Mortgage Fraud, the Great Recession, and Pension Fund Activism

Thomas Herndon*

January 1, 2017

1 Intro

Losses in private mortgage backed securities (MBS) were at the heart of the financial crisis of 2007-2008. The failure of the mortgages underlying these securities caused substantial losses for the institutions directly invested in them, such as pension funds, as well as loss of wealth for the communities in foreclosures occurred. The purpose of this paper is to discuss how pension fund activism can improve capital stewardship by helping to address the significant problems with the regulation of financial institutions revealed by the failure of private MBS. This paper will argue that losses in private MBS revealed substantial problems with asymmetric information throughout the structure of private mortgage securitization. These problems allowed financial industry insiders to use private information to profit at the expense of users of the financial system, often through outright fraud. This paper will then discuss how pension funds have tools unique to them, such as shareholder rights and access to capital, that would allow them to make a substantial contribution to activism aimed at improving protection from deception for all those who rely on the financial system.

This paper will be organized into two sections. The first section will describe how asymmetric information in the origination, distribution, and servicing portions of the private mortgage securitization supply chain allowed financial industry insiders to use deception and outright fraud to profit at the expense of borrowers, savers, and shareholders in financial institutions. This section will describe how executives of institutions originating loans to be privately securitized had perverse incentives to systemically conceal borrower risk in an effort to increase loan volume at the expense of quality. The section will then describe how sellers of private MBS concealed the fraudulent and negligent origination

^{*}Assistant Professor, Department of Economics, Loyola Marymount University. Email: thomas.herndon@lmu.edu. This paper was prepared for the session, "Rethinking Pension Fund Activism for Employment Equity and Capital Stewardship," at the Allied Social Sciences Association Conference, January 7th, 2017, Chicago. Conor Keith provided excellent research assistance for this paper.

practices from those who purchased these securities. Finally, the section will discuss how servicer's fee compensation created a conflict of interest that prevented loss mitigation for delinquent loans, and increased costs of foreclosure for investors. These problems caused a historic loss of wealth for borrowers subjected to fraudulent loans, investors in securities based on these loans, and shareholders of fraudulent financial institutions who either lost their investment, or were left to pay the fine. These losses show that pension funds have a common interest in promoting increased protection for all users of financial institutions.

The second section will describe how pension funds have unique tools available that would allow them to make a substantial contribution to efforts to activism aimed at preventing financial sector fraud, and recovering from the damage caused by it. This section will discuss two potential avenues for pension fund activism. The first is shareholder activism to prevent fraudulent or abusive financial practices. I argue that pension funds could use the tools available to them as shareholders in financial institutions to eliminate perverse incentives in executive compensation, develop stronger internal controls against fraud, monitor private information, and work with consumer protection groups, regulatory agencies, and the media to hold financial institutions accountable for abusive practices. Second, I argue that pension funds could help working class communities and communities of color recover from the Great Recession through working with non-profit financial institutions to purchase distressed mortgages, and restructuring the debt to allow families to remain in their home.

To be sure, the outcome of activism and organizing is based on a conflictual process, and hence is always uncertain. We should be sanguine about the ability of these efforts to completely eliminate fraud, or otherwise ensure the financial system serves social goals. Still, I argue pension funds possess powerful tools that could make meaningful contributions to activism. If we are fortunate, this may result in an improvement to the large shortcomings of current regulation of financial institutions.

2 Mortgage Fraud in Origination, Distribution, and Servicing during the Great Recession

The market for private MBS grew dramatically from 2002-2007, with the total outstanding balance of mortgages increasing from roughly \$1 trillion to \$2.7 trillion (Herndon, 2016a). This provided a large increase in the supply of credit for mortgages which drove the housing bubble (Mian and Sufi, 2014; Griffin and Maturana, 2014). As the housing bubble collapsed, losses in these securities were at the epicenter of the financial crisis of 2007-2008. A large body of academic research (Black, 2013; Crotty, 2009; Griffin and Maturana, 2016; Herndon, 2016a,b; Jiang, Nelson and Vytlacil, 2014; Mian and Sufi, 2015; Piskorski, Seru and Witkin, 2015; Taub, 2014), government reports (FCIC, 2011; FBI, 2007), court records, and popular accounts (Hudson, 2010; Dayen, 2016) has now shown that a significant portion of losses in these securities was caused by

mortgage fraud all along the originate to distribute supply chain. For example, as early as 2004 the FBI warned of an epidemic of mortgage fraud which could cause a financial crisis (Black, 2013). Additionally, the Financial Crisis Inquiry Commission (FCIC) concluded that a systemic breakdown in accountability and ethics was an essential contributor to the crisis. The report cites the dramatic increase in the filing of suspicious activity reports with the FBI as evidence of the widespread increase in mortgage fraud in the years leading up to the crisis. The filing of suspicious activity reports grew 20 fold between 1995-2005, and then doubled again between 2005-2007 (FCIC, 2011). This section will review this literature to describe the severe problems in the origination, distribution, and servicing portions of the private securitization supply chain.

