FEDERAL HOUSING FINANCE AGENCY
OFFICE OF INSPECTOR GENERAL

FHFA's Oversight of Freddie Mac's Investment in Inverse Floaters

Evaluation Report: EVL-2012-009 DATED: September 26, 2012

FEDERAL HOUSING FINANCE AGENCY
OFFICE OF INSPECTOR GENERAL

AT A GLANCE

FHFA's Oversight of Freddie Mac's Investment in Inverse Floaters

Why FHFA-OIG Did This Evaluation

The Federal National Mortgage Association (Fannie Mae) and the Federal Home Loan Mortgage Corporation (Freddie Mac) (collectively, the Enterprises) manage investment, funding, and hedging portfolios valued at more than $1.4 trillion. These capital markets businesses encompass a diverse range of sophisticated financial products. Although generally profitable, certain sectors of the Enterprises' capital markets businesses have lost tens of billions of dollars since the Enterprises entered into conservatorships overseen by the Federal Housing Finance Agency (FHFA or Agency) in September 2008. For this reason, the FHFA Office of Inspector General (FHFA-OIG) initiated a series of evaluations relating to FHFA's supervision of the Enterprises' capital markets businesses.

Among other capital markets activities, Freddie Mac structures and markets a family of bonds known as collateralized mortgage obligations (CMOs). Freddie Mac may tailor these products to the specific interests of investors. According to FHFA and Freddie Mac, as investor appetite for floating-rate bonds increased in the spring of 2010, Freddie Mac capitalized on the opportunity to charge a premium for structuring these bonds by carving them out of its securitized mortgages. In the process, it retained by-product variable rate bonds known as inverse floaters.

In late January 2012, these inverse floaters became the subject of significant attention. It was asserted that, because the value of inverse floaters decreases when the underlying mortgages are refinanced, Freddie Mac could deliberately limit loan refinancings in order to protect the value of its inverse floaters.

On January 31, 2012, Senator Robert Menendez requested that FHFA-OIG examine Freddie Mac's use of inverse of floaters.

What FHFA-OIG Found

FHFA-OIG uncovered no evidence that FHFA or Freddie Mac obstructed homeowners' abilities to refinance their mortgages in an effort to influence the yields of the inverse floating-rate bonds that the Enterprise retained in its investment portfolio.

Inverse floaters represent a small portion of Freddie Mac's capital markets portfolio. To the extent that a tension exists between Freddie Mac's refinancing and investment policies, inverse floaters are no more likely to adversely impact mortgage holders or discourage borrower refinancing than any of the mortgages or other assets that Freddie Mac holds for investment.

Further, Freddie Mac has an "information wall" policy to prevent its capital markets business from using non-public information to guide its investments. The information wall applies to non-public information about homeowner refinancing. In interviews with FHFA and Freddie Mac employees, FHFA-OIG found no evidence that individuals at Freddie Mac have violated the information wall.

FHFA began a process of reviewing Freddie Mac's CMO business in the spring of 2011, identified critical concerns, and issued findings in April 2012. FHFA-OIG found that FHFA's position on inverse floaters could have been communicated more clearly. Its public statements were ambiguous regarding when and how Freddie Mac stopped engaging in inverse floater transactions. Furthermore, to the extent FHFA communicated a recommendation or attempted to reach or confirm an agreement with Freddie Mac specifically focused on inverse floaters, that communication or agreement could have been more clearly articulated.

What FHFA-OIG Recommends

FHFA-OIG recommends that FHFA: (1) conduct periodic tests of Freddie Mac's information wall; (2) monitor Freddie Mac's hedges and models to ensure Freddie Mac remains oriented in a net flat position; (3) ensure supervisory polices are well-founded, coordinated, and communicated in writing; and (4) exercise care to ensure public statements include all relevant facts.

Evaluation Report: EVL-2012-009 Dated: September 26, 2012

TABLE OF CONTENTS

TABLE OF CONTENTS 3

ABBREVIATIONS 5

PREFACE 6

BACKGROUND 7

About Inverse Floaters 7

Mortgage Securitization: The Core of the Enterprises' Businesses 7

Mortgage Investments Come with Risk 9

CMOs Provide Investors the Opportunity to Manage Risk: Floaters and Inverse Floaters, Two Sides of the Same CMO Coin 11

Freddie Mac's Rationale for Structuring and Selling Floaters and Inverse Floaters 13

Fundamentals of Inverse Floaters Are Not Substantially Different from Mortgages 15

Interest and Prepayment Risk Hedging 16

Interest Rate and Prepayment Risk Are Hedged to Net Flat 17

Freddie Mac's Information Wall 18

FHFA's Role in Freddie Mac's Inverse Floater Business 20

Freddie Mac's Structuring of Inverse Floaters Ended Because of Market Conditions 20

FHFA's Review of Freddie Mac's CMO Business Begins in April 2011 21

FHFA's Communications with Freddie Mac Regarding CMOs 21

FHFA Confirms a Specific Agreement with Freddie Mac Regarding Inverse Floaters 23

FHFA Concludes Its Review of Freddie Mac's CMO Business in April 2012 24

FINDINGS 25

RECOMMENDATIONS 26

OBJECTIVE, SCOPE, AND METHODOLOGY 27

APPENDIX A: FHFA'S COMMENTS ON FINDINGS AND RECOMMENDATIONS 28

APPENDIX B: FHFA-OIG'S RESPONSE TO FHFA'S COMMENTS 32
ADDITIONAL INFORMATION AND COPIES 33

ABBREVIATIONS

Capital Markets Division ..... Investments & Capital Markets Division

CFO ..... Chief Financial Officer

CMO ..... Collateralized Mortgage Obligation

Enterprises ..... Fannie Mae and Freddie Mac

Fannie Mae ..... Federal National Mortgage Association

FHFA or Agency ..... Federal Housing Finance Agency

FHFA-OIG ..... Federal Housing Finance Agency Office of Inspector General

Freddie Mac ..... Federal Home Loan Mortgage Corporation

HARP ..... Home Affordable Refinance Program

MBS ..... Mortgage-Backed Security

PLMBS ..... Private Label Mortgage-Backed Security

SEC ..... Securities and Exchange Commission

Federal Housing Finance Agency
Office of Inspector General
Washington, DC

PREFACE

FHFA-OIG was established by the Housing and Economic Recovery Act of 2008, which amended the Inspector General Act of 1978. 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 report assesses FHFA's oversight of Freddie Mac's structuring and retention of inverse floaters, in the context of FHFA-OIG's commitment to prioritize projects related to FHFA's conservatorships and oversight of Fannie Mae and Freddie Mac.

This report was written principally by Investigative Counsel Charlie Divine and David P. Bloch, Director, Division of Mortgage, Investments, and Risk Analysis. Investigative Counsel Christopher Poor and Senior Policy Advisor Timothy Lee also contributed to the report. FHFA-OIG appreciates the assistance of FHFA and Enterprise staff in completing this report. 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.

George Grob
Deputy Inspector General for Evaluations

BACKGROUND

Fannie Mae's and Freddie Mac's combined capital markets businesses, which include their funding, hedging, and investment activities, manage more than $1.4 trillion of assets. Their capital markets portfolios share certain characteristics with a hedge fund and, like a hedge fund, they can sustain significant financial losses. Accordingly, although the Enterprises' capital markets businesses have generally been profitable, certain elements have incurred tens of billions of dollars in losses since the Enterprises entered into conservatorships overseen by FHFA in September 2008. Thus, FHFA-OIG launched an evaluation of the Enterprises' capital markets businesses in November 2011.

On January 31, 2012, Senator Robert Menendez requested that FHFA-OIG examine Freddie Mac's use of a financial instrument known as an "inverse floater." An inverse floater is one of many financial products in Freddie Mac's capital markets portfolio. Interest in inverse floaters has grown since January, with media articles, congressional inquiries, and interviews and congressional testimony from the FHFA Acting Director.[1] Despite the persistent attention focused on Freddie Mac's inverse floaters, the role of the investment in the Enterprise's portfolio has not been discussed at length. This report is intended—in the context of FHFA-OIG's ongoing work in evaluating the Enterprises' capital markets businesses—to explain inverse floaters, provide clarity regarding their use, and evaluate FHFA's role with regard to them.

About Inverse Floaters

Mortgage Securitization: The Core of the Enterprises' Businesses

Freddie Mac is a government-sponsored enterprise that provides liquidity to the mortgage finance system. Through its Single-Family Credit Guarantee Business, Freddie Mac stands ready to purchase home mortgage loans in bulk, providing mortgage lenders a reliable mechanism to obtain the funds needed for further lending. Freddie Mac can hold the mortgages it buys in its portfolio or, more commonly, package them into securities that are sold to investors. The proceeds of such sales, in turn, fund additional purchases of loans on the secondary market.

