Changes to the Federal Home Loan Bank System since the Great Recession

A Case Study

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List of Acronyms

ACLI -- American Council of Life Insurers

AIG – American International Group

CDO – Collateralized Debt Obligation

CRS – Congressional Research Service

CUNA -- Credit Union National Association

FDIC – Federal Deposit Insurance Corporation

FHA – Federal Housing Administration

FHFA – Federal Housing Finance Agency

FHFB – Federal Housing Finance Board

FHLB – Federal Home Loan Bank

FIRREA – Financial Institutions Reform, Recovery, and Enforcement Act of 1989

FSLIC – Federal Savings and Loan Insurance Corporation

GSE – Government-Sponsored Enterprise

HERA – Housing and Economic Recovery Act

ICBA – Independent Community Bankers of America

MBA – Mortgage Bankers Association

MBS – Mortgage-Backed Security

MPF – Mortgage Partnership Finance

MPF Xtra – Mortgage Partnership Finance Xtra

NAFCU -- National Association of Federal Credit Unions

OIG – Office of the Inspector General

P&C – Property and Casualty

REIT – Real Estate Investment Trust

SEC – Securities and Exchange Commission

USDA – United States Department of Agriculture

WaMu – Washington Mutual

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Abstract

Changes to the Federal Home Loan Bank System since the Great Recession
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The Federal Home Loan Bank (FHLB) System underwent changes following the recent financial crisis known as the Great Recession (2007-2009). Specifically, the FHLB System has been lending more to insurance companies, has become more involved in its mortgage partnership finance (MPF) programs, will see an unprecedented merger between two Federal Home Loan Banks (FHLBanks), and could potentially realize a major overhaul to its membership requirements. Its membership requirements changes could result in path dependency with increasing returns for the FHLB System. This paper will focus on these occurring and potential changes. These observances allude to the fact that the customer bases, products offered, and structure of the FHLB System could have shifted since the beginning of, or will shift as a result of, the Great Recession. With an entity as large as the FHLB System, the risks posed by these changes could be systemic.

CHAPTER 1: INTRODUCTION

The Federal Home Loan Bank (FHLB) System is a government-sponsored enterprise (GSE) created in 1932 for the purpose of allowing more Americans to achieve home ownership. The FHLB System is comprised of 12 regional banks located in Boston, New York, Pittsburgh, Atlanta, Cincinnati, Indianapolis, Chicago, Des Moines, Topeka, Dallas, Seattle, and San Francisco. The Federal Home Loan Banks (FHLBanks) lend money to banks (and other select institutions) so that those banks can issue mortgages, and each FHLBank is technically its own entity. Operating as individual entities allows each FHLBank to offer slightly different products to its member banks, but for the most part the products of the FHLBanks are very similar.

Respective member institutions cooperatively own each FHLBank, and FHLBank stock is not publicly traded. The System does have loose central guidance in the form of the Council of FHLBanks. The FHLB System receives the funds it lends to banks from issuing debt securities through the Office of Finance, but does have a line of credit with the U.S. Treasury. FHLBanks enjoy what is referred to as a ‘super lien’ on banks. This means in the event a bank fails and it owes money to an FHLBank, the FHLBank can collect repayments first, even before the Federal Deposit Insurance Corporation (FDIC). Since 1932, the FHLB System has slowly undergone changes in its activity, but following the recent financial crisis (or Great Recession) these changes have been more frequent and may prove to be more sweeping. Since the start of the Great Recession in 2007, the FHLB System has sought out new customer bases, offered new

products and services, and could see changes to its structure and membership requirements. While the FHLBanks can revert to their traditional customers and products in the long run, changes to its membership requirements may instill path dependency into the FHLB System. These new markets, products, and other changes could have a significant impact on the economy of the United States and subsequently the global economy.

GSEs are perceived to be quasi-governmental entities. This happens because while they can be privately owned, as is the case with Fannie Mae and Freddie Mac, they are publicly chartered and exist to serve a public service, such as providing demand in the secondary mortgage market. GSEs are typically thought of as intermediaries as they fulfill a purpose deemed important by the federal government, but are not themselves government entities. However, these public charters provide GSEs with a funding advantage over their private competitors in the form of an implicit guarantee. The implicit guarantee means it is implied, although not explicitly stated that the federal government will cover their debt in the event of a default. This implicit guarantee allows GSEs to borrow at cheaper rates than its private competitors because investors believe their debt to be less risky as the government will cover any shortfalls.

Fannie Mae, Freddie Mac, and the FHLB System comprise the U.S. Housing GSEs, whose primary mission is to provide banks with the necessary liquidity to issue mortgages. The FHLB System accomplishes this task by making over-collateralized loans to banks known as ‘advances’ while Fannie Mae and Freddie Mac accomplish this task by purchasing mortgages directly from banks. The housing GSEs were a focal point of the Great Recession and took heavy criticism for their perceived role in the crisis. In

2008, Fannie Mae and Freddie Mac were given federal bailouts because they were on the brink of insolvency.

Even before 2008, but especially after, there has been debate about whether GSEs should exist. Some believe entities should be explicitly public or explicitly private to remove any ambiguity, especially when that ambiguity results in a funding advantage. These critics argue 2008 is proof that the GSE is a failed business model, and perhaps homeownership is not as socially beneficial as previously thought. Homeownership was seen in 1932 as a community and economic pillar, similar to how it is seen today. However, some view this as an antiquated notion. Prior to 2008, housing values had been steadily climbing for many years, and housing was seen as a relatively safe way to increase one's net worth. During the Great Recession, the value of homes plummeted and perhaps changed the way Americans view homeownership as the path to prosperity.

With total combined assets of over $900 billion as-of December 31, 2014 (Federal Home Loan Banks, 2014), the FHLB System is a large, important, and understudied entity. Eric Weiss, who is a specialist in financial economics at the Congressional Research Service (CRS), was able to confirm this when he said there is "not a concern around Washington" (telephone interview, October 15, 2013) about the Federal Home Loan Bank System because currently it is in pretty good financial shape and has a sound [cooperative] structure. He believes there may be interest in the System after Fannie and Freddie are sorted out, but the CRS has not received any questions related to it in quite some time.

The purpose of this paper is to outline the changes to the FHLB System as a result of the recent financial crisis, and the paper will be broken up into several sections. First, I

will give an overview of some changes made to Federal Home Loan Bank System in response to financial crises. The next several sections will discuss the changes to the FHLB System as a result of the Great Recession, specifically lending to insurance companies, its mortgage partnership finance (MPF) programs, and what the future may hold for the FHLB System. Finally, I will offer some concluding remarks.

CHAPTER 2: FHLB SYSTEM CHANGES DUE TO FINANCIAL CRISES

The FHLB System has seen several economic downturns since its creation in 1932, but the two that have had the biggest impact have been the Savings and Loan Crisis of the late 1980s and early 1990s, and the Great Recession. Before the Savings and Loan Crisis, the FHLB System could only lend to savings and loans[1], savings banks, and insurance companies. This was by design as these entities could not borrow from the Federal Reserve until the early 1980s and so the FHLB System was the easiest source of liquidity for these entities. However, once savings and loans became eligible to borrow from the Discount Window, one could argue the need for the FHLB System to exist disappeared.

The Federal Reserve and the FHLB System provide similar services in the form of lending to depository institutions (both entities to a variety of other things, but there is significant overlap in this area), and this overlap could create competition, arbitrage, or other undesirable outcomes. It's true that having both serve as lenders to depository institutions does better ensure that these depository institutions have ample access to

[1] A savings and loan is a type of bank that is traditionally concentrated in mortgages and mortgage-related assets.

credit and liquidity, but perhaps having only one quasi-government agency perform this task would be safer and more efficient.

Under the Financial Institutions Reform, Recovery, and Enforcement Act of 1989 (FIRREA, which was legislation prompted by the Savings and Loan Crisis), the FHLB System acquired the ability to lend to commercial banks and credit unions. According to Hoffman and Cassell (2010), Herbert Hoover had wanted commercial banks to be eligible for FHLB membership in 1932, but the bankers themselves had no interest (p. 54). Historically, commercial banks have had little incentive to issue residential mortgages to low net worth individuals, which could be the source of their lack of interest in FHLB membership.