Fraud at Origination

Mortgage fraud at origination occurred when loan officers and underwriters used a variety of techniques to falsify borrower financial information such as appraisal value inflation, unreported second liens, income overstatement, and misreported owner occupancy status. This was done to conceal borrower leverage and risk to qualify borrowers for larger loans than they would otherwise be able to obtain. This section will begin by describing how fraud originated within the industry, rather than by dishonest borrowers. The section will then describe how short term compensation for financial industry executives created perverse incentives for fraud.

The direct falsification of borrower financial information was largely committed by loan officers and underwriters within the industry, who coached borrowers on the specific ways to falsify their information, rather than by borrower's who defrauded otherwise honest lenders. For example, based on investigations and fraud reports, the FBI found that 80% of fraud cases involved collusion or collaboration with industry insiders (FBI, 2007). Interviews in lawsuit documents with loan officers or underwriters also described coaching borrowers. One loan officer who originally worked at subprime originator Argent, but then was employed at Wells Fargo, said that, "[t]he loan officers were stretching the truth. They would say [to the borrower], 'You need to make this much.' So, of course, the borrower would say, 'Ok, I make that much'."¹ Even worse, a loan officer from Ameriquest, Omar Khan, explicitly described deceiving borrowers who were not comfortable with falsifying their information. He stated that, "Every closing was a bait and switch, because you could never get them to the table if you were honest," and further elaborated, "There were instances where the borrower felt uncomfortable about signing the stated income letter, because they didn't want to lie, and the stated income letter would be filled out later on by the processing staff."² Perhaps most infamously, workers at one Ameriquest branch dubbed their break room the "Art Department" because it contained all

¹Interview with confidential witness from General Retirement System of the City of Detroit v. Wells Fargo et al, 2009.

² National Credit Union Administration Board v. Wells Fargo Bank, National Association, 2014.

the tools needed to falsify documents (Hudson, 2010).

Interviews with loan officers and underwriters also described immense pressure coming from top level executives to falsify documents in order to expand loan volume at the expense of loan quality, as well as penalties for refusing to do so. For example, one confidential witness was employed as an Underwriter at Wells Fargo Home Mortgage in San Bernardino from 2002 to 2005, and Senior Underwriter from May 2005 to April 2006. This underwriter described Wells Fargo as a, "loan producing machine." They stated that, "[Managers] always said that we didn't have to approve loans we didn't want to approve, but if you didn't do them you wouldn't be around very long. We knew what we had to do to keep our jobs." They elaborated that, "sometimes it felt like I was in sales, because they wanted production, period."³ In addition to firing employees who refused to originate risky loans, those who called attention to risky or fraudulent practices were also punished. For example, Washington Mutual CEO Kerry Killinger hired and fired nine different compliance officers from 2000-2007 (Taub, 2014).

An obvious question is why executives would pressure loan officers, underwriters, and compliance officers to facilitate fraudulent loans, when it was these employees' raison d'etre to ensure that such practices did not occur. Fraud at origination occurred because executives at these institutions had perverse incentives to increase short-term profits based on the volume of loans originated, rather than the quality of loans. This was because executives were able to receive large bonus compensation for short term gains, for example through stock options, that were not required to be paid back if the firm went bankrupt.⁴ Fraud was particularly useful for increasing short-term revenues because riskier loans had higher closing costs and interest rates. This allowed originators to report high short term fee revenue which could be extracted before losses occurred. This pattern of fraud is also similar to that which occurred during the S&L crisis (Black, 2013).

Another incentive to originate risky loans is that many of these loans could be sold for packaging into MBS for a higher price than safer loans (Taub, 2014). This has led to calls for financial regulation that requires originating institutions to have "skin in the game" by holding a portion of the mortgages they originate on their balance sheets. However, these skin in the game regulations would likely not have stopped fraud at origination. Indeed, many of the originators did hold a large portion of the toxic loans in their portfolio, and went bankrupt as a result. These institutions in fact had substantial skin in the game which caused their failure. However, their executives did not. The pattern of extreme executive compensation, despite the failure of their firms, could reasonably be described as "looting." Looting occurs when owners or executives have limited liability for a firm, and maximize short-term pay-outs at the expense of the long run health of

³Interview with confidential witness from General Retirement System of the City of Detroit v. Wells Fargo et al, 2009.

⁴Perverse incentives due to extreme bonus compensation were not limited to this market. They were a consistent feature of the expansion of the financial system following deregulation (Crotty, 2009).

their firm, resulting in bankruptcy. Looting has been described as bankruptcy for profit (Akerlof and Romer, 1993). Preventing looting would likely have required increased monitoring of institutions, limits to extreme compensation packages, and criminal prosecution of top executives (Black, 2013).

