2011, Figure 4.

**losses** in that they provide against future losses. Provisions for loan losses – and the reserves they fund – can be attributable to a specific loan or can be based on the general expectation that a portion of the loans in the portfolio as a whole will **default**.

#### **MBS Guarantees**

With respect to **mortgage guarantees** associated with the MBS that Fannie Mae and Freddie Mac sell, they collect a monthly fee to ensure the payment of principal and interest to MBS investors. This fee – spread over the life of the pool of loans that comprise a particular MBS – is intended to cover that small portion of loans that are expected to default. And, similar to the practice for the loans they

#### Default

Occurs when a mortgagor misses one or more payments.

#### **Mortgage Guarantees**

Historically, the Enterprises purchased mortgages and securitized them, then provided a guarantee to investors that if the mortgagor defaulted, the Enterprise would make timely principal and interest payments to the securitization trust, which in turn would make payments to the security holder.

retain in their own portfolios, the Enterprises establish reserves for losses on the MBS portfolios they guarantee.<sup>4</sup>

#### **Defaults and Foreclosures**

After a homeowner defaults on a loan that the Enterprises own or guarantee, a loan servicer – typically, a vendor hired to collect mortgage payments, set aside taxes and insurance premiums, forward principal and interest obligations to mortgage owners, and respond to payment defaults – may commence **foreclosure** on behalf of the Enterprises. Foreclosure is designed to recover the proceeds of a defaulted loan through the sale of the mortgaged property. Once the servicer has foreclosed on a loan and taken the title on the property, the Enterprise essentially erases – or **charges off** – the unpaid mortgage balance from its accounting records. Following charge off, if the Enterprise sells the property to a third party, the sales price will offset losses.

#### **Foreclosure**

The legal process used by a lender to obtain possession of a mortgaged property.

#### **Charges Off**

An accounting term describing the elimination of an asset, such as a mortgage loan, from a company's books. It does not necessarily imply a reduction in the company's assets, depending on the allowance established for loan losses.

The Enterprises aim to contribute to their loan loss and guarantee portfolio reserves sufficiently to cover these losses. However, with the collapse of the housing market and the ensuing

<sup>&</sup>lt;sup>4</sup> Fannie Mae uses the term "guaranty fee," whereas Freddie Mac uses the term "management and guarantee fee." This report refers to them both as "guarantee fees."

financial crisis, losses on loans and payment on guarantee obligations vastly exceeded the Enterprises' abilities to cover their losses.

#### The Financial Crisis and Its Effect on the Enterprises

#### **The Crisis**

*The Bubble Inflated* 

From 2001 until it reached its peak in 2006, the U.S. housing market experienced a rapid increase in real estate values.<sup>5</sup> During this time, prices of single-family homes increased by an average of more than 12% annually. Home price appreciation was accompanied by a rapid increase in mortgage indebtedness. Total mortgage debt outstanding in the U.S. more than doubled, from \$5.1 trillion in 2000 to \$11.2 trillion in the second quarter of 2008. This swift escalation of home prices and mortgage indebtedness is often referred to as the "housing bubble."

During the housing bubble, Fannie Mae's mortgage-related assets and guarantees increased from \$1.3 trillion in 2000 to \$3.1 trillion in 2008, or approximately 11% annually. Likewise, Freddie Mac's mortgage-related assets and guarantees increased from \$1 trillion in 2000 to \$2.2 trillion in 2008, or 11% annually.

#### The Bubble Burst

In 2007, housing prices began to plummet and loan delinquencies and defaults significantly increased. As reflected in Figure 2, after more than doubling over six years, home prices fell by 27% between 2006 and 2008.

<sup>5</sup> Over a longer period, between 1997 and 2006, home values increased 124%.

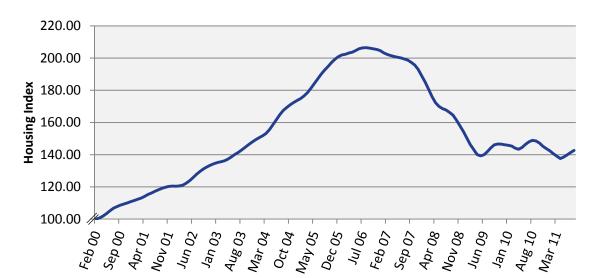


Figure 2: Average Single Family Residence Prices, 2000-2011<sup>6</sup>

#### The Impact

The collapse of housing prices had widespread adverse impacts on many sectors of the U.S. economy, particularly for those financial institutions and investors that were heavily concentrated in mortgage financing such as Fannie Mae and Freddie Mac. The Enterprises had grown rapidly with only a thin capital cushion to provide protection against losses. The capital they were required to hold to protect them from losses on their investment portfolio and guarantee obligations met regulatory standards but fell well below capital levels maintained by many large financial institutions. Hence, the Enterprises were ill-prepared for a sharp

Because of both regulatory requirements and the force of market discipline, banks hold much more capital than GSEs [government-sponsored enterprises] hold. The very largest bank holding companies generally hold equity capital equal to 6 percent or more of assets, and the largest regional banks generally have capital ratios of about 8 percent. (As I am sure you are keenly aware, community banks often have a capital-to-assets ratio exceeding 10 percent.) In comparison, the GSEs hold capital equal to roughly 3.5 percent of assets. The justification for the low capital holdings of GSEs relative to banks is unclear. The largest banks are more diversified than the GSEs; and although banks likely assume greater credit risks, they probably are less subject to interest-rate risk than are GSEs. Moreover, the recent experience of the GSEs suggests that they are subject to at least as much operational risk as the large banks.