Hoffman and Cassell (2010) add that the Savings and Loan Crisis had resulted in significant financial losses for the FHLB System, which combined with a shrinking customer base as many savings and loans were failing, put a strain on the FHLB System (p. 55). To exacerbate matters, Congress mandated the FHLB System helped finance the Resolution Funding Corporation (REFCorp). The purpose of REFCorp was to bailout savings and loans and to cover deposits that were insured under the Federal Savings and Loan Insurance Corporation (FSLIC, or the savings and loan equivalent of the FDIC). As a result of the obligation to help finance REFCorp, Congress likely wanted to ensure the FHLB System was able to stay solvent, which led to allowing commercial banks to join the FHLB System. Interestingly enough, Hoffman and Cassell (2010) point out that the FHLBanks had to initially recruit commercial bank members and in order to do that had to add a wider variety of advances and other products (p. 55). Further, before the Savings

and Loan Crisis, the FHLB System owned Freddie Mac, and FIRREA spun Freddie off to be its own entity.

The FHLB System played an integral role during the Great Recession as banks preferred to borrow from it instead of the Federal Reserve. Some have claimed that borrowing from the Federal Reserve comes with a stigma, but borrowing from the FHLBanks does not carry this stigma. This was evidenced by the fact that the FHLB System lent more to banks than the Federal Reserve throughout the crisis. Before the Great Recession, the FHLB System was not seen as a primary bank lender, but now that banks know they can rely on it as a source of liquidity, its role may have permanently changed.[2]

The Federal Home Loan Bank System is currently regulated by the Federal Housing Finance Agency (FHFA), which was created as a part of the Housing Economic Recovery Act (HERA) of 2008. The Federal Home Loan Bank Board regulated the FHLB System from its creation in 1932 until 1989, when that agency was dissolved as a result of the Savings and Loan Crisis. From 1989 until 2008, the Federal Housing Finance Board (FHFB) regulated the FHLB System, and was dissolved as a result of the Great Recession. All three regulators have been criticized for not providing adequate supervision into the activities of the Federal Home Loan Banks, and the first two were dissolved because of financial crises. While the FHFA has had more authoritative power than its predecessors, the FHLB System has still taken on new customers and products since 2008.

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[2] For more information on this topic, see Ashcraft, Bech, and Frame's (2008) The Federal Home Loan Bank System: The Lender of Next-to-Last Resort?

One frequently cited reason for the Great Recession was that banks and other financial firms made unsafe loans to consumers then packaged the loans into mortgage-backed securities (MBS) and collateralized debt obligations (CDOs). When the underlying loans of these products defaulted, investors took heavy losses. Banks are now required to uphold higher credit standards in lending as a result, and they have also been hesitant to lend to even qualified borrowers in fears of possible defaults. This has resulted in fewer loans issued, and thus, the need for fewer borrowings from the FHLBanks. According to Combined Financial Reports, total FHLB System advances went from an average of $780 billion in 2008 and 2009 to an average $396 billion from 2011-2013. Advances never dipped below $480 million from 2002-2006, and so the lack of advances after the Great Recession was not simply a return to normal activity.

Net interest income, which is interest earned minus interest paid, went from an average of $5.3 billion in 2008 and 2009 to an average of $3.8 billion from 2011-2013. Net interest income hadn't been below $4 billion since 2003. Even though net income went from $1.2 billion in 2008 to $2.5 billion in 2013, the decline in net interest income implies the FHLBanks are earning less income on their advances than in the past. Since banks make up a large majority of FHLB members (roughly 95 percent) and current advances are well below pre-crisis levels, one can assume the decline in advances and net interest income is related to a lack of demand for advances at banks, as well as a low interest rate environment. This lack of demand has forced the FHLBanks to turn to alternative income sources, such as the MPF programs, as well as lending to insurance companies. While it's true the MPF programs and lending to insurance companies existed before the worst part of the Great Recession in the fall of 2008; these two business lines

will likely have to become more prominent revenue sources (at least in the short run) while lending to banks continues to stagnate. In addition, the incurred investment losses and concentration in one member institution put the FHLBank of Seattle in serious financial trouble before, during, and after the Great Recession, and this trouble spurred the merger with the FHLBank of Des Moines. In short, the Great Recession has caused the FHLB System as a whole to rethink its short-term business strategy, as well as directly led to a merger between two FHLBanks.

CHAPTER 3: INSURANCE COMPANIES

As previously stated, the FHLBanks need to find other revenue sources while banks continue to be hesitant to lend. One such source is lending to insurance and captive insurance companies. A captive insurance company exists to insure its parent company's assets (as a form of self-insurance), and parent companies do not need to be in the banking or insurance sector to form captives. According to Fitch Ratings (2013), all twelve FHLBanks lend to insurance companies, and this lending was at year-end 2012 less than ten percent of the total outstanding advances at all except four FHLBanks (Des Moines, Indianapolis, New York, and Topeka).

Insurance company exposure at FHLBanks seems to be concentrated in the Midwestern (Des Moines, Indianapolis, and Topeka) and New York regions. The reason for this concentration is unclear. It may be due to favorable tax or regulatory treatment for insurance companies in these areas, geographic origins of insurance companies, or marketing efforts and business strategies of these four FHLBanks. Perhaps there are

simply more insurance companies located in these regions and so there are more customers to borrow from the FHLBanks. Research regarding the concentration of insurance company exposures at the Midwestern and the New York FHLBanks would complement this paper.

Insurance companies pose threats to the FHLBank System in two primary ways. First, insurance company failures are very expensive, possibly because they understate their liabilities, which could be a function of a lack of transparency. Part of this cost could be put on the FHLBanks, as they may not be able to get back their advances since they don't enjoy a 'super lien' on insurance companies. Second, captive insurance companies open the door to non-bank, non-insurance company customers that are unfamiliar to the FHLBanks.

The FHLB System has been more involved in lending to insurance companies since the start of the Great Recession than at any other point since its creation in 1932. According to a presentation given by representatives from the Federal Home Loan Banks of Indianapolis and Pittsburgh to the American Council of Life Insurers (ACLI) in October of 2013, insurance companies make up 3.6 percent (273 out of 7,558) of all FHLBank members (Griffin and Spiker, 2013). According to FHLB Boston's website, only 39 insurance companies were members of the FHLB System in 1999 and 154 were members in 2007. Per Griffin and Spiker (2013), insurance company membership has increased every year since 1999. It needs to again be pointed out that the Federal Home Loan Banks have had the ability to lend to insurance companies since their inception. In this respect, going from 39 to 273 members over the span of 15 years is significant

growth. This lending opens up a whole host of new risks such as the costs of failing insurance companies and the expansive scope of captive insurance companies.

SUBSECTION 3.1: Costs of Failure

As with most types of companies, failing entities can be very expensive. In this respect, insurance companies are no different, and in fact, research suggests insurance companies are more costly at failure than banks. The high costs could mean the FHLBanks will not recover their advances in the event of failure, as they do not enjoy a 'super lien' on insurance companies. The research on failing insurance companies is focused on property and casualty (P&C) insurance companies, but the same principles can be applied to other types of insurance companies.

In general, if a property and casualty insurance company fails, the state will cover certain liabilities owned by the company. This is referred to a guarantee fund, and is usually financed by all the insurers in the state.[3] According to Bohn and Hall (1998), states do not typically hold reserves for these guarantee funds and only analyze the potential liabilities after the insurance company has become insolvent. However, the price of insolvency of property and casualty insurance companies is rather large compared to failures of other entities. Both and Grace, Klein, and Phillips (2003) and Bohn and Hall (1998) assert that the failures of insurance companies cost more than the failures of banks.

[3] Each claim sold by insurers contributes a certain amount (generally 1 percent-4 percent) to the guarantee fund. This 'tax' can be included in the price of claim sold.

