

# All Capital Is Not Created Equal

## Commentary

by Michael R. McCabe

WHILE THE AMOUNT OF capital held by an institution is important, the *quality* of capital—the ability to absorb unexpected losses—is equally critical.

To validly compare the capital strength of different institutions requires a close examination of how well a company's capital can protect it from unexpected losses. Any comparison that relies exclusively on a quantification of capital, such as a simple **leverage ratio** of capital as a percentage of assets, can be misleading. Two firms could hold equal dollar amounts of capital, but one company may benefit from better insolvency protection than the other because the quality of the capital is not comparable for the pair.

### Testing for Quality

Judging the relative quality of capital boils down to a few fundamental questions:

- Is the capital permanent?
- Is the capital exclusively available to absorb unexpected losses?
- To what extent does the capital create a drain on earnings, especially during financially trying times?

To elaborate, the quality of capital improves when it is permanent—meaning, the owners



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of a firm cannot withdraw their capital from the company. **Common equity**, for example, typically is considered permanent. Although common stockholders can sell their shares to other investors, they cannot force the company to redeem their shares and refund their capital contributions.

To further qualify as high quality, capital must remain exclusively available to the company to cover unexpected losses that could ruin the firm. Capital fails the exclusivity test if it is simultaneously positioned to protect another company in the event of unexpected losses. This could happen only under a fairly unusual set of circumstances wherein Company Y is able to offset its losses by siphoning

away capital from Company Z. No matter how much capital Company Z reports on its balance sheet, some amount less than that truly stands ready to protect against default.

The third criterion for testing the quality of capital is the extent to which the capital creates a drag on the earnings of a company, particularly during periods of economic distress. All forms of capital represent a financial obligation of the company to its owners, but the type of capital dictates the extent of the imposition. The larger and more inflexible the obligation, the greater the potential drain becomes on corporate earnings. Common equity, **preferred equity** and **subordinated debt**, for example, all count as capital, but each influences earnings differently in stressful times.

A company paying cash dividends on its common stock usually can choose to reduce or eliminate the dividend payment when business sours, freeing up cash without pressuring earnings. A company typically enjoys far less flexibility when it comes to disbursing dividends on its preferred stock, which typically is issued with a contractually fixed or floating yield. In tough times, this means a preferred dividend gets paid even if the common

dividend is suspended. Falling in a still-lower quality tier is subordinated debt. This kind of capital can drag down earnings substantially because failure to make the interest payments on these obligations can force a company into default.

Thus, all three forms of capital—common and preferred equity and subordinated debt—may pass both the permanency and the exclusivity tests. However, preferred equity and especially subordinated debt rank lower on the capital-quality scale given the drag they can impose on company earnings. The more an organization's capital is characterized by inflexible dividend or interest payments, the weaker its capital position becomes.

#### Counting Capital: A Case Study

To assess a company's ability to withstand economic stress or unexpected losses, observers must understand how the quality of the firm's capital can undermine the quantity of that capital as fortification against financial ruin. Firms that rely too heavily on nonpermanent capital, or capital that likewise fails the tests for exclusivity and earnings flexibility, will fare worse in a crisis than firms with higher-quality capital.

The Federal Home Loan Bank (FHLB) System, which is unique among major financial institutions, provides an interesting case study of how the

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quality of capital can alter an organization's protection from various sources of risk. As a 1993 Congressional Budget Office study concludes, the "most striking feature of the capital of the FHLB system is that it cannot absorb much risk."

The FHLB System is a government-sponsored enterprise whose mission is to support residential-mortgage lending by its member-stockholders. The 12 district banks that form the FHLB System extend advances to their member thrifts, commercial banks, insurance companies and credit unions that, in turn, relend the funds as residential-mortgage money.

Nearly 85 percent of the FHLB System's 6,100 members have joined the system voluntarily. Mandatory membership is imposed only on

the country's federally chartered thrifts—which numbered 1,195 as of March 1998—that are regulated by the Office of Thrift Supervision.

The bulk of the FHLB System's equity consists of the capital contributed by its voluntary and mandatory members in exchange for common stock. Each member is required to purchase stock in its regional bank in amounts determined by a complex formula that measures, among other things, a member's assets and FHLB advances.

As of September 30, 1997, the consolidated balance sheet of the 12 regional banks reflected \$324.9 billion in total assets supported by capital stock of \$18.0 billion and **retained earnings** of \$0.4 billion. Although a simple leverage ratio would indicate that the system was capitalized at 5.7 percent ( $\$18.4 \text{ billion of capital} \div \$324.9 \text{ billion in assets}$ ), this belies the fact that the **paid-in** portion of the FHLB System capital does not wholly meet the three hallmarks of quality.