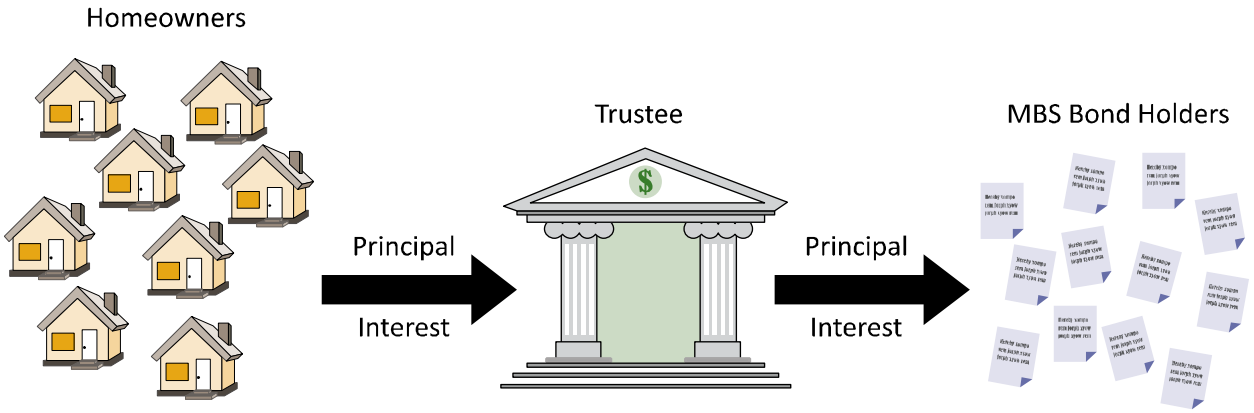
Freddie Mac, through its Investments & Capital Markets Division (Capital Markets Division), invests in mortgage-related securities guaranteed by Freddie Mac and other financial institutions. Freddie Mac's inverse floater investments are among the mortgage-related securities in which the Capital Markets Division invests. As discussed in greater detail below, inverse floaters, like

[1] The FHFA Acting Director testified on February 28, 2012, before the Senate Committee on Banking, Housing and Urban Affairs.

a number of the mortgage-related investments held by the Capital Markets Division, benefit from a low interest rate environment with limited prepayments. This characteristic of certain investments creates a potential tension between the Single-Family Credit Guarantee Business and the Capital Markets Division, as FHFA-OIG has previously discussed.[2]

Mortgages can be securitized in various forms, the most basic of which is a pass-through securitization, also known as a mortgage-backed security (MBS). As illustrated below, in a pass-through security, homeowners' payments of principal and interest pass through the **trustee** to the securitization investors, also called bond holders. In a standard MBS, homeowners' payments of principal and interest are allocated to bond holders on a *pro rata* basis.

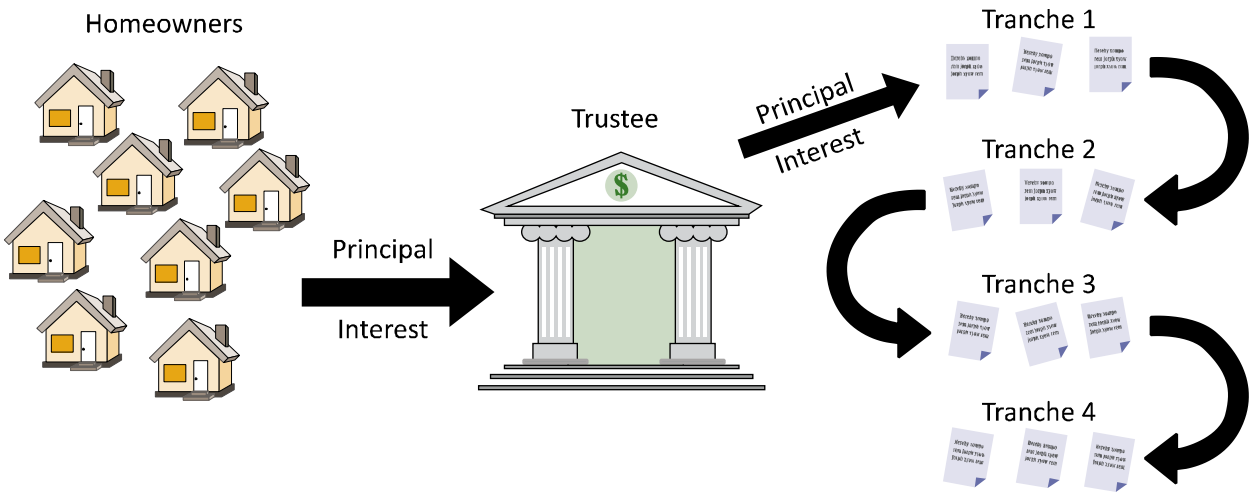
> **Trustee**
> The Trustee is an entity that serves as the custodian of funds from homeowners and is the official representative of MBS bond holders.



Mortgages can also be securitized in more sophisticated instruments known as CMOs. CMO investors are divided into different classes or **tranches**, with distinctive rights to certain portions of the payments on the underlying mortgage loans. For example, in a simple CMO structure, like the one in the following illustration, the first tranche receives payments before the second tranche and payments flow like a waterfall through to the last tranche.

> **Tranches**
> Tranches divide a securitization into distinct classes. Each class has its own payment structure and rights to the underlying investment pool. A single CMO can have more than a dozen tranches.

[2] See FHFA-OIG, *FHFA-OIG's Current Assessment of FHFA's Conservatorships of Fannie Mae and Freddie Mac*, at pp. 28-30 (March 2012) (WPR-2012-001) (online at http://www.fhfaoig.gov/Content/Files/WPR-2012-001.pdf).



Tranches can also be used to allocate specific payments from homeowners. For example, in an often used CMO structure, certain investors receive only interest payments by homeowners while other investors receive payments derived solely from payments of principal. As discussed below, inverse floaters can constitute one or more tranches in a CMO.

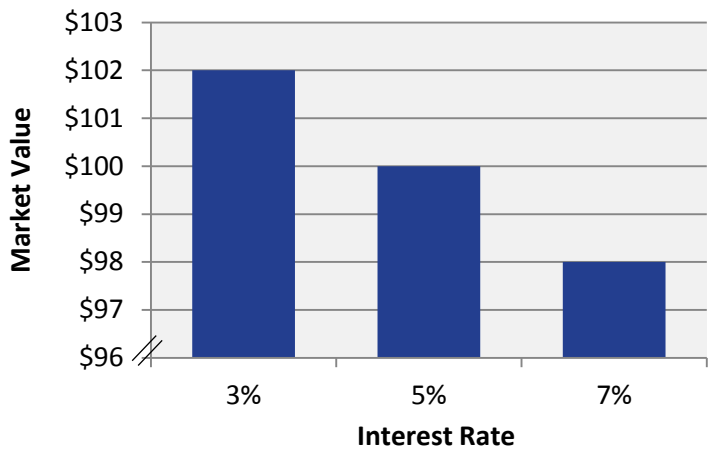
Mortgage Investments Come with Risk

Mortgage investments, including inverse floaters, carry numerous risks; the most prominent of these risks are credit risk, interest rate risk, and prepayment risk.

Credit risk is the risk of financial loss to investors stemming from borrowers failing to make scheduled mortgage payments in full and on time. The Enterprises accept credit risk as part of their mission and business model. A significant portion of the Enterprises' businesses centers on indemnifying mortgage loan owners and MBS investors against credit risk in return for a guarantee fee. As a result, the Enterprises bear the risk that homeowners will default on their mortgages. Ultimately, a mortgage holder's default may lead Fannie Mae or Freddie Mac to foreclose and sell the property. If the property is sold for less than the outstanding mortgage principal, the Enterprise incurs the loss. For example, if Freddie Mac guarantees a $100 mortgage, the homeowner defaults, and Freddie Mac has to foreclose, then Freddie Mac risks not recovering the full $100 pursuant to its guarantee. Thus, if Freddie Mac sells the foreclosed home for $90, Freddie Mac will suffer a $10 or 10% loss.[3]

[3] Under the specific terms of the applicable guarantee, Freddie Mac may also be responsible for accrued interest payments, thus potentially increasing the Enterprise's loss.

