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## Fannie Mae and Freddie Mac: What's Next?

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FANNIE MAE AND FREDDIE MAC: WHAT'S NEXT?

by

Zachary D. Porter

A Thesis Submitted in Partial Fulfillment  
of the Requirements for a Degree with Honors  
(Finance)

The Honors College

University of Maine

May 2014

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## **Abstract**

The purpose of this research was to explore the mortgage market in the United States and determine an effective plan of action moving forward. The US experienced a major housing crisis in 2007-2008. As a result, the market has been under significant scrutiny. At the heart of this debate are the two major lending institutions, Fannie Mae and Freddie Mac. The crisis has caused many politicians to call for an overhaul of the US mortgage market, a phasing out of the two agencies, and a shift in the market toward the private sector. A bipartisan proposal in March 2014 addressed those issues and will most likely be voted on in the Senate and the House this year.

Several questions arose during exploration of this topic. How can we help the secondary mortgage market run as effectively and efficiently as possible? Why are Fannie Mae and Freddie Mac often blamed for the housing crisis? What problems does the new bipartisan proposal address, and what problems does it fail to touch upon? After extensive research, it was determined that while the debate over moving forward with a public or private mortgage market is important, the problems in the mortgage market lie much deeper than that. Home buyers, the government, lending institutions, loan originators, real estate agents, investors, credit agencies, and many others have a stake in the market. It is increased accountability, responsibility, and education on behalf of each of those parties that will lead to higher effectiveness and efficiency in the mortgage market.

*To my grandfather, Lynwood Porter, who was always proud of me and showed me that I  
am capable of achieving anything.*

## **Acknowledgements**

This project would not have been possible without the support of many people. Thanks to my advisor, Robert A. Strong, who provided me with guidance throughout the process. Also thanks to my committee members, Richard Borgman, Edith Elwood, Grant Miles, and Patti Miles for their support. And finally, many thanks to my parents, sister, and girlfriend who accompanied me on this long and sometimes difficult journey, always offering support and love along the way.

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## **Questions for Research**

How can we help the secondary mortgage market in the United States run as effectively and efficiently as possible?

Why are Fannie Mae and Freddie Mac often looked at as a major cause of the economic crisis of 2007-2008, and is this blame justified?

What problems do the proposals that have been recently suggested address? What problems do they fail to address, and what do we do to make sure that they are addressed?

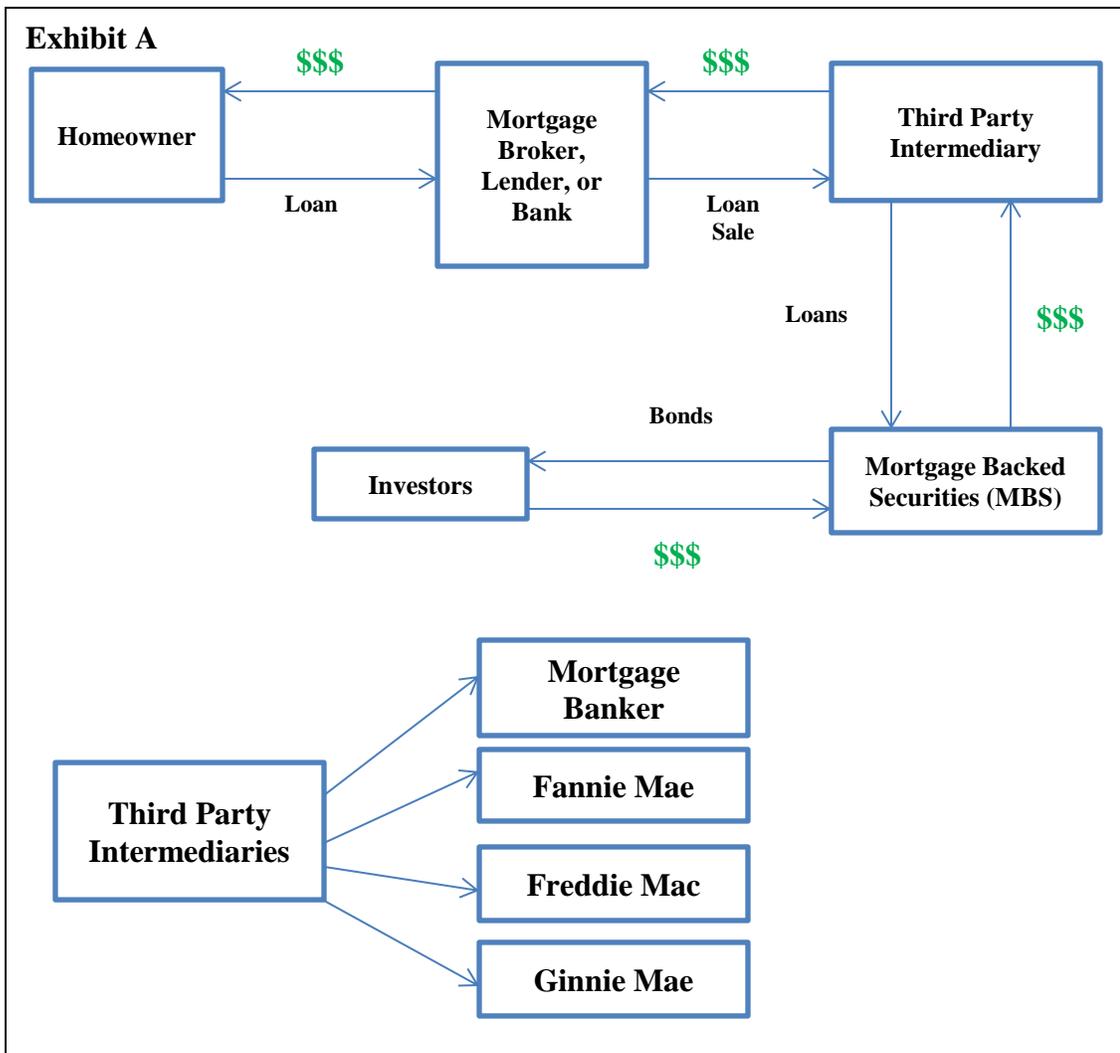
What are reasonable goals for the US mortgage market moving forward? Should we strive to keep the 30 year fixed rate mortgage intact? Should every person in America be able to own a home?

## The Secondary Mortgage Market – Terminology

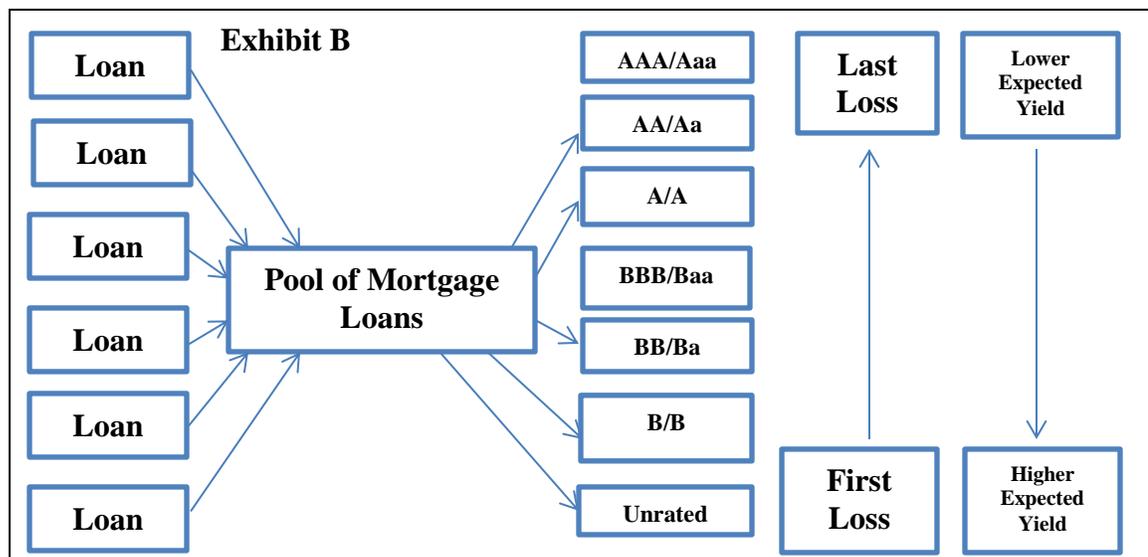
When an individual or family purchases a new home, they generally need to go to a bank or other lending institution and receive a loan. A general assumption is that the bank or institution will hold on to this loan and receive periodic payments of principal and interest from the home owners. In most cases, this assumption does not hold true.

The bank or lender will enter what is called the **secondary mortgage market**.

See **Exhibit A**, which shows the structure of the secondary mortgage market.



This is the arena where the bank will sell mortgages to a third party intermediary. The third party intermediary is often a mortgage banker, or an institution like Fannie Mae and Freddie Mac, and is known as the **aggregator**. The aggregator will package together groups of loans from a variety of banks and create **mortgage-backed securities (MBS)**. These mortgage-backed securities will be divided into **tranches**, or “slices” of the whole “pie”. Each tranche has its own set of characteristics – each one has a different maturity, risk, rating, and reward. These tranches are sold to investors. The investors that buy a piece of the tranches expect to have a return on their investment. This return comes from the homeowners' mortgage payments. See **Exhibit B** for an illustration of a typical MBS structure.



The secondary mortgage market serves several purposes. One purpose is to free up more capital for banks so that they can issue a greater amount of loans to homebuyers. If banks and lenders were unable to sell their mortgages to the secondary market, they would have an extremely large amount of capital tied up in those mortgages. The life of a mortgage can be 15, 20, 30, or even 40 years. Banks would be handing out hundreds of

thousands of dollars to each new homebuyer at the time the home is purchased. They would then wait for that money to be returned to them slowly over thirty years. The ability to sell their mortgages to the secondary market allows them to pass this “waiting game” over to other investors and replenish their capital more quickly. As said before, lenders can now use this freeing of capital to issue more loans to more homebuyers.