Board of Governors of the Federal Reserve System, *Statement of Chairman Ben S. Bernanke* (Mar. 6, 2007) (online at www.federalreserve.gov/newsevents/speech/bernanke20070306a.htm).

<sup>&</sup>lt;sup>6</sup> Standard and Poor's, *S&P/Case-Shiller Home Price Indices* (Instrument: Case-Shiller 20-City Composite Seasonally Adjusted, Frequency: Monthly) (online at www.standardandpoors.com/indices/sp-case-shiller-home-price-indices/en/us/?indexId=spusa-cashpidff--p-us----).

<sup>&</sup>lt;sup>7</sup> In 2007, Federal Reserve Board Chairman Ben S. Bernanke said:

nationwide decline in housing prices. When housing prices for the United States overall fell by an average of 9% in 2007, the Enterprises' businesses began to come under increasing stress. By early 2008, both institutions were experiencing financial difficulties and, as more and more homeowners became delinquent on their mortgages, their rates of seriously delinquent (i.e., 90 or more days delinquent) owned- or guaranteed-loans rapidly exceeded levels experienced during the preceding decade.

The financial crisis has produced unprecedented losses for the Enterprises. Fannie Mae lost \$5 billion in the second half of 2007 and another \$4.5 billion through the first half of 2008. Freddie Mac lost \$3.7 billion in the second half of 2007 and \$1 billion during the first half of 2008. Subsequently, the collapse in the market for MBS in the fall of 2008 resulted in even larger losses for both entities. For the full year 2008, Fannie Mae and Freddie Mac together recorded losses of more than \$100 billion (\$58.7 billion and \$50.1 billion, respectively). To put these losses into perspective, over the 37 year period from 1971 to mid-2008, Fannie Mae and Freddie Mac earned \$95 billion, less than they lost in 2008 alone. And, the losses continued; from 2008 through the end of the third quarter of 2011, the Enterprises lost \$261 billion. In other words, the amount lost during the conservatorships is more than twice as large as the cumulative net income that the Enterprises reported as public companies.

#### The Conservatorships

In July 2008, HERA was enacted. Among other things, HERA strengthened the regulator's ability to place the Enterprises in conservatorships and authorized it to place them into receiverships. Additionally, HERA empowered Treasury to provide financial assistance to Fannie Mae and Freddie Mac through the end of 2009.

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<sup>&</sup>lt;sup>8</sup> Federal Housing Finance Agency, *Conservator's Report on the Enterprises' Financial Condition, Third Quarter* 2011, at 9 (online at http://www.fhfa.gov/webfiles/22855/Conservator'sReport3Q2011F122111F.pdf) (accessed Apr. 16, 2012). This is a comprehensive income figure (upon which Treasury investments are calculated); net income figures reported by the Enterprises may differ.

As depicted in Figure 5, the Enterprises' cumulative losses exceed the amount of Treasury's investment by \$78 billion. When the conservatorships commenced, the Enterprises had \$78 billion in capital available, and this capital partially offset losses and the need for additional Treasury investment.

<sup>&</sup>lt;sup>9</sup> Federal Housing Finance Agency, *FHFA Report to Congress 2010*, at 114, 131 (online at www.fhfa.gov/webfiles/21570/FHFA2010RepToCongress61311.pdf) (accessed Feb. 29, 2012).

<sup>&</sup>lt;sup>10</sup> Under the previous statute governing federal oversight of the Enterprises, the Federal Housing Enterprises Financial Safety and Soundness Act of 1992, Public Law No. 102-550, the Enterprises' regulator, Office of Federal Housing Enterprise Oversight, had the authority to place an Enterprise in conservatorship, but not receivership.

On September 6, 2008, Fannie Mae and Freddie Mac entered conservatorships overseen by FHFA. 11 Among the key reasons FHFA cited for taking this action were concerns about the financial conditions of the Enterprises and their ability to raise capital and to continue funding themselves; FHFA also noted "the critical importance each company has in supporting the residential mortgage market in this country."<sup>12</sup>

At the same time, and in coordination with FHFA, Treasury exercised its authority under HERA to provide support to the Enterprises to ensure their solvency. In taking this action, former Treasury Secretary Henry Paulson stated that Treasury had concluded – based on a thorough review of the financial conditions of the Enterprises, their projected abilities to withstand difficult market conditions, and the need to provide stability to unsettled financial markets – that it was necessary both to place them in conservatorships and to set up a process for providing financial support to them, as needed.<sup>13</sup>

Treasury's financial support has been in the form of purchases of senior preferred stock issued by the Enterprises in accordance with Senior Preferred Stock Purchase Agreements (PSPAs).

