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The Role of Federal Housing Policy in Precipitating the 2008 Financial Crisis

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Abstact: This paper examines the role of federal housing policy in precipitating the 2008 Financial Crisis and provides an analysis of the ethical implications of these policies. First, it examines the history of organizations such as the Federal National Mortgage Association (Fannie Mae) and the Federal Home Loan Mortgage Corporation (Freddie Mac), as well as the evolution of the federal government's goal of promoting homeownership since the Great Depression. These homeownership goals ultimately spread subprime mortgages throughout the overall economy, thus creating the environment that allowed a larger financial crisis in 2008. The nature of these subprime mortgages, as well as their potential risks are investigated. An ethical analysis of these housing policies is combined with an analysis of the financial implications of the federal government's housing policies. This analysis is conducted from a utilitarian point of view, examining the positive and negative externalities of homeownership. The paper closes with an update on changes in federal housing policy, the state of the housing market today, and changes in mortgage lending practices since the financial crisis.

The widely accepted trigger of the 2008 Great Financial Crisis (GFC) is the proliferation of subprime mortgages, many of which subsequently went into foreclosure. Although Wall Street is often blamed for their proliferation, it should be noted the federal government also played a role in spreading subprime mortgages. Since the Great Depression, the federal government has largely pursued a policy of promoting homeownership, especially among lower- and middle-income individuals. Although well-intentioned, the attempt to promote homeownership among these disadvantaged populations was ultimately unethical because it spread subprime mortgages throughout the financial markets.

Fannie Mae and Freddie Mac: A History

In the US, federal housing policy is largely conducted by three agencies: the Federal National Mortgage Association (Fannie Mae), the Federal Home Loan Mortgage Corporation (Freddie Mac), and the Federal Housing Administration (FHA)[1] (Kohn 382). Fannie Mae was originally founded during the Great Depression, which had decimated mortgage credit throughout the United States. To revive homeownership rates, Fannie Mae was set up as a federally owned corporation that bought and securitized residential mortgages (Kohn 382). The FHA, meanwhile, was authorized to insure these mortgages with a standard mortgage contract that applied to all mortgages below a given value (Kohn 382). The collective efforts of these two organizations significantly increased the securitization of mortgages, thus creating a vibrant secondary market for these assets.

During its initial history, Fannie Mae was a government agency. However, Fannie's method of securitizing mortgages – that is, by borrowing money to purchase mortgages – was problematic for the government's balance sheet. The federal government privatized Fannie in 1968 to remove Fannie's debt from the government's balance sheet (Alford). Freddie Mac, which performs many of the same functions as Fannie Mae, was created two years later. Fannie Mae and Freddie Mac are both government-sponsored enterprises (GSE), or privately owned enterprises serving public goals. These two agencies dominate the mortgage industry.

Since the financial crisis, the two firms securitize more than 90% of all home mortgages each year (Kohn 391). They also offer a variety of mortgage products. Because of their GSE status, the two agencies enjoy a number of powerful regulatory advantages relative to other lending institutions. They do not pay state or local taxes, have a 8.5 billion dollar line of credit from the Treasury, and do not need to register their securities with the Securities and Exchange Commission (SEC), thus saving the GSEs many compliance costs (Kohn 391). The market also assumes the securities created by Fannie and Freddie have an implicit government guarantee, thereby allowing the two organizations to borrow closely to the Treasury rate (Kohn 391).

The Rise of Subprime Lending

[1] Federal housing policy is also determined by organizations like the Federal Home Loan Banks and the Government National Mortgage Association (Ginnie Mae), among others.

Since the founding of these institutions, the federal government has largely pursued a policy of promoting homeownership. Throughout the 60's and 70's, Fannie and Freddie generally purchased prime mortgages. Underwriting requirements for these mortgages were high, often requiring high down payments and strong credit histories (Wallison 109). The expansion into subprime mortgages began during the early 90s, after a particularly bad spate of publicity claiming the agencies' high underwriting standards prevented low-income borrowers from buying homes (Wallison 112). Such a claim was true. Obtaining a mortgage under these tight underwriting requirements inherently required a higher income. This pressure was further accentuated by studies from the Department of Housing and Urban Development (HUD) (Wallison 112). As a result, Fannie began its Opening Doors initiative, a program that promised to create $10 billion in new mortgages for low- and middle- income (LMI) borrowers through laxer underwriting standards (Wallison 114). This initiative was followed by its announcement of a "$1 trillion commitment", or a commitment to expand $1 trillion in mortgages for 10 million LMI borrowers (Wallison 114).