Bohn and Hall (1998) determine property and casualty insurance company failures generally cost around 100 percent of the book value of the assets of the insurance company while savings and loan failures in the late 1980s generally cost only around 30 percent of the book value of the assets of the savings and loan. Bohn and Hall (1998) deduce the main reason for the high cost of insurance company failures is that their liabilities are understated.

Bohn and Hall (1998) point out that if this is true, then insurance company and bank failures are inherently different, which could account for the difference in cost. When banks fail, it is due to bad assets (loan defaults, etc.), but when P&C insurance companies fail, it may be due to understated liabilities. Bohn and Hall (1998) also assert that P&C companies are inherently riskier than banks because there are too many unknowns in insurance. For example, nobody can know when a disaster will strike. This principle can be extended to life insurance because when someone will die can also be unknown. According to Bohn and Hall (1998), the amount of unknowns only increases when insurance companies give out long-term policies because the future gets less and less certain the farther out one goes. Another point Bohn and Hall (1998) make is that when a bank fails, other banks may purchase the healthy assets and reduce the cost of the failure. However, when P&C companies fail, this does not occur and the claims are all paid out to the extent of the assets in the guarantee fund. Again, this logic could be extended to life insurers as well.

Two potential enablers of expensive failures by insurance companies are state regulatory structures and a lack of transparency around the regulation. Unlike banks and bank holding companies, insurance companies are only regulated at the state level. Grace,

Klein, and Phillips (2003) claim the funding for insurance regulation departments from each state comes mainly from two sources, “general appropriations from the overall state budget or through fees and assessments imposed on the industry which flow directly to the department” (p.20-21). Further, Grace, Klein, and Phillips (2003), also say “state governments have stronger incentives to oversee the operations of an insurance department that receives the majority of its funds through general appropriations and does not have the access to additional resources” (p. 21). This could mean states do not spend equal portions of their budgets on this regulation, and thus, the level of regulation likely varies from state to state. It could also mean that in a post-Great Recession United States where state budgets are continuously being slashed, insurance regulation departments are probably not exempt from reduced staff and resources. Ultimately, states may not have the resources to properly regulate all insurance and captive insurance companies if budget austerity continues.

Insurance companies’ financial statements are not transparent and are often not available to the public. They do report such information to their state regulators, but this information is confidential, and neither the FHFA nor the FHLB System can access it. Fitch Ratings (2014) adds that the “financial statements [for insurance companies] filed with their state insurance regulator are not generally available to even other state insurance regulators.” According to Schich (2009), insurance companies do not share enough information with their state regulators so that insurance companies can be properly regulated. Grace, Klein, and Phillips (2003) and Schich (2009) advocate for more consistent and transparent insurance company regulation. Schich (2009) implies all states need sound regulatory frameworks by saying:

> This situation [Great Recession] has also increased the need for having an adequate regulatory and supervisory framework in place. As contagion risk from unregulated or lightly regulated entities within a financial group can create risks and liquidity demands for the group as a whole, it is important to ensure that this framework is comprehensive.
> (p. 24).

It is imperative that a sound regulatory structure exists for insurance companies and that the regulation is transparent. If insurance companies are not properly regulated and not made more transparent, then the FHLBank lending to these entities could be unknowingly creating risks. As a result, the FHFA Office of the Inspector General (OIG, 2012) is concerned that neither the FHFA nor the FHLBanks can adequately assess how risky the lending is when it is made to insurance companies.

However, not everyone agrees that increased lending to insurance companies poses additional risks to the FHLB System. Ed Toy, who is the Director of the Capital Markets Bureau at the National Association of Insurance Commissioners, has this mindset. During an interview in 2014 he said he does not believe insurance companies will eventually use FHLB advances in lieu of raising funds through the capital markets assuming the status quo stays the same. He added that insurance companies probably would not want to becoming heavily concentrated in one source of funding such as FHLB advances. This is probably true, but in the event of another financial crisis where many sources of liquidity dry up, it is possible that the FHLBanks could be a substantial funding source for insurance companies.

According to Ed Toy (telephone interview, May 13, 2014), insurance company regulators are focused on asset and liability management, as well as enterprise risk. This means just because insurance companies have access to funds via FHLB advances; they will not use the funds to take excessive risks. Insurance company regulators have been

criticized in the academic literature for not being consistent or transparent, and Ed Toy's optimism about them may be undeserved.

SUBSECTION 3.2: Captive Insurance Subsidiaries

There are variations between different types of insurance companies, and one particular type has drawn a lot of attention from the FHLBanks and its regulator: captive insurance companies. Captive insurance companies exist to insure the assets of their parents, and more captives have been using FHLB advances because they are cheaper than the rates in the private market. Any type of entity (as in, non-bank, non-insurance) can form a captive subsidiary, and so captive membership is an area of contention and is seen as creating risks. Fitch Ratings (2014) gives two reasons for these risks. First, there are different accounting standards for captives and regular insurance companies. There is a known lack of transparency and consistency with insurance company financials and regulation. These lacks of transparency and consistency are not limited to captives, but perhaps captives are even more mysterious in these regards. Second, captives can form in more than 30 states, which could cause competition between states for captives, and ultimately between the different FHLBanks for customers. This competition could lead to promises of lax regulation by the state, as well as favorable interest rates from the FHLBanks in exchange for membership.

For tax mitigation purposes, captive insurance companies can take the forms of real estate investment trusts (REITs), which is how REITs are eligible for FHLB

membership.[4] The captive REIT subsidiaries typically own the real estate assets of the parent company while their parent companies receive tax benefits. Similar to captive insurance subsidiaries, the parent companies of REITs do not need to be in the banking or insurance sector to be eligible for FHLB membership. According to *Bloomberg* (2014), Redwood Trust Inc. became the fourth REIT to join the FHLB System. Marsh (2014), which describes itself as "the world's leading insurance broker and risk adviser…" says it has been working with its REIT clients so that they can create captive insurance subsidiaries "for the purpose of accessing funding with the Federal Home Loan Bank system."

Marsh (2014) goes on to say that captives not only reduce the risks of the REIT because they will insure its assets, but the captives will also allow the REIT parents to "gain access to low-cost funding through the FHLB…" According to Marsh (2014), these captives are primarily forming in Michigan and Missouri to allow the subsidiaries to become members of FHLB Indianapolis and FHLB Des Moines, which have the largest percentage of insurance company advances compared to their total assets among the FHLBanks.

The partnership between the FHLBanks and captive insurance subsidiaries is highly controversial. In fact, so controversial that six days after Redwood joined the FHLBank of Chicago, the FHLBanks put a self-imposed moratorium on captives becoming FHLB members due to criticism and pressure from their regulator. Fitch Ratings (2014) also gives a specific reason why Redwood's membership is an issue: Redwood Trust Inc. deals in jumbo mortgages. By law, Fannie Mae and Freddie Mac are

[4] A REIT is an entity that invests in real estate directly, either through properties or mortgages, and receives special tax considerations.

only allowed to purchase conforming mortgages. The FHFA sets a ceiling dollar amount for conforming mortgages by county, with anything above that limit being referred to as a jumbo mortgage. For 2015, the maximum amounts for conforming mortgages typically range from $417,000 to $801,950, but in more expensive counties the FHFA may allow up to $1.20 million (FHFA, 2015). Redwood Trust, Inc. is borrowing from the FHLBanks to purchase jumbo mortgages, and then selling these jumbo mortgages to other banks. This means that Fannie and Freddie aren't legally allowed to spur demand for jumbo mortgages in the secondary market, but the FHLBanks could possibly have this power.

Captive insurance companies have come under scrutiny from the FHFA. In 2014, the FHFA proposed new eligibility requirements for FHLB members, two of which are that captive insurance companies would be ineligible for membership and that existing captive members would be phased out over a five year period (Members of Federal Home Loan Banks, 2014). The remainder of the new requirements will be discussed later in the paper. This proposed rule would decrease the potential risk and scope of the FHLBanks, as captives would not be eligible for membership. However, industry groups and Congress have attacked these requirements. These attacks will also be discussed in more detail later in the paper.

