

The Federal Home Loan Bank System: Current Issues in Perspective*

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Abstract

The Federal Home Loan Bank (FHLB) System is a very large, but relatively unknown, cooperatively owned government sponsored enterprise (GSE) that is charged with assisting its owner/members to finance housing and some community lending. After an introductory overview of the FHLB System, this chapter summarizes the 77-year history of the System, including the evolution of this institution's structure, public mission, and activities. Building on this background, we then conduct an evaluation of the public policy question of the expansion of the FHLBs' authorization to issue standby letters of credit. We further examine the role, actions, and stresses of the FHLB System in the context of the current financial crisis, as well as outlining some possibilities for the System in the post-crisis U.S. financial structure.

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I. Introduction

Substantial analytical and political attention has been paid this decade to two large "government sponsored enterprises" (GSEs) -- Fannie Mae and Freddie Mac -- that are at the center of the U.S. secondary residential mortgage market. Frequently overlooked is another large GSE -- the Federal Home Loan Bank (FHLB) System -- that is also involved in residential mortgage finance, albeit in a different way.¹ Indeed, by one standard measure of size -- the balance sheet assets of the organizations -- the FHLB System is now the largest of the three housing GSEs.²

The FHLB System is composed of 12 cooperatively owned wholesale Federal Home Loan Banks (FHLBs) and an Office of Finance that acts as the FHLBs' gateway to the capital markets. Each FHLB is a separate legal entity and has its own management, employees, board of directors, and financial statements. Each FHLB is cooperatively owned by its member commercial banks, thrifts, credit unions and insurance companies headquartered within the distinct geographic area that the FHLB has been assigned to serve. Members must either maintain at least 10 percent of their asset portfolios in mortgage-related assets or be designated as "community financial institutions". Altogether, the FHLB System currently has over 8,000 financial institutions members.

In Table 1 we show the relative sizes (in terms of total assets) and numbers of members for each of the 12 FHLBs as of December 31, 2008. The FHLB of San Francisco is by far the largest institution (\$321 billion), accounting for almost a quarter of the FHLB System's assets. The FHLBs of Des Moines and Atlanta each have about 15% of the total FHLB System membership. Table 1

¹ Flannery and Frame (2006), on which this essay draws heavily, characterize the FHLB System as the "other" housing GSE. They could find only seven academic articles concerning the operation of the FHLB System itself in an EconLit search. For an older effort to find discussions and descriptions of the FHLB System, see White (1991, p. 65, n. 1).

² As of year-end 2008, the FHLB System had total assets of \$1,349 billion; Fannie Mae had assets of \$912 billion; and Freddie Mac had assets of \$851 billion. What this comparison neglects, however, is the large amounts of mortgage-backed securities (MBS) issued by the latter two GSEs. As of year-end 2008, Fannie Mae had \$2,289 billion in net MBS outstanding (i.e., net of those MBS held on their own balance sheet), while Freddie Mac had \$1,403 billion in net MBS outstanding.

also shows the extent to which each bank's business is dominated by its largest members. The percentage of each bank's capital that is accounted for by its five largest members ranges from 30% (the FHLB of Chicago) to 73% (the FHLB of San Francisco); the weighted average for the entire System is 53%. Similarly, the percentage of each bank's advances that is accounted for by its five largest users range from 40% (the FHLBs of Chicago and of Des Moines) to 78% (the FHLB of San Francisco), and the System's weighted average is 59%.

The FHLB System is often viewed as a whole because most FHLB financing takes the form of consolidated obligations for which the 12 institutions are jointly and severally liable. The statutory mission of this GSE is to provide their owner/members with financial products and services to assist and enhance their members' financing of (a) housing and (b) community lending.³ Table 2 shows the consolidated balance sheet of the 12 FHLBs, as of December 31, 2008. As can be seen, collateralized loans (advances) constitute almost 69% of the FHLB System's assets, and residential mortgages and mortgage-backed securities account for 19% of assets. On the liabilities side of the balance sheet, the consolidated obligations, which are bonds floated in international capital markets, constitute over 93% of total liabilities and capital (and thus also of total assets). The FHLB System's capital is only 3.8% of assets, and almost all of that is the members' contributed capital; retained earnings are only 0.2% of assets (and 5.6% of capital).⁴ The FHLB System is thus highly leveraged.

³ See Federal Home Loan Bank Mission, 12 C.F.R. § 940 (2006), and "Mission of the Banks," 65 Fed. Reg. 25, 278 (May 1, 2000). Other FHLB activities include (a) acquiring member assets (e.g., mortgages), (b) standby letters of credit, (c) intermediary derivative contracts, and (d) debt or equity investments (that primarily benefit households below 80 percent of area median income).

⁴ By contrast, in 1986, retained earnings were 1.7% of assets and 9.2% of capital. There is a ready explanation for this relative reduction in retained earnings: The FHLB System had significant amounts of its retained earnings grabbed by the Congress in 1987 and 1989. Though the Gramm-Leach-Bliley Act of 1999 (GLBA) made clearer that the FHLB System's retained earnings were owned by its members, the FHLB System's members remain distrustful (and, of course, the Congress could pass new legislation that could reverse the GLBA assurances).

