July 2002

Federal Reserve Bank of Cleveland

Commercial Banks' Borrowing from the Federal Home Loan Banks

by James B. Thomson

Since 1990, when commercial banks were first eligible to join the Federal Home Loan Bank System, they have become an important constituency of the FHLBs. Currently, seven out of 10 banks are members, and nearly half of all banks have advances outstanding. Given the wide range of activities that commercial banks can engage in, this *Commentary* asks whether FHLB lending to them is consistent with their traditional housing finance mission, with the Gramm-Leach-Bliley extension of their mission to provide liquidity support to community banks, or with both.

Enactment of the Financial Institutions Reform, Recovery, and Enforcement Act of 1989 was a watershed event in the financial system policy of the federal government. It represented the first concrete effort to resolve the 1980s thrift debacle and to make meaningful financial system and regulatory reforms. It also changed the role of the Federal Home Loan Banks by opening them up to commercial banks.

The Federal Home Loan Banks (FHLBs) function as special lending facilities for the housing finance industry. These government-sponsored enterprises increase the liquidity of mortgage markets by making advances (loans) against member institutions' mortgage portfolios. For the better part of six decades, membership in the FHLBs was limited to institutions specializing in housing finance—largely savings associations. This limitation established a strong connection between FHLB lending and housing finance. The wider range of assets commercial banks can hold and the fungibility (interchangeability) of advances weakens the connection between housing finance and FHLB lending to banks. So, while it reaffirmed the FHLBs' housing finance mission, the Financial Institutions Reform, Recovery, and Enforcement Act widened the scope of lending that was supported, albeit indirectly, by FHLB advances. A decade later, the Gramm-Leach-Bliley Act of 1999 contained a provision that formally extended FHLB advances to support the small business and small agricultural loan portfolios of community financial institutions (then defined as those with assets of $500 million or less). In this provision of Gramm-Leach-Bliley, Congress amended the FHLBs' mission to include providing broader liquidity support for community banks and thrifts.

Today, commercial banks are an important constituency of the FHLBs. Starting from zero at the beginning of 1990, commercial bank membership had grown to 5,786 (73 percent of all FHLB members) by December 31, 2001. Moreover, at the end of 2001, three-fourths of all FHLB advances went to commercial banks, which collectively borrowed $198 billion (nearly 42 percent of the total dollar volume of FHLB advances).

Commercial banks' prominence as members of the FHLB system and their increased use of FHLB advances for funding is not surprising. After all, throughout the 1990s the attractive returns offered by the stock market and competition from other financial institutions made it difficult for banks to attract and retain deposits. Moreover, the stability of FHLB advances as a funding source and the below-market lending rate make borrowing from them attractive.

Given the cost and funding advantages that FHLBs enjoy as government-sponsored enterprises (see the Congressional Budget Office studies in the recommended reading list) and the increasing share of FHLB assets represented by advances to banks, I am interested in the effects on the financial system of changes in access to FHLB funding. Is the borrowing pattern consistent with the FHLBs' traditional housing finance mission? With the FHLBs' providing liquidity support for community banks? With some other objective? I shed light on these questions by examining the characteristics of banks' borrowing from FHLBs, including the distribution of borrowing across different sizes of banks. I find evidence of a positive relationship between a bank's reliance on FHLB advances for funding and the share of assets invested in housing-related credits. Although community banks are less likely than their larger brethren to have outstanding FHLB advances, the data suggest that the FHLBs are an important backup liquidity source for community banks.

■ Support of Housing Finance

In opening up the FHLBs to commercial banks, Congress recognized that the thrift industry's post-debacle role in financial markets would be permanently reduced. Failures during the 1980s and early 1990s, combined with ongoing industry consolidation over the last decade, brought the number of savings institutions down from a peak of 3,677 in 1986 to 1,533 at the end of 2001.

ISSN 0428-1276

Moreover, the thrift industry's share of total credit intermediated by depository institutions fell from 34 percent in 1986 to less than 17 percent at the end of 2001. On the flip side of the coin, the commercial banking industry emerged as an important housing finance lender. At the end of 1990, banks held nearly $399 billion in home mortgages, a number that rose to more than $966 billion by the end of 2001. In contrast, savings associations' mortgage portfolios showed anemic growth, rising just 10 percent (from $543 billion to $598 billion) over the same period.