Under the terms of the PSPAs, whenever an Enterprise's liabilities exceed its assets (as determined using Generally Accepted Accounting Principles (GAAP)), Treasury provides sufficient cash to eliminate that deficit in exchange for an increase in the value of the senior preferred stock. 14 The PSPAs thus provide the Enterprises a financial backstop. 15 Since establishing the

#### **Generally Accepted Accounting Principles** (GAAP)

A set of rules that is agreed upon by industry boards as common accounting practices.

conservatorships, Treasury has made equity investments in the Enterprises almost every quarter and, by the end of 2011, the cumulative amount of such taxpaver investments stood at \$185 billion, as shown in Figure 3. 16

<sup>&</sup>lt;sup>11</sup> For a more complete discussion of the impact of placing the Enterprises in conservatorships, see *FHFA-OIG's* Current Assessment of FHFA's Conservatorships of Fannie Mae and Freddie Mac (WPR-2012-001, March 28, 2012) (available at www.fhfaoig.gov/Content/Files/WPR-2012-001.pdf).

<sup>&</sup>lt;sup>12</sup> Federal Housing Finance Agency, Statement of FHFA Director James B. Lockhart (Sept. 7, 2008) (online at www.treasury.gov/press-center/press-releases/Documents/fhfa statement 090708hp1128.pdf).

<sup>&</sup>lt;sup>13</sup> U.S. Department of the Treasury, Statement by Secretary Henry M. Paulson, Jr. (Sept. 7, 2008) (online at www.treasury.gov/press-center/press-releases/Pages/hp1129.aspx).

<sup>&</sup>lt;sup>14</sup> Federal Housing Finance Agency, Mortgage Market Note U.S. Treasury Support for Fannie Mae and Freddie Mac, at 3 (online at www.fhfa.gov/webfiles/15362/MMNote 10-1 revision of MMN 09-1A 01192010.pdf) (accessed on Feb. 29, 2012).

<sup>&</sup>lt;sup>16</sup> This figure, \$185 billon, includes the \$2 billion initial commitment fee. Treasury was issued stock representing this fee as payment for agreeing to invest in the Enterprises as required.

Initially, the Enterprises were to receive from Treasury no more than \$200 billion. The PSPAs were subsequently revised to increase this amount to \$400 billion. The PSPAs were amended a third time to increase the investment ceiling to \$400 billion over the amount actually drawn as of December 31, 2012 (less any positive equity – which is unlikely – at that date). To illustrate, given the investment of \$185 billion at the end of 2011, if no more cash were drawn before December 31, 2012, (and stockholder equity is zero or less on that date), then the ceiling will be \$585 billion (\$185 billion plus \$400 billion).

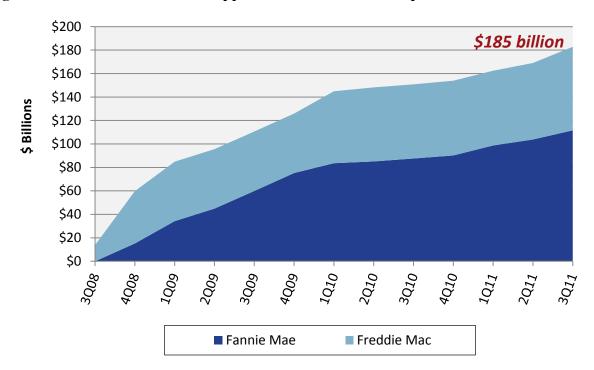


Figure 3: Federal Government Support Since Conservatorship<sup>17</sup>

As a condition of receiving financial support under the PSPAs, the Enterprises agreed to pay Treasury quarterly dividends. The dividend amounts are based on a 10% annual rate on Treasury's outstanding investment.

The Enterprises' dividend obligations, which are exacerbated by the 10% annual rate, are so large that they have yet to earn enough to pay them annually. Consequently, Treasury has had to advance additional sums to the Enterprises to pay dividends. As of the end of 2011, Treasury's investment in the Enterprises, excluding the amount needed to fund the dividend payments, is

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<sup>&</sup>lt;sup>17</sup> Federal Housing Finance Agency, *Data as of January 2, 2012 on Treasury and Federal Reserve Purchase Programs for GSE and Mortgage-Related Securities*, at Table 1 (online at www.fhfa.gov/webfiles/23193/TSYSupport1312012.pdf) (accessed Mar. 9, 2012); and Federal Housing Finance Agency, *Mortgage Market Note, US Treasury Support for Fannie Mae and Freddie Mac*, page 3 (January 20, 2010).

\$151 billion. 18 (Treasury's investment of \$185 billion also includes \$32 billion in dividend advances and \$2 billion in fees assessed against the Enterprises at the inception of the PSPAs.) According to FHFA and the Enterprises, the likelihood of the Enterprises ever earning enough to repay the full amount invested is remote. 19 This is illustrated in Figure 4, which compares the current dividend amount to the Enterprises' net annual income since 1988.

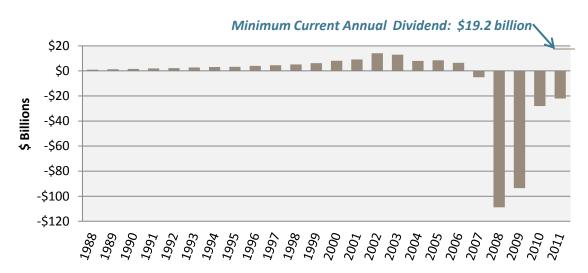


Figure 4: Combined Enterprise Net Income vs. Current Treasury Dividend 20

On the basis of Treasury's outstanding investment of \$185 billion and the annual dividend rate of 10% (paid quarterly at a rate of 2.5%), the Enterprises' current annual dividend payment is \$19.2 billion.<sup>21</sup> As depicted in Figure 4, even in their best year, 2002, when they earned

<sup>&</sup>lt;sup>18</sup> Federal Housing Finance Agency, *Data as of January 2, 2012 on Treasury and Federal Reserve Purchase Programs for GSE and Mortgage-Related Securities*, at Table 2 (online at www.fhfa.gov/webfiles/23193/TSYSupport1312012.pdf) (accessed Mar. 9, 2012); Freddie Mac, 2011 10-K Report, at 127 (online at www.freddiemac.com/investors/sec\_filings/index.html) (accessed Mar. 9, 2012); Fannie Mae, 2011 10-K Report, at 9 (online at www.fanniemae.com/resources/file/ir/pdf/quarterly-annual-results/2011/10k 2011.pdf) (accessed Mar. 9, 2012).

