

Federal Home Loan Bank Advances: A Supervisory Perspective

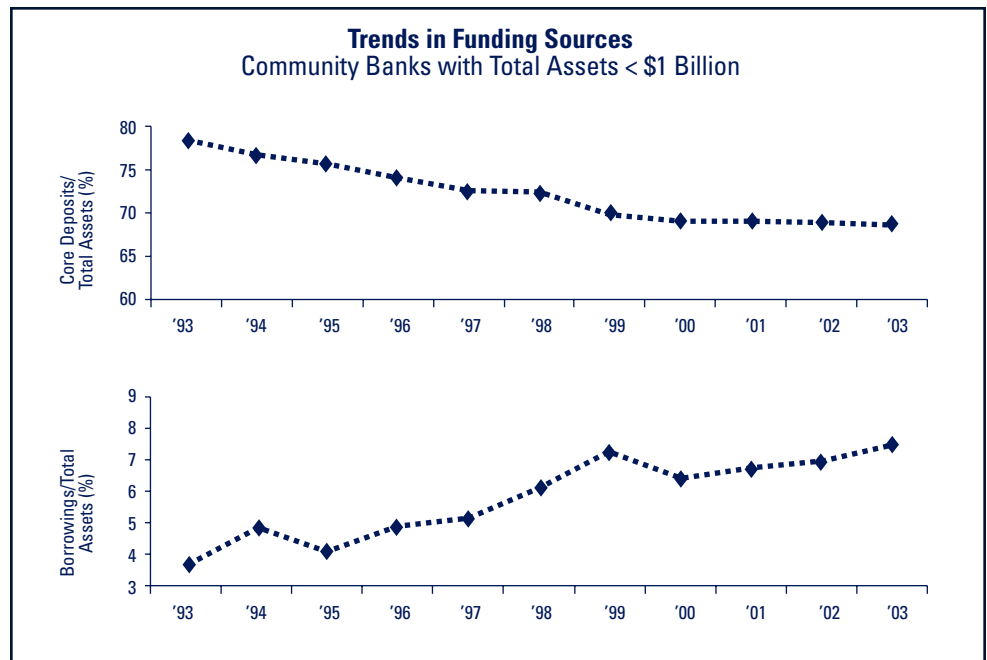
The Federal Home Loan Bank (FHLB) System is an increasingly important funding source for community banks. What risks are associated with the growing importance of FHLB advances in banks' funding mix? Such risks could include an unexpected increase in cost or reduction in availability of advances in general and the mismanagement of advances by specific institutions. While there is no immediate systemic threat to the overall cost and availability of advances, individual institutions must be mindful of the risks undue reliance on advances can pose. Examiner review of the heaviest users of advances indicates that most banks manage these products prudently—but the exceptions have given rise to supervisory concern.

Traditionally, community banks have relied on deposits as the primary funding source for earning assets. (In this article, institutions with total assets less

than \$1 billion are considered community banks.) As shown in Chart 1, core deposits remain the primary source of funding for these institutions.¹ There has been, however, a noteworthy trend in community bank funding patterns during the past ten years. Core deposits have been declining as a percentage of total assets as these institutions have become more dependent on other borrowings to meet funding needs.² Core deposit migration is due, in part, to bank deposit accounts losing significant ground to higher-yielding mutual funds and to the euphoria of the stock market during the late 1990s. For instance, during the ten years ending December 31, 2003, mutual fund assets increased 258 percent, while core deposits as a percentage of community bank total assets declined 11.52 percent.³

Even with recent negative publicity surrounding mutual fund sales practices,

Chart 1



¹Core deposits exclude certificates of deposit greater than \$100M, brokered deposits, and foreign deposits.

²Other borrowings include primarily FHLB advances, fed funds purchased, and repurchase agreements.