Unfortunately for the GSEs, these initiatives did not satiate the desires of legislators. A number of new studies, particularly one by the Federal Reserve Bank of Boston, further purported claims of discriminatory lending practices by Fannie and Freddie (Wallison 115). As a result, Congress passed the GSE Act in 1993, which established that 30 percent of the GSE's mortgage purchases had to be loans to lower- and middle- income (LMI) individuals, or individuals who earned less than 80% of the median income in the area in which they lived (Wallison 116). This piece of legislation also contained a directive ordering Fannie and Freddie to examine the possibilities of lowering underwriting standards, like lowering down payments to 5 percent or approving borrowers with poor credit histories (Wallison 117).

The affordable housing goals, that is, the 30% LMI requirement, were easily surpassed by the GSEs, who had already reached 34% by the end of 1993 (Wallison 128). As a result, HUD promptly began raising its LMI goals. For a mortgage to count towards the goals, HUD required that borrowers be new buyers of homes, not existing homeowners who were refinancing. HUD also created a partnership with private sector lenders called Fair Lending Best Practices Agreements (Wallison 137). These agreements incorporated "fair housing and equal opportunity principles into mortgage lending standards...banks and mortgage lenders [in the agreements] demonstrate a commitment to affirmatively fair lending. (Wallison 137)" Although this agreement did not explicitly say so, incorporating 'fair housing and equal opportunity principles' inevitably meant tight underwriting requirements, whether they be the 20% down payment, or the tight credit standards, would need to be loosened. After all, such standards inherently favor those with higher incomes. Countrywide Funding Corporation, one of the nation's biggest mortgage banks, was one of the first banks to enter these agreements. The corporation promising to originate one trillion dollars in mortgages to minority and low-income families (Wallison 138).

In 1995, the Clinton administration also unleashed its National Homeownership Strategy (Wallison 139). This strategy aimed to drastically increase homeownership rates over the course of four years. To do this, the Clinton administration increased the GSEs' LMI goal to 40 percent in 1996, from 30 percent, and to 42 percent for each of the succeeding four years (Wallison 139). Under the Bush administration, the LMI goal would be raised to 55 percent (Wallison 167). Within this strategy was an explicit intent to reduce underwriting standards, such as "reducing down payment requirements and interest costs…[and] increas[ing] the availability of alternative financing products in housing markets (Wallace 141)" These loans featured a number of lower underwriting requirements, like allowing the use of gifts or loans for down payments or focusing only on a borrower's last 12-24 months of credit history (Wallace 141). Because of these policies, the overall quality of loans originated by the FHA steadily declined: the percentage of loans to individuals with credit ratings below 660 increased from 42 percent in 1994 to 71 percent by 2000 (Wallison 146).

Subprime Mortgages in the Economy

The implications of lowering down payments is especially dangerous, as it reduces the extent to which an individual actually has to bear the upfront cost of a home. As a result, lower down payments incentivize individuals to purchase larger or second and third homes, thus further fueling the general rise in housing prices. The creation of these new housing goals caused both underwriting standards and subprime loans to proliferate throughout the financial system. A subsequent HUD ruling further expanded the market for subprime mortgage backed securities originated in the private sector. This ruling established that Fannie and Freddie could get credit to their LMI goals by buying private mortgage backed securities (PMBS) backed by mortgages to LMI borrowers (Wallace 162). Consequently, between 1997 and 2007, Fannie and Freddie collectively bought more than $700 billion in private mortgage backed securities backed by subprime mortgages (Wallison 162). They also purchased or originated over 1.5 trillion dollars in subprime loans (Wallison 180). The purchase of these assets over time is shown in Figures 1 and 2 of the Appendix.

During this time period, subprime loans mainly took on three forms: a fixed-interest mortgage, an adjustable rate mortgage, or an interest-only mortgage (Heyford). Like fixed-interest prime mortgages, fixed interest subprime mortgages feature a fixed interest rate on the principal of the loan. Fixed interest subprime loans generally feature a 40- or 50- year term as opposed to a 30- year term (Heyford). Unlike a fixed rate mortgage, a subprime adjustable rate mortgage (ARM) generally starts out with a fixed interest rate and later switches to a floating rate. One common example of an ARM[2] is a 2/28 mortgage, or a mortgage that features a fixed interest rate for two years before becoming an adjustable rate mortgage for 28 years (Heyford). The fixed interest rate is often known as a 'teaser' rate, as it is much lower than the adjustable rate. As a result, homeowners can often see massive increases in their monthly payments after the initial fixed interest rate period. The final type of subprime mortgage is an interest-only mortgage. For the initial five to ten years of the mortgage, the borrower only pays the mortgage's interest (Heyford). When this term ends, the borrower begins paying off the principal. The structure of the interest-only mortgage means that monthly payments can drastically increase after a borrower pays off the interest. Of the three types of mortgages, the adjustable rate mortgage is the riskiest.