<sup>&</sup>lt;sup>19</sup> The Acting FHFA Director noted in a September 2011 speech: "It ought to be clear to everyone at this point, given the Enterprises' losses since being placed into conservatorship and the terms of the Treasury's financial support agreements, that the Enterprises will not be able to earn their way back to a condition that allows them to emerge from conservatorship." Federal Housing Finance Agency, *Statement of Acting Director Edward J. DeMarco* (Sept. 19, 2011) (online at www.fhfa.gov/webfiles/ 22617/NCSpeech91911.pdf). Similarly, in their 2011 annual public filings, both Enterprises independently reported that, "there is significant uncertainty as to our long-term financial sustainability." Freddie Mac, 2011 10-K Report, at 24 (online at www.freddiemac.com/investors/sec\_filings/index.html) (accessed Mar. 9, 2012); Fannie Mae, 2011 10-K Report, at 21 (online at www.fanniemae.com/resources/file/ir/pdf/quarterly-annual-results/2011/10k 2011.pdf) (accessed Mar. 9, 2012).

<sup>&</sup>lt;sup>20</sup> Source: FHFA annual report to Congress, 2010, p. 113 and p. 114, Fannie 10-K, 2010 and Freddie 10-K, 2010; Fannie 10-Q, 3rd quarter, 2010 and Freddie 10-Q, 2010.

<sup>&</sup>lt;sup>21</sup> If the computation were made once a year, then the 10% rate would be assessed against the balance, resulting in a payment of \$18.5 billion.

\$14 billion, the Enterprises failed to earn the \$19.2 billion that would be needed to pay an annual dividend on Treasury's \$185 billion investment as of the end of 2011.		

## ENTERPRISE GAINS & LOSSES 2008-2011

## Summary of Gains, Losses, and Use of Funds

Large businesses like the Enterprises typically analyze financial performance of all of their business lines to gain an understanding of the dynamics of each particular segment of their operations. As discussed in more detail below, and as summarized in Figure 5, with the exception of their multifamily business lines, the Enterprises suffered losses in all of their operations.

### Sources of Gains and Losses Between 2008 and Q3:2011<sup>22 23</sup>

Single Family Houses	Loss
Multifamily	Gain
Investments	Loss
Other	Loss
Accounting Adjustments	Loss
Dividends to Treasury	Dividend Payment

As discussed above, the Enterprises' cumulative losses as of the end of the third quarter of 2011 total \$261 billion, but they had \$78 billion in unobligated capital at the beginning of 2008. (Additionally, \$2 billion in fees were assessed against the Enterprises at the inception of the PSPAs, and these fees are included in Treasury's \$185 billion investment.) This unobligated capital partially mitigated the need for Treasury investment. Figure 5 quantifies the relative losses, dividend obligations, and gain on Enterprise operations, through the third quarter of 2011.

<sup>&</sup>lt;sup>22</sup> FHFA publishes a quarterly conservator's report on Fannie Mae's and Freddie Mac's financial performance and condition, to enhance public understanding of their financial performance leading up to and during conservatorship, including the sources of Enterprise losses and capital deficits, and Enterprise loss mitigation activity. See <a href="http://www.fhfa.gov/Default.aspx?Page=172">http://www.fhfa.gov/Default.aspx?Page=172</a>.

<sup>&</sup>lt;sup>23</sup> "Figure 3.1 Capital Changes: January 1, 2008-September 30, 2011" from FHFA, *Conservator's Report on the Enterprises' Financial Performance, Third Quarter 2011*, p. 9 (online at http://www.fhfa.gov/webfiles/16591/ConservatorsRpt82610.pdf).

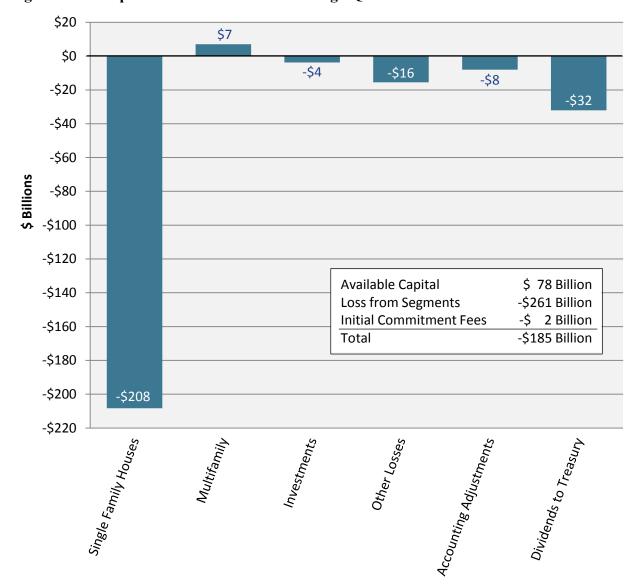


Figure 5: Enterprise Gains/Losses 2008 Through Q3:2011<sup>24</sup> 25

Figure 5 clearly demonstrates that the bulk of the Enterprises' losses were incurred in its single-family business: owning and guaranteeing home mortgages. Moreover, the vast majority of the Enterprises' losses in their single-family business lines are attributable to single-family loans made from 2004 through 2008.

