

ECONOMIC COMMENTARY

Federal Reserve Bank of Cleveland

Bank Exposure to Highly Leveraged Transactions

by William P. Osterberg

The commercial banking industry as a whole fared well in 1992, with many institutions citing improvements in profitability.¹ Despite this overall good news, however, analysts continue to question the health of some sectors of the industry. Such doubts ring familiar to those who recall banks' difficulties in the 1980s as a result of overinvestment in loans to agricultural and energy interests, to less-developed countries, and to commercial real-estate ventures in the Northeast and Southwest.

The underlying concern seems to be that banks are "too risky," referring either to the volatility of bank assets or to threats to the overall economy, depositors, the deposit insurance fund, or taxpayers. Perhaps banks made a series of investments that, while seemingly reasonable at the time, have since turned out to be bad bets. On the other hand, some economists would argue that a combination of regulations, including government guarantees, has induced banks to assume greater risk, and at lower borrowing rates, than they otherwise would have.

Measuring the riskiness of bank liabilities in absolute terms is difficult. In theory, potential lenders to a bank (such as purchasers of equity or debt instruments or certificates of deposit) incorporate their assessment of the soundness of the bank's assets into the rate of return they require on their investment. If this in fact occurs, and banks must pay for their risk, one could measure risk simply by looking at market-determined interest rates.

There may be reasons, however, why bank funding costs do not fully reflect risk or why regulators would not want to rely on market discipline. The presence of a system of deposit insurance in which premiums incorrectly gauge risk may induce bank management to assume greater levels of risk, and has been cited as a justification for capital regulation and for detailed examinations of bank balance sheets. Some argue that the deposit insurance subsidy to risk increases with greater leverage (lower capital-to-asset ratios), necessitating more regulatory control.

All of these perspectives are useful to consider in evaluating banks' exposure to highly leveraged transactions (HLT's). The aftermath of the wave of leveraged buyouts in the 1980s brought a realization that banks had played a key role in financing such transactions. In response, regulators required financial institutions to report information on their involvement in HLT's, beginning in the first quarter of 1991. Since this practice began, there has been a general perception that banks have abandoned the HLT market. Nonetheless, many market observers were surprised when regulators announced that banks would no longer be required to report HLT involvement separately. Effective the third quarter of 1992, bank HLT activity is simply combined with other loans, and most of these loans will now fall into the commercial and industrial (C&I) category.²

In response to increased bank involvement in highly leveraged transactions (HLT's) in the 1980s, regulators collected confidential data in 1991 and 1992. In examining these data, this study finds that while some banks remain heavily involved in HLT's, overall bank exposure to these activities poses little threat to bank capital or to the bank insurance fund.

This *Economic Commentary* characterizes changing bank involvement in HLT's. Using confidential information supplied by banks from the first quarter of 1991 to the first quarter of 1992, I assess the data in terms of the various risks posed by highly leveraged activity.³ These data show a steadily declining scope of bank involvement. However, the institutions that dealt most in HLT's at the onset of the report period generally continued to be the most strongly involved at the end.

Regulatory Response to Bank Involvement with HLT's

With mounting evidence of the potential aggregate impact of HLT's in the 1980s also came an awareness of the rough magnitude of banks' involvement. One expert, C.E.V. Borio, states that banks provided more than 50 percent of total financing for leveraged buyouts (LBOs)—the most visible form of HLT's—in the United States from late 1987 to mid-1989.⁴ A wide

range of academic studies contends that LBOs and other merger-related transactions were consistent with improvements in economic performance. If so, then banks' willingness to provide funding for such transactions would have resulted in balance-sheet entries whose values accurately reflected the risk involved in firm restructuring. However, speculation was growing that HLTs in the latter stages of the LBO boom were not necessarily justified by potential economic gains.⁵ Finally, concerns arose that some of the factors responsible for the savings and loan debacle might also be present in the commercial banking industry.