Banks also take part in the secondary mortgage market to manage their interest rate risk. Interest rate risk is the risk that an investment's value will change due to a change in the absolute level of interest rates. The life of a mortgage, as said before, is often 15 years or greater. This means that banks are significantly vulnerable to changes in interest rates, particularly those that accompany fixed-rate mortgages. The changing interest rates will not directly affect the homeowner in a fixed-rate mortgage, but it will hurt banks because the value of their mortgage assets will fluctuate. By selling the mortgages to a third party intermediary, banks manage this risk by removing the mortgages from their books altogether.

Another purpose of that the secondary mortgage market serves is to provide an investment vehicle for investors to earn a return. The investors will receive the homeowners' mortgage payments in place of the bank or original lender. If this process is completed effectively, it would be mutually successful for all parties involved – investors earn a return, and banks are able to give out more loans and make it possible for more people to own homes.

Mortgages can be divided into a variety of categories. It is important to understand three different types for these purposes. First, we have **prime mortgages**. These are mortgages that are considered to be of high quality. Second, there are **Alt-A**

**mortgages**, in which the risk profile falls between prime and subprime. Alt-A mortgages are generally considered higher risk than prime mortgages due to factors that may include higher loan-to-value and debt-to-income ratios or limited documentation of the borrower's income. Lastly, we have **subprime mortgages**. These mortgages have a higher perceived risk of default than prime and Alt-A loans. Interest rates on subprime mortgage loans are often higher, which is a reflection of the higher risk factor.

## **History of Fannie Mae and Freddie Mac**

Fannie Mae and Freddie Mac are two semi-acronyms for America's largest mortgage companies. The Federal National Mortgage Association (Fannie Mae) and the Federal Home Loan Mortgage Corporation (Freddie Mac) together hold or guarantee trillions of dollars of debt. Today, they back close to 95 percent of all home loans made in the United States. To begin to understand the role that Fannie and Freddie have in today's mortgage market, we need to examine their history. How long have these institutions been around? Why were they established? What significant changes have they gone through over the years?

Before the Great Depression in the 1930s, the housing market was primarily a function of the private sector. Home mortgages were generally short term renewable loans. Characteristics of these loans included high down payments (around 50 percent of the home's value), short maturities (10 years or less), and large balloon payments (a comparatively large payment the borrower must make to the lender at the mortgage term's end). The large initial capital requirement and high periodic payments made it difficult for many people to own a home.

The Great Depression hit the US economy extremely hard. This included the mortgage market. The Depression saw a large number of defaults on home mortgages – by early 1933, the government estimated that 20 to 25 percent of all home mortgages were in default. Banks found themselves with limited amounts of capital and were unable to lend money to borrowers.

Fannie Mae was created in 1938 as part of President Franklin Delano Roosevelt's New Deal. The purpose of creating the institution was to buy mortgages from lenders

and free up capital that could go to other borrowers. The creation of Fannie Mae also made it possible for banks to now lend to low and middle income home buyers who did not have prior access to the mortgage market. This did not mean that Fannie Mae would buy any kind of loan; there were still standards. At this time, Fannie Mae was a federal government agency.

In 1944, the Servicemen's Readjustment Act (commonly referred to as the GI Bill) created the Veterans Administration (VA) mortgage insurance program. This program gave veterans access to long-term, low-cost mortgages. In 1948, Fannie Mae began to purchase these VA-insured loans, increasing the size of their business significantly.

The Federal National Mortgage Association Charter Act of 1954 transformed Fannie Mae from a government agency into a public-private, mixed ownership corporation. Fannie still had to answer to the government though. They were not free to act on their own.

In 1968, the Housing and Urban Development Act (HUD) changed the status of Fannie Mae once again. It was converted into a for-profit, shareholder owned corporation. This removed Fannie Mae from the federal budget, which was done by President Lyndon B. Johnson to free up more money for the Vietnam War. The HUD act required Fannie Mae to purchase a reasonable amount of low and moderate income housing mortgages as well.

The HUD act also created an entirely new housing finance institution, called the Government National Mortgage Association (commonly referred to as Ginnie Mae). Ginnie Mae was established as a government-owned corporation within the HUD.

Ginnie Mae is responsible for guaranteeing the timely payment of principal and interest on privately issued mortgage-backed securities (MBS) collateralized by FHA, VA, or other government-insured or guaranteed mortgages. On the other hand, Fannie Mae (and later Freddie Mac) generally purchases conventional or conforming mortgage loans. The terms conventional and conforming are often used interchangeably. A conventional or conforming loan is a mortgage that is equal to or less than the dollar amount established by the conforming loan limit set by Fannie Mae and Freddie Mac's Federal regulator, The Office of Federal Housing Enterprise Oversight (OFHEO), and meets the funding criteria of Freddie Mac and Fannie Mae. Ginnie Mae does not play nearly as large a role in the mortgage market as Fannie and Freddie do, but it is important that it exists.

In 1970, Congress passed the Emergency Home Finance Act (EHFA), which established Freddie Mac. The purpose of Freddie Mac was to aid thrifts (financial institutions focused on taking deposits and originating home mortgages) in managing their interest rate risk – an institution's exposure to drastic changes in interest rates. Among other reasons, Freddie Mac was also created so that Fannie Mae would not act as a monopoly. The EHFA allowed both Fannie Mae and Freddie Mac to buy and sell mortgages not insured or guaranteed by the federal government. Freddie Mac issued the first conventional loan MBS in 1971.

Freddie Mac was created under ownership of the Federal Home Loan Banks. In 1989, under the Financial Institutions, Reform, Recovery, and Enforcement Act (FIRREA), Freddie Mac was reorganized to be structured similar to Fannie Mae – a for-profit corporation owned by private shareholders. They still, like Fannie Mae, had to answer to the government.

In 2007-2008, the US experienced a major housing crisis. Homeowners across the country began to default on their mortgages and foreclose on their homes. In the years leading up to the crisis, Fannie Mae and Freddie Mac engaged in questionable business activities. These activities included the purchase of subprime loans as they attempted to regain market share from the private Wall Street market that had emerged. (For a more detailed look at the housing crisis of 2007-2008, cf. **Understanding the Housing Crisis of 2007-2008** below.)

In 2008, as a result of their poor decisions, both institutions were placed under conservatorship. Prior to the housing crisis, the companies were government sponsored enterprises (GSEs). This meant that the companies were privately owned and controlled by shareholders, but they were protected financially by the US Government. After being placed under conservatorship, Fannie Mae and Freddie Mac were under complete control of the US Government.

Together, the two companies dominate the mortgage industry. This is partly because loans backed by Fannie and Freddie carried an *implicit government guarantee* – meaning that the companies are so large that the government would never allow them to fail (the guarantee became explicit when Fannie and Freddie were placed under conservatorship). Conservatives have often argued that the companies' close relationship with Washington gives them an unfair advantage over other companies in the industry. These reasons, among many others, explain why Fannie Mae and Freddie Mac were at the heart of the housing crisis of 2007-2008 and were looked at by some with extreme scrutiny.

**Exhibit C** shows a detailed timeline of the evolution of the secondary mortgage market.

## **Exhibit C**

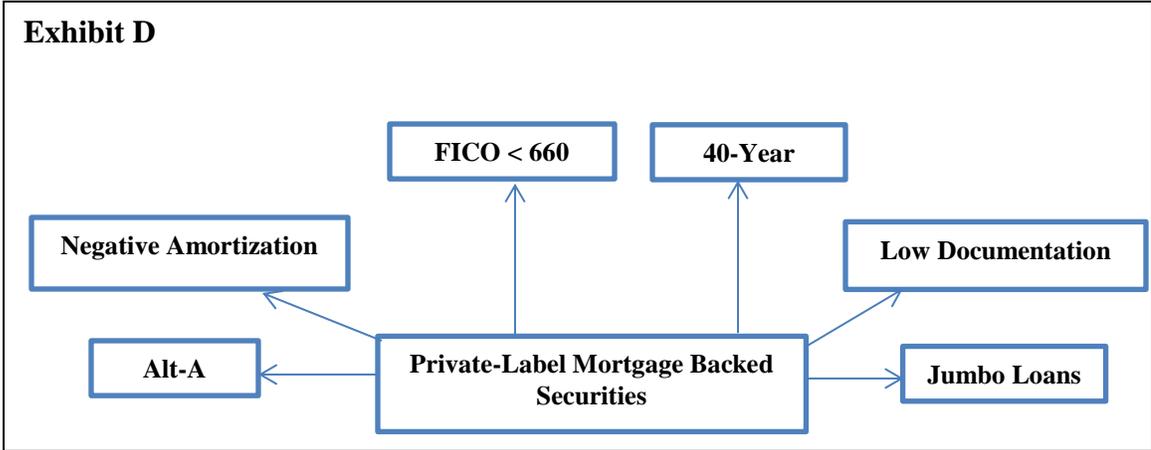
<b>TIMELINE</b>	
<b>1930s</b>	
<b>1932</b>	Federal Home Loan Bank Act is passed, creating the FHLBank System
<b>1933</b>	Home Owners' Loan Act is passed, creating the Home Owners' Loan Corporation
<b>1934</b>	National Housing Act enacted, establishing the Federal Housing Administration
<b>1938</b>	Fannie Mae established
<b>1940s</b>	
<b>1944</b>	GI bill authorizes VA mortgage loans and Fannie Mae's purchases of such mortgages
<b>1950s</b>	
<b>1954</b>	Charter Act reorganizes Fannie Mae
<b>1960s</b>	
<b>1968</b>	Fannie Mae reorganized as publicly-traded, shareholder-owned company
<b>1968</b>	Housing and Urban Development Act of 1968 created the Government National Mortgage Association ("Ginnie Mae")
<b>1970s</b>	
<b>1970</b>	Freddie Mac created
<b>1971</b>	Freddie Mac offers its first conventional Mortgage-Backed Security
<b>1970s and early 1980s</b>	Fannie Mae and Freddie Mac pursue differing business strategies: Fannie Mae holds mortgages in portfolio, while Freddie Mac securitizes them
<b>1980s</b>	
<b>Early 1980s</b>	Fannie Mae suffers financial deterioration due to rising interest rates, while Freddie Mac's losses are limited due to securitization strategy
<b>1989</b>	Financial Institutions Reform, Recovery, and Enforcement Act ("FIRREA") is passed to address the savings and loan crisis
<b>1989</b>	Freddie Mac becomes a publicly-traded, shareholder-owned company
<b>1990s</b>	
<b>1992</b>	Federal Housing Enterprises Financial Safety and Soundness Act enacted, creating the Office of Federal Housing Enterprise Oversight
<b>1995</b>	HUD establishes new goals for Fannie Mae and Freddie Mac, requiring them to meet an "affirmative obligation to facilitate the financing of affordable housing for low-income and moderate-income families"
<b>2000s</b>	
<b>2000s</b>	Fannie Mae and Freddie Mac began purchasing Alt-A and subprime mortgages
<b>2006</b>	Housing prices begin to fall nationwide for the first time since the 1930's
<b>2008</b>	Housing and Economic Recovery Act enacted, creating FHFA and FHFA-OIG
<b>2008</b>	Fannie Mae and Freddie Mac enter FHFA-supervised conservatorships