<sup>&</sup>lt;sup>24</sup> Numbers do not total due to rounding.

<sup>&</sup>lt;sup>25</sup> "Figure 3.1 Capital Changes: January 1, 2008-September 30, 2011" from FHFA, *Conservator's Report on the Enterprises' Financial Performance, Third Quarter 2011*, p. 9. (online at http://www.fhfa.gov/webfiles/16591/ConservatorsRpt82610.pdf).

#### **Single-Family**

As discussed above, the Enterprises purchase single-family mortgages from lenders. The Enterprises then either hold the mortgages in their investment portfolios or package and sell them as MBS. The Enterprises typically guarantee payment of principal and interest on the MBS they sell in exchange for guarantee fees.

As shown in Figure 5, after accounting for revenues from new and existing loans (e.g., guarantee fees), the Enterprises' single-family business line had a net loss (i.e., expenses exceeding income) of \$208 billion since 2008. As described below, and depicted in Figure 6, Fannie Mae's and Freddie Mac's loss-related expenses totaled \$218 billion, and these expenses were predominantly associated with MBS guarantees.

#### Retained Mortgage Loans

During the conservatorships, the Enterprises accrued \$86 billion in expenses (called "provisions") related to mortgage loans held on their books, as shown in Figure 6. However, this sum is affected by a recent accounting change. Prior to 2010, these losses related solely to those loans the Enterprises purchased from third-parties and immediately placed into their portfolios (without securitizing and selling them to investors). Beginning in 2010, changes in accounting rules required the Enterprises

# Reserve for Guarantee Losses

An accounting phrase meaning to establish a reserve fund on the balance sheet in anticipation of future losses for loans guaranteed by the Enterprises. It has the effect of reducing income in the current period.

to account for loans they had guaranteed in the same way as loans they owned and held on their books. Thus, the Enterprises reduced their **reserve for MBS guarantee losses** and increased their reserves for retained mortgages losses.

#### MBS Guarantees

The Enterprises expanded their MBS business rapidly beginning in the mid-1990s. By 2008, the amount of the Enterprises' guarantees on mortgages that were **securitized** into MBS was nearly seven times the amount held in their investment portfolios.<sup>26</sup> As the housing market collapsed and homeowners failed to make interest and principal payments for securitized loans, the Enterprises satisfied

#### Securitization

A process whereby a financial institution assembles pools of income-producing assets (such as loans) and then sells an interest in the assets' cash flows as securities to investors.

<sup>&</sup>lt;sup>26</sup> Fannie Mae, *2008 10-K Report*, at 170 (online at www.fanniemae.com/ir/pdf/earnings/2008/form10k\_022609.pdf) (accessed Mar. 12, 2012); Freddie Mac, *2008 10-K Report*, at 127 (online at www.freddiemac.com/investors/er/pdf/10k\_031109.pdf) (accessed Mar. 29, 2012).

their guarantee obligations and made required periodic payments to MBS investors. As shown in Figure 6, in spite of the 2010 accounting change, the Enterprises' provisions for losses related to their guarantee business totaled \$132 billion through the third quarter of 2011.

\$140 Total \$218 billion \$120 \$100 MBS \$80 Guarantee Provisions \$60 Retained Mortgage Provisions \$40 \$20 \$132 \$86 \$0 2008 through Q3:2011

Figure 6: Enterprise Provisions for Losses on MBS Guarantees vs. Retained Mortgages<sup>27</sup>

#### **Multifamily**

Like with their single-family business, the Enterprises participate in mortgages secured by multifamily buildings, acquiring, holding, or securitizing them into MBS. As shown in Figure 5, results from this business segment contributed a gain of \$7 billion from 2008 through the end of the third quarter of 2011.

<sup>27</sup> Information for Allowance for Loan Losses and Reserves for Guarantee Losses taken from annual and quarterly

filings (form 10K and form 10Q) from Fannie Mae and Freddie Mac between 2008 and 2011.

#### **Investments**

During the same time frame, investments contributed \$4 billion in overall losses, as shown in Figure 5. Figure 7 shows, however, that the Enterprises lost \$83 billion on their investments in 2008, and that since that time annual gains have partially offset the 2008 results.

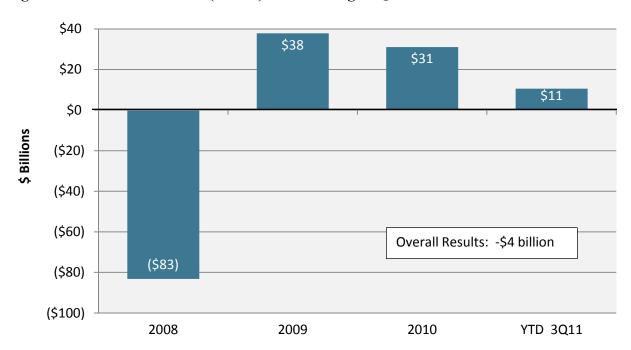


Figure 7: Investments Gains/(Losses) 2008 Through 3Q11<sup>28</sup>

Investment results are largely comprised of private-label MBS and derivative performance.