Member advances are historically the primary activity conducted by the FHLBs. These loans are generally collateralized by residential mortgage-related assets (whole loans and mortgage-backed securities) and U.S. Treasury and Federal Agency securities.⁵ Beyond the explicit collateral, the FHLBs also have priority over the claims of depositors and almost all other creditors (including the Federal Deposit Insurance Corporation) in the event of a member's default; this is often described as a "super-lien."⁶ Taken together, these features help to explain why none of the FHLBs has ever suffered a loss on an advance.

The FHLB System is considered to be a GSE because, like Fannie Mae and Freddie Mac, it was expressly created by an Act of Congress (the Federal Home Loan Bank Act of 1932) that includes limits on permissible activities as well as several institutional benefits. As noted previously, the FHLBs are, in principle, statutorily limited to assisting their members in residential mortgage funding and some community lending, although in practice their activities may be supporting a wide-variety of economic sectors. The FHLBs also designate at least 10 percent of their net earnings for low- and moderate-income housing programs and are also responsible for paying interest on the \$30 billion in REFCORP bonds that were issued from 1989 through 1991 to help fund the resolution of the savings-and-loan crisis.

Special privileges accruing to the FHLB System include: a provision authorizing the Treasury Secretary to purchase up to \$4 billion of FHLB securities; the treatment of FHLB securities as "government securities" under the Securities and Exchange Act of 1934; and an exemption from the bankruptcy code by way of being considered "federal instrumentalities". These and other provisions, combined with past government actions, have created a perception in financial

⁵ See 12 U.S.C. 1430(a)(3) for a complete list of eligible collateral. Federal Agency securities are generally synonymous with debt and mortgage-backed securities issued by government sponsored enterprises.

⁶ See 12 U.S.C. 1430(e).

markets that FHLB obligations (like those of Fannie Mae and Freddie Mac) are implicitly guaranteed by the federal government. This, in turn, allows the FHLB System consistently to finance their activities by issuing debt on favorable terms (better than AAA corporate rates, but not quite as good as U.S. Treasury rates).⁷ The FHLBs pass most of that advantage through to their members in the form of lower interest rates on advances, and the remainder (after the System's expenses are covered) to members in the form of dividends (consistent with the FHLBs' cooperative structure).⁸

The purpose of the FHLB funding advantage is to encourage their members' financing of housing and some community development. While members must post collateral to secure their advances and that collateral is typically residential mortgage-related (whole loans or mortgage-backed securities), money is fungible; there is no reason why the members would necessarily use the borrowed funds for further housing loans or other designated uses. Indeed, Frame, Hancock, and Passmore (2007) find that FHLB advances are just as likely to fund other types of bank credit as to fund residential mortgages.

Recognizing the special GSE status of the FHLB System and the potential risk to taxpayers, the federal government regulates the FHLB System for "safety and soundness" and for "mission" purposes through the Federal Housing Finance Agency (FHFA). The FHFA was created in 2008 through the consolidation of the FHLB System's former regulator (the Federal Housing Finance Board) with the former regulator of Fannie Mae and Freddie Mac (the Office of Federal Housing Enterprise Oversight).

⁷ For example, looking at average funding spreads between 1995 and 1999 period, Ambrose and Warga (2002) estimate that FHLB long-term debt securities trade at 44 basis points below comparable fully private firms. Overall, on a weighted-average basis, housing GSE funding advantages have been estimated at about 35-40 basis points. Other things being equal, the joint and several liability provision for FHLB System obligations would tend to increase this funding advantage for the FHLB System relative to Fannie Mae and Freddie Mac.

⁸ And, again, the FHLBs are reluctant to retain earnings, given their past experience with the Congress.

The remainder of this chapter will describe the 75-year evolution of the FHLB System, with special attention being paid to the various issues that this GSE faces. We will then provide some analysis of the recent expansion of FHLB authorities to issue standby letters of credit (SLOCs). Finally, we discuss the role, actions, and stresses of the FHLB System during the current financial crisis.

II. Some History

A. The early years.

Like a number of other features of America's housing finance sector, the FHLB System has its origins in the 1930s.⁹ In 1932, the FHLB System was created by statute, with the goal of helping provide a stable source of long-term funding for residential mortgage lending. Their core business was lending (via advances) to their member/owners, which were almost exclusively thrift institutions located in the FHLBs' geographic service districts. (Some life insurance companies, which at the time were significant funders of residential mortgages, were also members.) Until the 1990s, all federally chartered thrifts and state-chartered thrifts that were insured by the FSLIC were required to join the FHLB System; state-chartered thrifts (which included mutual savings banks) that were insured by the FDIC or by state insurance funds had the option of joining.