³Mutual fund asset data for December 2003 were provided by the Investment Company Institute.

investors have not lost faith in this investment alternative. This observation is supported by the recently reported 2.5 percent growth in mutual fund assets for month-end December 2003. To a large extent, the decline in core deposit funding has been offset by an increase in different types of wholesale funding, such as FHLB advances and brokered certificates of deposit (CDs). In fact, community bank use of other borrowings and brokered CDs increased by 123 percent and 394 percent, respectively, from 1993 to 2003. During this time, FDIC-insured institutions significantly increased their reliance on FHLB advances (see Chart 2).

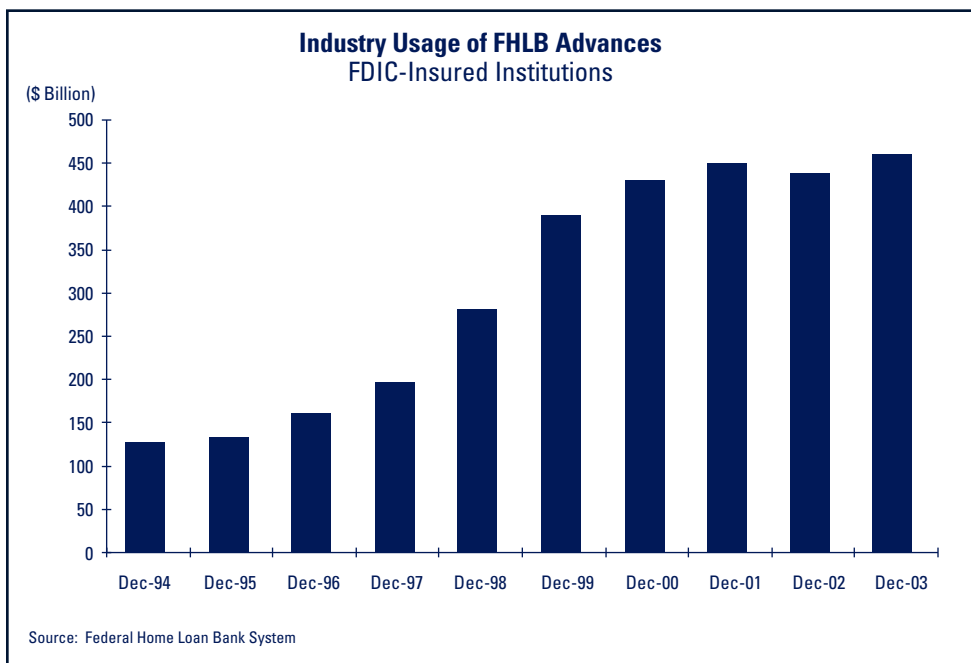
Most notably, the rate of advance usage accelerated from 1994 through 2000, before tapering off in response to the recession and the resultant lackluster stock market performance. However, as the economy and the equity markets began to rebound in 2003, FDIC-insured institutions started to increase borrowing

levels from the FHLB System. Determining the specific composition of advances in any given bank is difficult without visiting the financial institution, as the amount and nature of advance information reported in the Call Report is extremely limited. Call Report data show that commercial banks were liable for \$237 billion in FHLB advances as of September 30, 2003, which is 52 percent of the \$456 billion in advances outstanding to FDIC-insured institutions.⁴ Savings associations and savings banks held 39 percent and 9 percent of advances, respectively. Accordingly, commercial banks are now a core constituent and borrower of the FHLB System.

In light of community banks' growing use of advances, this article focuses on two areas of supervisory attention:

- (1) the impact of the FHLB System's risk profile on FDIC-supervised institutions; and

Chart 2



⁴Commercial banks include national, state member, and state nonmember banks.

- (2) whether the types and degree of advance usage by FDIC-supervised institutions raise any concerns.