By originating so many subprime mortgages and mortgage backed securities, Fannie and Freddie spread risky assets throughout the financial system. A number of studies indicated the high likelihood of foreclosure for a subprime mortgage. For example, a Federal Reserve study found that a subprime loan with a down payment lower than 20% was 51 times more likely to enter foreclosure than a prime loan with a 20% down payment or higher (Wallace 164). These housing policies also contributed to the inflation of the housing bubble. For example, reducing mortgage down payments means that borrowers can purchase larger and more expensive houses that they might not afford with a higher down payment. This is not a problem when housing prices are rising. When housing prices rise, homeowners can engage in cash-out refinances to take out equity from their housing values (Chen). For example, suppose a $225,000 mortgage is taken out on a home whose value is $225,000. After five years, the home's value rises to $250,000, while the mortgage balance is $200,000. In a cash-out refinance, an individual can take out a new loan equal to the house's price, that is, $250,000, to pay off the old mortgage's $200,000 mortgage balance. The borrower can use the $50,000 difference between the loan and the old mortgage's balance to finance other spending. Refinancing works especially well in a low interest rate environment, as one can reduce the share of monthly payments paid on interest. Although cash-out refinancing represents the

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[2] An adjustable rate mortgage is a loan with an interest rate that is periodically adjusted based on an index.

creation of new debt, it often has lower interest rates and tax advantages relative to other forms of debt, like credit card debt.

However, taking out large mortgages is a bad idea when housing prices fall. Homeowners cannot engage in cash-out refinancing, as they cannot take out a new mortgage larger than the value of the house (Chen). Going back to the prior example of the $225,000 house, suppose its value were to fall to $200,000. Homeowners cannot take out a new mortgage of $225,000 on a home whose value is $200,000. Homeowners could also wind up making mortgage payments higher than the actual value of their house. For example, suppose that a $1 million mortgage is taken out on a home whose value is $1 million. If the value of the home falls to $800,000, the homeowner will be paying a $1 million mortgage on a home whose value is only $800,000. In many situations, homeowners may choose to put their houses–particularly homes that might not be needed, like second or third homes–into foreclosure to avoid the conundrums associated with falling housing values.

If housing prices fall and interest rates rise, homeowners with adjustable rate mortgages face drastic increases in their monthly payments. They cannot refinance to a lower fixed interest rate to reduce their monthly payments, making foreclosure a very strong possibility. The same can be said about interest-only mortgages. The interest rate payments are much lower than the principal payments; as a result, households often refinance after paying off the interest on their mortgage to avoid the principal payments on their mortgage. Without the ability to refinance to a different mortgage, homeowners are forced to pay the principal on their mortgage, thus resulting in drastic increases in their monthly payments. In 2006, a rising interest-rate environment (the Treasury rate rose from 4.75% to 6.25% between September of 2005 and June of 2006) just so happened to coincide with falling home prices ("Interest Rates, Discount Rate for United States"). Subsequently, many holders of ARM mortgages began facing higher monthly payments. Without the ability to refinance, holders of interest-only mortgages also began seeing higher monthly payments. As a result, the percent of mortgages more than 90 days delinquent increased from approximately 2% in 2006 to 10% by 2009 (Housing Finance Chartbook). Foreclosures resulted in major asset losses by banks around the country, bringing many financial institutions – including Fannie and Freddie – to the brink of collapse and precipitating in the larger financial crisis (Nielsen).

The Housing Market Today

The housing market has made significant gains since the financial crisis. Although increases vary by city, median home values have increased by nearly $50,000 across the 50 largest US metros since 2009 (LendingTree). Although the federal government still aims to promote homeownership, it has since drastically lowered the LMI ratios that were so pernicious in spreading subprime mortgages. For example, Fannie Mae and Freddie Mac's LMI goals have fallen significantly from their high of 55% in 2007 (Fannie Mae Housing Goal Documents). From 2010 to 2017, their LMI goal was never higher than 30%. This change is reflected in figures 3 and 4 in the appendix. Mortgages, while safer, are now harder to obtain. Such a fact is reflected through the general decline in homeownership, which has fallen from approximately 68% in in January of 2006 to approximately 64% today, as well as the decline in the securitization of subprime mortgages ("Housing Market Trends 2019 – The Ultimate Guide."). Prior to 2007, the private sector purchased $1.6 trillion worth of such assets; in 2018, private securitization companies held only $361 billion in subprime and near-prime loans (Kapfidze).

Mortgage lending practices, meanwhile, have tightened since the financial crisis. As one can see in figures 5 and 6 of the appendix, many financial institutions immediately tightened their lending standards in 2008, whether through stricter examinations of borrowers' credit histories or the requiring of higher down payments. No financial institutions have loosened their subprime lending standards through 2007 to 2019. Financial institutions have also not seen a drastic increase in demand for subprime loans, as shown in figure 4. Data for these figures are obtained from the Federal Reserve's Senior Loan Officer Survey, a survey administered to all senior loan officers for all banks operating in the US with assets greater than 2 billion dollars.