As is still true today, FHLB member/owners were required to buy stock in their regional FHLB, and this provided the GSE with some of its equity/capital. The FHLBs then leveraged these funds by borrowing in the capital markets at favorable rates and relending these funds at favorable rates to their members (via advances). In addition to posting collateral for an advance, members

⁹ Other important government innovations of the 1930s include: (a) the federal regulatory regime for the housing-oriented thrift industry in 1933 and 1934; (b) federal deposit insurance -- the Federal Savings and Loan Insurance Corporation (FSLIC) -- for thrifts in 1934; (c) the creation of the Federal Housing Administration (FHA) in 1934 (and from the FHA, the development of the 30-year fixed-rate mortgage); and (d) the creation of the predecessor organization to Fannie Mae in 1938.

were expected to subscribe for additional FHLB capital as a percentage of the size of the advance (e.g., 5% of the amount of an advance).¹⁰

The original FHLBs were headquartered in 12 cities that were specifically not the cities in which the 12 regional Federal Reserve Banks were headquartered.¹¹ The overseer of the FHLB System was the Federal Home Loan Bank Board (Bank Board), which acquired additional powers as the federal charterer and safety-and-soundness regulator of the savings and loan (S&L) industry in 1933 and as the deposit insurer through the Federal Savings and Loan Insurance Corporation (FSLIC) in 1934.

The FHLB System grew slowly from the 1930s through the 1950s, as can be seen in Table 3. And as of 1960, the FHLBs' advances to their members were equal to less than 3% of the assets of their members. During the 1960s, 1970s, and 1980s, however, thrifts increasingly saw the FHLBs' advances as an alternative source of low-cost liquidity. By 1980, advances were about 8% of members' assets. The increased importance of FHLB advances was perhaps due to limitations on the interest rates that thrifts (and other depository institutions) could pay depositors under Regulation Q. Hence, FHLB advances to thrifts acted as a reliable source of mortgage funding during deposit shortages.

B. The 1980s.

Despite the termination of the Regulation Q ceiling on savings account interest rates in

¹⁰ This capital subscription requirement can be considered to be similar to “compensating balances”, which banks as lenders often required from borrowers. See Flannery and Frame (2006) for a discussion of other activity-based capital requirements by the FHLBs.

¹¹ The original 12 cities of the FHLB System were: Cambridge, MA; Newark, NJ; Pittsburgh, PA; Winston-Salem, NC; Cincinnati, OH; Indianapolis, IN; Evanston, IL; Little Rock, AR; Topeka, KS; Des Moines, IA; Los Angeles, CA; and Portland, OR. Today the banks' headquarters are in Boston, New York, Pittsburgh, Atlanta, Cincinnati, Indianapolis, Chicago, Dallas, Topeka, Des Moines, San Francisco, and Seattle, and thus they overlap with Federal Reserve regional banks in six cities.

1980 and 1982 (by the Depository Institutions Deregulation and Monetary Control Act, and the Garn-St Germain Act, respectively), the early 1980s saw a significant expansion of the FHLBs. Between 1980 and 1985, FHLB System total assets doubled (from \$54 billion to \$112 billion) – even while membership slid by almost 20%. This occurred because FHLB advances became an important tool for helping thrifts improve their asset-liability positions, since it was widely recognized that the thrifts' maturity-mismatched balance sheets -- long-term (30-year fixed-rate) residential mortgage assets and short-term deposit liabilities -- had been the cause of the initial thrift crisis when interest rates spiked in the late 1970s and early 1980s.¹²

There was an additional important change for the System in the mid-1980s. From the beginning of the Bank Board's chartering and safety-and-soundness regulatory authority over the thrift industry in the 1930s, the FHLBs had played a role in that regulation. Though the examiners were on the payroll of the Bank Board and thus were federal government civil servants, the supervisors were employees of the FHLBs and outside the civil service (and the president of each FHLB also had the title of "Principal Supervisory Agent"). When the leadership of the Bank Board decided in 1984-85 that expanded regulatory personnel were needed to deal with the growing safety-and-soundness crisis of the S&L industry, it turned to the FHLB System. In July 1985 the agency's examiners were transferred to the FHLBs, where their numbers and pay scales could be expanded without the restrictions of civil service salaries and federal staffing limits.

C. 1989 and afterward.

The next major change to the FHLB System occurred in August 1989, with the passage of the Financial Institutions Recovery and Reform Act (FIRREA). This law represented the Congress's belated effort to deal with the necessity of resolving the insolvency of the thrifts' deposit

¹² See White (1991) for further discussion.

insurance fund, the FSLIC. In addition to allocating \$50 billion to that resolution (which turned out to be only a down payment on an estimated \$150 billion total resolution cost), the law abolished the Bank Board and divided its responsibilities in four directions: Thrift regulation was the responsibility of a newly created agency, the Office of Thrift Supervision (OTS), and the FHLB System's role in the regulation of the thrift industry ceased. The FSLIC's deposit insurance function was absorbed by the Federal Deposit Insurance Corporation (FDIC). The cleanup and disposal of hundreds of insolvent thrifts became the responsibility of another newly created agency, the Resolution Trust Corporation (RTC), which was primarily staffed and led by personnel from the FDIC. And the regulation and oversight of the FHLB System was lodged in yet another newly created agency, the Federal Housing Finance Board (FHFB).¹³

A new regulator was not the only change for the FHLB System that was contained in the FIRREA. First, the Congress was eager to have the thrift industry bear part of the burden of the cleanup costs. Since the FHLB System was owned by the thrift industry, taking some of the System's net worth and levying a tax on its future profits would be a way of putting part of the burden on the thrifts.¹⁴ The FIRREA required that \$2.8 billion of the System's net worth be used to defease the principal on the \$30 billion in 40-year REFCORP bonds that were floated to help pay for the cleanup and also required that \$300 million per year from the FHLBs' annual earnings be devoted to paying part of the interest on those bonds. Additionally, the FHLBs were required to support low- and moderate-income housing programs with \$50 million per year through 1993, \$75

¹³ As noted previously, in July 2008 the FHFB and the Office of Federal Housing Enterprise Oversight (OFHEO) were combined into a new agency, the Federal Housing Finance Agency (FHFA).