The FHLB System

The FHLB System recently has been the focus of negative financial news and increased regulatory scrutiny. In the second half of 2003, FHLB-New York reported a loss of \$183 million on its investment portfolio and suspended its third quarter dividend payment. Consequently, Standard & Poor's (S&P) lowered the long-term counterparty credit rating for FHLB-New York to AA+ with a stable outlook because of higher credit exposures and operating losses. Late in third quarter 2003, S&P revised its outlook to negative from stable for FHLB-Pittsburgh and FHLB-Atlanta because of heightened interest rate risk exposure and earnings volatility. S&P also revised its outlook for FHLB-Chicago, -Indianapolis, and -Seattle to negative from stable. In a November 17, 2003, press release, S&P stated that the ratings action reflects its concern regarding the banks' change in risk profile, which has led to a higher degree of interest rate risk exposure and higher demands for risk management. The change in risk profile stems from actively growing fixed-rate residential mortgage portfolios as a part of the mortgage partnership programs developed in the FHLB System. S&P stated that the ratings actions do not affect the AAA rating on the senior debt of the banks in the system based on their status as government-chartered entities.

In addition to rating agency attention, policymakers have expressed concerns regarding the regulation of housing government-sponsored enterprises (GSEs). In the "Analytical Perspectives" portion of the fiscal year 2005 budget of the United States (budget proposal), the Bush administration strongly suggests

that regulatory reform is necessary for the housing GSEs, including the FHLB System.⁵ The budget proposal includes a detailed analysis that indicates that GSEs do not hold enough capital and outlines problems encountered last year by the FHL Banks and other housing finance GSEs. Furthermore, the analysis warns that because of the large size of these entities, even a small mistake by a GSE could have consequences throughout the economy.

FDIC-supervised institutions could be affected negatively if these recent events result in higher advance rates. FHL Banks can lend money to members at lower rates because, as GSEs, they can borrow at cheaper rates. Traditionally, GSEs benefit from an implied guarantee to the extent investors perceive that they are backed by the federal government. Although highly unlikely, loss of GSE status coupled with negative ratings actions or downgrades would probably result in much higher borrowing costs for FHL Banks and borrowing members, many of which are FDIC-supervised and -insured institutions.

Even though the FHLB System has recently sustained some negative press and closer regulatory scrutiny, these factors do not pose significant negative implications for FDIC-supervised institutions at this time. This finding is evidenced by Moody's third quarter 2003 reaffirmation of its Aaa bank-deposit rating on the FHL Banks, which attests to their profitability, liquidity, and asset quality. However, regulators should continue to monitor FDIC-supervised and -insured institutions' level and use of FHLB advances.

Community Bank Use of FHLB Advances

The upward trend in advance use by FDIC-supervised institutions coupled

⁵ "Analytical Perspectives," *Budget of the U.S. Government—Fiscal Year 2005*, pp. 81–85.

with the lack of Call Report information on the composition of FHLB advances prompted the FDIC in 2002 to review the largest users of FHLB advances it supervises. The sample consisted of 79 banks; each bank had advances equal to at least 25 percent of total assets as of June 30, 2002.⁶ The sample included the top ten FHLB advance users (as a percentage of assets) in each Region and area office. This supervisory review was conducted primarily to determine the types of advances community banks used (although 10 percent of the sample banks had total assets in excess of \$1 billion). Of particular interest was the level of advances containing options, referred to as structured advances. Historically, such advances have been characterized by higher levels of interest rate risk and have required more rigorous risk management techniques.

In 2003, a second supervisory review was conducted to analyze trends in the types of advances community banks used, in the aggregate and among FDIC Regions and area offices. The 2003 review focused on banks with a significant increase in advances year-over-year, not only on banks with a relatively high use of advances. In addition to

having a high asset concentration of advances, sample banks displayed at least a 25 percent increase in their use of advances between June 30, 2002, and June 30, 2003. Because both requirements had to be met for inclusion in the sample, the sample cutoff for advances as a percentage of assets was lowered from 25 percent to 15 percent. Although the average asset size of the banks in the sample increased in 2003, the sample population remained essentially community banks.

The survey results indicated that fixed-rate, nonstructured advances were the most popular type of advances used by sample banks in 2003 and 2002. Floating-rate advances showed a significant increase in popularity in the 2003 survey, but they remained a relatively small percentage of total advances. Structured advances accounted for just under one-third of total advances in both years. The relatively heavy use of structured advances by some institutions in the sample would not have been identified through current reporting requirements.

