ECONOMIC COMMENTARY

Federal Reserve Bank of Cleveland

Bank Lending to LBOs: Risks and Supervisory Response

by James B. Thomson

Leveraged buyouts (LBOs), a popular method of corporate restructuring in the past decade, have attracted significant attention among the news media, Congress, and bank regulators. The huge size of recent takeover deals and the dramatic increase in LBO credits on bank portfolios have raised concerns about the risks of LBO financing. This article examines these risks and discusses the current response of bank supervisory authorities to the increased use of funding by leveraged buyouts.

An increased use of debt financing has been a hallmark of the financial restructuring of corporate America that has taken place in the mid- and late 1980s. An organization that develops from a corporate reorganization now commonly has 80 to 90 percent of its financing in the form of debt, in contrast to the 30-percent debt-to-assets ratio that prevailed in the previous two decades. Because of the high degree of leverage employed in these deals, they are often referred to as leveraged buyouts (LBOs), a form of highly leveraged financings.

The news media, Congress, and the regulatory community have all focused considerable attention on LBOs in recent months, largely because of the use of this financing arrangement to fund corporate takeovers. Media interest has been heightened by the size and volume of recent deals, particularly the reported $25.3 billion that the firm of Kohlberg, Kravis & Roberts paid for RJR Nabisco. The total volume of LBO deals for 1988 exceeded $98 billion.

Congressional attention concerns the use of LBOs in takeover deals that involve a major restructuring of the acquired company. The result in such deals may be layoffs and plant closings in communities where the acquired firm is the major, and sometimes only, employer. Some members of Congress are also wary of the LBO market's potential effect on consumer and small-business credit and on the stability of the financial system itself. Furthermore, because the tax code makes debt financing relatively less expensive than equity financing, Congress is concerned that tax considerations alone may be a major motivation behind many of the LBO deals. The LBO situation is so important that only the $100 billion thrift-industry bailout and deposit-insurance reform take precedence over it on the 101st Congress's agenda for regulatory reform in the financial sector.

Bank regulators are becoming increasingly interested in bank participation in LBO lending because of the dramatic increase in LBO credits on bank portfolios. The Comptroller of the Currency estimates that of the $150 billion to $180 billion in LBO debt outstanding, $80 billion is held by U.S. banks.[1] Most of this exposure has been accumulated in recent years. In fact, estimates of total bank lending for LBOs in 1988 may exceed $48 billion (excluding $15 billion in bank loans to RJR Nabisco).

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In addition, analysts estimate that LBO credits on bank portfolios equal 18 percent of the total dollar volume of commercial and industrial loans and 50 percent of bank capital.[2] Concentration of LBO exposure is uneven; one published estimate of LBO exposure for the 10 most active banks in the LBO market cites a range from 40 to 140 percent of equity capital.[3]

Bank regulators are concerned about the impact of increased LBO exposure on bank soundness and, ultimately, on the regulatory safety net. High levels of leverage are thought to be associated with both increased risk and larger expected returns than most loans to less-leveraged customers. Assuming the current system of federal deposit insurance remains intact, federal deposit guarantees may cause banks to underprice the risk of LBO credits and to book more LBO loans for their portfolios than they would in the absence of deposit guarantees.[4] Because of these incentives, it is likely that LBO-related credits will be a point of exposure in the banking system.

This *Economic Commentary* looks at the risks associated with LBO lending and the current response of federal bank regulators to banks' increasing participation in this market. First, we will provide a brief overview of LBOs. Then we will examine the risks associated with lending to these highly leveraged companies. Finally, we will outline the current response of federal bank regulators to the increased participation of banks and bank holding companies in funding LBOs.

■ A Brief Primer on LBOs

What degree of leverage must a firm have in order for its financial restructuring to be defined as an LBO? There seems to be no consensus: Bankers Trust defines a firm as highly leveraged if it has 70 percent debt financing, while the Federal Reserve System is now using 75 percent debt financing as a general examination guideline.[5]

The degree of leverage that constitutes a highly leveraged firm is a relative concept. For example, the J.P. Morgan deal that created U.S. Steel in 1901 was considered to be highly leveraged because it resulted in a debt-to-assets ratio of 35 percent.[6] Although a debt-to-assets ratio of 80 percent is not uncommon in a country like Japan, a U.S. firm with this ratio is considered to be highly leveraged.