Source: <http://fhfa.ig.gov/LearnMore/History>

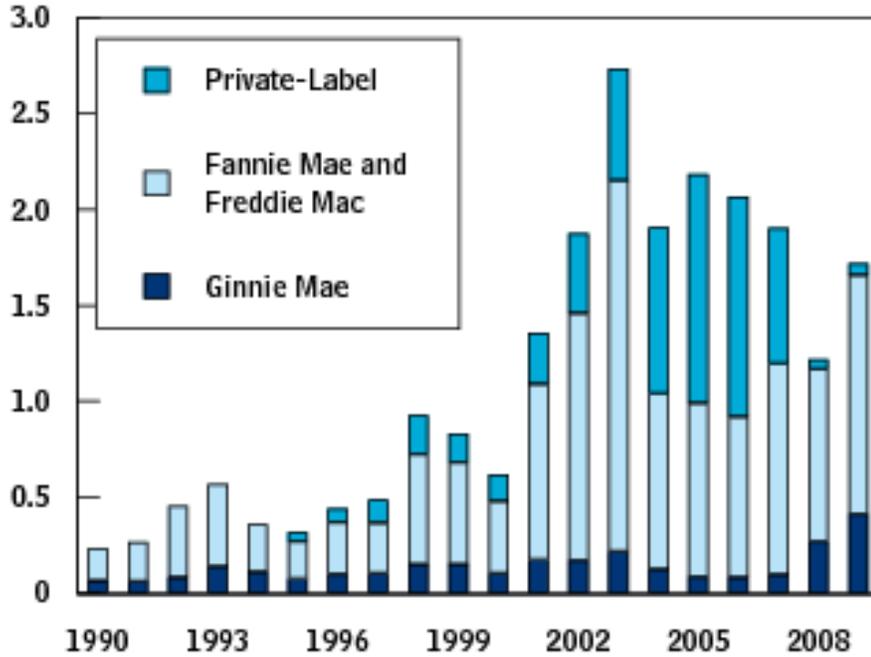
## Understanding the Housing Crisis of 2007-2008

A question that has been brought up countless times over the last five years is this: Why are Fannie Mae and Freddie Mac often looked at as a major cause of the housing crisis of 2007-2008 and is this blame justified? The answer to the second part of the question is *no*. Fannie Mae and Freddie Mac did in fact make some bad business decisions during the early 2000s that led to their downfall and subsequent need for a government bailout. They were not, however, the major contributors to the housing bubble that led to the housing crisis. With any crisis as big as the one that occurred in 2007-2008, it is almost never one single player that is the cause. The United States' economy is extremely large with many working parts – all parts that were in motion leading up to and during the crisis. It is impossible to think that only one of these parts caused the collapse of the housing market. So which players in the mortgage market did play a role in the collapse and why?

Contrary to what many believe, private markets played a large role in inflating the housing bubble. The bubble was concentrated mostly within the private label securitization channel (PLS) market. Private-label mortgage-backed securities are securitized mortgages that do not conform to the criteria set by Freddie Mac, Fannie Mae and Ginnie Mae. **Exhibit D** shows examples of some of the types of loans that would be considered part of the PLS market. Loan originators backed by Wall Street began to take on high-risk subprime mortgages with characteristics that significantly increased their chance of default. **Exhibit E** shows the amount of PLS in the mortgage-backed security market, along with the MBS held by Fannie Mae, Freddie Mac, Ginnie Mae from 1990-2009.



**Exhibit E**



Value of mortgage-backed security issuances in \$USD trillions, 1990-2009.  
Source: SIFMA Statistics

A major portion of these loans featured adjustable-rates, balloon payments that would require constant refinancing, and negative amortization, which meant that the unpaid balance on the mortgage increases over time.

Barry Ritholtz, a columnist for the Washington Post, does a tremendous job describing in detail some of the events that contributed to the creation of the housing bubble in an article titled “What caused the financial crisis? The Big Lie goes viral”.<sup>1</sup>

In 2000, the Glass-Steagall Act was repealed. The act separated regular banks from investment banks. The repealing of the act effectively allowed banks, because their deposits were guaranteed by the FDIC, to take part in high-risk business practices.

Following the dot-com bubble in 2000, the Federal Reserve dropped interest rates to one percent and kept them at that level for a significant time. The value of anything priced in dollars, or that dealt with credit or liquidity, rose greatly. Housing fell under the credit category. The low interest rates caused the low-risk or risk-free securities, such as Treasury bonds and municipal bonds, to become unattractive to investors and asset managers because they could not get a decent yield from them. Investors were forced to elsewhere for a higher return, and one of these places was the high-yield mortgage-backed securities market.

The credit agencies – Moody's, S&P, and Fitch – gave these mortgage-backed securities AAA ratings. The AAA rating essentially told investors that the mortgage-backed securities were as safe as US Treasury bonds. Investors failed to take these ratings with a grain of salt, assuming that the securities were a safe investment opportunity. Investors did not understand the underlying risks involved.

In 2004, the Securities and Exchange Commission (SEC) loosened the capital requirements for five banks on Wall Street – Goldman Sachs, Morgan Stanley, Merrill

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<sup>1</sup> Ritholtz, Barry. “What caused the financial crisis? The Big Lie goes viral.” *Washington Post*. N.p., 5 Nov. 2011. Web. 13 Feb. 2013.

Lynch, Lehman Brothers, and Bear Stearns. The move by the SEC changed the leverage rules for the banks and allowed them to take on an unlimited amount of leverage.

Leverage is the amount of debt used to finance a firm's assets. A firm with significantly more debt than equity is considered to be highly leveraged. The banks increased their leverage – some of them had ratios upwards of 40-to-1. The high amounts of leverage left the banks vulnerable in the event of even a little error. Not surprisingly, only two of the five banks were left standing by 2008, and that was only with the help of the government bailout.

In 2004, the Office of the Comptroller of the Currency federally preempted state laws regulating mortgage credit and national banks. This included anti-predatory lending laws on their books. With these laws removed, national lenders booked an increasing number of risky loan products in those states. As a result, their default and foreclosure rates increased as well.

The demand for higher-yielding securities was high. Firms on Wall Street, like the five banks mentioned above, took these loans, packaged them together into mortgage-backed securities, received high ratings from the credit agencies, and then sold them off to investors. The highest-yielding securities were those bundled with subprime mortgages. The bundling and selling of subprime mortgages allowed originators to lower their underwriting standards because they knew that they would be able to sell the mortgages quickly and that they would become “an issue for someone else to deal with.”

As discussed briefly above, a variety of loan products were now available in the market to cater to subprime borrowers. Some commercial banks began to take part in the

subprime market to try and keep up with the “new type” of originators. Employees at these banks were rewarded based on loan quantity, not quality.

Now is when we see Fannie and Freddie come into the picture. The number of nonbank mortgage loan originators was skyrocketing at the beginning of the decade. The PLS market was effectively surpassing Fannie and Freddie in the mortgage market. In fact, Fannie and Freddie lost market share during this time. In 2003, Fannie and Freddie had a 57 percent share of all new mortgage originations. In 2005-2006, when the bubble was developing, their share was down to 37 percent. Federal Reserve Board data shows that more than 84 percent of the sub-prime mortgages in 2006 were issued by private lending. These private firms made nearly 83 percent of the subprime loans to low- and moderate-income borrowers that year.<sup>2</sup>

Fannie and Freddie were now concerned with their lost profits and diminishing share of the market. In an attempt to regain profits and market share, Fannie and Freddie decided to enter the subprime mortgage market. Many of these subprime mortgages led to homeowners defaulting on their mortgages, and foreclosing on their homes. Detailed foreclosure statistics from 1990-2010 showing the sharp increase in foreclosures during the crisis are shown here in **Exhibit F and Exhibit G**.<sup>3</sup>

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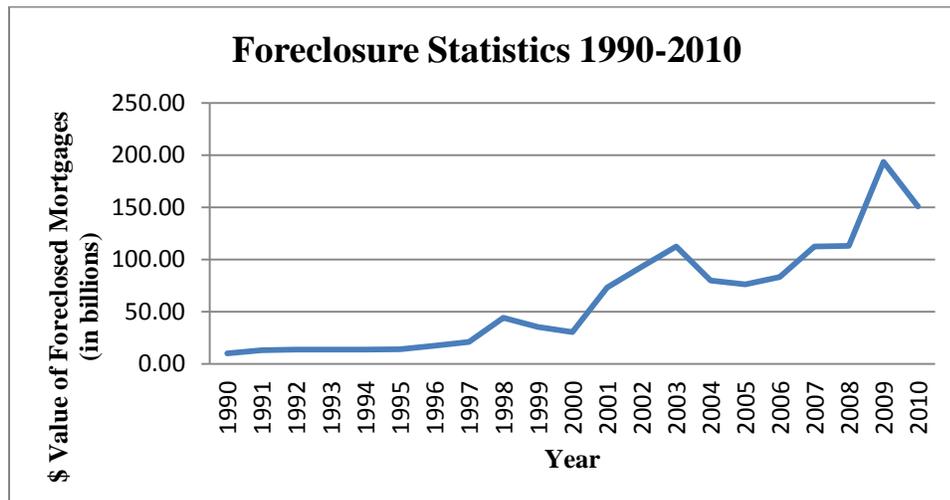
<sup>2</sup> Konczal, Mike. "No, Marco Rubio, government did not cause the housing crisis." *Washington Post*. N.p., 13 Feb. 2013. Web. 10 Dec. 2013.