SUBSECTION 3.3: Facts and Figures

According to Griffin and Spiker (2013), advances to insurance companies made up 11.7 percent ($55 billion out of $471 billion) of all outstanding FHLB advances as of June 30, 2013. From 1999-2006, advances to insurance companies never exceeded $15

billion. However, in 2007, they shot up to almost $30 billion. Then in 2008 they rose as high as roughly $55 billion. Since 2008, advances to insurance companies have not dropped below $45 billion, and have gone up every year since 2010.

Griffin and Spiker's (2013) presentation also provided a breakout of the largest insurance company borrowers (in terms of asset size) from the FHLBanks. The three largest were MetLife ($361 billion in total assets), Prudential ($285 billion in total assets), and John Hancock ($227 billion in total assets). The FHLBanks are broken up by regional district, and of the top ten largest insurance company borrowers, four were in the New York district, three were in Indianapolis, two were in Boston, and one was in Dallas.

These data show that lending to insurance companies is becoming a bigger part of the FHLBanks' lines of business. Both membership and advances have gone up significantly since 1999. It is also telling that the FHLBanks are going out to insurance company groups to market the benefits of advances. This suggests the FHLBanks want to continue to grow this customer base.

A report by Fitch Ratings (2013) shows that FHLB lending to insurance companies rose 91 percent from 2007 to 2008. This is a quite a large jump, though not surprising given that it was during the Great Recession and insurance companies badly needed liquidity. Bank borrowing from the FHLB System followed a similar pattern because so many sources of funding dried up. Liquidity traps are common in financial crises, and the FHLB System may be used again for the same purpose in the future for both banks and insurance companies.

Fitch Ratings (2013) goes on to report that of the 17 largest FHLB borrowers that are insurance companies, only one was not a life insurance company at year-end 2012.

This happens because life insurance companies need longer-duration assets to combat their cash flow characteristics. This concentration in one or two insurance company sectors could create systemic market risk if those sectors experience a crisis. Further, 11.7 percent of the members of FHLB Indianapolis were insurance companies at the end of 2012. FHLB Boston was second with 6.0 percent. The following table highlights the concentration in life and P&C insurance companies:

TABLE 1: Insurance Company Concentration

Insurance Company Type	**Percentage of FHLB Insurance Members**
Life	58 percent
Property and Casualty	39 percent
Health	3 percent

Fitch Ratings (2013) estimates 14 percent of all life insurance companies and 3 percent of all P&C insurance companies in the U.S. are FHLB members. Again, this concentration in life and P&C insurance companies could have negative effects if things deteriorate in those market sectors.

It should be noted that Fitch Ratings (2013) does say that since the financial crisis FHLB membership has gone up for insurance companies, but the aggregate amount of borrowings has gone down $3.3 billion since the end of 2008. However, this means the insurance borrowers relied on FHLB advances once, and will likely not hesitate to rely on

them again if liquidity becomes scarce. FHLBanks do not allow members to borrow more than 20-55 percent of their total assets. While this rule does somewhat mitigate excessive borrowing, 55 percent of a large insurance company is likely significant enough to create risk.

According to Fitch Ratings (2013), FHLB lending to insurance companies seem to be concentrated in the Midwest and New York.

TABLE 2: FHLBank Insurance Lending

Federal Home Loan Bank	Advances/Line of Credit to Insurance Companies	Percent of Total Advances
Des Moines	$15.2 billion	58.5 percent
Indianapolis	$8.4 billion	48.6 percent
New York	$17.2 billion	23.8 percent
Topeka	$3.4 billion	21.0 percent

Over half of all outstanding advances (or available lines of credit) belong to insurance companies at FHLB Des Moines, and roughly half belong to insurance companies at FHLB Indianapolis. If these insurance companies run into financial trouble and cannot repay the FHLBanks, FHLB Indianapolis and FHLB Des Moines could experience significant losses.

Fitch Ratings (2013) does point out that insurance companies have more funding agreements than borrowings. This means so far insurance companies have the ability to borrow more than they have actually borrowed. However, when these lines of credit are

drawn they will become liabilities for the FHLBanks. MetLife had nearly $14 billion outstanding with FHLB New York as of December 31, 2012, which was 18.7 percent of FHLB New York's total advances, and 3.3 percent of all FHLBanks' advances. This is a staggering number as the default of one customer could cause serious problems for FHLB New York.

Securities and Exchange Commission (SEC) 10-K reports reveal that not only have insurance companies been taking out more advances, they are supplanting banks as top borrowers at some of the FHLBanks. Insurance companies made up one of the top ten borrowers from the FHLBanks of Indianapolis and New York at the end of 2006, but made up five at year-end 2013. The majority of this gain happened at the FHLBank of Indianapolis. Even though FHLB New York only went from having zero to one in its top five borrowers, that one made up 14.4 percent of its total advances. The following table breaks out the number of insurance companies in four of the FHLBanks' top five borrowers at year-end.

TABLE 3: Top Five Borrowers

Federal Home Loan Bank	**2006**	**2013**
Indianapolis	1	4
Des Moines	3	3
Topeka	2	2
New York	0	1

The Federal Home Loan Bank of Indianapolis saw an insurance company rise to become its largest lender at year-end 2013. At year-end 2006, the largest insurance company ranked fifth at FHLB Indianapolis. Even though one was ranked fifth in 2006 at FHLB Indianapolis, it only had 2.7 percent of all outstanding balances that FHLBank. By year-end 2013 this exposure almost quadrupled, with the balance representing 12 percent of all outstanding advances. This is a major jump in terms of balance sheet composition.

The data about advances to insurance companies is telling because it could signify a potential large-scale shift (at least in the short run) in FHLB business activity because advances to insurance companies have been growing for quite some time. Right now banks have so much excess liquidity that they do not need to take out as much in FHLB advances. This may not change over the next several years and the FHLBanks will need to earn interest income somehow. Lending to insurance companies could possibly fill some of that revenue void.

Although right now life insurance companies are bigger borrowers from the FHLBanks, lending to property and casualty insurance companies could continue to grow over the next several years. Property and casualty does not always include coverage for water damage, flooding, and natural disasters, but these types of insurers will generally offer these types of coverage in addition to property and casualty insurance. Since money is fungible,[5] some of the funds lent to property and casualty insurance companies will undoubtedly go towards funding water damage, flooding, and natural disaster coverage. Floods and large-scale natural disasters have been coming at more frequent levels than in

[5] Fungible in finance means funds borrowed for a specific purpose (issuing mortgages, etc.) can be used to fulfill other purposes (maanging cash flow, etc.), and there is no way to track the exact purpose once the borrower has the funds.

the past and if climate change is the cause of this increased frequency, then these types of activities will likely continue at a higher frequency for the foreseeable future. It is conceivable that property and casualty insurance companies could rival life insurance companies as the FHLBanks' biggest insurance customers in coming years.

It is evident that insurance companies are becoming a bigger part of FHLBanks' membership and balance sheets. Although it's possible lending to insurance companies will wane in the long run, it is growing in the short run. Growth seems to be relatively concentrated in life insurance companies located in the Federal Home Loan Bank districts of New York, Indianapolis, Topeka and Des Moines, but property and casualty insurance companies could be in need of advances as a result of increased natural disaster activity. Insurance company advisors are even suggesting companies open up captive subsidiaries in two of these regions, which will only exacerbate the concentration risk. Lending to insurance companies went from a fledgling operation to a noteworthy business function during the Great Recession. While the economy remains mired in its current abeyant state, lending to insurance companies is likely to grow as these entities want cheap funds and banks continue to not need FHLBank advances.

CHAPTER 4: THE MPF PROGRAMS

Since 1932, the primary business of the FHLBanks has been to earn interest from advances to member banks. In the late 1990s and early 2000s, most FHLBanks added some kind of mortgage purchasing program (MPF, etc.) to this model, but the primary income still came from interest associated with advances to member banks. However, so

long as banks continue to not rely on FHLBank advances following the Great Recession, these mortgage purchase programs may play a larger role in the FHLBanks' revenue stream. The FHLBanks earn revenue from these programs by purchasing mortgages directly from banks and earning the interest and fees directly from borrowers, or by selling the mortgages to MBS issuers such as Fannie Mae.