### Keeping Capital from Straying

FHLB System capital comes up short on the permanency trait. Most of the members can choose to rescind their membership and, over time, withdraw their paid-in contribution, thereby reducing the FHLB System's capital level. In contrast, shareholders in a company backed by permanent capital cannot demand their money back from the firm in which they invested. They can only sell their stock to another investor.

The 1993 Congressional Budget Office report does note that the System's regulator, the Federal Housing Finance Board, can move to prevent the redemption of FHLB stock to ensure that FHLBs never fail. But, the study continues, "in exercising that authority, the regulator shifts the risk to the system's members, which are insured depositors." That, in turn, puts the deposit-insurance fund at risk (see "Why Care About Capital, Anyway?" page 3).

*Stress testing  
would identify  
the risk-  
absorption  
strengths and  
weaknesses in the  
FHLB's capital  
structure.*

### Once Is Enough

Just as the FHLB System cannot clear the permanency hurdle, it likewise cannot clear the exclusivity hurdle for quality capital. That is because much of its capital base comes from the deposit accounts maintained by the customers of its thrift and bank participants. As members, thrifts and banks are entitled to use their depositor money to satisfy virtually all of their FHLB System stock-purchase requirement. For example, if a thrift invests \$10 million in FHLB stock, the investment is recorded simultaneously as \$10 million in capital on the FHLB System's books and as a \$10-million asset on the thrift's balance sheet. The thrift, however, then needs to hold capital against the risk of its investment in the FHLB System

stock. Under current risk-based capital regulations, that type of investment falls into the low-risk category necessitating a 1.6-percent risk capital charge relative to riskier assets capitalized at a standard 8-percent rate. As a result, the thrift would need to capitalize its \$10-million investment with \$160,000 (1.6 percent x \$10-million stock purchase). The thrift funds the remaining \$9.84 million (\$10 million – \$160,000) of the investment with deposits, in effect "converting" deposits into capital which then is used by the FHLB in its own lending and investment activities.

Consequently, FHLB capital fails the exclusivity test because the very same capital that supports the thrift's or bank's assets is simultaneously used to support the FHLB's assets.

Among the implications of this unique capital arrangement is this: If the FHLB System experiences unexpected losses from its activities that erode its capital, then its thrift, bank and other members must write down the value of their FHLB investments by a commensurate amount. Since the FHLB capital consists, to a great extent, of depositors' money, this write-down jeopardizes the ability of the thrift or bank to pay off its depositors. This ultimately places the risks taken by the FHLB System squarely on the shoulders of the Federal Deposit Insurance Corp. Historically, this capital

arrangement has carried no ill consequences because the FHLB System's activities have entailed very little inherent risk. However, to the extent that the System engages in new ventures with additional risks—whether interest-rate risk or mortgage-default risk—these issues of capital quality become more urgent.

#### **What a Drag**

The third test for high-quality capital—whether or not capital creates a drag on earnings—also is problematic for the FHLB System. Despite the various benefits of FHLB membership, the organization feels it must pay a relatively high dividend on its common equity (historically, nearly 7 percent, compared to dividend yields of closer to 1 percent that Freddie Mac and Fannie Mae have paid). Reducing that dividend yield could threaten the FHLB System's ability to attract and retain its membership base and, therefore, its capital base.

If the FHLB System were to reduce or discontinue its dividends during a period of economic stress, this could lead to membership rescissions and capital withdrawals at precisely the wrong time. The dividend yield paid by the FHLB System potentially creates a drain on the system's earnings that is atypical of common equity, pushing it closer in quality to a debt obligation.

#### **Putting the Stress on Quality**

If the most important characteristic of high-quality capital is its ability to absorb risk, then what changes will improve the quality of the FHLB System's capital? Various Congressional Committees, as they take up the question of financial modernization, have raised the same question about how to improve the System's capital. One option under consideration is to subject the 12 regional banks to **stress testing** similar to that which Freddie Mac and Fannie Mae will face (see "Stressing Performance: Evaluating the Capital Adequacy of Freddie Mac and Fannie Mae," page 47). An effective stress test would measure the rate of capital withdrawn under a crisis scenario as its members leave the System. Although stress testing would not provide an immediate solution to the problems of nonexclusivity, nonpermanency and the earnings drain, it would identify the risk-absorption strengths and weaknesses in the FHLB's capital structure. **SMM**