Interest rate risk is the risk of financial loss to investors stemming from movements of interest rates over time. As an illustration, consider a $100 bond at a 5% fixed interest rate with a single interest payment due in one year. An investor who buys the bond today for $100 can expect to receive $105 at the end of the year—$100 in principal and $5 in interest. If prevailing interest rates drop to 3%, then a second investor who purchases a similar bond on the same terms, except at the current interest rate, would expect to receive $103 at the end of the year—$100 in principal and $3 in interest. The original investor, who holds a 5% asset at a time when investors will accept a 3% annual return on a comparable bond, can expect to sell the bond for an amount greater than the original $100 purchase price. The original investor can expect other investors will be prepared to buy the 5% bond for $101.94 because at that price the purchaser will still receive a 3% (i.e., $3.06) net return on the investment. The 3% return is the same return the purchaser could have obtained by buying a newly issued $100 bond at the current interest rate of 3%.



The converse is also true. If rates were instead to rise to 7%, the original investor would possess a 5% asset at a time when investors expect a 7% annual return. Accordingly, the price of the bond would fall below its $100 face value, to $98.13, in order to compensate any prospective purchaser and provide a competitive return.

Investors who purchase mortgages similarly face interest rate risk. A mortgage investment is similar to a bond investment in that the investor expects to receive principal and interest for the life of the mortgage. In the United States, most mortgages are issued at a fixed-rate of interest (for example, 5% per year) that is charged for the life of the loan. The interest rate risk thus continues throughout the life of the mortgage. Hence, domestic home mortgages, which are conventionally originated for terms of 30 years, can experience sharp swings in value as interest rates fluctuate over that long period.

For the purposes of this discussion, it is essential to note that even if full and timely principal and interest payments are guaranteed—as they are with Enterprise-guaranteed MBS—significant risk of financial loss to investors still exists due to interest rate risk. To limit interest rate risk, investors can purchase, from a variety of sources, bonds that pay a floating interest rate that resets at regular intervals to match the current interest rate. Floating-rate bonds minimize interest rate risk.

Prepayment risk is the risk of financial loss to investors stemming from mortgage prepayments and is related to interest rate risk. Domestic mortgage loans typically provide borrowers the right to terminate their obligations at any time by repaying in full the outstanding principal balance of their mortgages. When interest rates fall, homeowners may take the opportunity to refinance existing high interest rate mortgages. For example, if a homeowner holds a $100 mortgage with a 5% interest rate, assuming the option is available, the homeowner will likely seek to refinance if interest rates fall to 3%. In a falling interest rate environment, prepayment rates may increase and result in mortgage investors forfeiting a significant portion of the gains they would otherwise expect from holding above-market rate mortgage loans. For example, if the homeowner refinances his or her 5% interest rate mortgage loan and returns the investor's $100 in principal, but the prevailing interest rates have dropped to 3%, then the investor (i.e., the owner of the paid-off mortgage loan) will likely earn only a 3% return if he or she chooses to reinvest the $100 in new mortgage loans. The net result is the investor loses the opportunity to earn an additional 2% with each interest payment. Accordingly, investors in mortgage loans inherently stand to lose less in a low interest rate environment with low prepayment rates.

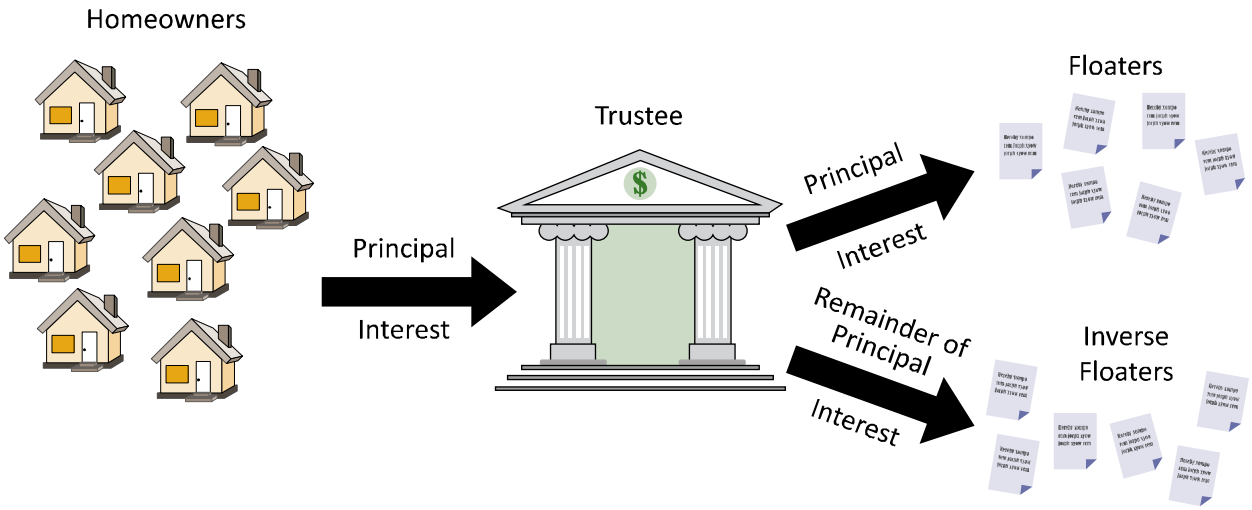
CMOs Provide Investors the Opportunity to Manage Risk: Floaters and Inverse Floaters, Two Sides of the Same CMO Coin

CMOs provide investors the opportunity to invest in mortgage-related assets and manage the degree of interest rate and prepayment risk to which they are exposed. CMOs, therefore, allow the Enterprises to sell MBS to a wider range of investors by offering a "menu" of alternatives tailored to their investment strategy preferences.

Floating-rate bonds are one category of products popular with many investors. They prefer floating-rate investments because their value is less vulnerable to interest rate fluctuations than fixed-rate investments. As illustrated below, Freddie Mac can create a tranche of a CMO with floating-rate bonds by splitting the pooled homeowners' mortgage payments. Floating-rate bonds are created by assigning investors a portion of the pooled homeowners' mortgage payments corresponding to the prevailing interest rate. Inverse floaters are essentially the rights to the remainder of the homeowners' mortgage payments after payments due to the floating-rate bonds are subtracted (i.e., should interest rates fall, the difference between the currently prevailing interest rate and the higher rate at which the underlying mortgage pool was originated is allocated to the inverse floater investors).

Floating-Rate Bonds
Floating-rate bonds pay a variable interest rate that fluctuates with the market. Over time, as interest rates change as measured by an index such as **LIBOR**, the interest rate paid by the floating-rate bond also changes.

LIBOR
LIBOR is the London Interbank Offered Rate, which is the interest rate banks charge each other for short-term loans. LIBOR is frequently used as the base for resetting rates on floating-rate securities.



The inverse floater, then, is a by-product or residual of Freddie Mac's structuring and selling floating-rate CMO products. Since the commencement of the conservatorship, Freddie Mac has generally retained the residual inverse floaters.

The example discussed here and in the table below provides an illustration of the connection between floating and inverse floating-rate bonds. For this example, assume there are ten $100 fixed-rate mortgages with a combined outstanding balance of $1,000 and an aggregate 5% interest rate. Setting aside credit and other risks, these ten mortgages will pay 5% in interest per year or $50. Freddie Mac could structure the ten mortgages in a manner that reflects fluctuations in market interest rates by creating a simple CMO in which the combined pool is split into two tranches of $500 each: one $500 tranche structured as floating-rate bonds and the other as inverse floating-rate bonds. If market interest rates do not fluctuate and remain at 5% through the life of the CMO, floating and inverse floating-rate investors would each receive an equal and proportionate share of interest payments (in this case, $25 each).

However, market interest rates generally do not remain static but, instead, will fluctuate above and below the 5% interest rate over the life of the bonds. Regardless of the change in market interest rates, the interest payments from homeowners remain constant because they have fixed-rate mortgages. Assuming each homeowner pays what he or she owes, the total amount of interest payments remitted to the CMO is approximately $50 annually (5% of $1,000).[4] But, how the annual payment of $50 is allocated to investors of the floating-rate and inverse floating-rate bonds depends on the prevailing interest rate. As shown in the table below, if prevailing interest rates rise above 5% to 7%, then the floating-rate bond investors receive an amount

[4] Over the years, as the homeowners pay down the mortgage principal, interest payments would decrease. For simplicity, however, assume in this example that the aggregate interest payments remain at $50.

greater than their $25 proportionate share (i.e., $35) and the inverse floating-rate investors receive less than $25 (i.e., $15). On the other hand, if interest rates fall to 3%, then the floating-rate bond investors receive only $15, a loss of $10. At the same time the inverse floating-rate bond investors gain 2% or $10. In other words, an inverse floater investor makes more money if interest rates fall and loses money if interest rates rise.