Subprime Lending Since the Recession

Although subprime lending has lost much of its popularity since the financial crisis, lending to borrowers with poor credit has adopted a new name – nonprime mortgages (Olick). As with subprime loans, nonprime loans allow borrowers to have credit scores as low as 500 (Olick). However, unlike subprime mortgages, nonprime loans face tough underwriting standards. Higher risk borrowers will be required to make higher down payments; many lenders also choose to manually underwrite each loan, thus allowing them to assess borrowers' individual risks (Olick). These stricter underwriting requirements are further enforced by the Consumer Financial Protection Bureau (CFPB), which requires potential homebuyers be counseled by a representative approved by HUD (Heyford). Overall, it can be said that lending standards have become far stricter since the end of the financial crisis.

Fannie and Freddie, meanwhile, continue to remain under federal conservatorship. That is, the federal government has the right to manage the financial affairs of the respective agencies. In 2012, the Treasury also began seizing all profits generated by the companies (Morgensen). The federal government has mainly worked to reduce Fannie Mae and Freddie Mac's holdings of assets like mortgages and mortgage-backed securities. As of 2014, Fannie Mae's holdings have fallen from $867 billion in March of 2009 to $434 billion; Freddie Mac's holdings have fallen from $784 billion in March of 2009 to $468 billion ("The 2014 Strategic Plan for the Conservatorships of Fannie Mae and Freddie Mac). Further efforts aim to reduce the two GSE's exposure to credit risk. Although Fannie Mae and Freddie Mac have less holdings of mortgages and mortgage-backed-securities, they still play a major role in the economy. As shown in figure 5, the vast majority of residential mortgage-backed-securities are still originated by Fannie and Freddie.

The Ethics of Homeownership

Although many reforms have been made, the federal government still pursues a policy of promoting homeownership. From a utilitarian point of view, the federal government's attempt to promote homeownership is unethical. This effort ultimately forced Fannie Mae and Freddie Mac to engage in a variety of risky lending practices, thus contributing to the housing bubble and the larger foreclosure crisis. Beyond expanding mortgage credit through Fannie and Freddie's securitization efforts, homeownership is further promoted through tax incentives like the mortgage interest deduction. Given these initiatives, one cannot help but wonder: why is the federal government so eager to promote homeownership? Looking back to the financial crisis, is such a policy ethical?

The primary reason for this policy is the government's belief there are societal benefits to owning a home. Such a belief is recounted in President Bush's remarks to the National Association of Home Builders, in which he stated that "if you own something…you have a vital stake in the future of our country. The more ownership there is in America, the more vitality there is in America (Bush)." In other words, homeowners are more likely to be civically engaged than non-owners, whether through participation in politics or caring for the neighborhood. This policy of encouraging homeownership is further promoted by lobbyists from industries that benefit from the construction of homes, like realtors' associations, the construction industry, and Fannie Mae and Freddie Mac themselves.

The empirical evidence on the positive externalities resulting from homeownership is largely inconclusive. In a 2002 study, researchers Glaeser and Shapiro concluded there is a positive correlation between homeownership and activities with positive externalities, like gardening and civic participation (Glaeser). However, the researchers were unable to infer a causal relationship between these two activities (Glaeser). Individuals who choose to own homes may inherently be more inclined to engage in these activities; homeownership itself might not be the cause of these actions. Indeed, subsequent studies have put Glaeser and Shapiro's conclusions to doubt. A study by the Brookings Institute in 2010 found less evidence of this positive correlation. For example, they found no evidence that homeowners are more politically involved than renters (Engelhardt et al. 3). Although homeowners are more likely to perform home maintenance, this maintenance only occurs for interior, rather than exterior, repairs (Engelhardt et al. 4).

A number of negative environmental externalities also result from homeownership. Rented homes tend to be in multi-family units like apartment complexes and condos. By contrast, homes that are purchased under mortgages tend to be single-family units in the suburbs, which are larger and more energy-intensive (Glaeser).

The federal government also claims that homeownership represents a form of asset accumulation. Proponents of homeownership claim that owning a home represents the accumulation of an asset that provides returns after a mortgage is paid off. However, this argument only holds if two conditions are met: (1) housing prices must rise, and (2) the homeowner must successfully pay off her mortgage. The first condition, obviously, did not hold in 2008. As noted earlier, a whole host of negative consequences can occur if housing prices fall. If forced to foreclose a mortgage, an owner loses an asset and takes severe damage to his or her credit score. It should further be noted that owning a home is likely more expensive than renting. Homeowners cover all costs associated with maintaining a home. Substantial closing costs are also associated with taking out a mortgage. Overall, the ethical grounds for promoting homeownership are shaky from a utilitarian framework of analysis. The positive externalities of owning a home are questionable and the potential damages from defaulting on a mortgage are massive.