Fraud in Distribution

Fraud also occurred in the distribution phase of the supply chain because sellers of MBS concealed these fraudulent origination practices from investors in order to make the securities marketable. The sale of loans that were originated with fraudulent practices, or simply negligent underwriting, typically violated market regulations and contractual obligations. These rules require the accurate disclosure of loan quality; however, these practices obviously were not disclosed.⁵ The basic issue underlying fraud in distribution was succintly summarized in a recent ruling by District Judge Denise Cote,

"This case is complex from almost any angle, but at its core there is a single, simple question. Did the defendants accurately describe the home mortgages in the Offering Documents for the securities they sold that were backed by those mortgages? Following trial, the answer to that question is clear. The offering documents did not correctly describe the mortgage loans. The magnitude of falsity, conservatively measured, is enormous.

Given the magnitude of falsity, it is perhaps not surprising that in defending this lawsuit defendants did not opt to prove that the statements in the Offering Documents were truthful,"⁶ [emphasis added].

A recent body of empirical research has also estimated the incidence of mortgage quality misrepresentation in private MBS. For example, using conservative

⁶From ruling in *Federal Housing Finance Agency v. Nomura Holding America*, May 11th, 2015. The FHFA sued 16 trustees for misrepresentations made in offering documents and prospectuses for securities sold to Fannie Mae and Freddie Mac. All but Nomura and Royal Bank Scotland settled out of court, and the court ruled against these institutions in trial on May 11th, 2015. Accessed on June 26th, 2015 from: https://s3.amazonaws.com/s3.documentcloud.org/documents/2077713/ruling-on-mortgage-fraud-in-2008-crisis.pdf

⁵ The typical offering documents included prospectus supplements which described the quality of collateral underyling the securities. These documents tended to include boilerplate language similar to, "Wells Fargo Bank's underwriting standards are applied by or on behalf of the Wells Fargo Bank to evaluate the applicant's credit standing and the ability to repay the loan, as well as the value and adequacy of the mortgaged properties collateral" [General Retirement System of the City of Detroit v. Wells Fargo et al, 2009]. If the trustee discovered a breach of these representations and warranties, such as falsification of borrower financial characteristics, violations of assurances that loans were originated following proper underwriting standards, or that the appraisal value for the collateral was inflated, the "trustee must notify the appropriate parties and take steps to enforce the responsible parties obligation to cure, substitute, or repurchase the defective mortgage loans" [National Credit Union Administration Board v. Wells Fargo Bank, National Association, 2014]. It should be noted that origination practices that could be argued were simply negligent or dubious, but did not involve outright falsfication, were still fraudulent in distribution because they violated the representations made in offering documents.

measures Griffin and Maturana (2016) find that 48% of loans that were privately securitized contain at least one of three relatively easy to quantify forms of fraud: appraisal inflation, unreported second liens, and misreported owner occupancy status. They find that loans with one of these forms of fraud were 51% more likely to become delinquent.

My research has also shown that this fraud was also particularly costly to investors in these securities. Total losses to foreclosure in the private label MBS was roughly \$500 billion dollars from 2008-2012. My research found that loans that lacked documentation of income, which were so notoriously fraudulent that they were known colloquially within the industry as "Liar's Loans," accounted for \$350 billion of these losses. Liar's loans were 25% more likely to default than a control group of full documentation loans, and lost roughly \$20,000 more in foreclosure. Therefore, the higher than expected losses to investors due to this single form of fraud account for roughly one-fifth of total losses to foreclosure, or \$100 billion (Herndon, 2016a).

In contrast to the problems with originating institutions that could reasonably be described as looting, the problems in the market for securities based on these loans are more accurately described as a "market for lemons." The term "lemon" refers to a car which is poor quality, or more generally to any product that is poor quality. A market for lemons is a market where good and bad quality products are sold, but where the buyers cannot know beforehand whether they are buying a good or bad product. In these markets bad products tend to push out good products because good and bad products must sell at the same price (Akerlof, 1970). Over the course of the housing bubble, it is clear that bad practices in this market had pushed out good practices because a "significant degree of misrepresentation exists *across all* reputable intermediaries involved in the sale of mortgages," [emphasis in original] (Piskorski, Seru and Witkin, 2015).

Litigation is the most direct method for defrauded investors to recover losses and deter future fraudulent activities. To this end, diverse institutions that bought fraudulent MBS, including pension funds, government agencies, and mortgage insurers, have initiated a large amount of litigation against all major sellers of MBS.⁷ To be sure, there have been several notable settlements. The latest tally of recoveries I was able to locate is from 2014, and puts the total amount recovered at roughly \$100 billion (Levitin, 2014). Since then, there have been several additional settlements, which would raise the total amount recovered to perhaps around \$130-\$140 billion. However, I argue that the outcome of these settlements shows the limits of private investors to recover damages or

⁷ An older list of 58 lawsuits filed between 2008-2012 can be found in the appendix to (Piskorski, Seru and Witkin, 2015). However, this list is not exhaustive, as the 2009 class action lawsuit used in this paper was not on the list (*General Retirement System of the City of Detroit v. Wells Fargo et al*, 2009). In addition, several similar lawsuits have been filed for violations of the False Claims Act or the Financial Institutions Reform, Recovery and Enforcement Act (FIRREA), for actions such as misrepresenting the quality of loans to entities which insured these loans. A list of 31 lawsuits can be found at: http://www.buckleysandler.com/uploads/1082/doc/Recent-FIRREA-Cases_BuckleySandler-LLP_v20.pdf. Accessed August 12th, 2015.

create a credible deterrent against future fraud.