At the margin, the ability to pledge mortgages as collateral for FHLB advances should increase the attractiveness of investing in these assets. After all, this collateralization option increases the liquidity of mortgage portfolios and reduces the cost of funding additional mortgages, especially when advances are made at below-market rates of interest. Giving banks the option of using housing-related assets as collateral against advances is consistent—in principle—with the FHLBs' housing finance mission. But is lending to banks also consistent with this mission in practice?

To answer this question, I compare the housing-related assets held by FHLB members against those held by nonmember commercial banks as of June 30, 2001. I use data from the June 2001 Call Report exclusively because banks did not report FHLB advances as a separate item before 2001, and some data of interest are reported once a year, in June. I also look for differences in portfolio shares of these assets, comparing FHLB members that have advances outstanding with members that choose not to borrow. If access to advances promotes housing finance lending by banks, one would expect to find higher concentrations of housing finance loans for FHLB member banks than for nonmembers, and for FHLB borrowers than for nonborrowers. For the most part, I find exactly that. The average FHLB member's housing-related assets make up 19 percent of total assets, while the average nonmember bank holds roughly 14 percent of its assets in housing-related loans. Moreover, banks with FHLB advances outstanding invest 40 percent more in housing-related assets than do nonborrowing banks.

Another interesting question: Is greater reliance on FHLB advances associated with a higher portfolio share for housing-related assets? As noted earlier, for commercial banks the fungibility of funds, coupled with asset powers that are wider than thrifts', weakens the link between FHLB advances and housing finance. If access to FHLB advances increases banks' holdings of housing-related assets, we should observe a positive relationship between a bank's reliance on FHLB advances and the share of its assets in housing finance loans. Regression analysis shows a significant relationship between FHLB advances and housing-related loans for banks: For a 1 percent increase in the ratio of advances to assets, the share of assets invested in housing loans increases 0.74 percent. Overall, the evidence suggests that admitting commercial banks to the FHLB system is consistent in practice with the system's traditional housing finance mission.

Support of Community Banks

For commercial banks, much of the value associated with FHLB membership comes from access to FHLB advances—a low-cost (subsidized), stable source of funding. Advances give banks an additional tool for managing their liabilities so as to minimize interest costs and increase liquidity. Advances potentially reduce a bank's interest costs by increasing its flexibility in funding its assets. Banks are likely to borrow from the FHLB whenever the marginal cost of raising additional deposits or the interest costs of other nondeposit funding sources exceed the cost of advances. In addition, access to the FHLB credit facility may allow a bank to supply credit to customers that might otherwise go unfunded; credit access may also help a bank cover an unexpected short-term deposit outflow (or other temporary losses of funds), thereby avoiding potentially costly short-term borrowing or asset liquidation.

By expanding the collateral that community financial institutions can pledge against advances, this provision of the Gramm-Leach-Bliley Act represents a potentially important expansion of the FHLBs' mission by providing additional support for community financial institutions. By making a larger part of their balance sheets eligible as collateral (in comparison with larger-sized institutions), the Act substantially increases these institutions' ability to use FHLB advances for funding assets and asset growth. In June 2001, community banks (those with total assets not exceeding $500 million) held nearly 19 percent of their assets in housing-related loans and investments that could be used as collateral for FHLB borrowings. Under the terms of Gramm-Leach-Bliley, the additional 19 percent of community bank assets held in the form of small business and small agricultural credits also qualifies as collateral.

A recent study by Craig and Thomson (2001) questions the need to expand the pool of collateral that community banks can pledge against advances. The authors find no evidence that these institutions need greater access to FHLB advances to meet their customers' credit needs. Valid concerns have been raised in rural areas about the possibility that shrinking deposit bases could cause community banks to ration credit to small businesses and farms. But Craig and Thomson find no evidence that community banks' access to funding has damped credit access in rural areas. On the contrary, they find that the deposit base of the average rural community bank is more than sufficient to fund its customers' credit needs.