Interest Rate	Aggregate Return on $500 Floating-Rate Bonds		Aggregate Return on $500 Inverse Floating-Rate Bonds	
5%	$25	5%	$25	5%
3%	$15	3%	$35	7%
7%	$35	7%	$15	3%

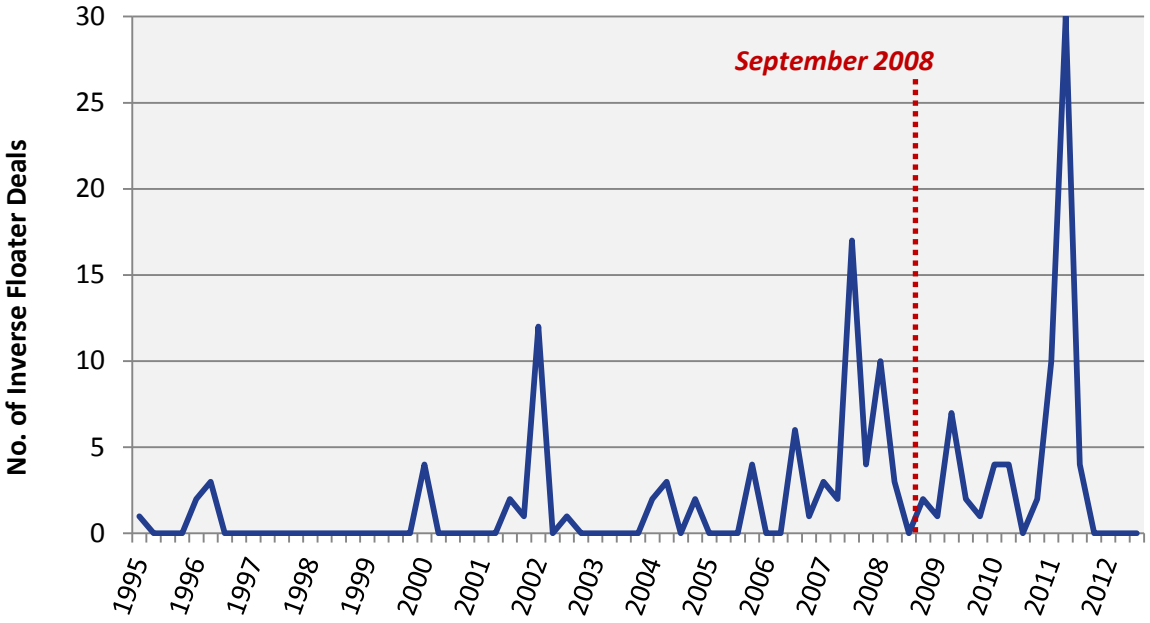
The foregoing is merely for illustration; the structure of CMOs involving floating-rate and inverse floating-rate bond pairs can vary in any number of ways. For example, the CMO structure often includes a leverage element, which results in any change in interest rates potentially having a far more dramatic impact on the return of the inverse floating-rate bonds.

Freddie Mac's Rationale for Structuring and Selling Floaters and Inverse Floaters

Freddie Mac has been in the business of structuring CMOs for decades, and inverse floaters have been a part of that business since at least 1994. According to Freddie Mac, its CMO process typically starts with what are known as "reverse inquiries." In a reverse inquiry, a dealer, usually an investment banker representing a customer, reaches out to Freddie Mac to ascertain its willingness to structure a deal to specifications sought by the customer. According to executives currently with Freddie Mac, the inverse floaters created after the Enterprise entered conservatorship arose in response to reverse inquiries for floating-rate securities, and were a by-product of transactions resulting from those inquiries.

Consistent with the reality of fluctuating investor demand, the following chart shows that inverse floater activity has varied over time.

Total Number of Inverse Floater Deals Either Structured and Retained or Purchased by Freddie Mac (1995 – Present)[5]



As of December 31, 2011, Freddie Mac's retained investment portfolio had a balance of $653 billion, of which inverse floaters represented less than $5 billion, which is less than 1%.[6]

According to interviews with both FHFA and Freddie Mac executives, Freddie Mac's decision to issue or invest in CMO securities is principally driven by market dynamics and investor appetite. Investors who prefer high-quality, stable-value floating-rate CMOs are at times willing to pay Freddie Mac relatively higher prices for such assets. Depending on market conditions, dividing an MBS into a floating-rate and inverse floater CMO pair can be more profitable for Freddie Mac when investors are willing to pay a premium for floating-rate bonds. Both FHFA and Freddie Mac employees suggested that such a premium was available starting in the spring of 2010 through the spring of 2011.

According to Freddie Mac executives, Enterprise traders' standard practice for evaluating inverse floater deals starts with analyzing the proposed structure with internal models. The Enterprise executes a deal only if: (1) the floating-rate bonds provide Freddie Mac a premium; and (2) Freddie Mac is comfortable holding the inverse floating-rate bonds. Freddie Mac is comfortable if, after subtracting the price of the floating-rate CMO from that of the underlying portfolio of

[5] Data provided by Freddie Mac. According to the data provided, Freddie Mac retained more than 92% of all inverse floater deals that it structured.

[6] The less than $5 billion in inverse floaters were structured from approximately $30 billion in underlying collateral.

mortgage assets, Freddie Mac is left with an inverse floater at a more favorable price than would be otherwise possible. In essence, such a "relative value strategy," if properly executed, permits Freddie Mac to improve the return on its mortgage investments. It is critical, however, that Freddie Mac is comfortable with holding the inverse floaters because they are difficult to sell and accordingly are considered less **liquid**.

> **Liquid assets** are cash and other assets that can be converted easily into cash.

Another potential benefit of Freddie Mac's structuring inverse floating-rate bonds and selling the matching floating-rate bonds is the reduction of mortgage assets on its balance sheet. For example, if Freddie Mac packages ten $100 mortgages in a CMO with a $500 floating-rate tranche and a $500 inverse floating-rate tranche, and then sells the floating-rate tranche, Freddie Mac has reduced the mortgage assets on its balance sheet by $500. Such a reduction in the size of Freddie Mac's balance sheet is consistent with Section 5.7 of Freddie Mac's Amended and Restated Senior Preferred Stock Purchase Agreement with Treasury, which requires Freddie Mac to reduce the aggregate amount of its mortgage assets each year.[7]

Fundamentals of Inverse Floaters Are Not Substantially Different from Mortgages

Creating and holding inverse floaters does not substantially change Freddie Mac's position in the market because inverse floaters derive their economics from the underlying mortgage investments. In effect, by holding inverse floaters, Freddie Mac retains the risks of its fundamental business—particularly, interest rate and prepayment risk—albeit in a smaller, more concentrated form. The risk is not transformed or magnified relative to the risk already associated with the loans structured in the inverse floater. In other words, Freddie Mac's structuring does not change the total amount of risk. In certain instances, Freddie Mac's structuring and subsequent retention of inverse floaters may result in Freddie Mac retaining nearly all of the risk associated with the underlying mortgages, but the structuring itself does not magnify that risk.

[7] FHFA-OIG interviewed a number of Freddie Mac and FHFA employees to understand Freddie Mac's rationale for creating inverse floating-rate bonds. According to the majority of those interviewed, a reduction in mortgage assets was not Freddie Mac's motivation in creating inverse floaters. Nevertheless, Freddie Mac's most recent annual filing with the Securities and Exchange Commission notes that a reduction in mortgage assets is a justification for creating inverse floating-rate securities: "We create inverse floating-rate securities ... and sell tranches that are in demand by investors to reduce our asset balance, while conserving value for the taxpayer." Read in isolation, Freddie Mac's statement is not consistent with certain information the Enterprise and FHFA provided to FHFA-OIG. Nevertheless, no matter the intention, the aggregate value of mortgage assets held by Freddie Mac is reduced. However, Freddie Mac's use of leverage in creating inverse floating-rate bonds may diminish the benefits of reducing mortgage assets because the use of leverage may concentrate a disproportionate amount of the underlying collateral's interest and prepayment risk in the portion retained by Freddie Mac.

Indeed, holding inverse floaters is, in many aspects, fundamentally no different than holding any number of other assets that Freddie Mac and Fannie Mae retain. The Enterprises own a number of assets in their portfolios, including:

- Unsecuritized mortgages
- CMO instruments (e.g., inverse floaters, floating-rate securities, interest-only securities)
- Agency MBS
- Private label mortgage-backed securities (PLMBS)
- Commercial MBS
- Hedging instruments such as options, interest rate swaps, swaptions, foreign-currency swaps, and credit derivatives.

Many of those assets (e.g., mortgages, PLMBS, Agency MBS, and CMO instruments), like inverse floaters, are potentially premium assets. In the mortgage context, a premium asset is a mortgage-backed product with an interest rate greater than an investor could obtain on the market. If market interest rates rise above the interest rate on a mortgage-backed asset, the asset loses value and is no longer considered a premium asset. For example, at a time when the prevailing interest rate is 3%, Freddie Mac may hold billions of dollars of assets that pay an interest rate greater than 5%. Those assets are considered premium. If at some point the prevailing interest rate increases to 6%, those same assets will no longer be considered premium.