¹⁴ Two years earlier, when the Congress had expanded the FSLIC's borrowing capacity in the Competitive Equality Banking Act (CEBA) of 1987, it also required that up to \$3 billion of the FHLB System's net worth be used to defease the principal on the 30-year bonds that were floated by the Financing Corporation (FICO) on behalf of the FSLIC; in fact, only \$700 million was required at the time. However, the remainder, plus an additional sum, was used subsequently to defease the principal on the 40-year REFCORP bonds that were part of the FIRREA clean-up.

million in 1994, and \$100 million per year thereafter. In 1999, the Gramm-Leach-Bliley Act (GLBA) altered these “income taxes” to 20% and 10% of the FHLB System's profits, respectively.

Second, to ease the burden on the FHLBs themselves, the legislation also opened voluntary membership in the FHLBs to other federally insured depository institutions -- commercial banks and credit unions -- that had 10% or more of their assets devoted to residential mortgage finance.¹⁵ The GLBA further opened potential FHLB membership by allowing “community financial institutions” (i.e., those with under \$500 million in total assets as of 1999, and subsequently indexed) to join irrespective of their holdings of residential mortgage-related assets.

The statutory changes in FIRREA encouraged the FHLB System to grow and to increase its attention to profitability. Between 1989 and 2008, FHLB System total assets increased from about \$175 billion to \$1,349 trillion, and its composition of assets changed. Besides a secular increase in advances, FHLB balance sheets also came to include substantial investment in marketable securities (especially residential mortgage-backed securities) and member-guaranteed mortgage pools. This shift, in turn, resulted in the FHLBs’ managing an increasing amount of interest rate risk, including the embedded call options associated with the prepayment of residential mortgages. Concomitantly, the System's leverage increased and percentage capital levels fell, from 8.9% of assets in 1988 to 3.8% of assets in 2008.

Each FHLB maintains an investment portfolio of shorter-term instruments for liquidity and longer-term securities for income. Pre-FIRREA, in 1988, FHLB System total investments were \$35.2 billion (19.5% of total assets); this quickly jumped to \$71.7 billion (46.4% of total assets) in three years time (year-end 1991). Much of this initial increase in investment holdings was in mortgage-backed securities issued by Fannie Mae and Freddie Mac. Concerns about interest-rate

¹⁵ Federally chartered thrifts were still required to be FHLB members until 1999, when the GLBA allowed their membership too to become voluntary; as a consequence of regulations adopted by the Office of Thrift Supervision, federally insured state-chartered thrifts became voluntary members in 1995.

risk, coupled with political criticism, led the FHFBS subsequently to revise its “Financial Management Policy” in 1992 so as to limit FHLB holdings of mortgage-backed securities to 300% of total equity.¹⁶

In the late 1990s, the FHLBs began purchasing mortgages from their members through either the “mortgage partnership finance program” operated by the Chicago FHLB or other “mortgage purchase” programs operated by some of the other individual FHLBs. While there are some differences between these programs, the fundamental risk-sharing principles are the same: The selling member guarantees most of the credit risk on the mortgages, while the FHLBs bear the attendant interest rate risks.¹⁷ While these mortgage purchases are economically the same as investing in mortgage-backed securities, the FHFBS approved this activity on the basis that it was consistent with the FHLB System’s mission and benefited members. The FHLBs’ mortgage holdings peaked at \$114 billion in 2004 and have slowly, but steadily, declined since then, following some financial and accounting difficulties related to these programs. At year-end 2008 they amounted to \$87 billion.

Internal competitive pressures have also increasingly been felt by the individual FHLBs due to the introduction of voluntary membership and to financial services consolidation. The commercial banks, thrifts, and credit unions chartered in a FHLB’s geographic territory will join only if they receive valuable services. In addition, as a consequence of mergers and acquisitions some financial institutions have retained charters in multiple FHLB districts, which allow them to borrow from the individual FHLB offering the cheapest advances. This competition places downward pressure on the interest rates on advances (while the non-borrowing or light-borrowing members of the FHLB System would prefer higher interest rates on advances and thus higher profits

¹⁶ In March 2008, the FHFBS temporarily increased this limit to 600%.

¹⁷ More detailed descriptions and further discussions of the FHLB mortgage programs can be found in Frame (2003) and Frame and White (2007).

and dividends).¹⁸

Earlier in this decade several of the individual FHLBs and certain housing industry groups (e.g., the Mortgage Bankers Association of America) proposed allowing the FHLB System to securitize conforming mortgages.¹⁹ The policy motivation for this proposal was grounded in the perception that the guarantee fees charged by Fannie Mae and Freddie Mac in conjunction with the issuance of mortgage-backed securities (at the time, around 20 basis points on a weighted average basis) appeared to be excessive. While a formal proposal including the proposed structure and scope of FHLB securitization activity has not yet been put forward, one may speculate that it would involve the issuance of single-class securities with a blanket FHLB System guarantee and be operated through the Office of Finance.²⁰ This would be akin to the FHLB System's being authorized to enter the mortgage credit guarantee business on an equal footing with Fannie Mae and Freddie Mac.²¹

The entry of the FHLBs into providing standby letters of credit (SLOCs) is yet another area of controversy -- an issue that we address below in Section III.