In summary, the federal government spread subprime mortgages throughout the financial system by expanding mortgage credit to lower- and middle- income individuals. To do this, the government raised Fannie Mae and Freddie Mac's LMI ratios, which forced the two firms to expand their issuing of subprime loans and their purchase of mortgage backed securities composed of underlying subprime mortgages. These two activities incentivized the private sector to expand its origination and securitization of subprime mortgages, thus further driving the housing bubble.

Fortunately, it appears that the federal government and the private sector have learned their lessons regarding subprime lending. Most lending institutions have drastically raised their underwriting standards for subprime loans. The federal government, meanwhile, has lowered Fannie Mae and Freddie Mac's LMI goals. Many of the poor financing practices that fueled the housing bubble in 2008 are no longer present. From a utilitarian point of view, Fannie and Freddie's LMI goals are far more ethically sound. Although these goals still promote the existence of some subprime lending, they are far less likely to create enough mortgage backed securities backed by subprime mortgages to create the financial catastrophe of 2008. The catastrophe of 2008 was not a result of the existence of subprime lending, but its proliferation.

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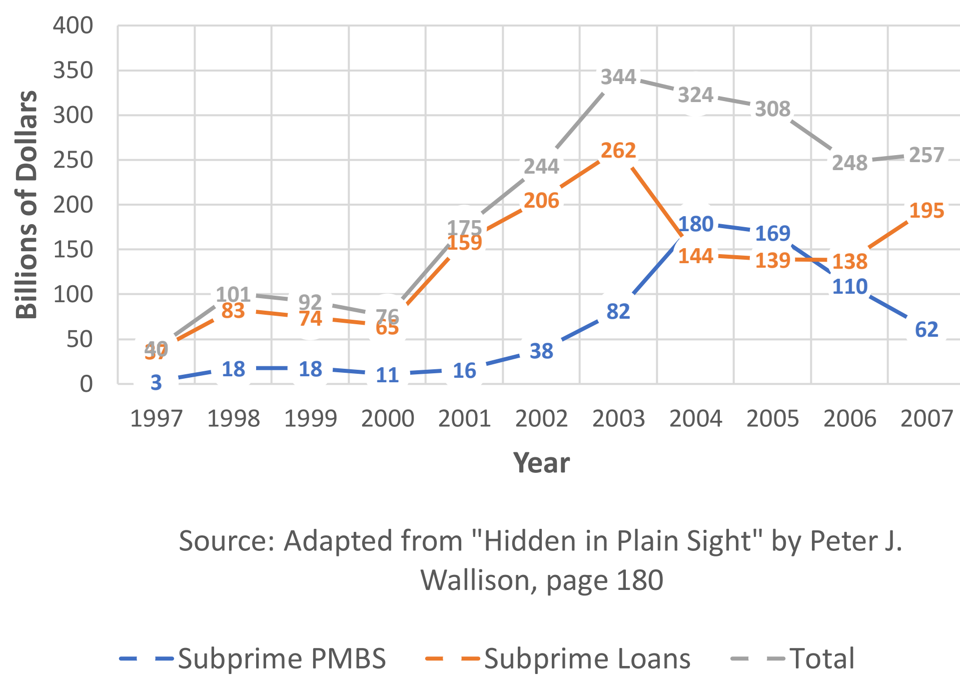
Appendix