Even though the transactions that have drawn the majority of attention lately are the multibillion-dollar deals like RJR Nabisco, the data presented in table 1 show that the bulk of the $98.3 billion of LBO deals last year were relatively small. Of the 304 deals in 1988 identified as LBOs by Venture Economics, Inc., roughly 88 percent had a transaction price under $500 million, 19 deals were between $500 million and $1 billion, and 17 deals exceeded $1 billion. The average size of LBO transactions in 1988 was $327 million. The multibillion-dollar deals dominated the market in terms of total dollar lending, however, accounting for nearly 57 percent of the $98.3 billion in total transactions.[7]

Making loans to highly leveraged firms is not a new activity for banks. Banks have lent to highly leveraged firms in the middle market (deals under $500 million) for years. Most loans guaranteed by the Small Business Administration can be defined as highly leveraged financings. However, the syndication of loans for leveraged buyouts of national and multinational companies is a more recent phenomenon.

LBOs typically have three tiers of financing. The first tier is senior debt, which makes up 50 to 60 percent of the total and mainly consists of secured bank loans. The second tier is mezzanine financing, which consists of unsecured debt and makes up roughly 30 percent of the total. These debentures are considered highly speculative investments (junk bonds). The last tier of financing is equity, which usually makes up 10 to 20 percent of total financing. Some of the equity in the reorganized firm may be held by nonbank subsidiaries of bank holding companies.

■ Risks Associated with LBO Credits

LBO financing is a natural market for banks. Loans to support LBO transactions carry many of the same risks of more traditional commercial loans, so banks should be in an excellent position to assess and assume these risks. However, the larger degree of leverage in LBO financing accentuates the risk of default, because there is less equity in the firm to absorb unexpected earnings losses. It is therefore essential that the lender conduct a sufficient analysis of the proposed transaction and of the creditor, and that it appropriately price the risks of these loans.

TABLE 1 LEVERAGED BUYOUTS IN 1988 BY TRANSACTION SIZE[a]

Transaction Size	Number of Buyouts	Percent of Total	Dollar Volume[b]	Percent of Total $
Under $50 million	105	34.5%	$2,206.6	2.2%
$50 million - $99.9 million	58	19.1%	4,086.8	4.2%
$100 million - $499.9 million	105	34.5%	22,334.0	22.7%
$500 million - $999.9 million	19	6.3%	13,961.0	14.2%
Over $1 billion	17	5.6%	55,687.0	56.7%
Totals	304	100.0%	$98,275.4	100.0%

a. Deals announced or consummated in 1988.
b. Millions of dollars.
SOURCE: *Buyouts*, vol. 2, issue 1, Venture Economics, Inc., January 11, 1989, page 2.

Lending analysis should be focused primarily on reasonable projections of cash flows and secondarily on collateral values. Recent experience with real-estate lending in Texas and with agricultural loans in the Midwest illustrates the problems that can arise when lending is based on inflated asset values and not on accurately projected cash flows.

However, the valuation of collateral and cash flows may be difficult, as the value of a firm's stock may double or triple when a takeover deal is announced. Furthermore, cash-flow projections are often based on a radically reorganized firm and on overly optimistic assumptions about cost-cutting measures and asset sales. These uncertainties make it difficult to use historical cash flows to project future cash flows.

The recent expansion of lending to highly leveraged firms has occurred during the relatively stable macroeconomic environment of the mid-1980s. Although banks' loss experience on LBO-related loans is not materially higher than for more traditional commercial loans, it is unclear how LBO credits will perform in a less stable macroeconomy. How much can interest rates rise before some highly leveraged firms can no longer meet their debt payments? What effects would an economic downturn (especially a prolonged recession) have on many highly leveraged firms' abilities to service their debt from operating income? A large part of a bank's LBO portfolio could conceivably go under if interest rates rise dramatically or if there is a severe economic downturn. The concern is that a bank may not be able to adequately hedge against macroeconomic risks in its LBO-related loan portfolio.