¹⁸ See U.S. General Accounting Office (2003) for a discussion of competition within the FHLB System, including the role of the price and non-price terms of credit.

¹⁹ Conforming mortgages are those that conform to the size and quality standards that would allow them to be bought or securitized by Fannie Mae or Freddie Mac.

²⁰ The Chicago FHLB has already participated in some securitization activity through their "shared funding program", which allows the institution to acquire collateralized mortgage obligations and sell interests in such assets (to other FHLBs or to FHLB System members). The inaugural deals involved the Chicago FHLB working with certain members to structure securities backed by conventional-conforming mortgages, using a REMIC structure. Given that no new "shared funding program" deals have recently occurred, one may speculate that the structure has been found to be uneconomical.

²¹ Following the imposition of conservatorship regimes at Fannie Mae and Freddie Mac in 2008, there has also been policy discussion about converting these GSEs from stock to cooperative ownership. This could also naturally lead to a discussion of whether simply to abolish Fannie Mae and Freddie Mac and hand over responsibility for government-sponsored securitization to the FHLB System.

III. Public Policy and the FHLB System

A. The overriding issue.

As is true for the two other housing GSEs (i.e., Fannie Mae and Freddie Mac), a fundamental public policy issue for the FHLB System should be immediately addressed: Since the U.S. today has well-developed financial markets (including mortgage markets) and there are also extensive tax advantages and other preferential policies for residential housing already in place, what legitimate purpose is currently served by the housing GSEs?²² Where are the market failures that housing GSEs are supposed to correct? This question takes special importance for the FHLB System since, as was mentioned above, it appears that the FHLBs' advances to their members are used for general lending purposes, rather than being particularly focused on housing finance. Further, it is clear that the larger FHLB members that are the largest users of advances are well able to access national capital markets on their own and do not need the FHLBs as intermediaries on their behalf. While smaller members might benefit from a FHLB-like wholesale funding intermediary, it is not clear that such an institution needs a Congressional charter.

As a related matter, when a GSE enters a new activity, the presence of their underlying borrowing advantage makes it difficult to discern whether their expansion (if successful) is due to an inherent efficiency or synergy or whether it is simply a "leveraging" of their borrowing advantage to the new activity. This issue is particularly troublesome when private firms are already serving the market that the GSE is entering. Moreover, if the new activity should prove to be a major problem for the GSE, could the adverse financial consequences be large enough to place taxpayers at risk? Note that the perceived implied guarantee provides excessive risk-taking incentives to GSE shareholders and allows these institutions to grow almost without limit since their debt funding costs are seemingly invariant to risk. Such concerns about moral hazard and the

²² This question has also been posed specifically for the activities of Fannie Mae and Freddie Mac by White (2003, 2004) and Frame and White (2005).

potential scale of taxpayer liability have been primarily discussed in the context of Fannie Mae and Freddie Mac – and these fears were ultimately realized.²³

With respect to the FHLB System and as discussed in Flannery and Frame (2006), the cooperative ownership structure does not mitigate the dangers of deliberate or inadvertent risk-taking by the FHLBs. The extremely high leverage of the FHLB System (a ratio of assets to capital of over twenty-to-one) and the fact that the debt is held by outsiders who are lulled into slack monitoring (and the acceptance of that high leverage) because of the System's GSE status mean that FHLB member/owners can still gain (in an expected value sense) from risk-taking. Similarly, the joint-and-several-liability structure of their consolidated obligations serves as only a modest restraint on risk-taking. Though the 11 other FHLBs may be liable for the misdeeds or errors of any single FHLB, a free rider problem among those 11 could well mute their efforts to control risk-taking among the 12. Indeed, just prior to the financial crisis, financial difficulties arose at some of the FHLBs (e.g., Chicago and Seattle) because of difficulties in managing and accounting for the interest rate risk associated with their respective mortgage purchase programs (discussed above). During the crisis, several FHLBs have experienced material write-downs due to their holdings of the supposedly safe, high-rated tranches of privately issued mortgage-backed securities.

As mentioned previously, the federal government regulates the safety-and-soundness of the FHLB System, so as to protect the System's creditors and (perhaps) the federal government, in the event that the System experienced financial difficulties. However, as Frame and White (2004) point out, the presence of a safety-and-soundness regulator, somewhat ironically, may well strengthen the capital market's perception that the federal government will bail out the System and thereby strengthen the political pressures for such a bailout in the event of financial difficulties. As a matter of a priori reasoning, then, it is unclear whether the presence of a safety-and-soundness regulator (or

²³ See Frame (2009) for a discussion of the federal intervention with respect to these two housing GSEs.

the prominent strengthening of such a regulator) lowers or raises the expected costs to taxpayers.²⁴

In any event, the safety-and-soundness issue re-raises the question of what are the public purpose benefits of the FHLB System and whether those benefits are worth the risks. Now, we turn to a specific FHLB issue: standby letters of credit.