In response to these worries, the three U.S. bank regulatory agencies sought to coordinate efforts to monitor bank involvement in HLTs. The major hurdle was agreeing upon a definition of "highly leveraged."⁶ In April 1989, the Office of the Comptroller of the Currency (OCC) conducted a study of large-bank involvement in HLTs, followed in October with a joint declaration of regulations by the OCC, the Federal Deposit Insurance Corporation, and the Federal Reserve System. These were supplemented in February 1990 by the announcement of a definition of HLTs for which banks would be required to report data beginning in 1991. Accordingly, two conditions would have to be met for a transaction to be classified as highly leveraged: It must 1) involve a "buyout, acquisition, or recapitalization of an existing business," or 2) at least double the liabilities of the borrower and yield leverage ratios greater than 0.50, or result in a leverage ratio of at least 0.75 with no less than 25 percent of total liabilities consisting of debt related to buyouts, acquisitions, or recapitalizations. This information was to be reported quarterly on the Federal Financial Institutions Examination Council's Consolidated Reports on Condition and Income, or "call reports."

Banks asserted that the definition did not distinguish between transactions that were justified or unjustified on the basis of anticipated cash flow.⁷ They also voiced concerns that the requirement to list HLTs on the call reports would lead to a curtailment of credit just

when its extension seemed crucial to keep the economy afloat. In particular, such a regulatory-induced credit crunch seemed to be affecting the highly leveraged cable television industry.⁸ The leverage threshold also did not account for differences across industries. Partly in response to these worries about the impact on credit availability, the regulatory agencies announced in early 1992 that the reporting requirements would cease after the second quarter of the year. Henceforth, examiners would assess bank involvement in HLTs as they would for other transactions.

■ Evidence from the Call Reports

To study the change in bank involvement in HLTs, I examined quarterly balance-sheet information reported to the three regulatory agencies from the first quarter of 1991 to the first quarter of 1992. I focus only on the institutions that supplied applicable data in each quarter. The number of banks varied from 12,227 in 1991:1Q to 11,787 in 1992:1Q.

Unfortunately, the call report data probably do not cover the period of maximum HLT involvement by banks. The Senior Loan Officer Opinion Survey on Bank Lending Practices, compiled by the Board of Governors of the Federal Reserve System, shows that from December 1989 to December 1990, LBOs as a share of total merger-related loans outstanding fell from 57.7 percent to 43.7 percent. The declines for large banks (with more than \$10 billion in assets) and small banks (\$10 billion or less in assets) were from 54.0 percent to 44.9 percent and from 68.2 percent to 37.2 percent, respectively. Although total merger-related loans as a percentage of total C&I loans outstanding remained essentially unchanged, the involvement of smaller banks decreased.

The overall picture, then, is that bank involvement in HLTs, at least as measured by LBO participation, had already declined markedly by the time the HLT reporting requirements began. This is not surprising, because there is often a significant lag between the point when the market and regulators become aware of a problem and when some

regulatory action, such as reporting requirements, is implemented.

■ Characteristics of Banks Involved in HLT Activities

Relatively few banks were involved in highly leveraged activity during the period studied: Only 385 cited positive HLT volume on every call report from the first quarter of 1991 through the first quarter of 1992.⁹ Banks involved in HLTs tended to be larger, with an average asset size of \$5.19 billion at the end of 1991:1Q, compared with \$112.6 million for the other 11,842 institutions. The 385 banks on average held HLT balances of \$192 million, amounting to 3.7 percent of their total assets.

These banks also tended to differ from the majority in terms of capitalization and portfolios. The average ratio between qualifying capital and total assets for the 385 banks was 7.8 percent, compared with 8.1 percent for the entire group represented in the 1991:1Q call reports.¹⁰ Banks involved in HLTs were less reliant on real-estate lending (35.3 percent of total loans versus 39.9 percent for all banks), but depended more on C&I loans (34.7 percent versus 28.8 percent), which constitute the vast majority of HLT lending.

From 1991:1Q through 1992:1Q, banks' HLT activity declined steadily. For the 11,788 banks that reported on the latter date, highly leveraged activities fell to \$4.05 million on average, or 1.4 percent of total assets. Focusing on the top half of the banks that reported any HLT involvement in 1991:1Q, I find that by 1992:1Q, their HLT numbers declined from \$377 million (4.4 percent of assets) to \$249 million (2.8 percent of assets). Capital adequacy also improved. The ratio described above reached 8.3 percent for all banks and moved from 7.8 percent to 8.0 percent for the top half of the 385 banks.