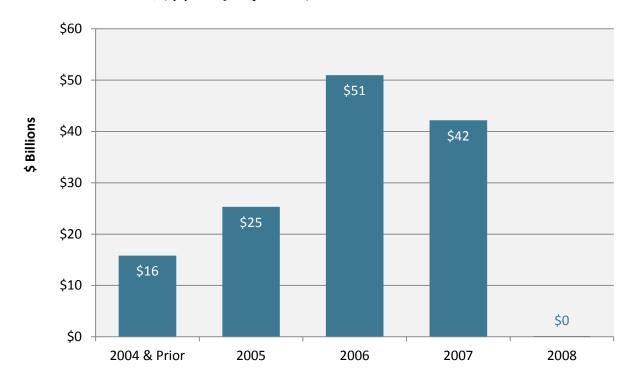
#### Private-Label MBS

From 2004 through 2007, as reflected in Figure 8, the Enterprises bought substantial quantities of private-label MBS. Such securities typically offered higher yields than either their own such securities or the mortgages they held in their investment portfolios. Further, in part, the mortgages backing these securities often were issued to low- and moderate-income homebuyers, whom the Enterprises had a legislative mission to serve.<sup>29</sup>

<sup>&</sup>lt;sup>28</sup> Results from the Enterprises' investments and capital markets activities include derivatives and agency securities in addition to private-label securities.

<sup>&</sup>lt;sup>29</sup> Federal Reserve Board Chairman Ben S. Bernanke said, "By borrowing at this preferential rate and purchasing assets (including MBS) that pay returns considerably greater than the Treasury rate, the GSEs can enjoy profits of an effectively unlimited scale." Bernanke went on to say, "the GSE portfolio purchases may create benefits for home purchase mortgages extended to lower-income households, to low- and moderate-income first-time homebuyers, and to buyers of homes in lower-income neighborhoods." Board of Governors of the Federal Reserve System, *Statement* 

Figure 8: New Acquisitions of Sub Prime and Other Private-Label Mortgage-Backed Securities, (by year of acquisition)<sup>30</sup>



With the downturn in the overall housing market, the value of private-label MBS held by the Enterprises plummeted as well. Freddie Mac noted in its financial statements for 2010, that the "decline has been particularly severe for subprime, **option [Adjustable Rate Mortgages (ARMs)]**, and Alt-A and other loans" held in MBS. <sup>31</sup> Freddie Mac cited high unemployment, a large inventory of seriously delinquent mortgage loans and unsold homes, tight credit conditions, and weak consumer confidence as contributing to the poor performance of these securities. Further,

# Payment Option ARM or Option ARM

A special type of ARM that enabled the borrower to choose among various payments levels with each payment: a 40-, 30-, or 15-year fully amortizing payment, an interest-only payment, or a negatively amortizing minimum payment.

of Chairman Ben S. Bernanke (Mar. 6, 2007) (online at www.federalreserve.gov/newsevents/speech/bernanke20070306a.htm).

<sup>&</sup>lt;sup>30</sup> "Credit Statistics of Loan underlying Alt-A and Subprime Private-Label Mortgage-related Securities (including Wraps)", Fannie Mae Form 10-K, 2010, p124. and "Significant Modeled Attributes for Certain Non-Agency Mortgage-Related Securities", Freddie Mac Form 10-K 2010, p. 218.

<sup>&</sup>lt;sup>31</sup> Freddie Mac, *2010 10-K Report*, at 96 (online at www.freddiemac.com/investors/er/pdf/10k\_022411.pdf) (accessed Feb. 29, 2012).

subprime loans that back these securities have had significantly greater concentrations in states that have experienced the greatest distress during the economic downturn, such as California, Florida, Arizona, and Nevada. Loans in these states have experienced among the highest delinquency rates and the credit losses associated with such loans have been among the highest in the country.<sup>32</sup> Nonetheless, steep declines in the value of the Enterprises' private-label MBS in 2008 have been offset by income from them and partial recovery of MBS prices since then.

#### Derivatives

As the Enterprises accumulated investments in mortgages and MBS, they were exposed to significant risks affecting the value of their mortgage-related assets. Like many sophisticated investors, they entered into **derivatives** contracts to manage interest rate risk. Such **hedging** activities are intended to moderate the possible financial impact from these risk factors. Derivatives function as a form of risk management such that when the value of the underlying asset declines, the value of the derivative contract rises and vice versa. Changes in the value of these derivatives holdings are generally expected to offset fluctuations in the value of the Enterprises' portfolios of

#### **Derivatives**

Securities used to hedge interest rate or other risks related to holding a mortgage.

#### Hedging

The practice of taking an additional step, such as buying or selling a derivative, to reduce the risk of holding a certain investment, such as MBS.

mortgages and MBS. Thus, as MBS values have increased – and moderated the Enterprises' private-label MBS losses – the values of derivative contracts have declined.