Freddie Mac purchases and retains potentially premium assets as part of its hedging, funding, securitization, and guarantee business. As a result, contrary to the notion that inverse floaters are unique in that they give rise to tensions between policies aimed at homeowner refinancing and Freddie Mac's CMOs, that tension is inherent throughout the Enterprises' various business lines.

Hedging Offsets Significant Gains in Inverse Floaters

Freddie Mac manages interest rate and prepayment risk in its retained portfolio investments, including inverse floaters, by hedging. Hedging occurs when an investment is made to offset the risk of adverse price movements in an asset. In most instances, the "hedge" consists of taking an offsetting or counter position in a related security.

Interest and Prepayment Risk Hedging

Both Enterprises use hedging strategies in an effort to reduce or eliminate the prospect of interest rate and prepayment risk driven price volatility in their portfolios, which include inverse floaters.

Hedging Interest Rate Risk. As discussed above, the value of the Enterprises' portfolio of mortgage-related investments will tend to fall as interest rates rise and to rise as interest rates fall. Thus, as part of their risk management strategy, the Enterprises will invest in financial products, such as **interest rate swaps**, that tend to offset the change in value as interest rates fluctuate. By contracting to receive floating or fixed-rate payments on a set amount, the Enterprises can effectively offset interest rate-driven changes in the value of their core mortgage holdings. For example, if Freddie Mac's portfolio is situated such that an increase in interest rates from 5% to 7% would yield a $100 loss, Freddie Mac can invest in interest rate swaps that would return a $100 profit from the same increase in interest rates, thus leaving Freddie Mac in a neutral position with respect to interest rates, minus the cost of the hedge. It is important to note that because the future direction of interest rates is unpredictable, Freddie Mac reduces interest rate risk by taking offsetting positions in both directions.

Interest Rate Swaps
Interest rate swaps are a form of derivative in which two counter-parties agree to exchange interest payments on a predetermined amount of principal for an agreed-upon period. One counterparty pays the other counterparty a floating-rate of interest, typically based on an index such as LIBOR. In return, the other pays a fixed-rate of interest for the life of the swap.

Hedging Prepayment Risk. The value of the Enterprises' portfolio of mortgage-related investments is also sensitive to unexpected changes in prepayments. As mortgage rates fall, homeowners refinance mortgages more aggressively, and the Enterprises may lose the premium on their investments. Conversely, if—as mortgage rates rise—homeowners refinance at an unexpectedly slow pace, then the Enterprises may lose the opportunity to reinvest the proceeds at higher rates. In either case, the Enterprises can offset the inherent risk of loss from borrower prepayment rights by purchasing options and **swaptions**. In the same way that interest rate swaps provide Freddie Mac the opportunity to offset losses due to changing interest rates, options and swaptions, if properly executed, could allow Freddie Mac to offset losses due to unexpectedly fast or slow homeowner prepayments.

Swaptions
A swaption is an option to enter into an interest rate swap.

Interest Rate and Prepayment Risk Are Hedged to Net Flat

The value of inverse floaters rises as interest rates decrease. However, as interest rates fall, prepayment risk increases because homeowners will likely seek to refinance their mortgages. Homeowner refinancing prematurely retires the mortgages underlying the inverse floaters thus wiping out potentially high interest collections. Accordingly, viewed in isolation, with regard to inverse floaters, Freddie Mac stands to benefit most from a low interest rate environment with minimal prepayments.

However, according to executives at Freddie Mac and FHFA, the Enterprise attempts to hedge interest rate and prepayment risk in its retained portfolio, including inverse floaters, to "net flat," meaning the portfolio consists of offsetting positive and negative positions. Freddie Mac hedges

interest rate risk on a *macro* level, which means the Enterprise positions its portfolio as a whole rather than hedges individual *micro* positions or individual trades. Put another way, according to Freddie Mac, its interest rate hedges are designed to eliminate risk, not to generate profit. It is important to note that if achieved, a perfect hedge, for example a position on an option, completely offsets a position on the underlying asset. Thus, while perfect hedges work to eliminate risk, they simultaneously eliminate the potential for a benefit from changes in the market. In the context of inverse floaters, although Freddie Mac may on one hand benefit from a trend of low interest rates and reduced prepayments by homeowners, on the other hand, Freddie Mac's other investments may equally suffer from such a trend. Thus, the end result, if perfectly hedged on interest rates, is that Freddie Mac's overall position will remain the same regardless of prepayments.

Implementing a perfect hedge of a portfolio as large and diversified as Freddie Mac's is difficult. Freddie Mac's Capital Markets Division utilizes internal financial models to ascertain its position at the end of each day and to implement correcting hedges. Freddie Mac has set limits on how far from a net flat position it can be on any given day. Freddie Mac tracks and compares the performance of its hedging strategy to those self-imposed limits, then reports its performance on an aggregate monthly basis in publicly available Securities and Exchange Commission (SEC) filings.[8] FHFA-OIG reviewed the aggregate monthly data reported by Freddie Mac and confirmed that the Enterprise reported that it operated within its limits each month since at least March 2009. Still, although it operates within the limits it sets, Freddie Mac will typically be positioned such that, even after hedging, an increase in prevailing interest rates will be detrimental to some degree to the total value of its portfolio.

Inherent in any *macro* hedging strategy, specifically Freddie Mac's, is the risk that the models used to ascertain the current position and the required hedge are flawed. Freddie Mac's self-imposed limits are similarly based on Freddie Mac's own models and assumptions and utilize Freddie Mac's own internal data. FHFA-OIG did not independently analyze Freddie Mac's models or assumptions or verify Freddie Mac's self-reported data in SEC filings.

Freddie Mac's Information Wall

On an institutional level, potential exists for a conflict of interest between Freddie Mac's Single-Family Credit Guarantee Business, which purchases and securitizes residential mortgages, and its Capital Markets Division, which trades CMO structured products. That potential exists because the Single-Family Credit Guarantee Business has access to material non-public information such as loan-level detail about borrowers seeking to refinance at lower interest rates. In the absence of safeguards, the Capital Markets Division theoretically could misuse such data

[8] E.g., Freddie Mac, *Form 8-K* (April 25, 2012), incorporating by reference, Monthly Volume Summary.

to its advantage and discourage or interfere with refinancing efforts. This issue is particularly sensitive given that Freddie Mac is capable of impacting homeowner refinancing through programs such as the Home Affordable Refinance Program (HARP), which provides certain underwater homeowners the opportunity to refinance.[9]

To combat misuse of material non-public information, Freddie Mac has an "information wall" policy. Freddie Mac's information wall policy:

- Provides examples of various types of material non-public information and a definition of who at Freddie Mac is a **restricted person**;
- Specifies actions Freddie Mac employees must undertake to comply with the policy; and
- Defines the steps employees must take if they believe there is/has been a violation of the policy.

In the context of Freddie Mac's information wall, a **restricted person** is someone whose job responsibilities at Freddie Mac include purchasing and selling mortgage securities in the market.

Based upon interviews with FHFA officials and Freddie Mac executives as well as a review of Freddie Mac's information wall policy, FHFA-OIG has found no evidence of collusion between the Capital Markets Division and Single-Family Credit Guarantee Business that would: (1) discourage borrowers from refinancing at lower interest rates; or (2) prevent or otherwise obstruct a homeowner from seeking more favorable mortgage terms. Further, an FHFA official from the Division of Examination Programs and Support who examines Freddie Mac's Capital Markets Division told FHFA-OIG that she is not aware of any breaches to Freddie Mac's information wall. However, FHFA acknowledged that it does not conduct any independent testing because it implements a risk-based supervision policy, and it has not encountered any indications that there is a high risk of any violation of Freddie Mac's information wall policy.[10]

[9] This tension is illustrated by the value of conducting a prudent risk analysis of the impact of any new program proposal on the Enterprise's various businesses. According to documents reviewed by FHFA-OIG, Freddie Mac analyzed the impact of changes to HARP on its retained investment portfolio. However, FHFA-OIG found no documentation indicating that Freddie Mac planned to manipulate or obstruct HARP through the use of inverse floaters. Further, FHFA issued a statement regarding inverse floaters on January 30, 2012, which notes: "Freddie Mac's retained portfolio investment in inverse floaters did not have any impact on the recent changes to [HARP]. In evaluating changes to HARP, FHFA specifically directed both Enterprises not to consider changes in their own investment income as part of the HARP evaluation process."