The review captured the dollar amount and types of structured advances

Characteristics of Banks in the Sample	June 30, 2003	June 30, 2002
Total Number of Banks	107	79
Total Assets	\$128.5 billion	\$41.5 billion
Average Total Assets	\$680 million*	\$521 million
Average FHLB Advances/Assets**	20 percent	29 percent
Banks With FHLB Advances/Assets > 35 percent	4	16
Composition of FHLB Advances		
Average Fixed-Rate Advances/Total Advances	57 percent	63 percent
Average Floating-Rate Advances/Total Advances	13 percent	5 percent
Average Structured Advances/Total Advances	30 percent	32 percent

*For the 2003 sample, average total assets excludes two large banks with \$34 billion and \$23 billion in total assets.

**The decline in this ratio from 2002 to 2003 is not attributed to an actual decline in use but rather to a change in the criteria for choosing banks in the sample. In the 2002 sample, each bank had advances equal to at least 25 percent of total assets; however, this ratio was changed to 15 percent for the 2003 sample.

⁶The bank population represented each FDIC Region and area office and was derived using judgmental sampling, with emphasis placed on the banks with high concentration levels and, for the 2003 review, rapid growth over the sample period.

reported by the sample banks. The most commonly used structured advances were callable, putable, and convertible advances. The FHL Banks use various terms for these structured advance products; but for purposes of the survey, FDIC provided sample banks with the following terminology and definitions to ensure consistency. Callable and convertible advances are very similar in that the borrowing bank has effectively sold an option to the FHLB in return for a relatively low interest rate. The initial interest rates on these products are *lower* than a fixed-rate advance with the same maturity, owing to the embedded option. The interest rate remains fixed for a predetermined amount of time (lockout period), after which the FHLB has the option to call the advance or convert it to a floating-rate advance. These types of borrowings carry risk associated with the uncertainty of the option exercise. Also, when the option is exercised, it will be at a point when it is financially disadvantageous for the borrower. The FHLB charges substantial prepayment penalty fees for early payoff of an advance. Typically, the prepayment fee for an advance with an option includes the FHLB's hedge-unwind cost related to the borrowing plus the present value of the foregone profit on the advance. With a putable advance, the borrowing bank effectively purchases an option from the FHLB that allows the bank to prepay the advance without penalty on a predetermined date or dates. Because the borrowing bank controls the embedded option, the bank must pay a premium for the advance, generally in the form of an above-market interest rate. Therefore, putable advances are offered at a *higher* cost than fixed-rate advances with a similar maturity date. The FHLB System's 2003

financial report indicates that only a little over 2 percent of total advances outstanding at year-end 2003 were putable advances.

Potential supervisory concerns with structured advances include the following: (1) these products can have a significant impact on a bank's interest rate risk profile as they are used in increasing quantities; (2) they often are used as part of leverage programs that tend to focus on short-term enhancement of return on equity with a concomitant increase in the institution's risk profile; (3) several banks have recently paid substantial prepayment penalties to retire costly structured advances before maturity; and, in some instances, (4) bank management did not possess the requisite knowledge and understanding of these products to manage the risks effectively.

The 2003 sample banks appeared to have a preference for convertible advances, whereas the 2002 banks preferred callable advances. The popularity of convertible advances over other structured advances is probably an indication that the sample banks decided to take advantage of the historically low interest rate environment. Almost a year later, convertible advances could still be obtained at a very low interest rate. For example, as of April 6, 2004, several FHL Banks offered five-year convertible advances with a one-year lockout period at an initial interest rate ranging from 1.28 percent to 1.62 percent.⁷

Sample banks in various Regions showed notable differences in terms of advance composition and use.⁸ In both reviews, sample banks in the Chicago Region were the heaviest users of FHLB

⁷The range of interest rates for a five-year/one-year convertible advance was obtained from FHLB-Atlanta, -Chicago, -Des Moines, and -Topeka websites as of April 6, 2004.