#### **Other Losses**

Losses attributable to the write down of low-income housing tax credits during the fourth quarter of 2009 are included in "Other Losses" shown in Figure 5. Because the Enterprises currently are not generating taxable income, the credits, which they had previously acquired, have no practical present value to them. Therefore, they sought Treasury's approval to sell their credits to entities that have net operating income and thus potential tax liability that the credits can offset. Treasury denied their requests. The write down of these credits for both Enterprises contributed \$8 billion of the \$16 billion loss.

<sup>&</sup>lt;sup>32</sup> Freddie Mac, *2010 10-K Report*, at 96 (online at www.freddiemac.com/investors/er/pdf/10k\_022411.pdf) (accessed Feb. 29, 2012).

#### **Accounting Adjustments**

The Enterprises make changes to their accounting policies when they are required to do so. One such change in 2010 required them to report on their balance sheets the amount of mortgages outstanding that are included in MBS that they guaranteed. This resulted in a one-time \$8 billion loss for the Enterprises, as shown in Figure 5.

### **Dividends to Treasury**

Through the third quarter of 2011, the Enterprises have paid Treasury \$32 billion in dividends. Of course, as discussed above, Treasury advanced the dividend payments to the Enterprises.

# PUTTING THE LOSSES IN PERSPECTIVE: WINNERS AND LOSERS

As of the end of the last quarter prior to the conservatorships (i.e., June 30, 2008), the Enterprises had \$1.6 trillion in short- and long-term outstanding debt; \$3.7 trillion worth of MBS guarantees; and stockholders' equity of only \$54 billion. With mounting losses and without Treasury funding, it is likely the Enterprises would have found themselves with insufficient funds to make scheduled debt payments and satisfy MBS guarantee obligations.

#### **Losers: Stockholders**

According to the PSPAs, no dividends can be paid to preferred or common **shareholders** of the Enterprises (with the exception of Treasury) without Treasury's approval or until Treasury is fully repaid. Additionally, Treasury received a warrant to purchase 80% of the Enterprises' stock for a nominal amount. Both of these measures rendered the common shares of the Enterprises virtually worthless. For example, Fannie Mae's shares closed at \$4.74 on the Friday before conservatorship and as recently as of March 9, 2012, they traded for \$0.32 per share on the OTC Bulletin Board (Fannie Mae's and Freddie Mac's shares are no longer traded on the New York Stock Exchange); similarly, Freddie Mac's shares, which closed at \$5.10 on the Friday before conservatorship, have fallen to \$0.326 per share as of March 9, 2012. Other factors also have impaired the Enterprises' share prices. Their share prices had deteriorated substantially before the conservatorships, and, had the Enterprises been forced to liquidate, common shareholders would not have received a return on their investment until all creditors and senior classes of shareholders had been paid in full.<sup>33</sup>

In short, the PSPAs give priority in repayment to Treasury ahead of any other preferred or common shareholders. Thus, the preferred and common shareholders of Fannie Mae and Freddie Mac did not benefit by Treasury's actions. They effectively lost their investments.

#### Winners: Holders of Bonds and Guaranteed MBS

Treasury's investment effectively made "explicit" the federal government's "implicit" guarantee of the Enterprises' debt. Further, by placing the Enterprises in conservatorship and committing to making capital investments in them, FHFA and Treasury provided assurance that the Enterprises would, in turn, be able to make contractually required payments to future **creditors**.

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<sup>&</sup>lt;sup>33</sup> 12 U.S.C. § 4617(c).

Neither Enterprise publishes a comprehensive list of creditors. However, foreign central banks, commercial banks, fund managers, insurance companies, state and local governments, corporate pensions, individuals, and nonprofit foundations invested in the Enterprises' debt and guaranteed MBS. For example, in the year before the conservatorships, Fannie Mae sold bonds to the following categories of investors: foreign central banks (44%), fund managers (26%), commercial banks (18%), insurance companies (6%), state and local governments (4%), retail (2%), and corporate pensions (1%).<sup>34</sup>

More importantly, allowing the Enterprises to meet their debt and guarantee obligations enabled them to continue to support the secondary market. As the Congressional Research Service has noted:

#### Creditors vs. Shareholders

Creditors, also called lenders, expect to earn interest that will be paid according to contractual terms.

Common shareholders are the owners of a company, can receive dividends if the company declares them, and can sell their shares to others.

Preferred shareholders cannot vote on shareholder matters, but they receive preference over common shareholders if the company becomes insolvent and its assets are distributed.

A failure or default by Fannie [Mae] or Freddie [Mac] would have severely disrupted financial markets around the world. If the [Enterprises'] portfolios of mortgage loans and MBSs had to be liquidated, prices would plunge, the secondary market for mortgages would be decimated, and the supply of new mortgage credit might be severely restricted. These market disruptions would have negative impacts on the economy as a whole.<sup>35</sup>

Further, since September 2008, the private sector has almost entirely abandoned the secondary mortgage market, and the Enterprises and Ginnie Mae have stepped up to fill the void. In 2010, the Enterprises' and Ginnie Mae's guaranteed MBS comprised 96% of newly issued MBS. Additionally, Treasury's intervention has provided assurance to future creditors and MBS investors that they, too, will get their money back if they transact business with the Enterprises.

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<sup>&</sup>lt;sup>34</sup> Fannie Mae, *Review of Funding Activities for 2009*, p. 2 (Dec. 2009). (Figures do not add to 100% because of rounding.)