Although macroeconomic risk may not be mitigated by diversifying the LBO portfolio, diversification is important. Even in a robust macroeconomy, regional- or industry-specific problems can affect the ability of an LBO firm to service its debt. Through diversification, the impact of these problems on the bank's LBO portfolio is minimized.

■ **Current Supervisory Response**

Currently, federal bank authorities both supervise and regulate risks posed to the banking system from the LBO portfolios of banks. Because no additional restrictions have been imposed on the activities of banks participating in the LBO market, only the existing regulations for bank lending pertain to LBO loans.[8] Moreover, much like the approach taken to reign in daylight overdrafts in the payments system, banks are being asked to define, manage, and impose internal limits on their own LBO risk exposure.[9] Regulators, using their supervisory authority, would take action against a bank only if its internal procedures were deemed inadequate. Federal supervisors would emphasize management skills and portfolio composition in evaluating a bank or bank holding company's LBO exposure.

In their evaluation, bank examiners look for an internal definition of an LBO credit: can the bank identify its LBO portfolio and LBO loan exposure? In addition, are there procedures in place for evaluating the risk of LBO loans? Does management have the ability to evaluate the target company's management and operating controls?

Banks are also expected to have in place specific procedures to deal with defaults, including procedures to monitor their risk exposure to both individual and aggregate LBO credits. In addition, the banks must have established policies, procedures and documentation to handle the special legal problems associated with LBO lending.[10] Finally, the adequacy of internal controls will be examined. For instance, has management established prudent and reasonable limits on the total amount of exposure and the type of exposure to LBO credits (on both a bank and a consolidated holding company basis)?

In conjunction with their evaluation of management, bank examiners will pay particular attention to the composition of the LBO portfolio. Specifically, they will look at the quality of the credits and the overall diversification, as well as the bank's total capital exposure to the LBO portfolio, on both a firm and industry basis. In the context of the overall asset portfolio, total LBO loans may be treated as a specific concentration of credit.

Another concern of bank regulators is the syndicated loans in a bank's LBO portfolio. To the extent that the lead banks in the LBO loan syndicate primarily perform an investment banking function and retain only a small percentage of the loans on their books, the banks purchasing the loans must conduct their own independent evaluation of the loan. Examiners will scrutinize this part of the portfolio to determine the adequacy of internal procedures for evaluating and managing the risks of the syndicated loans. In addition, examiners are concerned with banks' potential higher risk of obtaining liens on collateral and participating in any debt renegotiation.

■ LBO Loans and Risk-Based Capital Standards

Bank regulators view capital as the last line of defense between unexpected earnings losses on a bank's portfolio and both uninsured bank depositors and the regulatory safety net. The traditional approach to capital regulation has been to set a uniform capital-to-assets ratio for all banks, regardless of their risk, and to control portfolio risk through supervision and regulation. This approach has been criticized for two reasons. First, regulators do not know with much precision how much capital an individual bank (let alone *all* banks) needs to hold to protect against insolvency. Second, the amount of capital required to protect the federal deposit insurance funds and uninsured depositors from loss varies from bank to bank depending on risk. In response to the second criticism, bank regulators in the United States and in the other major developed countries have recently announced new international capital standards for banks.[11] These new standards require banks to hold a level of capital that corresponds to the credit risk in their portfolio.

The new capital standards partition a bank's asset portfolio into four risk categories according to perceived default risk. The amount of capital a bank must hold against a particular asset (or activity) is then determined by its risk category. The premise behind this approach is that banks should be allowed to choose the risk of their portfolio without regulatory interference, so long as increased risk to depositors and to the federal deposit insurance funds is offset by increased capital protection.

Critics of the new capital guidelines claim that they do not explicitly recognize the increased risk associated with LBO-related loans. Under the current risk-based capital standards, loans to highly leveraged companies are placed into the same risk category as more traditional commercial and industrial loans. This means that a bank must hold the same amount of capital to back up an LBO-related credit as it would a similar credit to a less-leveraged firm.