First, the settlement total shows that in general purchasers of MBS have not been able to enforce their contractual rights and recover damages from those that defrauded them. On the face of it, the aggregate settlement amount of roughly \$130-\$140 billion is much less than the \$500 billion lost to foreclosures in the private label RMBS market from 2007-2012. Additionally, from the perspective of any single party defrauded in the purchase of RMBS, these lawsuits required large commitments of time and money for an uncertain outcome. This suggests that all parties faced significant limits to their ability to recover damages.

More significant for pension funds, the distribution of settlements shows that private investors were able to recover much less than any other party. Private MBS litigation settlements only account for roughly 2% of the total settlement amount as of 2014, or roughly \$1.67 billion. Indeed, private MBS litigation has only been able to recover roughly 4% of the amount that GSE's were able to, and one-quarter of what monoline insurers have been able to recover (Levitin, 2014). To be sure, some public pension funds, such as CalPERs have recently recovered large amounts as part of DoJ settlements. CalPERs was able to recover roughly \$250 million from Bank of America, \$261 million from JP Morgan, \$88 million from Citigroup, \$100 million from Moody's, and \$125 million from S&P.⁸ However, private pensions and other investors have had difficulty recovering the full amount of damages. Indeed, at roughly \$800 million, the settlements received by CalPERs alone are roughly 50% of the total recovery by private MBS legislation as of 2014.

Second, this body of litigation has also shown the limits of any party to impose substantive deterrents for fraudulent behavior on financial crises. First, while I have not been able to locate data on the profits generated by the financial sector in the sale of MBS, the financial penalties imposed seem far too small to make the costs of engaging in fraud higher than the payoff for a financial institution. Additionally, there has been a noticeable lack of prison sentences for executives who oversaw MBS fraud, or any other form of fraudulent behavior for the activities that led to the financial crisis. In stark contrast, there were over 1000 felony convictions during the S&L crisis (Black, 2013). Without criminal prosecution of the actual executives responsible for fraud, it is unlikely fraud will be deterred. Fines that are imposed on institutions will be paid for by shareholders and employees, rather than the executives who committed the actual abuses.

Fraud in Servicing

Servicer misconduct also negatively affected investors by increasing the number of foreclosures which occurred, and increasing the costs of foreclosure. Servicers often charged borrowers arbitrary fees and misapplied payments so that they could charge delinquency fees. This prevented delinquent borrowers from curing, and even pushed borrowers who never missed payments into foreclosure.

⁸CalPERs settlement totals can be found: https://www.calpers.ca.gov/page/newsroom/ calpers-news

Once in foreclosure, it was in servicers' financial interest to impose arbitrary fees that would be recovered out of foreclosure proceeds prior to any revenue given to investors. For example, in December 2013 one of the largest servicers, Ocwen, settled a complaint with the Consumer Financial Protection Bureau and attorney generals from 49 states for \$2 billion. CFPB director, Richard Cordray, stated that, "Ocwen took advantage of borrowers at every stage of the process." The complaint documented how Ocwen "took advantage of homeowners with servicing shortcuts and unauthorized fees," "deceived consumers about foreclosure alternatives and improperly denied loan modications," and "engaged in illegal foreclosure practices."

At the root of servicer misconduct was a conflict of interest based on servicer's cost-plus compensation structure. Servicer's compensation is not aligned with the investors interest in maximizing the net present value of the loan. Instead, servicer's choice of modification or foreclosure, and type of modification, is based on the incentives in their own compensation structure. Servicers receive three main types of income: a fixed-rate fee based on the unpaid principal balance of a loan; float income from the period in which the servicer receives monthly payments but has not remitted them to the trust; and ancillary fees. The main types of ancillary fees include delinquency fees and reimbursement for costs associated with foreclosure, such as property maintenance fees, title search fees, process serving fees, appraisal fees, other legal fees, or any of a number of other fees. There is no effective oversight of the reasonableness of these fees, and servicers are able to be reimbursed for these fees out of the proceeds of the foreclosure sale prior to any revenue being given to investors (Levitin and Twomey, 2011; Thompson, 2011; COP, 2009).

Lack of oversight of fees charged in foreclosure caused two main problems for investors during the waves of foreclosures which followed the collapse of the housing bubble. First, these fees can be quite lucrative and create an incentive to foreclose, even when it is in the investors best interest to modify, because modification is costly. Modification is costly for three reasons. First, modifications require substantial labor costs such as reunderwriting the loan. Second, if the modification reduces monthly payments through reducing the unpaid principal balance, the servicer loses its fixed rate fee. Third, servicers must advance missed payments while the loan is delinquent. They can recoup these advances in cases of foreclosure or if the loan becomes current, but not in many types of modifications.