In 1997, the Federal Home Loan Bank of Chicago created the original MPF Program, which is a mortgage purchase program. The primary reason for the original MPF Program, according to both Eric Schambow (telephone interview, November 5, 2013), who is the current Senior Vice President of the MPF Program, and Alex Pollock (telephone interview, October 21, 2013), who is currently a Senior Fellow at the American Enterprise Institute and created the original MPF Program during his tenure as CEO of FHLB Chicago (1991-2004), was that Fannie Mae and Freddie Mac did not (and still do not) have an incentive to purchase loans from small banks. This happens because due diligence is more costly on some of the mortgages issued by small banks. In addition, some of these mortgages have unusual characteristics.

Ron Haynie (telephone interview, May 17, 2014), who is the Senior Vice President of Mortgage Finance Policy for the Independent Community Bankers Association (ICBA) and previously worked for Freddie Mac, echoed this point when he told me that Fannie and Freddie do not even provide representative service to many small community banks and credit unions. He went on to say these entities have to call a 1-800 number to have any questions answered or to talk to Fannie and Freddie. So, in essence, small banks had few (if any) outlets to sell these mortgages before the original MPF Program. This 'discrimination' did not give small banks easy access to the secondary

mortgage market. In contrast, the FHLBanks are regional in focus and provide small community banks and credit unions with better customer service and attention. The FHLBanks deal with these small banks on a daily basis and have the personnel and wherewithal to apply due diligence to small or unusual loans.

The 2007 Combined Financial Report of the Federal Home Loan Banks lists seven FHLBanks (Boston, Chicago, Dallas, Des Moines, New York, Pittsburgh, and Topeka) that were involved in the original MPF program, and all the FHLBanks on that list except Dallas have participated in the MPF Xtra program since it debuted in 2008. The FHLBanks of Cincinnati and Indianapolis do not participate in the MPF programs, but instead have their own mortgage purchase programs (MPPs).[6] In 2013 and 2014, the FHLBanks of San Francisco, Atlanta, and Seattle joined the MPF and MPF Xtra programs, and FHLB Dallas joined the MPF Xtra program. The FHLBank of San Francisco participated in the original MPF program from 2001-2006 (Federal Home Loan Bank of San Francisco, 2013), and it possibly left the program due to mounting concerns over potential losses associated with defaulting mortgages.

It is unclear why some FHLBanks did not participate in either the MPF or MPP programs before the Great Recession. Perhaps those who abstained did not wish to get involved in the secondary mortgage market, or did not have the systems and controls in place to participate in these programs. Some of these abstainers may have planned to join, but were dissuaded by the losses due to defaulting mortgages incurred by participating FHLBanks and other private entities immediately preceding and during the Great

[6] The MPPs of the FHLBanks of Cincinnati and Indianapolis are not a focus of this paper and will not be discussed in detail.

Recession. Research concerning the management practices of the FHLBanks would also complement this paper.

In general, banks like to sell mortgages after origination so that they do not have to tie up their funds until the mortgage is periodically repaid. Also, selling the mortgages serves as a hedge against interest rate risk. This means that if interest rates suddenly rise then banks may have to pay more interest on their deposits than they are making on fixed-rate loans. The original MPF Program allows the Federal Home Loan Banks to purchase mortgages while the selling banks can keep the relationship with their clients as they will typically still service the loans.[7] In addition, the original MPF Program forces banks to keep a portion of the credit risk (or risk the borrower will not repay) so that these lenders have skin in the game even when selling the mortgages.

In the summer of 2008, a few months before the lowest points of the Great Recession, the FHLB System unveiled the MPF Xtra Program. This program is essentially the same as the original MPF Program with one major difference: under the MPF Xtra Program, banks are no longer required to keep a portion of the credit risk, and thus have less of an incentive to make sound loans. Such practices are cited as part of the cause of the Great Recession, as banks could sell loans to Fannie and Freddie while facing little (if any) recourse if borrowers defaulted and stopped making payments. This opens to the door to moral hazard as mortgage originators know that because they can immediately sell the mortgages without retaining any portion of the credit risk, the originators have less of an incentive to issue sound mortgages. This happens because once the mortgage is sold; it is unlikely (only through representation and warranty issues)

[7] Servicing rights include collecting the payments, directly dealing with the borrowers, and performing other administrative tasks. These rights are sometimes sold to private third parties, Fannie, or Freddie.

that the originator realize any losses in the event default. Hence, banks had little incentive to issue sound loans because they could sell them immediately.

Eric Schambow (telephone interview, November 5, 2013) was adamant that the Great Recession had nothing to do with the timing of the MPF Xtra Program. According to Eric Schambow (telephone interview, November 5, 2013), the FHLBanks had been trying since around 2005 or 2006 to offer the MPF Xtra Program but the FHFB, then regulator of the FHLB System, would not allow the FHLBanks to be involved in such a practice. Eventually the FHLBanks were able to convince the FHFB to allow this practice and so the MPF Xtra Program began right before the heart of the crisis, but the MPF Xtra Program was not authorized as a result of any crisis thinking.

The primary reason for the MPF Xtra Program, according to Eric Schambow (telephone interview, November 5, 2013), was that the FHFB put a cap on how large the FHLBanks' asset portfolios could become. Under the original MPF Program, each FHLBank would purchase mortgages from the bank and keep them in its own portfolio. However, the FHLBanks were accumulating assets to the point where they could no longer legally purchase any more loans. The MPF Xtra Program allowed the FHLBanks to sell the loans to Fannie Mae and thus, be off the books of the FHLBanks. By law, the FHLBanks cannot securitize mortgages and so they need to sell loans to entities that are legally allowed to do so in order to further spur demand the secondary mortgage market. Thus, the MPF Xtra Program was a perfect fit because it allowed the FHLBanks to offer their member institutions access to the secondary mortgage market and it provided Fannie Mae more mortgages to securitize.

The MPF Xtra Program, however, is not without its critics. Brent Ambrose, who holds a Ph.D. in real estate and is a current professor at Penn State University, is one such critic. Brent Ambrose (telephone interview, October 11, 2013) is very much concerned with the FHLB System's MPF Xtra Program as the FHLB System likely lacks sufficient oversight and so he is not convinced the FHFA has been properly keeping an eye on this product. He also does not buy the argument made by some community banks that have said they prefer dealing with the FHLB System in terms of selling mortgages (as opposed to Fannie and Freddie) because the System better understands their needs due to the regional jurisdiction of the 12 FHLBanks. According to Brent Ambrose (telephone interview, October 11, 2013), banks will seek out the best price, and would only prefer to sell to the FHLBanks if they could not be forced to buy back loans that default due to representation and warranty issues.[8]

Professor of banking, finance, and real estate at U.C. Berkeley, Dwight Jaffee, who has written about GSEs for the National Bureau of Economic Research, also shares Brent Ambrose's concerns over the MPF Programs (both original and Xtra). He takes this position because if the MPF Programs continue to grow, the FHLB System could eventually become a new version of Fannie and Freddie. Having been a long-standing critic against Fannie and Freddie purchasing loans for investment, Dwight Jaffee (telephone interview, October 10, 2013) does not believe the FHLBanks should be involved in this practice either because they were not created to do so. FHLBanks should not look like investment banks; they should be there to make loans to banks so that the

[8] If the selling bank is proven to have not provided proper documentation or correct information such as the borrower's credit score, it may have to repurchase the loan from Fannie and Freddie in the event of default.

banks can issue mortgages. Merely transferring all the risks associated with mortgages from banks to GSEs was not the original intent of the GSEs and does not serve a public policy purpose.

Unlike Brent Ambrose and Dwight Jaffee, Fred Graham (personal communication, October 24, 2013) at the FHFA prefers the MPF Xtra Program to the original MPF Program because it gets the mortgages off the FHLBanks' books. While this is true, it is just transferring risk to Fannie Mae and does not require originating banks to share a portion of the credit risk. This may not have mattered before 2008 because both the FHLB System and Fannie Mae were operating as GSEs. However, since Fannie has been in conservatorship, American taxpayers will be responsible for any losses.