B. Standby Letters of Credit.

Standby letters of credit (SLOCs) are, in essence, a guarantee (or insurance) issued by a third party to a lending transaction that states that, in the event that a borrower fails to honor its repayment obligation to the lender, the SLOC issuer will fulfill that obligation.²⁵ Put differently, in the event of borrower default, the SLOC issuer agrees to make regular principal and interest payment to the lender and then will establish a claim on the original borrower for these funds. (The same principle applies if there is yet an additional party that is providing a back-up SLOC to support the original issuer of a SLOC.) The borrower pays a fee to the issuer in exchange for the SLOC, but as a result is able to obtain better terms (e.g., a lower interest rate) on its borrowing since the lender is able to look to the issuer for the back-up protection. Though there is always some advantage to the lender in being able to look to an additional party for back-up protection,²⁶ the advantage is especially salient when the financial strength of the guarantor (e.g., as measured by an external credit rater, such as Moody's or Standard & Poor's) is greater than the financial strength of the borrower.

²⁴ In addition, the actions of the U.S. Treasury in 2008-2009 to support Fannie Mae and Freddie Mac has likely further strengthened the FHLBs' creditors' beliefs that the Treasury would likely come to the rescue of the FHLB System if it experienced financial difficulties.

²⁵ Other, familiar forms of this kind of back-up arrangement are the practices of having a co-signer on a loan, having mortgage insurance, and having credit card insurance. Another way of phrasing this activity is that it is a "credit enhancement".

²⁶ An exception is if the probabilities of repayment by the borrower and by the SLOC issuer are perfectly correlated.

The FHLBs first received authority to issue SLOCs in 1983 because these instruments were considered to be the functional equivalent of an advance. In November 1998, the FHFB codified existing regulatory guidance related to FHLB issuance of SLOCs in Part 938 of its rules and regulations.²⁷ The final rule expanded the FHLBs' authorization to offer SLOCs to members and eligible non-member mortgagees for any of four general purposes: (1) to assist members in facilitating residential housing finance; (2) to assist members in facilitating community lending; (3) to assist members with asset/liability management; and (4) to assist members with liquidity and other funding. SLOCs issued to members must be fully collateralized using either eligible advance collateral (outlined in 12 C.F.R. 950.7) or, when related to (1) or (2), investment grade municipal bonds. SLOCs issued to eligible nonmember mortgagees (housing associates) generally must be collateralized by FHA-insured mortgages (or securities backed exclusively by such loans), although the broader range of advance collateral may be pledged in the event that the SLOC is for purpose (2).

As of year-end 2007, the 12 FHLBs together had almost \$29 billion in SLOCs outstanding – backing taxable bonds, tax-exempt housing bonds, and public unit deposits. Nevertheless, the FHLBs' issuances of SLOCs had been limited by the fact that existing law required that municipal bonds (the interest for which is typically income-tax-exempt) would lose their income-tax-exempt status if they were guaranteed or insured by the federal government or its agencies, which for these purposes appeared to include the FHLBs. But the Federal Housing Administration (FHA), the Veteran's Administration (VA), Fannie Mae, Freddie Mac, and Ginnie Mae were each already exempt from this law.²⁸ Legislation had been periodically considered by the Congress that would have allowed municipal bonds to retain their tax-exempt status even when they received

²⁷ During the notice and comment period for proposed Part 938, the U.S. Treasury Department raised objections – most notably that the new rule gave the FHLBs too much latitude for issuing SLOCs. See Carnell (1998).

²⁸ See 26 U.S.C. 149(b)(3)(A))

SLOCs directly from the FHLBs or indirectly from FHLB members that had back-up SLOCs from the FHLBs. Not surprisingly, the private-sector monoline bond guarantors opposed the proposed legislation (as they did the 1998 expanded authorization).²⁹

In mid-2008, as part of the Housing and Economic Recovery Act of 2008, the FHLBs gained their exemption as well. By the end of 2008, the FHLBs' outstanding SLOCs had expanded to almost \$50 billion.

The FHLBs' expansion of their SLOC activities poses the kinds of questions that we raised in Section A above: Is the FHLBs' expansion here part of an inherent efficiency or synergy? Or is it just a leveraging of their special GSE borrowing advantage into an already competitive market? As a related point, how well does the offering of SLOCs fit with the FHLBs' current expertise? Does it raise safety-and-soundness concerns?

On this last question, under FHFBS regulations, it appears that a SLOC issued by a FHLB to credit enhance municipal obligations would have to be intermediated by an FHLB member. Further, in the event that the municipal borrower (covered by the SLOC) defaults, the original issuer of the SLOC (the FHLB member) would be expected to make the principal and interest payments to the lender/beneficiary and then would acquire the lender's claim on the borrower (and would try to collect). Only if the FHLB member also defaulted on its obligation would the FHLB be liable for the obligation; but the FHLB would have the collateral that had been posted by the member as part of the terms of the SLOC, as well as a "super-lien" on the assets of the member for the repayment of advances, including advances that are created by a SLOC-related member default. At this level, the safety aspects of the SLOCs to the FHLBs appear to be quite small.³⁰ However, unlike the capital requirements for advances, only a few FHLBs require an additional activity stock purchase

²⁹ See Stern and Cochrane (1998) and McCarthy (2006).