<sup>&</sup>lt;sup>35</sup> Congressional Research Service, Fannie Mae and Freddie Mac in Conservatorship (Sept. 15, 2008).

# OUTLOOK: FORECASTING FUTURE GOVERNMENT PAYMENTS

From September 2008 through the end of 2011, Treasury invested \$185 billion in the Enterprises, and FHFA projects three scenarios for the future capital draws by both Fannie Mae and Freddie Mac through the end of calendar year 2014. Under these projections, the amount of the additional payments that Treasury would make to each Enterprise depends on the outlook for home prices – e.g., whether prices continue to fall, if so, by how much and for how long – and when and how strongly circumstances turn around so prices begin to increase. According to the most recent projections, which FHFA released in October 2011, additional taxpayer financing for the Enterprises ranges from \$37 billion to as much as \$128 billion through the end of 2014. In other words, total Treasury support for the Enterprises is currently expected to range from a low of \$220 billion to a high of \$311 billion.

<sup>36</sup> Federal Housing Finance Agency, *FHFA Releases Projections Showing Range of Potential Draws for Fannie Mae and Freddie Mac* (online at www.fhfa.gov/webfiles/19409/Projections\_102110.pdf) (accessed Feb. 29, 2012). For this purpose, FHFA used three house price path projections with a "current baseline" in which the decline in house prices hits bottom in the first quarter of 2012 and then prices rise by 15% through the end of 2014; a second scenario in which near-term growth is stronger but prices end up at the same level as the baseline by the end of 2014; and a "deeper second recession" projection in which house prices bottom out in mid-2012 and then rise by 23%.

FHFA provided the Enterprises with key assumptions for each scenario. The Enterprises used their respective internal models to project their financial results based on the assumptions provided by FHFA. While this effort achieves a degree of comparability between the Enterprises, it does not allow for actions that the Enterprises might undertake in response to the economic conditions specified in the scenarios. Those Enterprise-specific business changes could lead to results that differ from those presented in the projections.

<sup>&</sup>lt;sup>37</sup> However, the projections reported are not expected outcomes. They are modeled projections in response to "what if" scenarios involving assumptions about Enterprise operations, loan performance, macroeconomic and financial market conditions, and house prices. The projections do not define the full range of possible outcomes and actual outcomes may be very different. This effort should be interpreted as an analysis of the sensitivity of future Enterprise capital draws to possible house price paths.

## **SCOPE AND METHODOLOGY**

This is one in a series of audits, evaluations, and special reports reflecting FHFA-OIG's ongoing oversight and analysis of FHFA's conservatorships of the Enterprises.

The bases of the financial analysis were the tables included in the Enterprises' SEC filings, FHFA's Conservatorship Report of the Enterprises' Financial Performance, and other publicly available information. To gain an understanding of the issues discussed herein, FHFA-OIG interviewed officials from the Office of the Financial Analysis, Modeling and Simulations, FHFA, as well as the Office of the Chief Accountant, FHFA. FHFA-OIG also shared drafts of the report with FHFA, Fannie Mae, and Freddie Mac executives.

This report was prepared under the authority of the Inspector General Act of 1978, as amended, and in accordance with the Quality Standards for Inspection and Evaluation (January 2011), which were promulgated by the Council of the Inspectors General on Integrity and Efficiency. These standards require FHFA-OIG to plan and perform evaluations that obtain evidence sufficient to provide reasonable bases for its findings and recommendations. FHFA-OIG believes that the analysis and conclusions contained in this report meet these standards.

The scope of this report is from January 2008 through September 2011.

FHFA-OIG appreciates the efforts of FHFA and its staff in providing information and access to necessary documents to accomplish this evaluation.

## **APPENDIX**

## The Mechanics of Treasury Financial Support of the Enterprises

#### **The Draw**

With each quarter's public filings, FHFA reviews each Enterprise's financial report to determine if its liabilities exceed its assets. This condition is called "stockholders' deficit." If there is a stockholders' deficit, FHFA requests money from Treasury – called the Draw – to make up any such deficit. Treasury, in turn, receives a similar increase in the stated value (called the "liquidation preference") of the senior preferred shares purchased from the Enterprises at the inception of the conservatorships. Given this unique structure, Treasury is not *lending money to* the Enterprises as much as it is *investing in* them.

Under HERA, if the obligations of an Enterprise exceed its assets for more than 60 days, FHFA would appoint a receiver of an Enterprise.<sup>38</sup> If Treasury had not been providing funding during the conservatorships, the Enterprises, given their losses, would have entered receivership.

#### **How the Draw is Calculated**

- According to the terms of the PSPA between Treasury and each Enterprise, the
   Enterprises were required to each issue \$1 billion in senior preferred stock without a
   corresponding cash payment from Treasury. This was called the "initial commitment
   fee." Every time an Enterprise makes a Draw under the PSPA, the liquidation preference
   of the senior preferred stock increases by the same amount.
- Each quarter's Draw is based on the stockholders' deficit, if any, from the previous quarter.
- Up until the second quarter of 2011, the Draw was the stockholders' deficit rounded up to the nearest \$100 million and paid in the following quarter. Beginning with the payment in the third quarter of 2011, the Draw was rounded up to the nearest million dollars.

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<sup>&</sup>lt;sup>38</sup> 12 U.S.C. § 4617(a)(4).

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