According to the Federal Home Loan Bank of Chicago (2013), the MPF Program doubled in size from December of 2011 to December of 2012. In 2012, the overall MPF Program purchased roughly $14 billion in mortgages and $7 billion of that was from the MPF Xtra Program, which increased $5 billion. Even Eric Schambow (telephone interview, November 5, 2013) admitted that the MPF Xtra Program took off faster than he and his colleagues had anticipated. Also, the FHLB of Chicago is currently in talks with Freddie Mac and other private label securitization firms to get involved in the MPF Xtra Program. If successful, the FHLBanks could become bigger players in the secondary mortgage market, as they would directly feed a greater amount of mortgages into it.

SUBSECTION 4.1: The MPF Program and Ginnie Mae

Recently, the FHLBanks have gotten involved in a different way of bolstering the housing market. In September of 2013, Ginnie Mae put out a press release announcing that the Federal Home Loan Bank of Chicago will be able to issue Ginnie Mae MBS. This product is called 'MPF Government Mortgage-Backed Securities', and could break down the barrier between the FHLBanks and issuing their own MBS.

It is important to point out some of the nuances of these MBS. Ginnie Mae is a government corporation, and so Ginnie Mae MBS are fully guaranteed (explicitly) by the United States government. Also, only mortgages insured or guaranteed by the Federal Housing Administration (FHA), the Department Veterans Affairs, and the Department of Agriculture (USDA, for rural development) can make up Ginnie Mae MBS. MBS issued by Fannie Mae and Freddie Mac can be composed of mortgages issued by any parties, so long as they meet conforming standards. One final difference is that Ginnie Mae does not actually issue the securities. Lending institutions work with Ginnie Mae staff to make sure all the underlying mortgages meet Ginnie Mae standards. If they all meet these standards, then Ginnie Mae puts a stamp of approval on the MBS but the lending institution actually issues it. In other MBS issuances, the mortgages are sold by the lending institution to a third party (Fannie, Freddie, etc.), and then that third party issues the security.

This product is important for one primary reason: FHLBanks are not authorized to issue MBS of their own. That is, they are not allowed to package the mortgages purchased from the MPF Programs into MBS. In 2009, the FHFA denied the FHLBanks'

request to be able to issue MBS because it created too much systemic risk. This likely was due to the fact that Fannie and Freddie had needed a bailout less than a year before. The fact that the FHLBank of Chicago can now issue Ginnie Mae MBS could be the toehold the FHLBanks have been looking for in terms of a first step towards being able to issue their own MBS.

Ron Haynie (telephone interview, May 17, 2014) thinks the FHLBanks should be allowed to issue their own MBS but only if that service was completely segregated from normal FHLBank activity. He said issuing MBS would help FHLBank members manage risk (interest rate, credit, etc.). However, he added, what happened to Fannie and Freddie could happen again and so the FHLBanks would have to find a way to not expose the whole FHLB System in the event of MBS defaults.

However, Ron Haynie (telephone interview, May 17, 2014) did caveat this by saying small banks do not want to see the FHLBanks get too involved in the secondary mortgage market because that is only a secondary service they offer. The FHLBanks' primary service is issuing loans to banks so that the banks can issue mortgages. The fear is that eventually the FHLBanks will start to care only about larger mortgages. Some FHLBanks have been criticized for having too many advances outstanding with a handful of large customers and the same thing could happen with their MPF Programs.

SUBSECTION 4.2: MPF Program Dollar Figures

According to the 2007 FHLB Combined Financial Report, the Federal Home Loan Banks held a total of $67 billion of MPF loans held their portfolios at year-end 2007 and $73 billion at year-end 2006. According to 2011 Securities Exchange SEC reports, the Federal Home Loan Bank of Chicago, where the MPF Programs started, held $18.3 billion in MPF loans in its portfolio at year-end 2010 and $23.8 billion at year-end 2009. Also, it sold $3.4 billion worth of MPF Xtra loans in 2010.

According to 2013 SEC reports, FHLB Chicago's mortgage portfolio has been declining because it has not been acquiring MPF mortgages for its portfolio. By the end of 2013, this balance had dropped to $7.7 billion. $6.9 billion worth of MPF Xtra loans were sold in 2012 and $4.7 billion were sold in 2013, with activity at FHLB Chicago making up almost half of these balances. However, three FHLBanks joined the program in 2013, which could revitalize activity.

As indicated in a 2013 SEC report, FHLB Topeka had $1.2 billion of MPF loans in its portfolio at year-end 2011 and $1.4 billion at year-end 2012. Also, although MPF Xtra loans sold from the Topeka district to FHLB Chicago were only $178 million in 2013, FHLB Topeka expects a higher volume of sales in 2014. The table below breaks out MPF activity at FHLB Des Moines (from SEC reports):

TABLE 4: Des Moines MPF Activity 2011-2013

Year	Original MPF Purchases	MPF Xtra sold to FHLB Chicago
2011	$1.4 billion	$600 million
2012	$2.1 billion	$2.0 billion
2013	$1.2 billion	$1.6 billion

The following table summarizes Original MPF and MPF Xtra activity for the entire FHLB System (from Mortgage Partnership Finance, 2014):

TABLE 5: FHLB System MPF Activity 2011-2013

Year	Original MPF Program	MPF Xtra Program
2011	$6.99 billion	$2.81 billion
2012	$14.33 billion	$6.94 billion
2013	$8.99 billion	$4.67 billion

According to the Mortgage Partnership Finance (2014), the MPF Program funded almost 56,000 loans totaling roughly $9 billion in 2013. Almost half of these loans came from the MPF Xtra Program. At the end of 2013 there were 832 MPF participants, and 773 (92.9 percent) of them had less than $1.095 billion in total assets. The MPF Programs have been providing an outlet in the secondary market for these small banks. It is surprising that over 90 percent of banks and credit unions involved have less than $1.095 billion, but it does underline the importance and potential growth of the MPF Programs for small banks and credit unions.

According to the FHFA OIG (2014), the MPF Xtra program represented 20 percent (roughly $14.2 billion) of FHLB Chicago's business in 2013, which grew from both 2012 (18 percent) and 2011 (12 percent). However, the MPF Xtra Program only makes up 1-2 percent of Fannie Mae's total single-family loan purchases. The FHFA OIG does not feel that either one of these values is large enough to present anything but minimal risk to both FHLB Chicago and Fannie Mae.

It is evident that the MPF Programs are growing and becoming a larger part of the FHLBanks' business in the wake of the Great Recession. Although products can come and go depending on customer demand, the MPF Programs are directly in line with the FHLBanks' primary mission and so they are likely to remain relevant even if they experience long-run declines. This growth in these programs could be troublesome if the FHFA does not keep a close eye on the Programs because one of the main causes of the Great Recession was lending to customers with questionable credit. The MPF and MPF Xtra Programs provide an outlet for small banks and credit unions into the secondary mortgage market that they might not have if only Fannie Mae and Freddie Mac existed. However, this outlet may come at a price as these programs may lead the FHLBanks down similar paths as Fannie and Freddie.

CHAPTER 5: MERGER AND MEMBERSHIP REQUIREMENTS

Aside from lending to insurance companies and the growth of the MPF Programs, there are other changes looming for the FHLB System. These changes include a merger between two FHLBanks and proposed, restrictive eligibility requirements. This

unprecedented merger could lead to more mergers and significantly alter the future FHLB System. Some have criticized the FHLBanks because the Banks can be seen as cheap liquidity sources for members. These critics claim that because the FHLB System is a GSE, there is an implicit guarantee on their debt. Some of these same critics have called for the FHLBanks to become stricter with their membership requirements to lessen the potential for future taxpayer bailouts. The FHFA has listened and proposed new membership requirements as a result. These new requirements are stricter than the old requirements, and industry groups, some members of Congress, and some of the FHLBanks presidents have opposed them. The proposed membership requirements could create path dependency with increasing returns for the FHLBanks. According to Pierson (2000), path dependency can be thought of as "…preceding steps in a particular direction [that] induce further movement in the same direction" (p. 252).