[10] FHFA-OIG did not independently evaluate the efficacy of Freddie Mac's information wall policy in connection with this evaluation.

FHFA's Role in Freddie Mac's Inverse Floater Business

FHFA and its predecessor, the Office of Federal Housing Enterprise Oversight, have known about Freddie Mac's inverse floater business for at least 10 years. However, FHFA does not maintain a transactional role or manage the trading operations of Freddie Mac's Capital Markets Division. Further, although FHFA is aware of and monitors Freddie Mac's CMO business, it does not pre-approve Freddie Mac's trades. FHFA also does not approve individual CMO structured transactions, including those that involve inverse floaters.

Nevertheless, FHFA began a formal supervisory review of Freddie Mac's CMO business, including inverse floaters, in April 2011. Before FHFA completed its review of Freddie Mac's CMO business, on January 30, 2012, the media published stories drawing attention to Freddie Mac's retention of inverse floaters. After January 30, 2012, FHFA completed its review of Freddie Mac's CMO business and identified critical concerns. FHFA-OIG found FHFA's review robust, but it also found that FHFA's communications lacked clarity: first to Freddie Mac before January 30, 2012, and second, to the public on and after January 30, 2012.

Freddie Mac's Structuring of Inverse Floaters Ended Because of Market Conditions

After the media reports regarding inverse floaters surfaced in late January and February 2012, FHFA made a series of public statements that could have been interpreted to imply that Freddie Mac abandoned its inverse floater business in the spring of 2011 as part of a risk management strategy. For example, one FHFA statement indicated:

> [I]n spring 2011 Freddie Mac suspended its CMO structuring activities where it retained less liquid securities, like inverse floaters, until further notice. (FHFA Acting Director, Letter to Senator Mark Warner (May 21, 2012).)

According to Freddie Mac, however, investor appetite for floating-rate bonds evaporated by the spring of 2011, without specific action by Freddie Mac. The demand for Freddie Mac-sponsored floating-rate bonds increased in 2010 as investors sought protection from potentially fluctuating interest rates. In order to meet market demand, Freddie Mac created floating-rate CMOs and retained the corresponding illiquid inverse floaters. Demand for floating-rate bonds decreased in the spring of 2011 after the Chairman of the Federal Reserve Board of Governors stated that a stabilized low interest rate environment would continue for at least another year. Without investor demand (i.e., without investors willing to pay a premium for floating-rate bonds), the economics of creating floating and inverse-floating CMOs was no longer attractive to Freddie Mac and no further deals were executed.

In other words, prior to January 2012, neither Freddie Mac nor FHFA made a decision to halt Freddie Mac's creation and investment in inverse floaters; the market for reciprocal floating rate

bonds simply disappeared. Had the market reappeared and Freddie Mac found the economics were again profitable, the Enterprise would have been free to structure floating-rate and inverse floating-rate CMOs.

FHFA's Review of Freddie Mac's CMO Business Begins in April 2011

FHFA's Market Risk Branch, Division of Examination Programs and Support, began an examination of Freddie Mac's CMO activity in April 2011, roughly around the same time that Freddie Mac stopped structuring inverse floater deals. The timing of the examination and the decline in inverse floater deals appears to be coincidental. According to FHFA executives and documents provided to FHFA-OIG, the examination was initiated not because FHFA was concerned that CMO structuring potentially placed Freddie Mac at odds with homeowners. Instead, FHFA commenced the examination because it was concerned that: (1) Freddie Mac lacked the requisite expertise in the CMO market after the departure of key personnel; (2) Freddie Mac's retention of illiquid CMO instruments like inverse floaters and interest-only securities increased risk and complicated the process of winding down Freddie Mac's retained portfolio; and (3) Freddie Mac's retained CMO products were highly leveraged. The Market Risk Branch's work continued throughout 2011 and into 2012 with the fieldwork coincidentally culminating on the same day the media stories were released, January 30, 2012.

FHFA's work with respect to Freddie Mac's CMO business was not limited to the Market Risk Branch. FHFA's Office of the Chief Accountant also began work in the area in late November 2011, when the Chief Accountant sent Freddie Mac's Chief Financial Officer (CFO) an email inquiring about Freddie Mac's business purpose for retaining interest-only securities and inverse floaters. FHFA's Chief Accountant and Freddie Mac's CFO had related discussions through December 14, 2011, when the CFO responded with a letter. Those discussions focused on CMO structuring generally, not specifically on inverse floaters.

FHFA's Communications with Freddie Mac Regarding CMOs

As FHFA's Market Risk Branch began the final stages of its review of Freddie Mac's CMO business in December 2011, the Agency's communications with Freddie Mac became decentralized, with multiple individuals and departments engaging with various Freddie Mac personnel. As a result, FHFA-OIG found an absence of a clear and consistent understanding among Freddie Mac and FHFA personnel interviewed regarding FHFA's position with respect to Freddie Mac's CMO business and inverse floaters.

For example, on December 15, 2011, teams from FHFA and Freddie Mac met to discuss the preliminary results of a market risk governance examination. Neither the examination nor the agenda for the meeting was in any way related to Freddie Mac's CMO structuring business. Nevertheless, a senior FHFA executive in attendance raised several concerns regarding Freddie

Mac's CMO business. According to the senior FHFA executive, he gave his views on a number of CMO structuring topics, including hidden leverage in CMO products, floating-rate securities, and interest-only securities. In interviews with FHFA-OIG, the senior FHFA executive described his comments as an admonition to Freddie Mac to "knock-off" deals involving illiquid CMO structures, which he believed included inverse floaters and interest-only securities. However, Freddie Mac attendees of the December 15, 2011, meeting interviewed by FHFA-OIG said that they did not believe that inverse floaters were prohibited, nor was there an explicit instruction to cease illiquid CMO structuring.

FHFA did not send a written confirmation of the referenced admonition. Further, the substance of the December 15 meeting was not widely shared within FHFA until after circulation of the media reports about inverse floaters on January 30, 2012. Indeed, the senior official most responsible for monitoring Freddie Mac's CMO business did not learn of the substance of the December 15 meeting until after public attention surged in late January 2012. In addition, none of the FHFA and Freddie Mac individuals involved in previous discussions regarding CMO structuring attended the December 15 meeting. Moreover, at the time of the meeting, FHFA's Market Risk Branch was still reviewing Freddie Mac's CMO business, and FHFA's management had not yet formulated an opinion with respect to such business.

Compounding the confusion surrounding the message delivered by the senior FHFA executive at the December 15 meeting, on December 16, 2011, Freddie Mac's CFO asked FHFA's Chief Accountant if FHFA was directing Freddie Mac to stop CMO structuring. The Chief Accountant responded no. As a result, as of December 16, FHFA had not formally directed Freddie Mac to cease creating inverse floaters; Freddie Mac had not agreed to refrain from creating inverse floaters or other illiquid CMO transactions; and there was apparent uncertainty at Freddie Mac with respect to FHFA's position on Freddie Mac's CMO business.

On the other hand, despite the confusion and seemingly inconsistent messages, FHFA apparently was successful in causing Freddie Mac to reconsider its CMO business prior to the January 30, 2012, media reports. On January 6, 2012, the head of Freddie Mac's Capital Markets Division sent an email to his staff instructing them to suspend structured sales of certain categories of investment products such as inverse floaters. The head of Freddie Mac's Capital Markets Division then forwarded the email to the individual leading the Market Risk Branch's examination. In interviews with FHFA-OIG, the head of Freddie Mac's Capital Markets Division did not recall why he suspended Freddie Mac's structuring of these products. Freddie Mac's CFO suggested to FHFA-OIG that the January 6 suspension was a result of several factors, including his correspondence with FHFA's Chief Accountant, the December 15 meeting, and the general tenor of the Market Risk Branch's review of Freddie Mac's CMO business.

FHFA Confirms a Specific Agreement with Freddie Mac Regarding Inverse Floaters

After media reports surfaced on January 30, 2012, FHFA took a step it described as not typical and issued a press release on inverse floaters because, in its own words, "the circumstances ... require[d] some clarification." Regarding FHFA's involvement in Freddie Mac's inverse floater business, the press release stated:

> FHFA supervision staff informed Freddie Mac in December [2011] of its preliminary examination findings and FHFA and Freddie Mac agreed that those transactions would not resume pending completion of the examination work.

FHFA's statement legitimately highlights its proactive review of Freddie Mac's CMO business. However, a specific, well-articulated FHFA policy and agreement between FHFA and Freddie Mac regarding inverse floaters was not in place in December 2011, as implied by FHFA's press release.