FIGURE 1: FANNIE AND FREDDIE'S PER-YEAR ACQUISITIONS OF SUBPRIME PMBS AND SUBPRIME LOANS OVER TIME



Source: Adapted from "Hidden in Plain Sight" by Peter J. Wallison, page 180

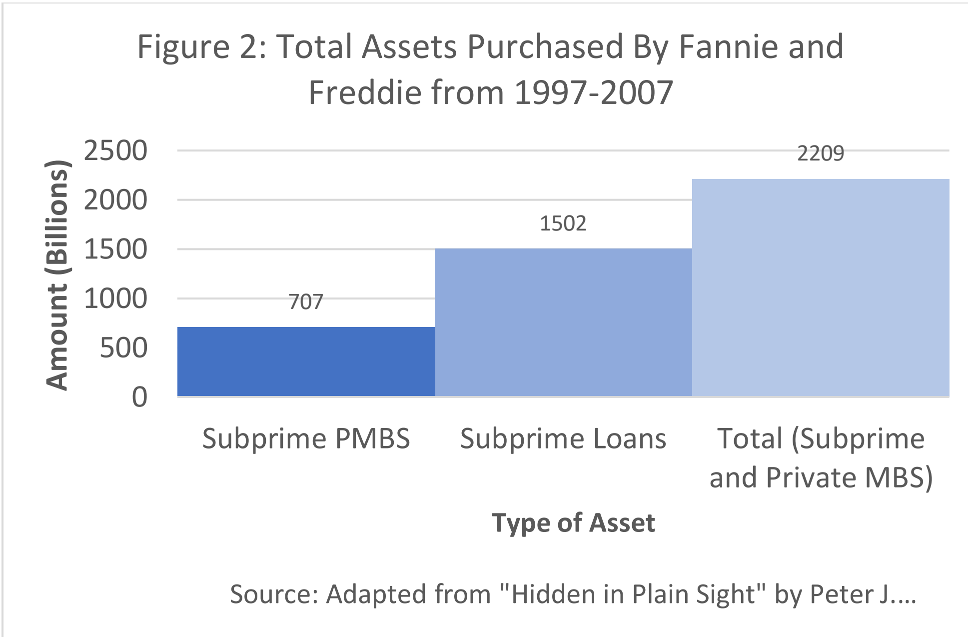


Figure 2: Total Assets Purchased By Fannie and Freddie from 1997-2007
Amount (Billions)
2500
2000
1500
1000
500
0
707
1502
2209
Subprime PMBS
Subprime Loans
Total (Subprime and Private MBS)
Type of Asset
Source: Adapted from "Hidden in Plain Sight" by Peter J....

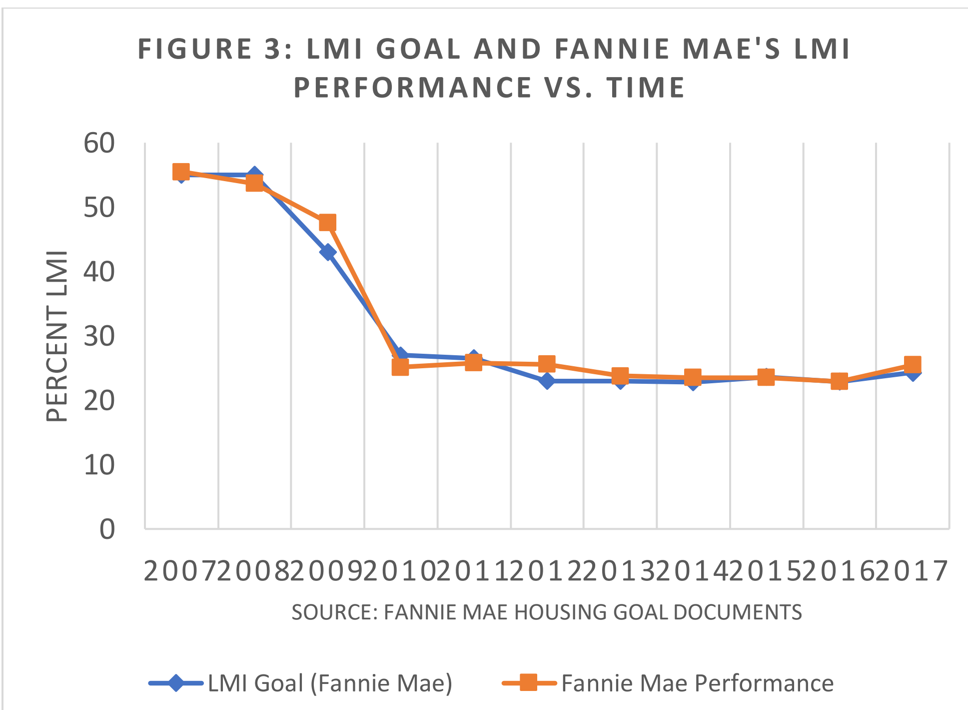


FIGURE 3: LMI GOAL AND FANNIE MAE'S LMI PERFORMANCE VS. TIME
PERCENT LMI
60
50
40
30
20
10
0
2007 2008 2009 2010 2011 2012 2013 2014 2015 2016 2017
SOURCE: FANNIE MAE HOUSING GOAL DOCUMENTS
LMI Goal (Fannie Mae)
Fannie Mae Performance