<sup>3</sup> Foreclosure statistics taken from The 2012 Statistical Abstract - U.S. Census Bureau.

**Exhibit F**

Year	Foreclosure %	Dollar Value of Foreclosed Mortgages (in billions)
1990	0.0218	10.01
1991	0.0218	13.16
1992	0.0218	13.75
1993	0.0218	13.73
1994	0.0218	13.73
1995	0.0217	13.89
1996	0.0235	17.31
1997	0.0253	21.07
1998	0.0266	44.05
1999	0.0256	35.30
2000	0.0267	30.41
2001	0.0326	73.12
2002	0.0326	93.04
2003	0.0295	112.45
2004	0.0288	79.86
2005	0.0262	76.19
2006	0.0305	83.14
2007	0.0488	112.53
2008	0.075	113.18
2009	0.097	193.52
2010	0.096	150.91

**Exhibit G**



Fannie Mae and Freddie Mac took major capital hits as a result, and required a bailout from the government in order to stay solvent.

Fannie Mae and Freddie Mac are often blamed for the housing crisis. The two institutions were given a \$187 billion bailout that was made up of taxpayers' money. The federal government took control of Fannie and Freddie in September 2008 and gave them the bailout funds. In return, the government received preferred stock in the companies. Up through 2012, Fannie and Freddie paid the US Treasury in the form of a dividend. Starting in 2013, the government started collecting virtually all of each institution's profits. As of February 2014, the two housing agencies had paid a combined \$192 billion to the federal government. Fannie and Freddie received the taxpayer bailout, but had repaid the entire balance only five years later.

Without examining the facts, it is easy to see why many people would immediately point fingers at Fannie and Freddie for causing the housing downfall. If you look deeper, though, you will see that there were a significant number of other players involved. Wall Street's private markets, the government, uninformed investors, the credit agencies, and numerous others all played a role in inflating the housing bubble. Yes, Fannie Mae and Freddie Mac made poor business decisions that hurt them financially and led to their need for a bailout, but it is not reasonable or accurate to put the entire blame on them. This is important to understand when trying to decide the best way to provide liquidity in the mortgage market – especially the decision of giving control of mortgages to the private markets, or keeping mortgages in the public sector.

## Overview of Major Proposals

Several proposals have been developed over the last five years or so that aim to answer one question: What comes next after Fannie Mae and Freddie Mac? There is a general consensus in Washington that the two companies should no longer be government-sponsored enterprises (GSEs) and should no longer be present in our country's mortgage market. But what should replace the two agencies?

One of the first proposed solutions was a market-based one. It is known as H.R. 2767, or by its latest title as the Protecting American Taxpayers and Homeowners Act of 2013. It was introduced on July 22, 2013, was created by the House Financial Services Committee, and was sponsored by Congressman Scott Garrett (R-NJ-5) along with 51 other cosponsors. The bill looks to wind down Fannie Mae and Freddie Mac over a period of five years, turn the Federal Housing Administration (FHA) into an independent wholly owned government corporation, strengthen the financial sector of FHA operations, and reduce the extent of government guarantees in the mortgage market.<sup>4</sup> The bill will also require the Federal Housing Finance Agency, which is the regulator of both Fannie Mae and Freddie Mac, to create a nonprofit organization to manage the securitization infrastructure instead of the weak system that is currently in place within the two agencies.

The House Financial Services Committee claims that their bill will continue to keep the 30-year fixed-rate mortgage alive in the market, absent from any government

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<sup>4</sup> Stanton, Thomas H. "What Comes Next after Fannie Mae and Freddie Mac." *Public Administration Review* 73.6 (2013): 784-785. Web. 5 Jan. 2014.

support. It will leave federal support of the market to the FHA. The FHA will serve a smaller number of residential borrowers than in the past, but with greater efficiency and effectiveness.

The second solution is expected to come from the stockholders of Fannie Mae and Freddie Mac. As of now, their bill has not yet been introduced. It is likely though that the stockholders will suggest that Fannie Mae and Freddie Mac be turned into government corporations that securitize mortgages. Stockholders would be able to benefit from the two companies' high leverage during good times, and would be bailed out by taxpayers in events such as the high leverage that led to their failure in 2008.

The third solution is the creation of a new government corporation to issue government-guaranteed mortgage-backed securities. It is known as S. 1217, or the Corker-Warner bill after its Senate cosponsors Republican Bob Corker of Tennessee and Democrat Mark Warner of Virginia. The bill, similar to the first solution, would wind down Fannie Mae and Freddie Mac. In this solution, however, a government corporation called the Federal Mortgage Insurance Corporation (FMIC) would be created to guarantee mortgage-backed securities. The FMIC would also set mortgage size and other standards, require private parties to take the first ten percent of losses on FMIC-guaranteed mortgage-backed securities, and build a fund to absorb any additional losses. Analysts believe that the ten percent loss requirement would be enough to absorb a level of loss similar to that experienced by Fannie Mae and Freddie Mac during the crisis in 2008.

The Senate bill seems to cater to the needs of agencies in the housing, real estate, and mortgage industries. It also, like the first solution, maintains the availability of the

30-year fixed-rate mortgage as a standard option. The bill's main focus is to find a balance between providing an explicit government guarantee through the FMIC, and making sure that taxpayers have protections in place in the event of another crisis or downturn.

In March 2014, top members in the Senate and the White House agreed on a plan to wind down Fannie Mae and Freddie Mac and overhaul the US mortgage market. The bipartisan plan has not officially been put into action yet, and it still needs approval in both the House and Senate. It is, however, the biggest indication of any progress being made in the debate since the crisis happened a little over five years ago.

The plan was proposed by Senate Banking Committee leaders Tim Johnson, a Democrat from South Dakota, and Mike Crapo, a Republican from Idaho. Crapo explained how the current system where Fannie Mae and Freddie Mac back almost three out of every five new loans while under government control cannot continue. Crapo says that their new proposal "provides a balance between providing broad access to mortgages while protecting taxpayers from losses."<sup>5</sup> Crapo also stated:

“This agreement moves us closer to ending the five-year status quo and beginning the wind down of Fannie and Freddie while protecting taxpayers with strong

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<sup>5</sup> Timiraos, Nick. "Plan for Mortgage Giants Takes Shape." *Wall Street Journal*. N.p., 11 Mar. 2014. Web. 11 Mar. 2014.

private capital, building the components for a stable secondary market and avoiding repeating the mistakes of the past.”<sup>6</sup>

The plan was based off of S. 1217 (the Corker-Warner bill). The plan would set specific goals for transitioning Fannie Mae and Freddie Mac to the new system, and guarantee that the two agencies would only completely withdraw from the market after the replacement private market was running effectively. The Senate framework, under the new proposal, would allow private entities to purchase an explicit government guarantee to cover catastrophic losses on mortgages issued as bonds from a new guarantor, similar to how the Federal Deposit Insurance Corp. regulates banks and provides deposit insurance to minimize bank runs. Rather than issuing separate securities with an implied federal guarantee as Fannie and Freddie did, the new system would see multiple firms issue a universal security in which the government would stand behind the payment of principal and interest to bondholders, preserving the deep and liquid markets created over the last 30 years by Fannie and Freddie.<sup>7</sup>

Industry groups have said that a government guarantee is needed to maintain access to the popular 30-year, fixed-rate mortgage. "Whether it's called Fannie and Freddie or reconstituted as something else, it's clear we need a government guarantee," said Kevin Brown, the president of the California Association of Realtors.<sup>8</sup>

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<sup>6</sup> Benson, Clea, and Jody Shenn. "U.S. Wind-Down Bill Clips Fannie Mae, Freddie Mac Shares ." Bloomberg, 12 Mar. 2014. Web. 13 Mar. 2014.

<sup>7</sup> Timiraos, Nick. "Plan for Mortgage Giants Takes Shape." *Wall Street Journal*. N.p., 11 Mar. 2014. Web. 11 Mar. 2014.

<sup>8</sup> Ibid

Other characteristics of the bill include creation of funds for affordable housing that would be paid for through a fee that users of the new government reinsurance agency would have to pay. It would increase access for buyers to community banks by establishing a mutual cooperative jointly owned by small lenders to provide a cash window for eligible loans while allowing the firms to retain servicing rights.<sup>9</sup>

A full draft of the bill and a committee vote is expected to occur sometime at the end of March or early April. Despite the fact that top Democrats and Republicans on the Senate Banking Committee have agreed on the preliminary proposal, its approval in the Senate is not guaranteed. Its approval in the House is even less assured, as many House Republicans are opposed to a significant federal backstop in the mortgage market. Senate Democrats like Elizabeth Warren of Massachusetts and Sherrod Brown of Ohio have stated that they will not back any plan that does not guarantee access to affordable loans for most buyers or include support for low-income rental housing.