Although this study looks at whether community banks need expanded access to FHLB advances to fund assets, it does not consider the role FHLB advances might play as a source of liquidity. With outstanding advances to commercial banks approaching $198 billion, it is natural to ask whether, in addition to funding housing finance assets, borrowing from the FHLBs is an important source of liquidity for community banks. One way to get at this question is to look at how borrowing is distributed across different size classes of banks. For that purpose, I break the industry down into three size classifications: large banks (total assets greater than $10 billion), medium-sized banks (total assets greater than $500 million and less than or equal to $10 billion), and community banks (total assets no greater than $500 million).

Table 1 shows that large banks account for about $104 billion (49 percent) of total dollar advances outstanding to commercial banks. Medium-sized banks account for more than $74 billion, representing 35 percent of the total outstanding to banks. Community banks, which borrowed less than $34 billion

TABLE 1 FHLB BORROWINGS BY BANK SIZE

	Small banks (total assets less than $500 million)	**Medium-sized banks** (total assets $500–$10 billion)	**Large banks** (total assets more than $10 billion)
Number of borrowers	3,549	528	50
Borrowers as s percent of total banks	45.68	73.54	65.79
Total advances (millions of dollars)	33,520	74,389	103,866
Percent of advances to banks	15.83	35.13	49.05
Average advance (millions of dollars)	9	141	2,077
Advances as a percent of assets	6.41	8.42	6.51

SOURCE: Federal Financial Institutions Examination Council, *Reports of Condition and Income*, June 2001.

from the FHLBs, account for less than 16 percent of total bank advances. A similar picture emerges if we look at the average size of advances outstanding—and the percentage of banks—in each category. Less than half of small banks had advances from the FHLBs; for those that did borrow, the mean size of the advance was $9 million. Nearly three-quarters of medium-sized banks and almost two-thirds of large banks borrowed from the FHLBs. The mean advance for borrower banks was $141 million for medium-sized institutions and $2,077 million for large ones. Clearly, medium-sized and large banks have been the most active users of advances.

The distribution of advances by bank size does not necessarily mean that FHLBs are not an important source of liquidity for community banks. After all, large banks hold 66 percent of total commercial bank assets, while medium-sized banks hold 20 percent and small ones hold 14 percent. Table 1 shows that, controlling for asset size, the use of advances looks very similar for large banks and for small ones. For banks with borrowings from the FHLBs, the ratio of advances to assets is 6.41 percent for small banks and 6.51 percent for large banks—and the difference is not statistically significant. However, for medium-sized banks with outstanding borrowings, the ratio of advances to assets is 8.42 percent, which is significantly higher than for either of the other two sizes. Overall, banks that borrow from the FHLBs do not show wide, size-related disparities in terms of reliance on them for funding.

Finally, this analysis does not consider the value for banks of the option to borrow from the FHLBs, that is, the FHLBs' role as a backup source of liquidity. For small banks without access to capital markets, this option to borrow may be particularly valuable, whether or not it is ever exercised. Remarkably, while about one-third of FHLB member banks had no outstanding advances, nearly 96 percent of these nonborrowers are small banks. Because FHLB membership is voluntary, it must be the case that for these nonborrowing banks the value of the option to borrow exceeds the costs of membership. A reasonable inference is that banks, especially small ones, value access to FHLB advances as a backup source of liquidity.

Conclusions

FHLBs have become an important source of funding and liquidity for commercial banks. Seven out of 10 banks are members, and nearly half of all banks have advances outstanding. In fact, more commercial banks are members of the FHLB system than of the Federal Reserve System. FHLB advances currently fund more than 3 percent of the banking system's assets. Moreover, as noted earlier, banks constitute the largest single membership group in the FHLBs and are the second-largest group of borrowers.

I find little evidence that commercial banks' admission to the FHLB system and their increasing prominence as members and borrowers is inconsistent with the FHLBs' traditional housing-related mission. The FHLB borrowing provision of the Gramm-Leach-Bliley Act increases the FHLBs' capacity for providing liquidity to community banks. Today, membership and borrowing patterns across banks are largely consistent with small banks' use of FHLBs as a backup source of liquidity. It remains to be seen what effect, if any, the expanded collateral provision of the act will have on community banking activities in years to come.

Recommended Reading

Congressional Budget Office. 1996. *Assessing the Public Costs and Benefits of Fannie Mae and Freddie Mac*. Washington, D.C.: U.S. Government Printing Office.

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