³⁰ In essence, because of the FHLB's collateral requirement and super-lien, any loss created by a SLOC-related member default would be absorbed by the Federal Deposit Insurance Corporation (FDIC).

requirement on their members for obtaining SLOCs. This suggests that a large increase in SLOC activity (with no attendant increase in capital) could increase FHLB risk profiles.

In any event, the first of our questions remains: Is there a market failure in the area of bond guarantees that would justify the FHLBs' expanded SLOC authority? It seems unlikely that the market for third-party credit enhancements for municipalities is inefficient or underserved. We are unaware of any barriers to entry. And, at the same time, the FHLBs may have two important GSE-related advantages that could help them under-price private-sector SLOC competitors: The first is that the FHLB System, like Fannie Mae and Freddie Mac, maintains a AAA rating despite holding much less equity/capital than similarly rated private financial firms. The second is the previously mentioned ability of the FHLB to lay to claim to marketable collateral as well having as a "super-lien" for the repayment of advances, which include those advances created by a SLOC.

The SLOC debate thus represented an interesting question as to the extent to which public policy should encourage the leveraging of the FHLBs' GSE advantage into areas that are increasingly distant from the original housing mission of the System. We expect that this will not be the last time that the issue of the FHLBs' expansion will be debated.

C. The FHLB System during the Recent Financial Crisis.

At the outset of the recent financial crisis, the FHLB System played an important role in providing liquidity – via advances – to its members. According to Ashcraft, Bech, and Frame (2008), FHLB advances increased by \$235 billion during the second half of 2007 (to \$875 billion); with advances to 10 members accounting for \$150 billion of this increase. The authors point out that during this time the FHLBs provided cheaper and more flexible financing than the Federal Reserve, which is typically viewed as the lender-of-last-resort.

During 2008, however, FHLB advance lending began to taper off, owing to several factors: First, as the financial crisis evolved, the Federal Reserve System became more creative and

aggressive in their lending practices. Second, the imposition of a federal conservatorship regime at Fannie Mae and Freddie Mac led these issuers of federal agency debt to get more favorable pricing for their bonds – despite their financial distress. Higher interest rates on FHLB debt, *ceteris paribus*, led to higher advance rates and some decline in activity. Finally, the FDIC’s creation of the Term Liquidity Guarantee Program (TLGP) provided an attractive alternative for depository institutions to access low-cost capital market financing.³¹

However, as was mentioned above, the FHLBs themselves have been financially weakened during the crisis – partly from unfortunate investments in some of the “toxic assets” that were the result of the subprime mortgage securitizations of recent years, and partly from the continuing fallout from their inability to manage the interest rate risk from their “mortgage purchase” programs with FHLB members.

Thus, the appropriate role for the FHLBs once the crisis has passed remains an open but interesting and important question – as is true for the other two housing GSEs (Fannie Mae and Freddie Mac).

D. Whither the FHLB System?

The FHLB System has largely stayed “under the radar” in the policy discussions of post-crisis regulatory reform. Although the system has experienced some financial stress, it has remained solvent and has not required the kinds of governmental interventions that the insolvencies of Fannie Mae and Freddie Mac required: government conservatorships, and substantial injections of government funds. Also, as we noted at the beginning of this chapter, the FHLB System was and remains far less well known than its two GSE “colleagues”.

Nevertheless, as the Obama Administration’s “Financial Regulatory Reform” proposals

³¹ We note that preliminary data for the third quarter of 2009 show this shrinkage continuing, with the FHLB System’s aggregate assets shrinking to \$1,062 billion (from \$1,349 billion at year-end 2008) and advances shrinking to \$678 billion (from \$929 billion).

acknowledged,³² the needed long-run (i.e., post-crisis) reforms and restructuring of the U.S. housing finance system should encompass the FHLB System as well as Fannie Mae and Freddie Mac.

As we indicated earlier, the heart of any discussion about the future for the FHLB System should be the consideration of potential market failures. Without the identification of market failures, the justification for governmental action – or, in the case of the GSEs, semi-governmental action – is greatly eroded, unless favorable income redistribution enters the picture (e.g., efforts by society to help lower-income households). We are unaware of any significant income redistribution arguments that apply to the FHLB System; and, as argued above, we don't see the FHLB System's functions – lending directly to its members, and assisting its members in their lending activities -- as compensating for significant market failures. That the beneficiaries of these activities receive a subsidy (derived ultimately from the System's GSE-based favorable borrowing rates) is clear, as is their desire to continue to receive the subsidy; but absent a strong market failure or redistribution argument, the subsidy is a likely source of distortion and mis-allocation of resources, rather than a positive social feature.

Further, the System's GSE status introduces an extra set of issues: The implicit (or, post 2008, increasingly explicit) guaranty of the FHLBs' debt brings also the exposure of the federal government to the potential losses that may arise from risk-taking by the FHLBs that elude their regulator. The conservatorships of and Treasury contributions to Fannie Mae and Freddie Mac show that this is more than a theoretical possibility. The expansion of the System's "mission" to encompass somewhat related activities – as exemplified by the SLOC experience discussed above and by the System's expansion to community development lending more generally – raises the efficiency and risk issues in yet more dimensions.