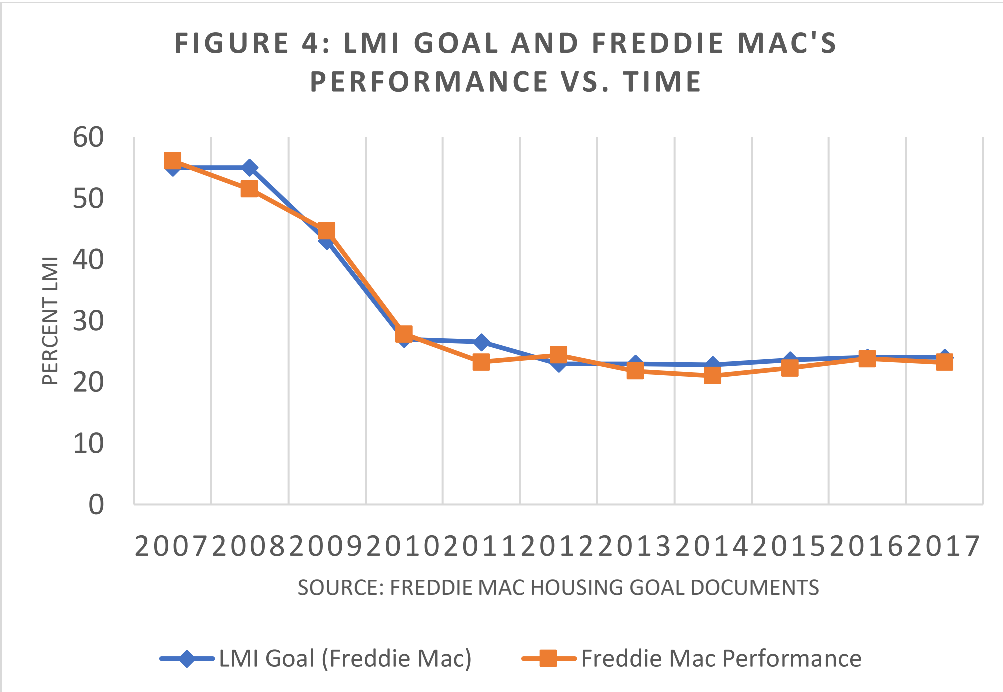


FIGURE 4: LMI GOAL AND FREDDIE MAC'S PERFORMANCE VS. TIME
PERCENT LMI
60
50
40
30
20
10
0
2007 2008 2009 2010 2011 2012 2013 2014 2015 2016 2017
SOURCE: FREDDIE MAC HOUSING GOAL DOCUMENTS
LMI Goal (Freddie Mac)
Freddie Mac Performance