In contrast to the costs associated with modifications, the fees associated with managing delinquency and foreclosure can be quite lucrative. For example, analysis of Ocwen showed that late fees and loan collection fees made up 18% of it's revenue in 2008 (Thompson, 2011). There can also be an incentive to keep a borrower delinquent so that the servicer can receive revenue from delinquency fees, until the cost of financing advances outweighs the revenue received from the fees. This has been described as keeping the borrower in a default fee "sweatbox" (Levitin and Twomey, 2011). Essentially, the servicer's choice between "modification and foreclosure is a choice between limited fixed-price income and a cost-plus contract arrangement with no oversight of either the

costs or the plus components," (COP, 2009). Even worse for the investor, this cost-plus structure creates an incentive to foreclose in a more costly manner than less, because servicer's compensation is positively related to costs and has the senior claim on foreclosure sale revenue. Cost-plus compensation is typically banned from government contracts due to these perverse incentives (Levitin and Twomey, 2011; COP, 2009).

The second problem created by this compensation structure is that it provides incentives for servicers to choose types of modifications that promote their own interests, even if these modifications have a higher redefault rate and hence do not promote the investor's interests. For example, reducing monthly payments through principal reduction has been shown to be the most effective form of modification at preventing redefaults (Haughwout, Okah and Tracy, 2009; Goodman et al., 2012). However, servicers are disincentivized to perform principal reduction because it reduces the amount of revenue they receive from their fixed-rate servicer fee, which is assessed on the unpaid principal balance of the loan. In contrast, servicers prefer modifications that increase the unpaid principal balance of the loan through capitalizing missed interest payments and fees because this increases the revenue from their fixed-rate fee. But these modifications that increase borrower indebtedness have higher redefault rates, which result in costly foreclosure for investors. Providing unsustainable modifications designed to redefault can also be a source of profit for servicers, because they can receive the lucrative foreclosure fees described above (Thompson, 2011; COP, 2009).

An obvious question is what is preventing market competition from correcting the principal-agent problem by creating incentives for "good" servicers who can meet the needs of investors? Market competition is unlikely to self-correct the misalignment of incentives because of investors in these securities lack the ability to monitor servicers, and the mechanism to fix abuses. Investors cannot effectively monitor servicers because they typically lack the information to do so. In general, investors do not have access to the detailed loan-level data necessary to evaluate the reunderwriting of modifications. Additionally, investors often lack the mechanism to address abuses when detected due to collective action problems. Investors faced two main collective action problems for addressing problems. First, many pooling and servicing agreements for private MBS had collective action clauses requiring a super majority of investors to amend any contractual terms. However, there were typically large numbers of geographically dispersed investors party to most of the major securitizations. Second, the investors often had different interests regarding the type of loan modification they would desire because they received compensation based on different parts of the cash flow, such as principal or interest payments. Therefore, some modifications would be favorable to some subset of investors, while wiping out a different subset of investors. These information and collective action problems effectively undermined investors ability to perform meaningful oversight of servicers (Levitin and Twomey, 2011).

The findings in my research are also consistent with the reports of servicer's conflict of interest. I found that foreclosures were much more frequent than

modifications, with 88% more foreclosures occurring. These foreclosures were also incredibly costly to investors, on average losing between 45%–65% of the original balance. I also found that the overwhelming number of modifications favored servicers's interests over investors' by increasing debt. Modifications which resulted in net reduction in debt were incredibly rare, with only 5% of modifications reducing net debt. Indeed, modifications in this market resulted in a total net increase to borrower debt balances of \$20 billion from 2008-2014. The amount of debt added per modication also grew from 2010-2014, roughly doubling from 5.6% to 11.3% of the original balance, or from \$16,000-\$26,000. Additionally, the growth in debt added per modication is consistent with increased fees assessed by servicers, but not increased missed interest payments, because missed interest payments per modication was constant from 2010-2014 (Herndon, 2016b).

3 What Is To Be Done?

The discovery of the problems in the previous section caused private investors to abandon the market for private MBS. New originations in this market disappeared entirely in 2009, and have since only existed at a low level. This caused to total outstanding balance of this market to shrinking to less than \$1 trillion in 2014, from it's \$2.7 trillion peak in 2007. Currently, the mortgage market is roughly 80% government supported, with GSE's guaranteeing roughly 60% of mortgages, and the FHA insuring another 20% (Levitin and Wachter, 2013). However, going forward almost all reform proposals for the secondary market envision a subtantially increased, if not exclusive, role for private institutions.