The somewhat dim outlook of the bill caused shares in both Fannie Mae and Freddie Mac to drop significantly after the news broke. Fannie Mae's shares fell as much as 44 percent, and Freddie Mac's shares went down as much as 27 percent. At this point, we will need to wait and see if our leaders in Washington can reach a definite agreement in the near future.

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<sup>9</sup> Benson, Clea, and Jody Shenn. "U.S. Wind-Down Bill Clips Fannie Mae, Freddie Mac Shares ." Bloomberg, 12 Mar. 2014. Web. 13 Mar. 2014.

## **Analysis and Recommendation**

The challenge behind developing an effective plan for providing liquidity in the mortgage markets lies in what questions we want to answer. What is a reasonable goal for the US mortgage market moving forward? Is it realistic for homeownership to be universally accessible? Should we strive to keep the 30-year fixed-rate mortgage intact? The answers to all of these questions are critical in creating a plan of action for the future of the mortgage market.

As we have learned, there is a proposal on the table that seeks to end the mortgage debate. But does this proposal address all of the problems that are present in the mortgage market? If not, what should we do to make sure that those problems are solved?

## **What the New Bill Does Address**

The new bill addresses several major issues that have been on the table since the housing crisis occurred almost six years ago. Let's take a look at what these issues are, and try to see if the new bill adequately begins to address these issues.

## **Evaluating a Private Mortgage Market**

The most talked-about issue in the mortgage debate is whether we should continue to purchase mortgages through the two GSEs, Fannie Mae and Freddie Mac, or

if we should allow private institutions to take over that responsibility. The new bill explicitly addresses this.

To understand the debate, we need to answer two more questions. One is: Why were Fannie Mae and Freddie Mac created? The second: Is this purpose still relevant in today's mortgage market?

As we learned earlier, Fannie Mae and Freddie Mac were both in some fashion created in order to purchase mortgage from banks to allow the banks to free up capital and provide more loans to more borrowers. This is still an important function in the mortgage market. There are millions of potential borrowers in this country, and banks need to be ready and willing to provide mortgages to those that are qualified. Without some kind of system in place to purchase the mortgages from banks, we would see a much smaller number of home-owners in the US.

The new bill aims to overhaul the mortgage market and calls for private capital. Can a private mortgage market fill the same need that Fannie and Freddie currently fill? Yes it can. But just like with any new idea, there are a few accompanying challenges.

A mostly private market could concentrate mortgage lending in the largest banks in the United States. In 2008, the top five banks in the countries of Canada, the UK, and Australia funded more than half of the mortgages in their respective countries.<sup>10</sup> This would effectively keep the “too-big-to-fail” problem a reality—a reality that shifting mortgages to the private market is seeking to avoid.

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<sup>10</sup> Timiraos, Nick. "Rethinking Fannie, Freddie—and the 30-Year Mortgage." *Wall Street Journal*. N.p., 22 Sept. 2013. Web. 2 Dec. 2013.

Additionally, private capital tends to take on more risk in good times. In bad times, however, private capital is generally the first to “run away” when trouble in on the horizon. In 2007, investors quickly liquidated their mortgage bonds when they became worried about the quality of the loans that were behind their investments. This was similar to the “bank runs” during the Great Depression, when depositors began withdrawing their money from banks in fear that the banks were on the brink of failure.

To avoid any of these potentially negative situations from occurring, we will need to impose strict and specific regulations on the private market and all entities involved. This regulation has not yet been, or may not be explicitly discussed in the new bill itself, so we will touch upon it later on.

### **The 30-Year Fixed-Rate Mortgage**

The major legislative proposals, have all in some way addressed the notion of the 30-year fixed-rate mortgage in this country. Since it was introduced, Americans have loved the 30-year fixed-rate mortgage. It allows for stable payments over the life of the loan and makes owning a home a possibility for a large portion of people across the country. It is important to realize, however, that the 30-year fixed-rate mortgage is not available in most other countries. In many other countries mortgages are financed using adjustable-rate mortgages where the interest rate on the mortgages moves relative to the overall interest rate in the respective country.

How valuable is the 30-year fixed-rate mortgage in this country and what would happen if it was no longer an option? This answer to the question is at the center of the mortgage debate.

Those who believe that the government should not be a part of the mortgage business (often those in favor of a private market) believe that the 30-year fixed-rate mortgage is not as “great” as some build it up to be. Borrowers pay a lot of interest during the first few years of the loan, making it hard to build equity at a fast rate. In a generation where people move frequently, change jobs, and get divorced more often than ever, the loan does not seem as practical as it did in the past.

On the other side of the debate, advocates of the 30-year fixed-rate mortgage believe that with the expectation of interest rate increases over the next decade, it is the wrong time to shift people into adjustable-rate mortgages. With interest rates expected to increase, home buyers that are looking to get a mortgage now will obviously want to get a fixed rate mortgage while the rates are still low.

That said, if mortgages were shifted to the private market, would banks still offer the 30-year fixed-rate mortgage absent a government guarantee, because it is so popular? The answer is most likely yes, but the mortgages would most likely require larger down payments and higher rates. I will explain later, however, that a higher down-payment is not necessarily a bad thing.

Despite the differing views among experts on the topic, the 30-year fixed-rate mortgage is extremely popular in this country and will continue to be a popular option for home buyers regardless of the public or private status of the market. If the private sector takes over the mortgage market, it should aim to still keep the 30-year fixed-rate option

available. There are *responsible* individuals in this country that will not be able to afford a home without the 30-year fixed-rate mortgage as an option. Take the following scenario for example in **Exhibit H**.

### **Exhibit H**

Bill and Sally want to purchase a home. We will assume that it is December 2010. The average price of a home sold in the United States in 2010 was \$272,900. Bill and Sally have a combined household income of \$75,000. They have a monthly debt obligation of \$500 – this includes a minimum credit card payment and two car loan payments. They have saved \$25,000 for a down payment. At an interest rate of 4.7% - the average for 2010. Average property tax, home insurance, and PMI payments, along with the maximum debt-to-income ratio for most mortgages of 36% have been used.

Based on their income:

With a loan term of 30 years (360 months), Bill and Sally can afford a house up to \$265,846 with a monthly payment of \$1,734.

With a loan term of 20 years (240 months), Bill and Sally can comfortably afford a house up to \$232,660 with a monthly payment of \$1,738.

With a loan term of 15 years (180 months), Bill and Sally can comfortably afford a house up to \$203,062 with a monthly payment of \$1,738.

*Numbers were calculated using Zillow.com's Affordability Calculator.*

You could argue that the combined household income of Bill and Sally is on the low end, but this is the case for many couples and potential borrowers in the United States. Under each loan term, the value of the home that Bill and Sally can afford is below the national average. The 30-year loan is quite close, but the 20 and 15-year loans are significantly far from the average. If we were to reduce their debt-to-income ratio to 25%, making their monthly mortgage payment \$1,053, Bill and Sally could only afford a

house up to \$168,536 in value. This is even further away from the national average of \$272,900.

Bill and Sally have demonstrated an ability to save with their \$25,000 down payment. On the surface, they appear to be responsible people looking to buy a home. Without the 30-year loan term as an option, they may not be able to afford to buy a home. While the example given here is arbitrary and assumes some facts and figures, the conclusion is still valid. For many individuals in the United States like Bill and Sally, the 30-year mortgage must remain an option in order for them to afford a home.

Mark Zandi, the chief economist at Moody's Analytics, made several estimates in 2013 regarding the possibility of having a mostly private mortgage market under the original Senate plan (S. 1217, Corker-Warner Bill). Zandi estimated that a typical borrower with a \$200,000 mortgage and a 20% down payment could pay about \$75 per month more in interest on a 30-year mortgage. Under the House's original plan (H.R. 2767), which would ultimately privatize the entire market, Zandi estimated that borrowers could pay up to \$135 more a month.<sup>11</sup>

We might conclude from Zandi's estimates that a shift to a private mortgage market would most likely lead to an increase in costs to borrowers. These costs can be offset using methods such as a higher down payment. The bottom line is that the need for the 30-year mortgage still remains. The consequences of eliminating the 30-year mortgage completely outweigh the consequences of slightly higher monthly payments for borrowers.

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<sup>11</sup> Tseng, Nin-Hai. "What the end of Freddie and Fannie could cost borrowers." CNN Money, 8 Aug. 2013. Web. 1 Apr. 2014.

## **The Government Guarantee**

The bipartisan proposal will allow private entities to purchase an explicit government guarantee to cover catastrophic losses on mortgages issued as bonds from a new guarantor, somewhat as the Federal Deposit Insurance Corp. regulates banks and provides deposit insurance to minimize bank runs. If the fees are set too low for this new insurance, taxpayers could be next on the chopping block for any additional losses that might be faced. If the goal of the proposal is to eliminate all taxpayer burdens in the event of another housing catastrophe, extensive research needs to be conducted in order to set the fees to an adequate level.

The Corker-Warner Bill (S. 1217) suggested the creation of a Federal Mortgage Insurance Corporation (FMIC) to guarantee mortgage-backed securities. The FMIC would also set mortgage size and other standards, require private parties to take the first ten percent of losses on FMIC-guaranteed mortgage-backed securities, and build a fund to absorb any additional losses. Analysts believe that the ten percent loss requirement would be enough to absorb a level of loss similar to that experienced by Fannie Mae and Freddie Mac during the crisis in 2008. Under any new plan, suggesting an overhaul of the mortgage market, a loss requirement should be derived in a similar fashion.

The notion of an explicit government guarantee is a sound one. It is hard to imagine a fully functioning mortgage market without some sort of government presence. The government has the amount of capital needed to be a sufficient “backstop” in the event of another housing crisis. The proposed guarantee would help calm the minds of

taxpayers that are uneasy because of the “too big to fail” problem in private banks, or the “implicit government guarantee” that Fannie and Freddie possessed.

### **What the New Bill Fails to Address**

While the new bill addresses several key issues in the mortgage market, there are still many other problems that need to be discussed. The main idea in most politicians' minds is whether or not to keep Fannie Mae and Freddie Mac. Making that decision is a big step forward, but it is just a start. There is much more we need to do in order to provide liquidity efficiently and effectively in this country.