The possibilities for the FHLB System in the post-crisis world, with a return to a structure of

³² See U.S. Treasury (2009).

reasonably well functioning housing finance markets, seem to us to be as follows:³³

a) Maintain the status quo. This would, of course, mean the continuation of the risks and tensions that accompany the status quo.

b) Privatize the System. To the extent that the System plays a worthwhile role as a wholesale lender to smaller financial institutions, this can be continued under a purely private charter – perhaps with the private entity keeping its cooperative membership structure.

c) Socialize the System. Bring the System wholly within the boundaries of the U.S. Government, perhaps placing it within the U.S. Department of Housing and Urban Development (HUD).

d) Combine aspects of b) and c): Privatize the normal lending function; expand the membership of the regional Federal Reserve banks to include the thrifts and insurance companies that are currently the members of the FHLB System and thus wrap the System's provision of liquidity to these financial institutions at times of stress explicitly into the functions of the Federal Reserve.

e) Combine all three GSEs into a cooperatively owned GSE structure: As we noted earlier, a co-op structure for Fannie Mae and Freddie Mac has been suggested and discussed, and their combination with the FHLB System would achieve just such an ownership structure; but many of the risks and the tensions related to the GSE structure would persist.

Perhaps creative students of public policy can devise yet more options. We urge careful consideration of all of them.

IV. Conclusion

The FHLB System is the least well known of the three housing GSEs, but its size and functions make it worthy of greater attention and understanding. The issue of the System's

³³ Similar options would seem to apply to the other housing GSEs.

capabilities for offering SLOCs on tax-exempt municipal bonds was discussed in this chapter as an illustration of a number of important questions concerning the System and its activities. The FHLB System's history, current structure, activities, incentives, and regulation all warrant further study, along with its appropriate role in the post-crisis landscape of the U.S. financial system.

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Table 1
The 12 FHLBs: Assets, Members, and Concentration of Ownership and Advances
December 31, 2008

FHLB	Total Assets	Number of Members	Membership Concentration (Five Largest Members)	
	\$ Billion		Share of Capital	Share of Advances
Atlanta	\$208.6	1,238	43.9%	51.3%
Boston	\$80.4	461	51.5%	53.6%
Chicago	\$92.1	816	29.9%	39.9%
Cincinnati	\$98.2	728	51.4%	59.6%
Dallas	\$78.9	923	51.1%	59.2%
Des Moines	\$68.1	1,245	40.1%	40.1%
Indianapolis	\$56.9	424	45.4%	48.4%
New York	\$137.5	311	47.8%	50.4%
Pittsburgh	\$90.8	323	57.8%	63.1%
San Francisco	\$321.2	430	72.2%	77.8%
Seattle	\$58.4	381	58.4%	68.4%
Topeka	\$58.6	872	39.2%	49.9%
Combining Adjustment	(\$0.6)			
TOTAL	\$1,349.1	8,152	52.7%^a	58.8%^a

^a Weighted average: assets as weights

Source: Federal Home Loan Banks' Office of Finance

Table 2
Consolidated Balance Sheet of the FHLB System
December 31, 2008

	Amount (\$ Billions)	Share of Assets (%)
Assets		
Advances	\$928.6	68.8
Mortgage Loans (Net)	\$87.4	6.5
Mortgage-backed Securities	\$169.2	12.5
Cash & Non-Mortgage Investments	\$157.5	11.7
Other Assets	\$6.4	0.5
Total Assets	\$1,349.1	100.0
Liabilities and Capital:		
Consolidated Obligations (Net)	\$1,258.3	93.3
Other Liabilities	\$39.4	2.9
Membership Capital Stock	\$49.6	3.7
Retained Earnings	\$2.9	0.2
Other Comprehensive Income	(\$1.1)	(0.1)
Total Liabilities and Capital	\$1,349.1	100.0

Source: Federal Home Loan Banks' Office of Finance

Table 3
The Growth of the FHLB System: 1935 – 2008

Year-end	FHLB System Total Assets (\$B)	FHLB System Advances (\$B)	Advances as a % of Assets	Number of Members
1935	\$0.2*	\$0.1	50.0%	3,467
1940	0.3	0.2	66.7	3,864
1945	0.3	0.2	66.7	3,697
1950	-	0.8	-	3,930
1955	2.2	1.4	63.6	4,336
1960	3.3	2.0	60.6	4,716
1965	7.8	6.0	76.9	5,053
1970	14.7	10.6	72.1	4,649
1975	22.7	17.8	78.4	4,274
1980	54.3	49.0	90.2	4,244
1985	112.2	88.9	79.2	3,489
1990	165.7	117.1	70.7	3,000*
1995	272.7	132.2	48.5	5,575
2000	653.7	437.9	67.0	7,777
2005	997.4	619.9	62.2	8,149
2006	1,016.5	640.7	63.0	8,127
2007	1,271.8	875.1	68.8	8,075
2008	\$1,349.1	\$928.6	68.8	8,152

* Estimated

Sources: FHFA, FHFB; FHLBs, FHLBB