A common theme of the description fraud in the previous section was that the problems of asymmetric information that allowed insiders to defraud outsiders negatively affected all users of the financial sector. Financial institution insiders used their access to private information to profit at the expense of borrowers, savers, and shareholders in their institutions. Therefore, going forward pension funds have a common interest with all other users of the financial sector in eliminating these problems. This will be particularly more important if the private role in the secondary market is substantially increased in the near future. This section will describe how pension funds have unique tools that could enable pension fund activism to make a significant contribution to preventing fraud in the future, and recovering from the damage. Based on the tools available to pension funds, this section proposes two areas for activism that could potentially be fruitful: shareholder activism and debt relief.

3.1 Shareholder Activism and Corporate Governance

In this section I describe how tools available to pension funds in their position as a shareholder could make significant contributions to fraud prevention. This includes both preventing fraud that directly affects pension funds as shareholders in looted institutions, as well as fraud and abusive practices affecting users of services offered by the financial institution in which a pension fund is invested. In particular, pension funds could help to eliminate fraud through preventing perverse incentives in executive compensation packages, strengthening internal controls for fraud prevention such as compliance managers, and direct monitoring of fraudulent or abusive activities. Direct monitoring could also work in tandem with consumer protection groups, regulatory agencies, and the media to hold financial institutions accountable for abusive practices. To be sure, the ability of shareholder activism to achieve its goals relies on the outcomes of conflicts between parties, and thus is always uncertain. That being said, these particular tools should provide real points of leverage to be used in this conflict.

As we saw in the discussion of fraud in the origination of mortgages, perverse incentives for executives drove them to loot their companies. Looting occurs when executives have limited liability and the ability to extract large payments from their institutions, especially compensation such as stock options which do not have to be paid back in event of insolvency. This gives them the incentive to generate large short-term cash flows based on fraudulent behavior and extreme leverage, which can then be extracted from the institution before the losses inevitably come due (Black, 2013). If shareholders are able to be effectively organized, they have some formal power to monitor executive compensation and limit opportunities for extracting short-term cash flows. A simple mechanism for this would be "clawback" clauses that require executives to repay compensation in the event of firm failure. At the most extreme, this may require organizing to elect different members to the board of directors of the corporation. To be fair, limiting excessive executive compensation might prove to be extremely difficult. For example, there is some evidence to show that proxy resolutions to limit executive compesation have had less sucess than other resolutions (Daily, Dalton and Rajagopalan, 2003). Still, if shareholders could successfully organize to limit of the ability of executives to extract payments, this would make a substantial contribution to fraud prevention.

Next, shareholder activism can strengthen internal controls to prevent fraud. Successful looting of financial institutions by executives requires them to use their power to disarm internal controls such as auditors and compliance managers. The financial crisis produced numerous reports from auditors and compliance managers who were fired for reporting fraud. For example, Kerry Killinger from Washington Mutual went through nine seperate compliance managers from 2000-2007. Perhaps most ironically, an auditor named Ed Parker from Ameriquest earned the nickname of "Darth Vader" from the loan origination staff through his attempts to prevent origination of fraudulent loans. Instead of being promoted, he was fired (Taub, 2014). Fraud would not have been able to remain concealed or cause the same extent of damage had these whistleblower's efforts received the support of shareholders or the board, rather than punishment. Without defeating these internal controls, top management will not be able to defraud borrowers, savers, and shareholders in their institutions.

Shareholders in corporations also often have greater access to private information than either consumer protection groups or often regulatory agencies. Direct monitoring by shareholders can play a large role in ensuring that the general public is not defrauded because successful fraud relies on concealing private information (Daily, Dalton and Rajagopalan, 2003). Shareholders could possibly work in tandem with consumer protection groups, regulatory agencies, and the media. Consumer protection groups and regulatory agencies can be early warning groups who sound the alarm for abusive practices. Shareholders could use their access to inside information to confirm these practices. They could then work with the media and regulatory agencies, such as the Consumer Financial Protection Bureau (CFPB), to hold the executives responsible accountable for these abuses.

3.2 Debt Relief?

Pension fund activism could also speed recovery in working class communities and communities of color through offering debt relief. I argue that pension funds should work with local non-profit financial institutions to buy distressed mortgages, and modify these mortgages to allow families to remain in their homes. Essentially, this proposal is for pension funds to help provide debt relief similar to the New Deal era Homeowner Loan Corporation (HOLC). At the height of the Great Depression in 1933, roughly one-half of the mortgages in the country were in default, and 10 percent were in foreclosure. To address this crisis, the HOLC bought up defaulted mortgages, wrote down the negative equity in these loans, and restructured the terms of the mortgages to create a more stable structure. In its first year, the HOLC received applications from 40 percent of all mortgage holders, and refinanced half of them (Levitin and Wachter, 2013). The HOLC is widely regarded as being highly successful, and I argue that pension funds could work with local non-profit institutions to provide similar debt relief. This would help prevent further foreclosures, and stimulate local aggregate demand through facilitating household deleveraging.