### **Suppression of Interest Rates by the Federal Reserve**

One concept that has rarely been touched upon during the mortgage debate is the Federal Reserve's suppression of interest rates. As it stands today, Fannie Mae and Freddie Mac are the two main purchasers of conventional mortgage loans. In the current state of the economy, where the Federal Reserve suppresses interest rates, there is no interest for the private sector to become involved in the mortgage market. The Federal Reserve has four trillion dollars in securities on their books; therefore they do not want to pay higher rates for the greater than fifty billion dollars worth of mortgage-backed securities they buy every month.

If Fannie Mae and Freddie Mac are wound down, as has been recommended, the private sector will take over and fill the void profitably. Insurance companies also used

to be involved in the mortgage industry. Pension funds and hedge funds were players as well when the risk/reward factor was attractive. The private sector, however, simply cannot compete with the “free money” provided by the Federal Reserve. If we choose to privatize the mortgage market, the Federal Reserve will need to step out of the way and allow interest rates to fluctuate on their own.

We also need to look at how interest rates affect home sales. A common and misguided notion is that when interest rates are low, home sales are at their best. This is not true. A statistical comparison of the 30 year fixed-rate interest rates and US home sales since 1972 shows that there is no strong correlation between the two factors (**see Exhibit I and Exhibit J**).<sup>12</sup>

**Exhibit I** shows the annual interest rate and the home sale numbers in thousands from 1972-2013. **Exhibit J** shows these two variables put together in a graph. As you can see, the r-squared value for the graph is only 0.033, which tells us that there is no statistically significant correlation between home sale numbers and interest rates.

Low interest rates do not guarantee that home sales will increase. If the goal is to keep home sales high and provide access to homeownership for as many people in this country as possible, which appears to be a common theme on the political front of the debate, suppressing interest rates is not an effective way of achieving that goal.

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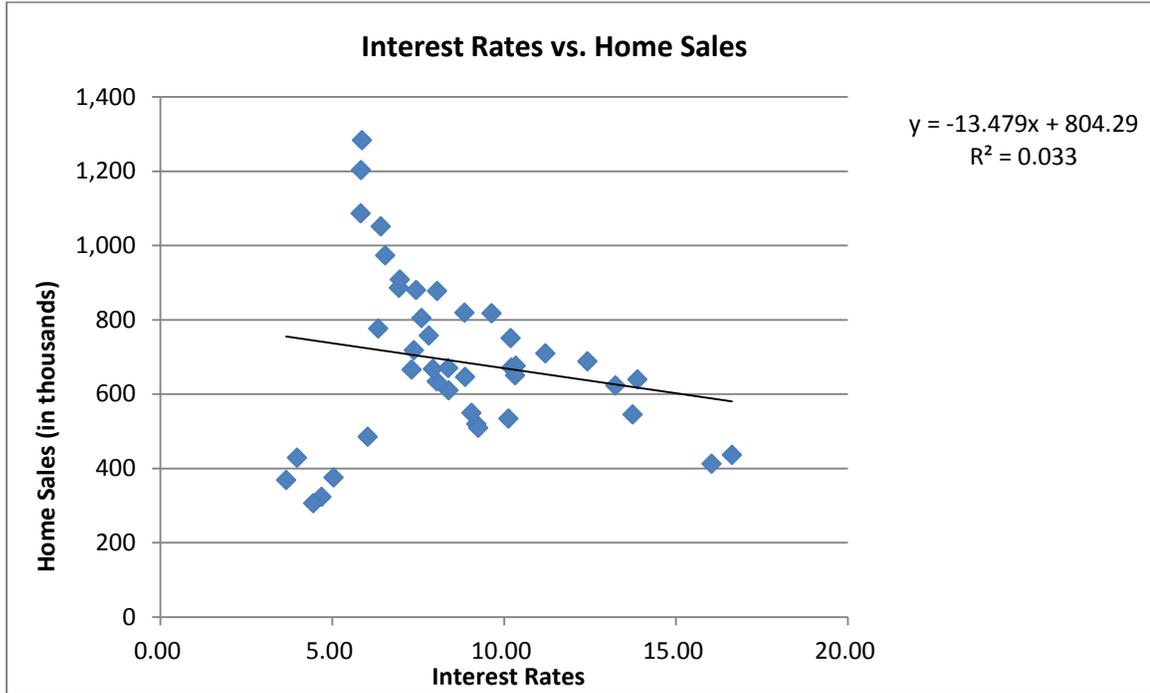
<sup>12</sup> Interest rate data taken from Freddie Mac at <http://www.freddie.mac.com/pmms/pmms30.htm>.

Home sale data taken from U.S. Census at <http://www.census.gov/>.

**Exhibit I**

<b>Year</b>	<b>Annual Interest Rate (%)</b>	<b>Home Sales (in thousands)</b>
1971	N/A	656
1972	7.38	718
1973	8.04	634
1974	9.19	519
1975	9.05	549
1976	8.87	646
1977	8.85	819
1978	9.64	817
1979	11.20	709
1980	13.74	545
1981	16.63	436
1982	16.04	412
1983	13.24	623
1984	13.88	639
1985	12.43	688
1986	10.19	750
1987	10.21	671
1988	10.34	676
1989	10.32	650
1990	10.13	534
1991	9.25	509
1992	8.39	610
1993	7.31	666
1994	8.38	670
1995	7.93	667
1996	7.81	757
1997	7.60	804
1998	6.94	886
1999	7.44	880
2000	8.05	877
2001	6.97	908
2002	6.54	973
2003	5.83	1,086
2004	5.84	1,203
2005	5.87	1,283
2006	6.41	1,051
2007	6.34	776
2008	6.03	485
2009	5.04	375
2010	4.69	323
2011	4.45	306
2012	3.66	368
2013	3.98	428

## Exhibit J



### Beyond the Public vs. Private Debate

The secret to developing an efficiently running mortgage market in this country lies much deeper than simply deciding whether we should keep mortgages a function of the public market or shift them to the private market. Whether we choose public or private, many other problems will remain unsolved. As we learned from studying the housing crisis, both the public and private markets had flaws and made bad decisions that contributed to the housing bubble. That said, what can we do to help make our mortgage market more effective?

## **Accountability, Responsibility, and Education**

Our goal in this country should not be simply to allow *any person* the opportunity to be a homeowner, as is the common theme in Washington, but to provide individuals with the tools necessary to become *responsible* homeowners.

Responsibility, accountability, and education are three simple but powerful words that can help solve our mortgage market problem. All parties involved – lenders, loan originators, real estate agents, the government, investors, credit agencies, and homeowners – need to be responsible, accountable, and well-educated in order for the market to run smoothly and effectively.

### **Accountability of the Lending Institution**

In the mortgage market we cannot allow anybody to pass risk off and keep their “hands clean”. This is related to the idea of having ethical loan originators. Leading up to the crisis, there was an abundance of bundling and selling of subprime mortgages. Loan originators lowered their underwriting standards because they knew that they would have no problem selling the mortgages.

This is a practice that we need to prevent going forward. Each entity on the secondary mortgage “supply chain” needs to have some stake in the process. One way this problem could be addressed is by introducing a system that will impose some type of monetary penalty on irresponsible loan originators and lending institutions. When an institution sells a loan or loans to a third party vendor, they will be required to put down a

“good faith deposit” or even “security” deposit in a sense. This deposit will be paid to an entirely separate entity, ideally an escrow service, and be held in an account until the end of the life of the loan or package of loans. The deposit amount will be based on a percentage of the value of the loans involved.

The deposit will act as an insurance policy for the third party institution in case of loan defaults or foreclosures. Each loan in any package of loans will have an individual value percentage attached to it in the event that only one or only a portion of the loans experiences default. If default or foreclosure occurs within the first two years of the loans life, the third party institution will be able to keep the deposit from the lending institution that is being held in the escrow account. If the loans prove to be sound and the homeowners have made full payments in a timely manner during the first two years of the loan, the deposit will be returned to the lending institution.

The two-year timeline will limit the defaults or foreclosures to the home-owners who fail to make their payments as a result of personal irresponsibility and bad loan writing. For example, there is the possibility that 15 years down the road, a home owner will experience a personal tragedy that will render them unable to make their mortgage payments. This is not a result of the home-owner’s irresponsibility or the lender’s poor loan writing, it is simply an event that nobody could have predicted.

This system will keep the lending institution and the loan originators on their toes as they write new loans. They will be more likely to verify all documentation and information given to them by the home buyers, as well as engage in ethical practices of their own when determining interest rates, fees, etc. The lender will have to keep some capital tied up, but it will be for a short period of time and it will only be a percentage of

the original loan amounts. It will ultimately lead to an overall better quality of loans in the market.

### **Ethical Loan Originators**

Let's move on to loan originators. Loan originators are another one of the groups that were to blame during the housing crisis. Loan originators need to be held more accountable moving forward. One step toward this has been the implementation of licensing requirements for mortgage loan originators (MLOs). The Secure and Fair Enforcement for Mortgage Licensing Act of 2008 (SAFE Act) requires state-licensed MLOs to pass a written test, to complete pre-licensure education courses, and to take annual continuing education courses. The SAFE Act also requires all MLOs to submit fingerprints to the Nationwide Mortgage Licensing System (NMLS) for submission to the FBI for a criminal background check; and state-licensed MLOs to provide authorization for NMLS to obtain an independent credit report.<sup>13</sup>

Prior to the creation of the SAFE act, virtually anybody had the ability to originate mortgage loans. This left the door wide open for predatory lending behavior, fraud, etc. The SAFE act has improved and will continue to improve the quality of loan origination in the United States. Loan originators will be better-informed, better-educated, and more ethical. This will lead to higher quality loans and help reduce default and foreclosure rates.