Interconnectedness is another frequently cited cause of the Great Recession. The bailout of the American International Group (AIG) was not given due to the size of AIG itself, but rather because AIG was so connected to other major players in the financial sector. Put another way, the failure of AIG likely would likely have resulted in the failure of other significant members of the financial sector. The FHFA is undoubtedly aware of the importance of interconnectedness, and probably does not want to see the FHLBanks become entwined with too many sectors beyond banking and insurance and too many purposes other than increasing home ownership. If the FHLB System does become too interconnected with too many different counterparties in different sectors, then it may wreak havoc across a myriad of sectors if it experiences financial trouble.

SUBSECTION 5.1: Merger

In 2014, the Federal Home Loan Bank of Seattle and the Federal Home Loan Bank of Des Moines ratified the terms for a merger set to take place sometime during mid-2015. The merging of two Home Loan Banks is unprecedented, and the fact that a merger negotiation was even being discussed is big news in itself. According to an *American Banker* (2014) article, if either party had backed out before June 30, 2015, it would have had to pay the other $57 million. If two Home Loan Banks merge, it's possible that others will merge as well. Two different FHLBanks tried to merge in 2007, but ultimately that merger fell apart after the two sides could not agree on a fair market price.

The Federal Home Loan Bank of Seattle has been in financial trouble for almost a decade. The trouble has come from two primary sources. First, during the mid-00s, it invested heavily in private-label MBS, which are MBS issued by companies without an explicit or implicit government guarantee (not issued by Ginnie, Fannie, or Freddie). During the Great Recession it became clear that large amounts of MBS proved to be comprised of low quality, high-risk mortgages, and those without an explicit or implicit government guarantee left holders with no recourse except to incur financial losses. According to a Seattle Times article (2009); FHLB Seattle had almost 10 percent of its total assets in private-label MBS in March of 2008. The default of the underlying mortgages of these MBS resulted in hundreds of millions in losses. Second, Washington Mutual (aka WaMu), FHLB Seattle's biggest customer, became insolvent and was sold to JP Morgan Chase in 2008. This sale took it out Seattle's geographic district, and so it

would no longer borrow from FHLB Seattle. Both of these factors combined to put significant financial strain on FHLB Seattle, and so the merger was likely its best option.

One could argue the FHFA should have allowed FHLB Seattle to fail. The Federal Reserve and the Treasury have been criticized by many for bailing out failing financial firms and not forcing these failing companies to close their doors when market forces have lead them to bankruptcy. One could argue the same criticism should be directed towards the FHFA for allowing the FHLB Seattle to be acquired. FHLB Seattle management clearly miscalculated its exposures and had been in financial trouble for almost a decade. The situation is different from a failing private firm because while FHLB Seattle has taken losses, it never defaulted on its debt, and the joint and severally liable nature of FHLB debt also serves as a security blanket. However, the merger may encourage more moral hazard by other FHLBanks in the future, as they know it is unlikely they will be allowed to fail.

The motivation for FHLB Des Moines is less clear, but two possible catalysts are increased efficiency and increased power. In terms increased efficiency, now FHLB Des Moines can better streamline its operations, as it will have more capital and resources. Perhaps a more streamlined FHLB Des Moines can charge less interest on its loans and entice members from other districts to relocate. In terms of power, FHLB Des Moines will now have a presence in 13 states and have by far the largest geographic region of any other FHLBank. This range could change the way the other FHLBanks and the members of those FHLBanks see FHLB Des Moines. Perhaps FHLB Des Moines will get more FHLBank allies, or perhaps the merger will create more FHLBank enemies. It is unlikely

the relationship will remain unchanged between the 10 other FHLBanks and FHLB Des Moines following the merger.

Now that two FHLBanks have merged, then some will undoubtedly raise the question as to whether other FHLBanks should merge. Even though nothing operationally will likely change as a result of the merger (other than the surviving FHLBank possibly being more efficient), it does raise questions of institutional dynamics. One argument for having 12 regional banks instead of one headquarters with branches is that each FHLBank better understands the needs and sentiments of the banks and insurance companies in its geographic region. Typically this argument is made on behalf of smaller banks and insurance companies. As previously mentioned, small banks prefer dealing with the FHLBanks to Fannie Mae and Freddie Mac. There could be a domino effect where several others merge, possibly getting eventually down to only a handful of FHLBanks. If this handful of FHLBanks begins to act like Fannie and Freddie and loses interest in smaller banks, then these smaller banks would feel detrimental effects, as they may need to find other, likely more expensive, liquidity providers.

Another argument for having 12 regional banks instead of one large FHLBank is that the regional banks spread out the risks associated with banking. Although the FHLBanks are joint and severally liable for each other's debt, meaning if one FHLBank defaults on its debt payments the others must honor the debt, there hasn't been any evidence this coverage has ever had to occur. During the Great Recession, Fannie Mae and Freddie Mac received bailouts from the U.S. Treasury as they were about to fail, and the FHLBanks could require similar treatment if they consolidate to too few entities. In

addition, one large FHLBank would likely be another ‘too big to fail’ institution, and the government is trying to get away from those types of entities.

Even before this merger was announced, there was talk of reducing the number of FHLBanks. During a Congressional Hearing in October of 2011, Timothy Zimmerman, speaking on behalf of the ICBA, was asked whether there should be fewer FHLBanks. Zimmerman (2011) did not agree there should be any FHLBank consolidation. According to Zimmerman (2011), the 12 banks allow the FHLBanks to better understand the member banks in their district and thus, better cater to their needs. Without this relationship and understanding, the FHLBanks would look more like Fannie Mae and Freddie Mac where banks would get one-size fits all lenders. In addition, the 12-bank structure helps to spread risk throughout the country.

Some in the industry, however, feel a merger, possibly more than one, would be beneficial for the FHLB System. Thad Woodard, who was the president and chief executive of the North Carolina Bankers Association from 1978 until he retired at the end of 2014, wrote an op-ed in *American Banker* regarding reforming the FHLB System. His main is point is to reform the FHLB System by reducing the FHLBanks “to a smaller, well-functioned few.” According to Woodard (2014), this would lower the operating costs of the FHLBanks because there would be fewer employees. He also points out that reducing the number of FHLBanks would mitigate geographically concentrated risk. Under the current format, if one of the FHLBanks starts to show financial stress, that whole geographic area is at risk because all the members of that FHLBank are located in the same region. Under Woodard’s format, the FHLB System would be operationally

streamlined and less geographically concentrated simply because there would be fewer FHLBanks. The dichotomy between Woodard's stance and Zimmerman's stance on the FHLBanks' geographic risk highlights the disagreement in the industry.

SUBSECTION 5.2: Proposed Membership Requirements

The FHLB System is a cooperative entity, which means its members are also its owners. This happens because new members are required to purchase FHLB stock and current members must maintain FHLB stock levels proportional to their advances. The membership requirements have been tweaked over time, but in September of 2014 they received some major proposed revisions.

The FHFA proposed new eligibility requirements for FHLB members. If adopted, the following relevant changes to membership would be put in place (Members of Federal Home Loan Banks, 2014): members with less than $1 billion in total assets would need to hold one percent of their total assets in home mortgage loans[9] on an on-going, as opposed to a one-time, basis, and members with more than $1 billion in total assets would need to hold ten percent of their total assets in residential mortgage loans[10] on an on-going, as opposed to a one-time, basis. There were also two requirements regarding captive subsidiaries that were mentioned earlier in the paper.

The proposed membership requirements are important because under the current rules smaller, potential members need to have one percent of their assets in home

[9] Certain mortgage-related assets also qualify as 'home mortgage loans'.
[10] Certain mortgage-related assets also qualify as 'residential mortgage loans'.

mortgage loans and larger ones need ten percent in residential mortgage loans to be accepted as members. However, after the members are accepted, they are not required to continue to hold these percentages of home or residential mortgage loans. Critics say this goes against the FHLB System's purpose, which is to provide members with liquidity so that these members can in turn issue more mortgages to increase home ownership. The FHFA appears to want the FHLBanks to be more in line with this purpose by requiring (through backwards means) that banks actually use the funds to issue mortgages or purchase mortgage-related assets (this would encourage other financial firms to issue mortgages and package them into mortgage-related products). The FHLBanks have received criticism saying members are not using their advances for issuing mortgages but instead using them for general liquidity purposes. These two proposed requirements would alleviate some of that criticism, and would better align FHLB membership with the System's mission to promote home ownership. The fact that even current members would have to keep the necessary level home and residential mortgage assets from the first day they join going forward means that these members will have to issue more mortgages or purchase mortgage-related assets, which will directly increase home ownership levels.