Currently, the largest government program for selling distressed loans has been the Distressed Asset Stabilization Program (DASP), which sells distressed loans insured by the FHA. In 2010 HUD began a pilot test for this program, and formally launched it in 2012. In 2014, Freddie Mac began to test pilot programs for distressed loan sales, with Fannie Mae following suit in 2015. As of 2016, these programs have sold roughly 100,000 distressed mortgages, with an unpaid principal balance of \$18 billion, across 175 different pools. The distressed mortgages in the DASP program also overwhelmingly come from working class and minority communities, with 84 percent of mortgage notes in the DASP program coming from communities with the share of minorities above the national median (Edelman, Zonta and Rawal, 2016). Therefore debt relief would be well suited for helping these communities deleverage and recover. Currently, there are roughly 800,000 distressed loans guaranteed either by the FHA or the GSE's, so there is still ample room to increase the scale of purchases (Edelman, Gordon and Desai, 2014; Goodman et al., 2016). To date, the distressed mortgage market has been dominated by for profit financial institutions such as private equity firms. The two largest are Lone Star Funds, a private equity group which has purchased 23% of DASP loans, and Bayview Asset Management, which has

purchased roughly 20% of DASP loans and is funded by Blackstone Private Equity (Goldstein, 2015).

However, similar to the description of servicer misconduct in the previous section, there have been significant consumer protection complaints lodged against these for profit financial institutions for refusing to modify loans. For example, borrowers have reported being in the process of negotiating a modification prior to sale of the distressed loan, but having the new servicer disregard the ongoing negotiations and initiate foreclosure. Additionally, servicers have been criticized for refusing to offer modification with principal reduction. HUD had sold the loans at a discount with the intent that private buyers would grant borrowers principal reduction, however this has rarely occurred. For example, Fitch Ratings reviewed loan modifications done by Calibre Home Loans, the lead servicer for Loan Star Funds, during the first half of 2015. Fitch Ratings was unable to locate even a single instance of a completed modification with permanent principal reduction. Instead modifications included reductions in payments or only required interest payments for a temporary period of up to 5 years. At the end, any deferred unpaid principal or unpaid interest were added back to the principal balance of the loan, resulting in higher payments than prior to modification. Therefore these modifications only added temporary relief, before often leaving borrowers more in debt than before. In a letter to HUD, the refusal to grant sustainable modifications in favor of foreclosures led Massachusetts Representative Michael Capuano (D) to remark that HUD sales, "may turn out to be an efficient new mechanism for increasing evictions," (Goldstein, 2015).

However, non-profit financial institutions have had a better track record of working to keep families in their homes. Several well established community development financial institutions, which are non-profit financial institutions with a social mission, have also participated in HUD sales. For example Hogar Hispano Inc (HHI), founded by the National Council of La Raza, purchases delinquent mortgages and works with families to keep them in their home. HHI has already helped homeowners reduce \$4 million in principal through modifications (Dreier and Sen, 2015). Additionally, Boston Community Capital has worked with the community organization Springfield Noone Leaves to provide debt relief to homeowners (Kinney, 2013). While non-profits have shown better performance at keeping families in their homes, to date they have only been able to purchase roughly 2% of loans from DASP (Edelman, Gordon and Desai, 2014). To increase their participation, in 2015 HUD created new rules for the DASP bidding to give non-profits a "first-look," or the first option to purchase vacant properties, and took steps to create a non-profit only auction (Edelman, Zonta and Rawal, 2016).

I argue that pension funds could play a useful role in partnering with CDFIs or other non-profit institutions by providing the funding necessary to substantially increase their scale of participation in this market. Unfortunately, to date some public pensions have been funding the private equity institutions in this market, such as Lone Star (Goldstein, 2015). However, funding institutions with better loss mitigation practices could greatly help working-class families and communities of color. The recovery in these communities is still tepid, and thus vulnerable to increased foreclosures and predatory servicer practices. Debt relief would allow pension funds to prevent abusive practices in these communities, and stimulate recovery.

4 Conclusion

This paper has described how the failure of private MBS at the core of the 2007-2008 financial crisis revealed substantial agency problems associated with asymmetric information, including widespread fraud. Financial reform since the crisis, such as the restrictions on mortgage origination enacted by the CFPB, has helped to mitigate the worst of the excesses. However, the perverse incentives generated by asymmetric information have not entirely been eliminated. Moreover, there has been a noticeable lack of criminal prosecution of the executives who committed fraud to serve as a deterrent. This suggests that mortgage fraud, or other forms of abuse by the financial services industry, could continue to be a persistent problem negatively affect borrowers, savers, and shareholders in financial institutions. This would be especially dangerous if private participation in MBS increases to its pre-crisis levels, as is proposed in most secondary market reforms. Therefore, defrauded parties have a common interest in organizing to enact significant changes to financial regulation. Using the unique tools available to pension funds, I hope they will be able to make a substantial contribution to activism aimed at preventing fraud by the financial services industry in the future.