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<sup>13</sup> "SAFE Mortgage Licensing Act of 2008." NMLS Resource Center, n.d. Web. 1 Apr 2014.

To touch upon an idea discussed earlier, as interest rates rise to higher levels, we will see more and more people leave the mortgage industry, but the quality of those that stay improve. Rising rates help those who are more professional and have more experience. When rates are falling, a large number of people just try to "sell" people on refinancing.<sup>14</sup> The number of loan originators is falling and will continue to do so. Those that remain should be the better ones.

### **Real Estate Agents**

Real estate agents are an important piece to the mortgage puzzle. Real estate agents are responsible for working with potential home buyers to find a home that will fit their preferences and lifestyle. A real estate agent will review information from the borrower, such as their income, debt, and other ratios. The agent should take this information and then begin to search for homes in a price range that fit within the criteria provided.

What happens sometimes is that a real estate agent will try to force someone into a home that exceeds their price range, or a home that is outside their "comfortable budget." The real estate agent will do this because the more expensive the home is, the higher their commission will be. There is no official law against what the agent is doing, but it is obviously unethical. The agents know that the buyer will have a hard time affording the home once he/she is in it, but they often disregard this. They are interested in receiving their commission and moving on to the next buyer.

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<sup>14</sup> White, Michael. E-mail interview. 7 Jan. 2014.

When a person is placed in a home that exceeds their budget, the risk that they will default or foreclose on their mortgage becomes much higher. Real estate agents need to act ethically in order to help reduce this risk. People that purchase homes that they can comfortably afford will be much happier in the long run, make their payments on time, and start the mortgage supply chain off in a positive way.

### **Effective Legislation and a Responsible Government**

Regulations and proposals need to be written and created by people who know the mortgage industry, not by members of Congress who just pass things that “sound good.” This will not resolve any of the issues that need to be addressed. The language within proposed bills is critically important. We are not talking about which proposals are right or wrong here – we are simply talking about the need for them to be written well.

The bills pertaining to the mortgage debate also need to address the idea of “implicit” versus “explicit”. One of the main criticisms of Fannie Mae and Freddie Mac was the “implicit government guarantee” that they carried. The guarantee was implied before the crisis, and has been explicit since 2008.

We need to move away from this notion. In proposals going forward, things need to either be explicitly for or against the idea on the table. It is when things are left up to interpretation that we run into problems. When we know exactly what the rules and regulations are, we are better able to follow these rules and regulations, as well as predict future scenarios related to them.

## **Strict and Specific Regulations**

After some in-depth research into the housing crisis, we learned that the private market was largely responsible for the inflation of the housing bubble. The new bill calls for private capital to take over the mortgage market. Regulations need to be present in the mortgage market regardless of whether it is an engine of the private or public institutions. It is a step that will be vital if the private market takes over, primarily because we do not currently have any regulations in place for that type of market. We do have at least some experience with regulation within the Fannie and Freddie-dominated system.

One example of this regulation is the leverage ratio requirements for private banks. In the years leading up to the crisis, the big investment banks were allowed to take on an unlimited amount of leverage. We cannot allow this to occur at any point in the future, especially if we are looking at shifting mortgages into the private market. The investment banks that purchase the mortgages need to be heavily regulated. There will most likely be some sort of regulation if the government insures the mortgages, as has been recommended.

The regulations, regardless of what they cover, need to be strict and specific. We have seen the “deregulation phenomenon” sweep across this country and in many industries, banking in particular. While deregulation is often done in order to spur growth or lead to positive outcomes, somebody or some group usually “gets hurt.” In the case of the housing and mortgage industries, we saw that the lack of regulation in the early 2000s caused major problems. In order to avoid these same type of problems (e.g.

increasing number of subprime mortgages, increased rate of defaults and foreclosures, etc.), we need to ensure that there are proper regulations in place prior to the possibility of a private mortgage market.

Growth and positive outcomes can still be an option, as long as the regulations are written appropriately. This is something that our legislative bodies will need to consider as the new bill reaches a voting stage in the near future. The sooner the regulations are developed, the better chance we have at creating an efficiently running mortgage market.

### **Informed Investors**

During the housing crisis, investors immediately accepted the AAA credit ratings given to mortgage-backed securities by the credit agencies. They failed to research the securities independently. It is important that investors do their own due diligence and thoroughly research any investment they choose to take on. Yes, it is the responsibility of the credit agencies to accurately rate securities. Investors should still, however, gather their own information to fully understand the risk/reward balance associated with a specific investment.

## **Accurate Credit Ratings**

Credit agencies were another group at the heart of the housing crisis. The credit agencies awarded mortgage-backed securities derived from Alt-A and subprime loans AAA ratings, despite their high risk factors. Credit agencies need to be held more accountable for the ratings they give to mortgage-backed securities. Inaccurate ratings lead to ill-informed investors. It is imperative that credit agencies accurately rate the investments that are used to create investment vehicles like mortgage-backed securities. Risk and all other important factors need to be taken into account.

If credit agencies are found guilty of being irresponsible with their security ratings, they need to be held accountable. Imposing fines, suspensions, or firing individuals within the agencies are a few examples of how this can be done. If the agencies and the individuals working for them are aware of the consequences, they will be much more likely to award securities with accurate ratings.

## **Homeowners and Education – A Two-Tiered System**

Homeowners are arguably the largest group within this discussion. We need to develop a structured program in this country to educate homeowners on how to be responsible with their finances. With any nationwide program, there are usually costs attached. Taxpayers, however, would much rather have their money put toward this type of education rather than toward bailing out the mortgage institutions when they are on the brink of failure.

The education infrastructure should be two-tiered. The first tier should be a program dedicated to educating young people, teenagers and young adults in particular. Classes on building credit, ways to save efficiently, and the basics of assets, liabilities, and equity would all be beneficial to the younger generation. Many people that make the decision to purchase a home are unaware of their credit score, have no savings, and know little to nothing about equity. If we teach these important tools to children early on, they will be much better prepared to own a home when they are older. There are credit building courses and seminars available today, but those are generally geared toward those who have been denied a loan because of poor credit and are working to raise their scores. It would make a lot more sense to teach people how to build and maintain high credit scores from the beginning so they can avoid bad credit altogether.

If an education system agrees to do so, these classes could be offered as a part of the core curriculum at middle and high schools across the country. Additionally, the classes could be offered at local banks or lending institutions. Individuals that attend the classes will benefit from the information and tools they acquire. The banks and lending institutions will benefit as well because the individuals may decide to go to the respective institution for a mortgage in the near future.

The second tier should be developing a class for first time home buyers. When an individual, a couple, or group of individuals decide to purchase a home for the first time, they should be required to take a course that covers all the essentials of owning a home. It should cover anything and everything it takes to own a home responsibly – the forms you need to sign at the closing, the loan details and requirements, mortgage insurance, interest accrual, equity, etc. When people purchase a home for the first time, they are

often unaware of all of the moving parts involved. It is easy to sign the bottom of several documents and own a home. It becomes an entirely different story when you get the first mortgage bill, have to make a costly home repair, or decide you want to sell or refinance. A first time home buyer class could solve these issues.

The US Department of Housing and Urban Development (HUD) currently aids first time home buyers by providing information on local programs and organizations, such as housing counseling agencies. It is one step to have the information available, but we need to take it a step further and make the programs a requirement. HUD could subsidize this effort to ensure that all individuals have access to a program locally. Like in the first tier, HUD could partner with local banks and lending institutions to provide these programs at little to no cost for those who attend.

Yes, a government subsidy will mean that taxpayer dollars will be used to fund this idea. As stated similarly before, taxpayers will much rather see their money go toward educating responsible homeowners as opposed to bailing out the irresponsible ones. This is only one suggestion though – the effort could be achieved in a variety of other ways.

Compare this education proposal to obtaining a driver's license. This process varies slightly from state to state. Take the state of Maine for example. In Maine, you are required to take a driver's education course before you can get a license. After you finish that course, you need to take a written test to show that you understand the rules of the road and how to drive safely. You are given a permit (as long as you are at least 15) and are required to drive under the supervision of a parent or guardian for a certain number of hours. Then, once you reach your sixteenth birthday, you can take a driving

test with a proctor from the DMV. If the proctor decides that you completed the test adequately and you have shown that you can responsibly operate a vehicle, you are granted a license.

Why do we require individuals to go through this process? We want to keep the public safe from irresponsible and unsafe drivers. We should do the same for obtaining a mortgage and owning a home. We should protect the public from irresponsible homeowners that default and foreclose on their homes. It is the taxpayers that more often than not carry the burden of these homeowners.

To stick with the driver's license analogy, car insurance companies offer a variety of discounts to drivers. These include discounts for being a good student or a safe driver. We should implement a similar program for homeowners. If a homeowner is able to demonstrate good paying history, paying his or her monthly payments in full and on time, we should provide them with incentives to continue their positive behavior.

One example of this could be allowing them to refinance at a lower cost. Refinancing is a beneficial option for many homeowners in an environment where prevailing interest rates are lower than they were when the homeowner originally financed the home. Refinancing can be a costly process though because there are a variety of fees attached. These include an application fee, a loan originator fee, an appraisal fee, and more. A program allowing one or more of these fees to be waived as a result of positive paying behavior would provide an incentive for individuals to be responsible homeowners.

## **The Value of Making an Initial Down Payment**

In today's market, some mortgages require no initial down payment. In return, home buyers will generally have to agree to a higher interest rate or other requirement, but they can still own a home without putting down any of their own money. This creates a significant accountability problem. The home buyer has not demonstrated any ability to save whatsoever. If the home buyer has not put any money down initially, this raises two questions. The first is: If this individual has not shown any ability to save, how will he or she be able to afford the upcoming monthly mortgage payments? The second: If the individual has not put any of his or her own money down on the mortgage, what incentive does he or she have to keep up with the monthly payments?