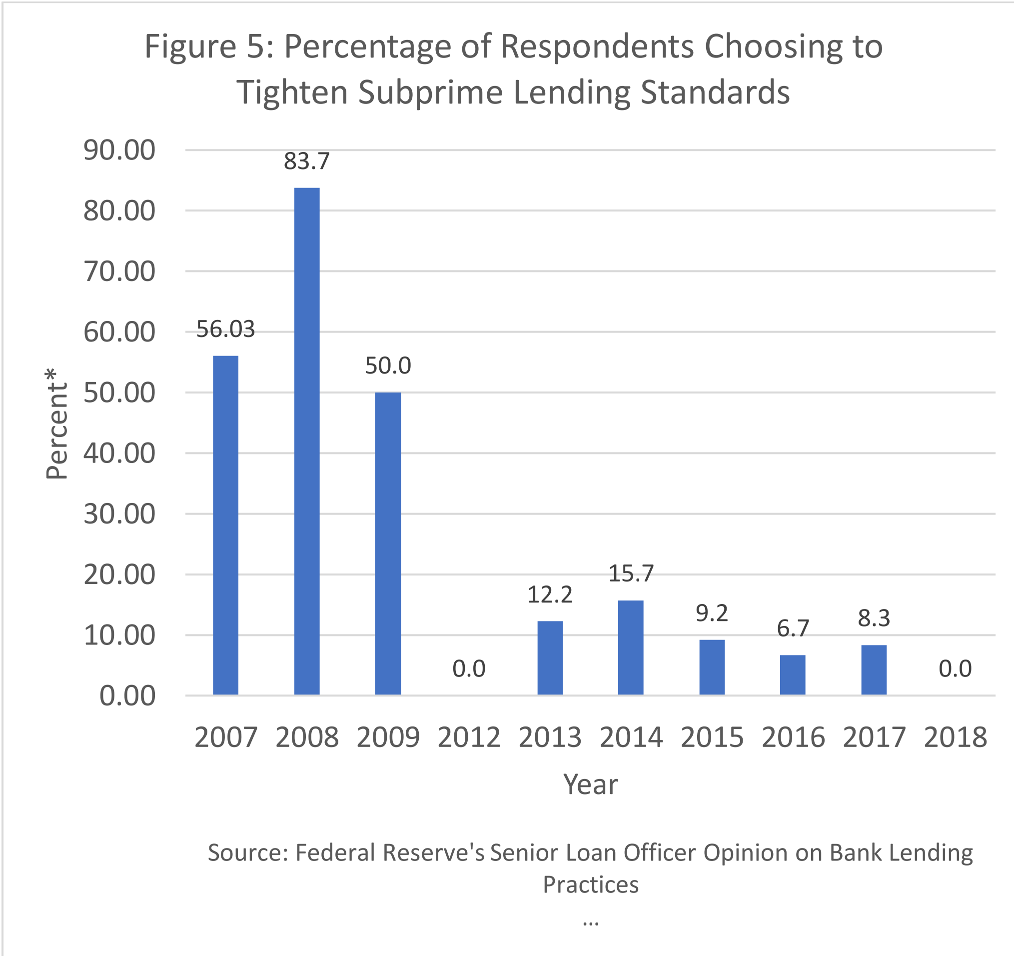


Figure 5: Percentage of Respondents Choosing to Tighten Subprime Lending Standards
Percent*
90.00
80.00
70.00
60.00
50.00
40.00
30.00
20.00
10.00
0.00
56.03
83.7
50.0
0.0
12.2
15.7
9.2
6.7
8.3
0.0
2007 2008 2009 2012 2013 2014 2015 2016 2017 2018
Year
Source: Federal Reserve's Senior Loan Officer Opinion on Bank Lending Practices
...

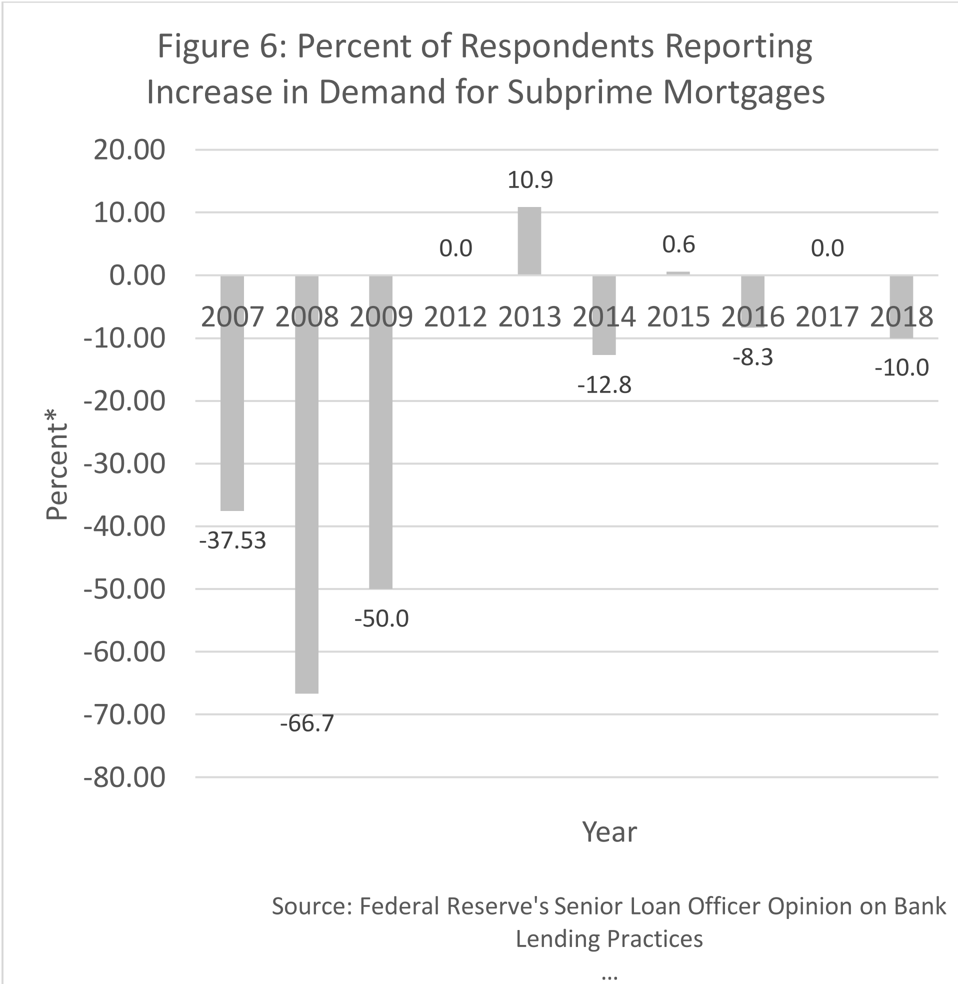


Figure 6: Percent of Respondents Reporting Increase in Demand for Subprime Mortgages
20.00
10.00
0.00
-10.00
-20.00
-30.00
-40.00
-50.00
-60.00
-70.00
-80.00
Percent*
2007 2008 2009 2012 2013 2014 2015 2016 2017 2018
-37.53
-66.7
-50.0
0.0
10.9
-12.8
0.6
-8.3
0.0
-10.0
Year
Source: Federal Reserve's Senior Loan Officer Opinion on Bank Lending Practices
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