References

- Akerlof, George. 1970. "The Market for "Lemons": Quality Uncertainty and the Market Mechanism." *The Quarterly Journal of Economics*, 488–500.
- Akerlof, George, and Paul Romer. 1993. "Looting: the Economic Underworld of Bankruptcy for Profit." Brookings Papers on Economic Activity, 1-73.
- Black, William K. 2013. The Best Way to Rob a Bank is to Own One: How Corporate Executives and Politicians Looted the S&L Industry. University of Texas Press.
- **COP.** 2009. "Foreclosure Crisis: Working Towards a Solution." Congressional Oversight Panel.
- **Crotty, James R.** 2009. "The Bonus Driven Rainmaker Financial Firm: How These Firms Enrich Top Employees, Destroy Shareholder Value and Create Systemic Financial Instability." *Political Economy Research Institute Working Paper*.

- Daily, Catherine M, Dan R Dalton, and Nandini Rajagopalan. 2003. "Governance Through Ownership: Centuries of Practice, Decades of Research." Academy of Management Journal, 46(2): 151-158.
- Dayen, David. 2016. "Chain of Title." The New Press.
- **Dreier, Peter, and Aditi Sen.** 2015. "Hedge Funds: The Ultimate Absentee Landlords." *American Prospect.*
- Edelman, Sarah, Julia Gordon, and Aashna Desai. 2014. "Is the FHA Distressed Asset Stabilization Program Meeting it's Goals?" *Center for American Progress.*
- Edelman, Sarah, Michela Zonta, and Shiv Rawal. 2016. "Protecting Communities on the Road to Recovery." Center for American Progress.
- **FBI.** 2007. "Financial Institution Fraud and Failure Report Fiscal Years 2006 and 2007."
- FCIC. 2011. "The Financial Crisis Inquiry Commission Report: Final Report of the National Commission on the Causes of the Financial and Economic Crisis in the United States." *Financial Crisis Inquiry Commission*.
- Goldstein, Matthew. 2015. "As Banks Retreat, Private Equity Rushes to Buy Troubled Home Mortgages." New York Times DealBook.
- Goodman, Laurie, Erik Cribbs, Eric Stein, Don Mullen, and Julia Gordon. 2016. "HUD and GSE Nonperforming Loan Sales: Are Further Improvements Necessary?" Urban Institute Sunset Seminar.
- Goodman, Laurie S, Lidan Yang, Roger Ashworth, and Brian Landy. 2012. "Modification Effectiveness: The Private Label Experience and Their Public Policy Implications." Washington: Pew Commissioned Research Paper, 15.
- Griffin, John M, and Gonzalo Maturana. 2014. "Did Dubious Mortgage Origination Practices Distort House Prices?" Available at SSRN 2485308.
- Griffin, John M, and Gonzalo Maturana. 2016. "Who Facilitated Misreporting in Securitized Loans?" *Review of Financial Studies*.
- Haughwout, Andrew, Ebiere Okah, and Joseph Tracy. 2009. "Second Chances: Subprime Mortgage Modification and Re-Default."
- Herndon, Thomas. 2016a. "Liar's Loans, Mortgage Fraud, and the Great Recession." Dissertation at University of Massachusetts Amherst.
- Herndon, Thomas. 2016b. "Punishment or Forgiveness? Loan Modifications in Private Label Mortgage Backed Securities from 2008-2014." Dissertation at the University of Massachusetts Amherst.

- Hudson, Michael W. 2010. The Monster: How a Gang of Predatory Lenders and Wall Street Bankers Fleeced America-and Spawned a Global Crisis. Macmillan.
- Jiang, Wei, Ashlyn Aiko Nelson, and Edward Vytlacil. 2014. "Liar's loan? Effects of origination channel and information falsification on mortgage delinquency." *The Review of Economics and Statistics*.
- Kinney, Jim. 2013. "Homeowners Call for Mortgage Help at 'Springfield Noone Leaves' Advocacy Group." Springfield Republican.
- Levitin, Adam. 2014. "MBS Settlements Following the Money." Credit Slips.
- Levitin, Adam J, and Susan M Wachter. 2013. "The Public Option in Housing Finance." UC Davis Law Review, 46: 1111-1655.
- Levitin, Adam J, and Tara Twomey. 2011. "Mortgage Servicing." Yale Journal on Regulation, 28(1).
- Mian, Atif, and Amir Sufi. 2014. House of Debt: How They (and You) Caused the Great Recession, and How We Can Prevent It from Happening Again. University of Chicago Press.
- Mian, Atif R., and Amir Sufi. 2015. "Fraudulent Income Overstatement on Mortgage Applications during the Credit Expansion of 2002 to 2005." National Bureau of Economic Research Working Paper 20947.
- Piskorski, Tomasz, Amit Seru, and James Witkin. 2015. "Asset Quality Misrepresentation by Financial Intermediaries: Evidence from the RMBS Market." The Journal of Finance, 70(6): 2635-2678.
- Taub, Jennnifer. 2014. "Other People's Houses." Yale University Press.
- **Thompson**, **Diane**. 2011. "Foreclosing Modifications: How Servicer Incentives Discourage Loan Modifications." *Washington Law Review*.