The new bipartisan proposal states that most mortgages will require a five percent down payment. This is a step in the right direction. The requirement will force home buyers to save at least a small portion of money before they can obtain a mortgage. Not only will this demonstrate their ability to save, but it will also lead to lower monthly payments. The higher a down payment a home buyer is willing to make, the lower their monthly payments will be and the amount of total interest they will pay over time will be smaller. Monthly payments will be more affordable, and the home owner will be more likely to make the payments and make them on time.

Another positive that stems from higher down payments is the ability to avoid paying the private mortgage insurance (PMI). PMI is the insurance that some homeowners must purchase in order to qualify for a loan. It protects the lender if the

homeowner fails to pay the mortgage. There are ways to avoid paying the PMI though, and a higher initial down payment is one of them.

One of the factors that a lender looks at evaluating creditworthiness is the loan-to-value (LTV) ratio. If your home you wish to purchase is valued at \$250,000 and you want to borrow \$200,000, your LTV is 80%. Typically, a lender will require you to pay the PMI if your LTV is above 80%. So, to avoid paying the PMI, you can make a down payment equal to or greater than 20% of the purchase price.

All parties benefit in this situation. The home buyer has demonstrated their ability to save and has reduced their amount of liability, and the lender has reduced their amount of risk with granting the loan.

### **Free Credit Reports – A New Law**

In the United States, there are three credit reporting agencies – Equifax, TransUnion, and Experian. Under federal law, every individual is entitled to one free credit report every 12 months from each of the agencies. In other words, each person in the country can receive three credit reports each year free of charge, one from each of the three companies.

While it is a requirement under law for the agencies to offer the free credit reports, it is not a requirement that people take advantage of the opportunity. This is something that we need to address. While the most effective option would be to implement a system where every individual is required by law to order their free credit reports each year, this is probably unrealistic. Instead, we could offer a tax break to any

individual who chooses to order their free credit report(s). The tax break could be done in a variety of ways. Some examples could be filing taxes in a lower bracket, getting a fixed discount, or receiving a higher tax return.

The IRS requires us to file taxes every year. The yearly tax law has been in effect since the 1800s, and people in the US are in the habit of completing their taxes every year by April 15. The same idea could be applied to credit reports. We can pick three dates every year that you must order your free credit reports by, if you want to receive the tax benefit. The three date system should be set up so that each person can order one credit report every four months; one from each of the companies. If we implement the system in this fashion, people will be much more aware of their credit rating and history.

This system will benefit the individuals that order their reports. These individuals will be more aware of their credit history and they will be able to continue to build positive credit, or begin to repair any poor credit they may have. They will also be motivated to participate in the program because of the tax incentive. When these people go to lender for their first mortgage, they will be significantly more aware and prepared during the credit check portion of the process.

## **Conclusion**

In order to make our mortgage market run as effectively and efficiently as possible, we need to make some significant changes. One of these changes is making the decision on whether or not to keep Fannie Mae and Freddie Mac intact, or to privatize the mortgage market. This idea is explicitly addressed in the latest legislative proposals. In the most recent proposal, an overhaul of the market been suggested, and the call for private capital has been made.

It is important that we solve the public vs. private debate, and it is important that we determine whether we need to continue to offer the 30-year fixed-rate mortgage. It is apparent though that the problems in our mortgage market lie much deeper than these issues. There are fundamental problems in the foundation of our mortgage market, including the lack of accountability, responsibility, and education among the major players in the market. These are notions that our current political leaders have failed to touch upon when writing the proposals and developing plans of action.

It is vital that we develop an infrastructure to educate new and potential home buyers in this country. We need to implement systems that hold credit agencies, lending institutions, real estate agents, and other parties accountable for their actions. We need to come up with incentive programs to show home owners that there are positive outcomes from responsible mortgage paying behavior. These ideas, among others, will allow for all parts of the mortgage supply chain to work smoothly. If all parts of a machine function properly, than the machine itself will be as effective and efficient as possible.

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## Glossary

**Adjustable Rate Mortgage (ARM)** - A type of mortgage in which the interest rate paid on the outstanding balance varies according to a specific benchmark. The initial interest rate is normally fixed for a period of time after which it is reset periodically, often every month.

**Aggregator** - A party involved within the secondary mortgage market that purchases mortgages from financial institutions and then securitizes them into mortgage-backed securities (MBS).

**Alt-A Mortgage** – A mortgage where the risk profile falls between prime and subprime.

**Conventional or Conforming Mortgage** - A mortgage that is equal to or less than the dollar amount established by the conforming loan limit set by Fannie Mae and Freddie Mac's Federal regulator, The Office of Federal Housing Enterprise Oversight (OFHEO) and meets the funding criteria of Freddie Mac and Fannie Mae. The term "conforming" is most often used when speaking specifically about a mortgage amount; however, the terms "conforming" and "conventional" are frequently used interchangeably.

**Department of Housing and Urban Development (HUD)** - A U.S. government agency created in 1965 to support community development and increase home ownership. HUD does this by improving affordable home-ownership opportunities, increasing safe and affordable rental options, reducing chronic homelessness, fighting housing discrimination by ensuring equal opportunity in both the rental and purchase markets, and supporting vulnerable populations.

**Fannie Mae (Federal National Mortgage Association – FNMA)** - A government-sponsored enterprise (GSE) that was created in 1938 to expand the flow of mortgage money by creating a secondary mortgage market.

**Fixed Rate Mortgage** - A mortgage that has a fixed interest rate for the entire term of the loan.

**Freddie Mac (Federal Home Loan Mortgage Corporation – FHLMC)** - A stockholder-owned, government-sponsored enterprise (GSE) chartered by Congress in 1970 to keep money flowing to mortgage lenders in support of homeownership and rental housing for middle income Americans.

**Ginnie Mae (Government National Mortgage Association – GNMA)** - A U.S. government corporation within the U.S. Department of Housing and Urban Development (HUD). Most of the mortgages securitized as Ginnie Mae mortgage-backed securities (MBSs) are those guaranteed by FHA, which are typically mortgages for first-time home buyers and low-income borrowers.

**Housing Bubble** - A run-up in housing prices fueled by demand, speculation and the belief that recent history is an infallible forecast of the future. Housing bubbles usually start with an increase in demand (a shift to the right in the demand curve), in the face of limited supply which takes a relatively long period of time to replenish and increase. Speculators enter the market, believing that profits can be made through short-term buying and selling. This further drives demand. At some point, demand decreases (a shift to the left in the demand curve), or stagnates at the same time supply increases, resulting in a sharp drop in prices - and the bubble bursts.

**Interest Rate Risk** - The risk that an investment's value will change due to a change in the absolute level of interest rates.

**Jumbo Loan** – A mortgage with a loan amount exceeding the conforming loan limits set by the Office of Federal Housing Enterprise Oversight (OFHEO), and therefore, not eligible to be purchased, guaranteed or securitized by Fannie Mae or Freddie Mac. OFHEO sets the conforming loan limit size on an annual basis.

**Leverage** - The amount of debt used to finance a firm's assets. A firm with significantly more debt than equity is considered to be highly leveraged.

**Mortgage Broker** - An intermediary who brings mortgage borrowers and mortgage lenders together, but does not use its own funds to originate mortgages. A mortgage broker gathers paperwork from a borrower, and passes that paperwork along to a mortgage lender for underwriting and approval.

**Mortgage-Backed Security** - A type of asset-backed security that is secured by a mortgage or collection of mortgages. These securities must also be grouped in one of the top two ratings as determined by an accredited credit rating agency, and usually pay periodic payments that are similar to coupon payments. Furthermore, the mortgage must have originated from a regulated and authorized financial institution.

**Negative Amortization** – An increase in the principal balance of a loan caused by making payments that fail to cover the interest due. The remaining amount of interest owed is added to the loan's principal, which ultimately causes the borrower to owe more money.

**Prime Mortgage** – A mortgage that is considered to be high quality.

**Private Label Securitization Channel** - Private-label mortgage backed securities are securitized mortgages that do not conform to the criteria set by the Government Sponsored Enterprises Freddie Mac, Fannie Mae and Ginnie Mae. The mortgages that make up these securities do not have the backing of the government and as a result carry a significantly greater risk.

**Secondary Mortgage Market** - The market where mortgage loans and servicing rights are bought and sold between mortgage originators, mortgage aggregators (securitizers) and investors. The secondary mortgage market is extremely large and liquid.

**Subprime Mortgage** – A mortgage with a higher perceived risk of default than prime and Alt-A loans.

**Tranche** - A division or portion of a pool or whole. In particular, an issue of bonds derived from a pooling of like obligations (as securitized mortgage debt) that is differentiated from other issues especially by maturity or rate of return.

*Most definitions were taken from the Investopedia Financial Dictionary.*

## References

**Fannie Mae - Federal National Mortgage Association (FNMA)**

<http://www.fanniemae.com/portal/index.html>

**Freddie Mac – Federal Home Loan Mortgage Corporation (FHLMC)**

<http://www.freddiemac.com/>

**Ginnie Mae – Government National Mortgage Association (GNMA)**

<http://www.ginniemae.gov/pages/default.aspx>

**U.S. Department of Housing and Urban Development (HUD)**

<http://portal.hud.gov/hudportal/HUD>

## **Author's Biography**

Zachary D. Porter was born in Nashua, NH on February 15, 1992. He grew up in Scarborough, ME and graduated from Scarborough High School in 2010. Zachary was a Finance major at the University of Maine. He is a member of Beta Gamma Sigma, and has received numerous academic scholarships, including the Presidential Distinguished Scholarship, Joseph Herbert Maine Business School Scholarship, Bank of America Scholarship, and William Freeman Snow Scholarship. Zachary also received the Finance Faculty Award from the University of Maine, and the Chicago Board of Options Exchange Award for Excellence in the Study of Options in Spring 2014.

After he graduates, Zachary plans to attend graduate school and attain a Master's degree in Finance. He also plans to complete the CFA program and become a Chartered Financial Analyst.