The same day that media stories were published (i.e., January 30, 2012), FHFA sought to formalize an agreement with Freddie Mac regarding inverse floaters. Several FHFA senior executives have confirmed that FHFA's senior management met early in the afternoon of January 30, to discuss the stories. The January 30 meeting was the first time FHFA's senior leadership met to discuss the Agency's position with respect to inverse floaters. FHFA then drafted its press release; a senior official with the Division of Enterprise Regulation called Freddie Mac's CFO to confirm that FHFA and Freddie Mac had reached an agreement regarding inverse floaters; and the same senior official emailed Freddie Mac's CFO a letter confirming the agreement.[11] Thus, a specific agreement with regard to inverse floaters was reached and recorded on January 30, not December 2011 as implied by FHFA's press release.

Although the statement FHFA released on January 30 notes that the agency reached an agreement with Freddie Mac regarding inverse floaters in December 2011, FHFA-OIG did not find evidence of such an agreement in December. The earliest record found is the January 6 email sent by the head of Freddie Mac's Capital Markets Division that is discussed above. Freddie Mac's January 6 email may have been the product of a chain of events precipitated by comments at the December 15 meeting, but those comments were neither the result of an agreement between FHFA and Freddie Mac nor a formal FHFA policy. Further, a December 2011 agreement would have predated FHFA's Market Risk Branch completing its fieldwork on January 30, 2012. A December 2011 agreement would also predate the FHFA executives responsible for supervising Freddie Mac's CMO business settling on a course of action. The

[11] There is some debate regarding whether FHFA first confirmed the agreement with Freddie Mac or released the January 30 statement that references an agreement with Freddie Mac.

FHFA executive responsible for making that decision told FHFA-OIG that he did not settle on a course of action until January 30. Yet, the record suggests that FHFA's statements at the December 15 meeting did convey to Freddie Mac, FHFA's concerns about the CMO business.

FHFA Concludes Its Review of Freddie Mac's CMO Business in April 2012

FHFA did not issue its formal findings regarding Freddie Mac's CMO business until several months after the initial publicity regarding inverse floaters. FHFA's Market Risk Branch completed its review of Freddie Mac's CMO activity on April 2, 2012, and provided Freddie Mac a letter detailing the Agency's findings. Although the final letter does not address Freddie Mac's retention of inverse floating-rate bonds, it does discuss the CMO business in detail. The letter concludes that Freddie Mac's retained mortgage investment portfolio, including CMO assets, represents a critical concern for three reasons:

1. The need to clarify risk tolerances, corporate objectives, and goals associated with management of the retained mortgage portfolio, including CMO structuring;

2. The need for improved risk management oversight of the large volume of illiquid assets and CMO structuring activities; and

3. Significant key person dependencies within the Capital Markets Division.

FHFA also requested that Freddie Mac address several issues of concern, including: clarifying goals and objectives associated with its CMO structuring activities; instructing Freddie Mac's Board of Directors to evaluate the CMO business and determine if CMO structuring is in the best interests of the taxpayer or creates undue headline or reputational risk; and addressing staffing concerns.

In summary, FHFA's April 2, 2012, letter provided the analysis and findings that were preempted by the events that started with the December 15 meeting and culminated with the January 30 agreement.

FINDINGS

1. Inverse Floaters Likely Do Not Adversely Impact Mortgage Holders.

FHFA-OIG uncovered no evidence that Freddie Mac: (1) obstructed refinancing efforts of homeowners to influence yields on inverse floating rate securities in its investment portfolio; or (2) retained inverse floating rate securities to position itself to benefit from a decrease in interest rates or in prepayments from homeowners.[12] Further, contrary to the notion that inverse floaters are unique in that they give rise to tensions between policies aimed at homeowner refinancing and Freddie Mac's retained investments, that tension is inherent in the Enterprise's various business lines.

Further, Freddie Mac endeavors to maintain a net flat interest rate risk position, meaning that theoretically profits derived from inverse floaters are offset, in large part, by losses elsewhere in the portfolio.

Finally, FHFA-OIG found no support for the contention that Freddie Mac's Capital Markets Division acted on non-public information regarding HARP or any other program in deciding to retain inverse floating rate bonds. However, FHFA has not conducted any reviews or tests to ensure that Freddie Mac's Capital Markets Division traders are not violating or circumventing Freddie Mac's information wall policy.

2. FHFA's Position on Inverse Floaters Could Have Been Communicated More Clearly.

FHFA began a process of reviewing Freddie Mac's CMO business in the spring of 2011, identified critical concerns, and issued written findings in April 2012. To the extent FHFA communicated a recommendation or attempted to confirm an agreement with Freddie Mac specifically focused on inverse floaters prior to public attention surging, that communication or confirmation could have been clearer and more consistent. Nevertheless, FHFA's basic message was received insofar as Freddie Mac itself took affirmative steps to halt structuring illiquid CMO structures, which included inverse floaters, in early January 2012.

Regarding FHFA's public statement, the Agency's press release was not as clear as it could have been concerning when and how Freddie Mac stopped engaging in inverse floater transactions. For example, the press release emphasized FHFA's review of Freddie Mac's CMO business and

[12] Rather, according to Freddie Mac and FHFA, the Enterprise reacted to market requests for floating rate bonds and retained the reciprocal illiquid investment where practical.

noted that FHFA had reached an agreement with Freddie Mac regarding inverse floaters in December 2011. This does not appear to be the case. It is clear that starting early in 2011 FHFA engaged in ongoing discussions with Freddie Mac about limiting and managing certain CMO assets. Further, as early as November 2011, discussions focusing on inverse floaters had commenced. As noted above, those discussions ultimately led to Freddie Mac's suspending a portion of its CMO business related to inverse floaters in early January 2012. It is equally clear, however, that this was not the result of a coordinated FHFA policy focused on inverse floaters but instead was the outcome of a broader examination of Freddie Mac's entire CMO business and several informal communications. Ultimately, FHFA and Freddie Mac did not come to a specific agreement regarding inverse floaters until after public attention surged in late January 2012, as opposed to December 2011 as implied by FHFA's press release.

RECOMMENDATIONS

1. FHFA should continue to monitor Freddie Mac's hedges and models to ensure the Enterprise's portfolio is hedged within its approved interest rate limits.

2. FHFA should conduct periodic reviews and tests of Freddie Mac's information wall to confirm that the Enterprise is not trading on non-public information.

3. FHFA should ensure that supervisory policies are well-founded and coordinated and that the Agency speaks with one voice.

    - If FHFA is going to take a position, or believes it has come to an agreement with Freddie Mac regarding a particular investment product, it should confirm its position or the agreement in writing as soon as practical. Written communication will avoid the confusion that occurred with respect to inverse floaters.
    - FHFA should also ensure that supervisory policies are based on the robust work of Agency personnel and not reactions to media or other public scrutiny.

4. Prior to issuing any public statement FHFA should exercise due diligence to ensure statements accurately reflect all relevant facts.

OBJECTIVE, SCOPE, AND METHODOLOGY

The objective of this evaluation was to assess FHFA's oversight of Freddie Mac's structuring and retention of inverse floaters. It does not address the broader tension that might exist between homeowner refinancing policies, such as HARP, and Freddie Mac's investment business.

To achieve its objectives, FHFA-OIG interviewed FHFA officials with knowledge of Freddie Mac's capital markets business, including those responsible for monitoring and examining the business, as well as FHFA employees with relevant knowledge about FHFA's public statements regarding inverse floaters. FHFA-OIG also interviewed current Freddie Mac and Fannie Mae employees with knowledge of the Enterprises' CMO businesses. FHFA-OIG also reviewed materials related to Freddie Mac's capital markets business including, but not limited to, deal documents, risk-monitoring documents, SEC filings, internal FHFA documents, and Freddie Mac's information wall policy. FHFA-OIG did not conduct an independent test of Freddie Mac's information wall. Finally, FHFA-OIG reviewed technical publications and securities industry publications addressing, among other things, CMO structuring and the CMO market.

This evaluation was conducted under the authority of the Inspector General Act and is in accordance with the *Quality Standards for Inspection and Evaluation* (January 2012), which was promulgated by the Council of the Inspectors General on Integrity and Efficiency. These standards require FHFA-OIG to plan and perform an evaluation that obtains evidence sufficient to provide reasonable bases to support the findings and recommendations made herein. FHFA-OIG believes that the findings and recommendations discussed in this report meet these standards.

The performance period for this evaluation was from February 2012 to September 2012.