⁸FDIC Regions are defined as the following geographic areas: Atlanta Region (AL, FL, GA, NC, SC, VA, WV); Chicago Region (IL, IN, KY, MI, OH, WI); Dallas Region (AR, CO, LA, MS, NM, OK, TN, TX); Kansas City Region (IA, KS, MN, MO, ND, NE, SD); New York Region (CT, DC, DE, MA, MD, ME, NH, NJ, NY, PA, PR, RI, VI, VT); San Francisco Region (AK, AS, AZ, CA, FM, GU, HI, ID, MT, NV, OR, UT, WA, WY).

advances, with advances-to-assets ratios of 26 percent in 2003 and 37 percent in 2002. For the 2003 sample banks, the *structured* advances-to-total-advances ratio ranged from a low of 3 percent in the San Francisco Region to a high of 58 percent in the New York Region.⁹ In 2002, the San Francisco Region again displayed the lowest use of structured advances at 15 percent; the largest user of structured advances was the Kansas City Region at 57 percent.

In both reviews, sample banks in the San Francisco Region were the most conservative in their choice of advances. They were the heaviest users of fixed-rate advances, with fixed-rate advances-to-total-advances ratios of 77 percent in 2003 and 85 percent in 2002.¹⁰ In 2003, three Regions (Atlanta—42 percent; Chicago—53 percent; and New York—58 percent) reported a higher percentage of structured advances than both fixed- and floating-rate advances. In 2002, four Regions (Atlanta—44 percent; Chicago—44 percent; Memphis—50 percent; and Kansas City—57 percent) reported a higher level of structured advances than all other advance products.¹¹ Based on the results of both reviews, we can conclude that the sample banks in the Atlanta and Chicago Regions rely heavily on structured advances.

How Community Banks Use Advances

The supervisory review asked three questions designed to gather information about how banks use advances and how well banks manage risks associated with advance use.

(1) What was the primary use of FHLB advances by each bank between June 30, 2002, and June 30, 2003?

The results of the survey indicate that advances were used primarily to fund loan growth and secondarily to buy securities and manage interest rate risk (IRR). Only 4 percent of surveyed banks used advances primarily to replace core deposit runoff.

Fund Loan Growth	34 percent
Purchase Securities	22 percent
Manage IRR	20 percent
Provide Liquidity	12 percent
Replace Core Deposits	4 percent
Pay Down Other Liabilities	4 percent
Other	4 percent
	100 percent

(2) Did the bank have a specific program, designed to enhance earnings, which matches FHLB advances with investments in earning assets (sometimes referred to as leverage or arbitrage programs)?

Forty-three percent of the sample banks used the advances as part of a leverage strategy. These strategies are intended to increase profitability by leveraging the bank's capital by purchasing earning assets using borrowed funds, often FHLB advances. Profitability may be achieved if a positive, stable net interest spread is maintained. Leveraging strategies increase assets and liabilities while decreasing the bank's capital ratios. If improperly managed, these strategies may cause increased IRR and credit risk (depending on the assets purchased) and

⁹One institution in the New York Region skews the percentage because it holds nearly \$2 billion in structured advances.

¹⁰The fixed-rate advances-to-total-advances ratio for 2003 is skewed due to inclusion of Washington Mutual Bank (WAMU); however, WAMU is not included in the 2002 sample group.

¹¹The former Memphis Region is now an area office within the FDIC's Dallas Region.

decreased net interest margin (NIM). Structured advances are often used in leveraging strategies. Survey results indicated that sample banks in both the Atlanta and Chicago Regions were heavy users of structured advances. The two Regions accounted for 22 percent of the reported leverage programs for the 2003 review. Sample banks indicated that advances obtained for leveraging purposes primarily funded securities, such as collateralized mortgage obligations (CMOs) and mortgage pass-throughs.

(3) Did the last FDIC examination identify any weaknesses in the bank's risk management program regarding the use of FHLB advances?