However, not everyone is supportive of the proposed membership requirements, as numerous industry groups have publicly spoken out against them. The National Association of Federal Credit Unions (NAFCU, 2015) opposes the requirements because it says over one million credit unions would not be eligible for FHLB membership under the new proposed rules. Further, according to NAFCU (2015), FHLB membership should not be a 'one-size-fits-all' model. The Credit Union National Association (CUNA, 2015)

also sent a letter to the FHFA urging them to withdraw the proposed requirements. The letter cites three primary reasons. First, it would require credit unions to change their business practices to make sure they kept the minimum requirements. Second, mortgage rates will go up because the FHLBanks provide low-cost liquidity to banks so that they can issue low-cost mortgages. If credit unions are restricted from using these advances, then they will have to raise funds through the private market, which will be more expensive to credit unions. Ultimately, credit unions will pass the costs through to consumers in the form of higher interest rates on loans. Third, it could deter credit union mergers because the entity after the merger (if it has more than $1 billion in total assets) will have to hold ten percent of its total assets in residential mortgage-related assets, which many credit unions will not be able to do.

At least one industry group doesn't want to see restricted membership, and goes as far to say membership should actually be expanded. The Mortgage Banking Association (MBA) is an industry group organization that is understandably concerned with the future of the FHLB System. Many of its members are likely also members of the FHLB System, and the FHLB's policies on issues such as membership and advance limits can have a major effect on many of these members. David Stevens, who is the CEO of the MBA, discussed FHLB membership in his testimony before the Senate Committee on Banking, Housing, and Urban Affairs in October of 2013:

> MBA believes serious consideration should be given to expanding Federal Home Loan Bank membership eligibility to include access for non-depository mortgage lenders. In fact, historical evidence shows that such a move is consistent with the original intent of the system (see Snowden, 2013). These lenders are often smaller, community-based independent mortgage bankers focused on providing

> mainstream mortgage products to consumers. In exchange for membership in the FHLB system, these institutions could be required to hold a limited class of stock with appropriate restrictions. Expanding FHLB access to these institutions would enhance market liquidity and ensure a broader range of mortgage options for consumers. (p. 108).

Due to his position as CEO of the MBA, it is understandable why he would want FHLB membership expanded. If more entities were able to join the FHLB System, then there would be more opportunity for non-bank, non-insurance real estate finance companies to gain access to low-cost FHLB advances. This does, however, open up more risks to the FHLBanks, as they would need to become familiar with different entity types.

Industry groups are not alone in their opposition to the proposed membership requirements as a regulator, some members of Congress, and some FHLBank presidents have also joined the fight. According to an *American Banker* (2015) article, John Ryan, who is the chief executive of the Conference of State Bank Supervisors, said the proposal 'would have a detrimental effect on FHLB members and the FHLB System as a whole.' *National Mortgage News* (2014) also had an article stating that more than 24 Senators sent a letter to the FHFA to drop the proposed requirements. The letter says the new proposed requirements are inconsistent with the FHLBank Act, and that Congress should be consulted before these types of decisions are made.

Presidents of the FHLBanks of Topeka and Dallas also oppose the proposed rules, but provide a different reason for denouncing it. According to an *American Banker* (2015) article, these two presidents believe that Congress has implicitly expanded the mission of the FHLBanks beyond that of promoting home ownership, but also to

providing liquidity to members. This is an interesting point because since the late 1980s, Congress has expanded FHLBank membership to several different types of entities (commercial banks, community development organizations, etc.). However, there haven't been any explicit changes in the FHLBanks' mission to add providing liquidity to their members as a goal.

Some critics of the FHLB System are concerned that the FHLBanks have merely become another liquidity source to banks. This cheaper liquidity from the FHLBanks' GSE status allows members to take out fewer amounts of more expensive debt, and provides members with a quick and reliable liquidity source. Some argue this quickness and reliability increase risk as the members know that if they need funds right away to cover a risky transaction, the FHLBanks would be there to fill that void.

One question is whether the industry groups and critics of proposed requirements are justified in their disdain. Perhaps the FHLBanks should exist to serve their mission in promoting home ownership, and until that mission is explicitly changed, it shouldn't exist just to provide liquidity to members. Allow institutions to borrow cheap FHLB advances so that they can issue mortgages, but make them go to the private market for general liquidity funding, because that funding will be more expensive and won't always be there to bail them out if they get into a liquidity trap. It appears industry groups, some lawmakers, and some FHLBank presidents want to keep the status quo because it allows banks to get access to cheaper funds to use for general liquidity purposes. However, this is not the mission of the FHLBanks, and it could encourage risk taking by banks and insurance companies.

These proposed requirements leave the FHLBanks at a critical juncture of path dependency with increasing returns. According to Pierson (2000), “In an increasing returns process, the probability of further steps along the same path increase with each move down that path…. To put it a different way, the costs of exit – of switching to some previously plausible alternative – rise” (p. 252). If the FHFA does not adopt the proposed, stricter requirements, then the FHLBanks will continue to be exposed to non-bank, non-insurance entity types, as well as continue to be another general liquidity source for bank and insurance members. The costs of exiting the current, loose requirements goes up as more members take out advances, and the exposure and scope of the FHLBanks continues to increase. It will be difficult to restrict membership in the future once more industry groups see the benefits of FHLBank advances for their members. These groups will continue to lobby for access to advances, and Congress will likely continue to grant their requests. Assuming there is not another financial crisis similar to the Great Recession in the near future, switching to stricter requirements will only get less and less popular as time passes as more industries will take advantage of the benefits of advances.

The landscape may be forming for a standoff between those who want to reduce the scope of the FHLBanks and those who do not. Even within those who want to reduce the scope, there is some disagreement as to how to achieve this, as some want fewer FHLBanks while others want restrictive membership clauses. The FHFA is on one side while industry groups, some of the FHLBank presidents, and some members of Congress are on the other. It is unclear which side will reign victorious, but what is clear is that

either way, the future of the FHLB System will have its direction for the foreseeable future.

This direction will probably be defined in the near future. Over the next few months, the FHLBanks of Seattle and Des Moines will have merged, and the FHFA will either have upheld or reversed its restrictive membership requirements. The System will see significant changes not only in the short run, but perhaps also in the long run, as the floodgates of reform could swing wide open. 2015 will be a critical year for the future of the FHLB System.

CHAPTER 6: CONCLUSION

It is clear that the FHLB System has undergone several changes before and after the Great Recession, and could also face significant changes in the near future. Before the recent crisis, lending to insurance companies and the MPF Programs were not significant portions of the FHLBanks' business models, but both have been growing exponentially. As long as banks hold excess cash and remain cautious about lending, these trends will likely continue at least in the short run. Lending to insurance companies and the expansion of the MPF Programs may create underlying risks, and with an entity as large as the FHLB System, these risks could reach systemic proportions.

Two of the FHLBanks will merge sometime during 2015, and that could open the door other FHLBank mergers. Eventually, there may be only a few FHLBanks left, and the remaining FHLBanks may look more like Fannie and Freddie than like their former selves. Fannie and Freddie need taxpayer bailouts in 2008, and the same could possibly

be true of the FHLBanks if they consolidate down to too few entities and concentrate the risk. Further, new membership requirements could also be on the horizon. While the proposed memberships are restrictive, some have expressed sentiments that the membership requirements should actually be loosened. This could further expand the scope and size of the FHLB System. Not restricting requirements now can result in path dependency with increasing returns as more industry groups will likely lobby to keep looser requirements in place. Regardless of whether the membership requirements are restricted or loosened, the future of the FHLB System will be altered going forward.

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