APPENDIX A: FHFA'S COMMENTS ON FINDINGS AND RECOMMENDATIONS

Federal Housing Finance Agency

MEMORANDUM

TO: George Grob, Deputy Inspector General for Evaluations

FROM: Jon D. Greenlee, Deputy Director for Enterprise Regulation

SUBJECT: Audit Memorandum SUR-2011-025-01; FHFA's Oversight of Freddie Mac's Investment in Inverse Floaters

DATE: July 31, 2012

This is a response to your report of July 31, 2012, which contained findings and recommendations relating to FHFA-OIG's recent survey of FHFA's oversight of Freddie Mac's use of retained inverse floating rate bonds (inverse floaters) in its capital markets business. FHFA appreciates the opportunity to respond to the matters identified during your review. Overall, FHFA agrees with the FHFA-OIG's findings that inverse floaters are a small portion of Freddie Mac's portfolio and that the Enterprise did not act improperly or otherwise benefit from a decrease in interest rates or prepayments from homeowners. However, it is important to put FHFA's supervisory activities and response into the proper context since this was one of multiple examinations underway during late 2011 and early 2012, a new supervision team had recently been put into place and the press reports occurred in the middle of FHFA's supervisory efforts. Below are some observations on the FHFA-OIG findings and DER's responses to the report's recommendations.

FHFA's Supervisory Authority

In the spring of 2011, FHFA supervision staff identified risks associated with some aspects of Freddie Mac's investment portfolio that included inverse floaters. As with any identified risk, supervisors then began to develop a deeper understanding through ongoing monitoring activities and planned onsite examination activities, which occurred throughout 2011 and into 2012 and included a targeted examination that started in the 2nd quarter of 2011. FHFA's efforts were deliberate and coordinated between the then Acting Head of Enterprise Regulation, Market Risk specialists, and the Office of the Chief Accountant. In addition, these efforts all took place prior to the press reports and were not, as indicated in the report, a reaction to that event. There were a number of emails by and between FHFA executives internally and with Freddie Mac management, and notes taken of specific meetings exclusive of the examination in 2011-12, that demonstrate our proactive approach to this area. These were provided to the FHFA-OIG and some of these documents and meetings are outlined in your report. The following timeline provides a summary of these efforts:

- 2nd quarter 2011: internal meetings within FHFA and email exchanges between FHFA and Freddie Mac staff addressing risks associated with inverse floater portfolio and examination coverage;
- 3rd quarter 2011: in-person and telephone contacts between FHFA and Freddie Mac staff included discussion of inverse floater issues;
- 4th quarter 2011: emails and meetings between FHFA and Freddie Mac staff regarding risk management and reporting for inverse floaters;
- January 2012: written communication between FHFA and Freddie Mac confirming enterprise action consistent with supervisory views communicated during 4th quarter meeting.

Each of these communications represent a meaningful and ordinary component of the supervision process and reflects that FHFA's supervision work was not driven by external events, as the report implies.

FHFA-OIG's report accurately referenced a meeting that took place on January 30, 2012, to discuss the press reports, and the report notes this was the first time all the key stakeholders within FHFA were briefed. Although, it is accurate that it was the first time that the newly appointed Deputy Director for Enterprise Regulation was briefed, emails and other supporting information provided to your office show that others had been communicating internally and expressing their views to Freddie Mac's management prior to that time. As your report notes, the communication of FHFA's views could have been clearer, a point with which I concur. This is the primary reason I sent a confirming letter to Freddie Mac's CFO on January 30, 2012, to minimize any potential confusion. While FHFA agrees with FHFA-OIG's findings that the Agency should speak with one voice, we must not limit the ability of examination staff to engage in productive, ongoing supervisory dialogue. FHFA also supports the recommendation that important supervisory views be committed to writing.

Although not addressed in the report, one reason there is room for improvement in clarity and documentation in this instance is that the Agency's supervision program was in transition during late 2011. There was a new Deputy Director for Enterprise Regulation and a new Examiner-in-Charge for Freddie Mac at the same time there were many examinations underway. The management transitions and high number of open projects presented challenges to timely, clear written communications. DER has been working diligently on improved and centralized communications.

As your report also noted, FHFA was effective in communicating its message in December, given the January 6, 2012 email confirming that Freddie Mac would not, among other things, create new inverse floaters. However, this was not by chance or accident, but rather the result of the examiners appropriately raising issues and concerns throughout the examination process. It is also important to note that the reports came during the ongoing review of Freddie Mac that

was completed in the spring of 2012, and it is important to note that the examination was completed in a coordinated and clear fashion.

Agency Press Release and Congressional Correspondence

The report suggests that FHFA's public statement on this issue and subsequent congressional correspondence was less than fully accurate. The report says that the press release implied that there was a specific, well-articulated FHFA policy and agreement between FHFA and Freddie Mac regarding inverse floaters in place in December 2011 (p.23). The report also says that the public statement notes the Agency reached an agreement with Freddie Mac regarding inverse floaters in December 2011 (p. 23). The public statement read in relevant part as follows:

> FHFA supervision staff informed Freddie Mac in December [2011] of its preliminary examination findings and FHFA and Freddie Mac agreed that those transactions would not resume pending completion of the examination work.

FHFA did not and would not claim that there was a specific, well-articulated FHFA policy and agreement at that time, as the examination work had not yet concluded. On January 6, Freddie Mac documented that it would not engage in, among other things, further inverse floater transactions. FHFA, however, had communicated supervisory concerns in December, and had impacted Freddie Mac's business decisions as of that time. Accordingly, we believe that FHFA did reflect all relevant facts in its public statement.

FHFA-OIG also referenced Acting Director DeMarco's May 21, 2012 letter to Senator Mark Warner. FHFA strongly believes the letter is accurate and it is important to note that the letter did not attribute Freddie Mac's suspension of CMO activities in the spring of 2011 to actions by the Agency and specifically noted that it was outside of our exam activity. The reference to risk management practices was related to our examination work that was, as described elsewhere in this memorandum, in process in December and finalized in the spring of 2012.

Recommendations and Responses

1. FHFA should continue to monitor Freddie Mac's hedges and models to ensure Freddie Mac's portfolio is hedged within its approved interest rate limits.

   FHFA has, as your report notes, followed Freddie Mac's portfolio and its hedging activities closely for many years. This will continue to be an area of supervisory attention consistent with FHFA's risk-based supervisory process. FHFA agrees with the recommendation as this activity is part of our ongoing supervision program.

2. FHFA should conduct periodic reviews and tests of Freddie Mac's information wall to confirm that Freddie Mac is not trading on non-public information.

FHFA will incorporate reviews of Freddie Mac's information wall as part of its risk-based supervision of Freddie Mac's investment activities. FHFA agrees with the recommendation as this activity is part of our ongoing supervision program.

3. FHFA should ensure that supervisory policies to the Enterprises are well-founded and coordinated and that the Agency speaks with one voice.

   - If FHFA is going to take a position, or believes it has come to an agreement with Freddie Mac, regarding a particular investment product, it should confirm its position or the agreement in writing as soon as practical. Written communication will avoid the confusion that occurred with respect to inverse floaters.

   While we do not agree with the implication that there was confusion based on the timeline provided in our response, FHFA nevertheless agrees it is important to confirm supervisory views in writing and will continue to make this a critical part of our supervisory process.

   - FHFA should also ensure that investment directives are based on the robust work of Agency personnel and not reactions to media or other public scrutiny.

FHFA agrees that supervisory work and supervisory concerns should be based on the Agency's work and analysis. We strongly believe that the facts and high level timeline provided in this memorandum demonstrate that we did base our supervisory work, discussions and findings on work that was well underway or completed prior to the reports, including the receipt of a confirming communication from Freddie Mac.

4. Prior to issuing any public statement FHFA should exercise due diligence to ensure statements accurately reflect all relevant facts.

FHFA agrees. As noted in the press release, commenting on this matter was unusual but was viewed as an important step to provide clarity to the public given the inaccuracies in the reports noted in your report. FHFA strongly believes that the public statement issued regarding inverse floaters accurately reflected all relevant facts and is supported by the timeline referenced in this memorandum and documentation provided to FHFA-OIG.

APPENDIX B: FHFA-OIG'S RESPONSE TO FHFA'S COMMENTS

FHFA-OIG appreciates FHFA's comments and agreement with the report's recommendations.

ADDITIONAL INFORMATION AND COPIES

For additional copies of this report:

Call the Office of Inspector General (FHFA-OIG) at: 202-730-0880

Fax your request to: 202-318-0239

Visit the FHFA-OIG website at: www.fhfaoig.gov

To report alleged fraud, waste, abuse, mismanagement, or any other kind of criminal or noncriminal misconduct relative to FHFA's programs or operations:

Call our Hotline at: 1-800-793-7724

Fax your written complaint directly to: 202-318-0358

E-mail us at: oighotline@fhfaoig.gov

Write to us at: FHFA Office of Inspector General
Attn: Office of Investigation – Hotline
400 Seventh Street, S.W.
Washington, DC 20024