Admittedly, the standards are not perfect because they do not take into account all risks. However, risk distinctions beyond those contained in the regulatory framework are difficult to define with precision. Additionally, regulating risk runs the danger of introducing unwanted effects on credit allocation. More important, the risk-based ratio is only a first step in assessing capital adequacy. As is the case with other loans, the quality of LBO-related loans and investments must also be taken into account.

Moreover, the final risk-based capital guidelines are the result of negotiation and compromise between bank regulators in the nations adopting the new capital standards. Given the differences in capital structure for nonfinancial firms across countries (as noted earlier, Japanese firms tend to be much more leveraged than U.S. firms), it would be difficult to gain a consensus among nations to adopt capital guidelines that differentiate among loans according to the leverage of the borrower. Consequently, it is unlikely that LBO-related loans will be assigned their own risk class under the international capital guidelines.

■ Conclusion

LBO financing is a natural market for banks to engage in, and they are in an excellent position to assess and assume this risk. With returns on LBO loans as much as four percentage points higher than those available on more traditional commercial loans, it appears that the higher risk may currently be offset by higher expected returns.[12]

The high debt-to-equity ratio in the resulting firm leaves little or no margin for error when evaluating and pricing these loans, however. Lenders therefore need to adopt adequate controls and procedures for evaluating, pricing, and managing the risks of this type of lending activity. As long as banks adopt appropriate internal controls, bank regulators should reasonably expect that supervision—not regulation—is the appropriate approach to LBO-related lending.

■ Footnotes

1. See Barbara A. Rehm, "Regulators Mull Changes in Fees on LBO Loans: Bank Exposure to Firms in Debt Raises Concerns," *American Banker*, January 31, 1989, page 1.

2. See Nancy J. Needham, "Son of LDCs: Banks Are Borrowing Trouble with Loans to LBOs," *Barron's*, December 26, 1988, page 13.

3. See Sarah Bartlett, "Bankers Defend Buyout Loans But Investors Fret," *The New York Times*, October 28, 1988, page D1.

4. As I discussed in an earlier article, the current system of federal deposit guarantees subsidizes risk-taking behavior by banks. The value of the subsidy increases with the risk of the bank. Therefore, banks will tend to hold riskier portfolios than they would if there were no deposit insurance subsidy. See James B. Thomson, "Equity, Efficiency, and Mispriced Deposit Guarantees," *Economic Commentary*, Federal Reserve Bank of Cleveland, July 15, 1986.

5. However, not all loans to companies with 75 percent debt financing are classified as LBOs by the Federal Reserve. In addition to the leverage criteria, the loans must be for the purpose of acquiring or reorganizing the firm to be considered as LBO credits by the Federal Reserve System.

6. See George Anders, "Shades of U.S. Steel: J.P. Morgan Paved the Way for LBOs: Bidding for RJR Nabisco Has Precedents Dating Back to the Turn of the Century," *The Wall Street Journal*, Midwest Edition, November 15, 1989, page A1.

7. See *Buyouts*, vol. 2, issue 1, Venture Economics, Inc., January 11, 1989.

8. Additional reporting requirements for LBO loans may be required. The Y-9 report for bank holding companies may include a line item for LBOs in the near future. Furthermore, the federal bank regulators may change the accounting treatment of fees on LBO credits. See Barbara A. Rehm, op. cit.

9. For a discussion of the payments system and daylight overdrafts, see E.J. Stevens, "Reducing Risk in Wire Transfer Systems," *Economic Review*, Federal Reserve Bank of Cleveland, Quarter 2 1986, pages 17-22; and E.J. Stevens, "Pricing Daylight Overdrafts," *Working Paper* 8816, Federal Reserve Bank of Cleveland, December 1988.

10. Unique legal problems can arise during the first year of an LBO loan, mostly concerning fraudulent conveyance, equitable subordination, and state bulk transfer laws.

11. For a more detailed discussion of the new capital guidelines, see Janice M. Moulton, "New Guidelines for Capital: An Attempt to Reflect Risk," *Business Review*, Federal Reserve Bank of Philadelphia, July/August 1987, pages 19-33.

12. See Stan Hinden, "Executive Urges LBO Loan Curbs: Moody's Official Sees History as a Warning," *The Washington Post*, February 2, 1989, page F2.

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