■ A Digression

Even if all banks were operating with sufficient capital (as determined by guidelines under the Basle accords, effective at the end of 1992), one could not safely conclude that regulators

should ignore exposure to HLTs. First, there is no such thing as the "right" amount of capital; no single ratio completely captures either the soundness or riskiness of a financial institution. In theory, market-determined risk premia, risk-based deposit insurance premiums, or risk-based capital measures can force banks to act as if the market were pricing risk correctly. Although some objective standards can be used to assess the riskiness of banks, detailed examinations of balance sheets are inevitably part of the regulatory process.

In practice, a variety of financial ratios can be examined to supplement the information summarized in the risk-based capital ratio. One aspect of potential exposure to HLTs is that banks that are highly involved with these transactions may also be relatively highly exposed to other risky assets. The system of risk-based capital does not consider that events capable of causing defaults on HLT assets may simultaneously create problems with other assets.

■ Other Risks

Real-estate lending has been a focus of great concern among observers of the banking industry. Again comparing the top half of the banks involved in HLTs (totaling 192) to the average for all banks at both the start and end of the sample period, I find that real-estate loans as a percentage of total loans for the 192 institutions rose from 33.6 percent to 34.2 percent.¹¹ For all banks combined, the increase was from 39.9 percent to 41.8 percent. Thus, although HLT banks were less involved with real estate, both categories of banks became increasingly dependent on these loans. Conversely, C&I involvement fell for both categories, from 36.7 percent to 35.0 percent for the 192 banks, and from 28.8 percent to 26.9 percent for all banks.

One critical measure of risk is directed to the bank insurance fund. It arises when a bank, if closed due to a decline in asset values relative to liabilities, has inadequate capital to meet the shortfall and draws upon the bank insurance fund to repay general creditors at par. Evaluating this risk requires an assess-

ment of the adequacy of capital requirements and regulatory scrutiny. If, on the other hand, regulators deem the bank "too big to fail," yet another risk ensues (to the deposit insurance fund and/or taxpayers) as forbearance in the face of insolvency allows such institutions to continue operations even when the market would not support their continued existence. HLT assets, because they are held mainly by large banks, which are more likely to be deemed too big to fail, may be of concern to regulators as a result of these risks.

How much danger does HLT activity pose for bank capital? The ratio between HLT involvement and qualifying capital gives a worst-case view of how much qualifying capital would be eaten up if all HLT assets were declared worthless. For the top half of highly leveraged banks in 1991:1Q, HLT assets amounted to 56.5 percent of qualifying capital. By the end of the first quarter of 1992, that percentage had fallen to 34.7 percent. A somewhat more revealing number is the ratio between HLT assets that are past due, or nonaccruing, and qualifying capital. For the same 192 banks, this measure fell from 5.97 percent at the beginning of the period to 4.18 percent by the end. It is substantially less than that for real-estate credits past due or nonaccruing, which posted shares of 28.9 percent and 25.6 percent of qualifying capital for 1991:1Q and 1992:1Q, respectively.

Another perspective that bears scrutiny is bank participation in HLT loans. Participation implies that a group of banks has joined to make a loan that presumably could not be made by any of them individually. Once again, involvement through this vehicle has declined, as the top banks relied less on this form of HLT credit in 1992:1Q than in 1991:1Q. As a percentage of total HLT involvement (participation plus direct involvement), participation fell from 18.3 percent to 16.5 percent. Unlike other ratios measured here, however, this activity is lower for the top 192 banks than for the rest. For all banks combined, participation accounted for 73.4 percent and 69.4 percent of total involve-

ment at the opening and close of the period, respectively.

■ Characteristics and Trends for the Top 20

Examining just the top 20 banks in terms of their involvement in HLT lending reaffirms most of the conclusions reached above. Based on the percentage of total gross loans made up of HLTs in the first quarter of 1991, the following comparisons between the top 20 banks and the top half of all HLT banks are valid: The top 20 are 1) larger (average assets of \$13.1 billion versus \$8.6 billion), 2) better capitalized (qualifying capital to total assets ratio of 8.0 percent versus 7.8 percent),¹² 3) more involved in C&I lending (54.7 percent of total loans versus 34.7 percent), 4) less active in real-estate lending (20.3 percent of total loans versus 38.3 percent), and 5) suffering relatively more from nonperforming HLT loans than from other C&I loans (53.0 percent of total C&I past due and nonaccruing loans are made up of HLT loans for the top 20 banks versus 30.9 percent for the top half).¹³

Finally, I assess the changes that occurred for the banks listed as the top 20 HLT lenders as of the first quarter of 1991. If ranked by the proportion of loans that were highly leveraged, 15 of the 20 were still in the top group in the first quarter of 1992. These banks were generally better capitalized, with ratios that improved from 8.0 percent to 8.3 percent. There was also a decrease in the proportion between total HLT loans past due and nonaccruing and qualifying capital, which fell from 10.6 percent in 1991:1Q to 7.2 percent in 1992:1Q.