FDIC regional capital markets specialists indicated that 10 percent of the sample banks had risk management weaknesses associated with FHLB advances. Deficient bank policy guidelines were the most frequently identified weakness. Other deficiencies included inadequate information provided to the board of directors on advance use, difficulty tracking the initial use of the funds, lack of a strategic plan for leverage strategies, compression of NIM because of costly advances, and lack of pre-purchase analysis and ongoing performance measurement.

Survey results are in line with recent examination data for FDIC-supervised banks. The use of advances does not play a material role in most examination ratings. Only 3 percent of FDIC-supervised banks with Composite CAMELS ratings of 3, 4, or 5 funded more than 15 percent of assets with advances, and only 7 percent of FDIC-supervised banks with poor ratings on Sensitivity to Market Risk made significant use of advances.

Consequences of Inadequate Risk Management

Is mismanagement of FHLB advances a significant problem for FDIC-supervised institutions? For some of the sampled institutions, the answer is yes. All sample banks with a composite 3 rating and a 3, 4, or 5 rating for earnings, liquidity, or sensitivity were assessed further to determine how FHLB advances factored into the examination rating. Examiner comments relative to earnings, liquidity, and sensitivity provided insight into how these banks managed the risks on both sides of the balance sheet as a result of obtaining FHLB advance funding. For the 2003 and 2002 reviews, FHLB advances contributed to the adverse examination rating for 5 percent and 16 percent, respectively, of the sample banks. The examiners' comments clearly show that improper management of FHLB advances can increase a bank's risk profile and the degree of supervisory scrutiny it may face.

The following are the most common weaknesses examiners identified for the 2003 sample banks with composite or component ratings of 3 or worse:

- repricing mismatch between advance and investment (IRR);
- expensive long-term advances relative to the cost of core deposits;
- low liquidity;
- advances used as the primary source of funding; and
- inadequate bank policies and monitoring practices.

The examiner findings for the 2002 sample banks with composite or component ratings of 3 or worse mirror those of the 2003 sample group. However,

several risk management weaknesses were unique to the 2002 sample banks:

Leverage strategies were not evaluated to determine the impact of interest rate volatility on earnings and capital.

IRR exposure was not maintained within established policy guidelines, resulting in a contravention to the Joint Agency Policy Statement on IRR.¹²

IRR position was exacerbated by leverage programs.

Conclusion

The intent of this article was to draw a conclusion regarding community banks' increasing reliance on the FHLB System via FHLB advances and whether this relationship poses a supervisory concern. We examined the availability of FHLB advance data through the Call Report system, evaluating how the financial condition of the FHLB System affects financial institutions and, finally, surveying the types and degree of advance usage by community banks that are the most active users.

Based on our research and supervisory review results, we can generally assert the following:

FHLB advances are a secondary, but growing, source of funding for community banks.

Limitations of available reported financial information highlight the need for on-site review of potential risks associated with inappropriate use of FHLB advances.

As indicated by a recent Moody's report, the FHLB System is in sound financial condition despite operating losses and earnings volatility experienced by several FHL Banks in 2003. However, bank regulators should continue to monitor the financial condition of the FHLB System and the outcome of regulatory reform for GSEs.

There is steady but not excessive use of structured advances among community banks.

Community banks are actively using FHLB borrowings to fund leverage programs.

Most banks with a high concentration of FHLB advances (≥ 15 percent advances to assets) do not have a high level of risk management deficiencies.

Management must continue to demonstrate a thorough knowledge of FHLB advance products, their risks, and enterprise-wide implications.

All of these observations lead us to the conclusion that FHLB advances are an important funding source for community banks when properly managed. Bank management needs to understand the terms of the advances, the risks they pose, and their impact on banks' financial condition. Our examiners will continue to ensure compliance with these sound principles.¹³

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¹²FIL-52-1996: Interest Rate Risk.

¹³Examiner guidance on FHLB advances:

- Wholesale Funding—Transmittal #2002-039, dated August 28, 2002.
- Revised Examination Guidance for Liquidity and Funds Management—Transmittal #2002-0001, dated November 19, 2001.
- Federal Home Loan Bank Advances—Transmittal #2000-046, dated August 22, 2000.