■ Conclusion

Bank involvement in HLTs has declined since the first quarter of 1991, when banks were first required to report these activities. However, because bank involvement in these transactions had already begun to taper off by the time reporting requirements were initiated, there is no reason to suggest that the decline was a result of regulatory scrutiny.¹⁴ HLT activity seems to account for a small portion of total lending.

In terms of problem HLT assets, and relative to real-estate loans, there is little evidence that HLT loans pose a substantial threat to bank capital or to the bank insurance fund. Banks involved in the HLT market tend to be comparatively larger (albeit more poorly capitalized), more dependent on C&I lending, and less involved in real-estate lending. Though HLT activity on banks' balance sheets has diminished over time, the 20 banks most highly involved in the market in the first quarter of 1991 were still strongly represented by the end of the first quarter of 1992.

■ Footnotes

1. For all insured commercial banks, return on assets for the first three quarters of 1992 was 0.96 percent, compared with 0.59 percent for the first three quarters of 1991. See *The FDIC Quarterly Banking Profile*, Third Quarter 1992. Washington, D.C.: FDIC.
2. HLT exposure will still be an area of possible scrutiny during a bank's annual examination.
3. Second-quarter 1992 data were not available at the time this paper was written. The data that banks submit describing HLT activity are confidential, although the balance of the data on banks' quarterly call reports is public information.
4. See C.E.V. Borio, "Banks' Involvement in Highly Leveraged Transactions," Bank for International Settlements, BIS Economic Papers No. 28, October 1990.

5. See Barrie A. Wigmore, "The Decline in Credit Quality of New-Issue Junk Bonds," *Financial Analysts Journal*, vol. 46, no. 5 (September/October 1990), pp. 53-62.

6. Banks can become exposed to HLTs in various ways. I focus on the financing of HLTs through equity, senior debt, or mezzanine finance (unsecured loans with maturities of at least five years that are dependent on cash flow for prepayment and allow the lender to share in the future success of the business). However, banks also provide commitments for financing, originate or participate in loan syndications, originate deals, and buy or sell HLT loans. See Borio, "Banks' Involvement in Highly Leveraged Transactions."

7. Other, more technical concerns are discussed in Creighton R. Meland, Jr., "Highly Leveraged Transactions: Clarifying the New Guidelines," *Issues in Bank Regulation*, vol. 14, no. 3 (Winter 1991), pp. 3-8.

8. See William Goodwin, "Lenders Bombard Bank Regulators with Criticism of HLT Definition," *American Banker*, September 30, 1991, and Barbara A. Rehm, "Agencies Weigh Four Options for Revising HLT Definition," *American Banker*, January 9, 1992.

9. Here, HLT loans refer to the entries reported as "senior debt, mezzanine financing, and equity investments currently outstanding" on the call reports. Some banks also were required to report data on commitments and participations or assignments.

10. Qualifying capital equals the total amount of capital considered under the Basle accords on capital standards, which became effective at the end of 1992. However, this ratio is not exactly comparable to either the leveraging or capital-asset ratios discussed in the accords.

11. These 192 banks represent the top half of the HLT banks based on 1991:1Q rankings. I follow these banks through time instead of comparing different banks.

12. If the banks are ranked by the ratio between HLT assets and qualifying capital, the top 20 are less well capitalized than the top 192 (7.1 percent versus 7.8 percent).

13. I investigated the possibility that although the top 20 banks had relatively more nonperforming HLT loans, they were also more aggressive in managing that portion of their portfolio. Using the ratio between HLT charge-offs and total C&I charge-offs, I found that the top 20 managed their HLT portfolios less aggressively in 1991:1Q.

14. At least *direct* scrutiny cannot be given credit. The anticipation of reporting requirements may have had an impact. Changes in bank behavior could also have been a response to growing investor concerns about banks' involvement in HLTs.

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