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Opportunities at the FHLB Advance Window

by Anson J. (Jay) Glacy, Jr.

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Recent passage of the Gramm-Leach-Bliley Act increased the access that insurers have to low-cost loans (called "advances") offered by the individual banks of the Federal Home Loan Bank (FHLB) system. This article describes the general features of how advance programs work, their potential benefit to insurers and key issues that need to be considered.

About the Federal Home Loan Bank System

Congress established the Federal Home Loan Bank (FHLB) system in 1932 to enhance liquidity in the residential mortgage sector by providing a low-cost source of funds to its member institutions. As government-sponsored enterprises (GSE), the FHLB Banks are federal instrumentalities specifically authorized to carry out federal housing policy. The system comprises twelve

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Risk Management Best Practices

by David N. Ingram

Author's Note: This article was reprinted from the SOA Risk Management Best Practices Seminar on December 5-6, 2001.

Best practice principles are well-established for risk management in banks. In addition, in the UK and Canada, best risk management practices are evolving that apply equally to banks, insurance companies and other financial services enterprises. The US life insurance industry is just beginning to talk about risk management best practices. By going last in approaching this idea, the US gets to look at the paths that have been blazed by others before choosing its course.

Risk management in banking has evolved over the past 15 years. Early in that period bank regulators expressed the strong feeling that the ad hoc approach risk management practiced in the banking business was not adequate. The business of banking was becoming more and more complex due to the steady increase of the use of derivative instruments. In addition, banks were among the losers in the junk bond market. Banks were

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given the clear impression that they had the choice of either taking the first step in providing standards for risk management or waiting to see what the regulators proposed. The banks chose to act. A group of representatives of 30 of the largest banks formed the "Group of Thirty". The 1993 G30 report on risk management became the first set of standards for bank risk management practices.

The G30 report made 24 recommendations for banks that were a mixture of common sense and high-tech approaches to the risk management problems as they saw them at that time. They addressed the problems of market and credit risks faced by banks. Many of their recommendations related to derivatives. At the time they were working on these principles, derivative contracts were not even clearly legally enforceable!! There was a long way to travel from unenforceable contracts to a fully risk-managed industry. The recommendations made by that group have held up over time, and with the subsequent changes in the financial marketplace, are still considered the base for all further risk management systems in banking.

G-30 Risk Management Report

1. Risk management policies set by Senior management
2. Mark to market
3. Market valuation methodology
4. Identify revenue sources
5. Measure market risk
6. Stress simulations
7. Cash flow forecasts
8. Users and dealers should all use the same risk management techniques
9. Measure credit exposure
10. Aggregate credit exposures
11. Standardized master agreements
12. Independent risk management function
13. Use of credit enhancements
14. Promote enforceability
15. Professional expertise
16. Adequate systems
17. Clearly delineated authority

FRB Field Audit Manual for Bank Holding Companies

FRB Field Audit Manual for Bank Holding Companies

1. Board approval of RM policies
2. Senior Mgt responsible for risk mgt
3. Independent risk mgt function
4. Comprehensive & accurate risk measurement system
5. Risk limits
6. New product review
7. Stress testing
8. Portfolio based standards
9. Management evaluation & review of risk management
10. Comprehensive internal controls

The G30 principles were quickly incorporated into the regulatory procedures. The 1994 Federal Reserve Board audit manual for bank holding companies has over 100 pages of instructions relating to the review of risk management practices in various areas of bank holding company activities. The manual says that "the review of risk management and internal controls is an essential element of the inspection or examination of trading activities" and that "many of the managerial practices and examiner procedures contained in this guidance are fundamental and are generally accepted as sound banking practices for both trading and non-trading activities."

In 1995, the unthinkable happened in England. Barings Bank, one of the oldest and largest banks in the U.K., unexpectedly recognized losses in trading activities in a Far Eastern office that erased all of the capital of the bank and led to Barings closure. The story of how one rogue trader brought down the venerable Barings Bank is well known. In 1995, the Bank of England issued a report about the Baring' failure. That report included recommendations for forestalling future situations. While the G30 and FRB risk management principles focused on a numerical-based risk management system, the Bank of England report focus was on the personal aspect of risk management. risk management reports flowing from these principles were primarily a list of names and areas of responsibility. These recommendations began the evolution of risk management standards in UK financial services.

The largest banks all operate on an international scale and are regulated on an international basis. That regulation originates from the Bank of International Settlements (BIS) that is headquartered in Basel, Switzerland. BIS reports have been issued on international standards for credit risk management, interest rate risk management, derivatives disclosure, stress testing, and risk concentration. The interest rate risk management principles summarized above were issued in 1997. These principles may look very similar to

Bank of England Report on Barings Bank

1. Management has duty to understand all bank activities
2. Clear responsibility for each business activity
3. Clear segregation of duties
4. Relevant internal controls
5. Quick resolution of weakness

Basel Interest Rate Risk Management Principles

1. Board responsible for risk Management
2. Senior Management to create risk management structure
3. Senior management responsible for risk management effectiveness
4. Clearly defined policies & procedures
5. Identify all material risks
6. Apply risk management to new products & ventures
7. Set and enforce risk limits
8. Perform stress testing
9. Risk information systems
10. Internal control system

the FRM manual guidelines. Often the Basel committees are chaired by and/or have several members from the US Federal Reserve Bank.

Even with these well-articulated and universally accepted risk management principles, a major debacle developed in U.S. banks in 1998. The hedge fund Long Term Capital Management (LTCM) was failing and 25 of the world's largest banks were holding various forms of IOUs from the hedge fund. The problem was seen to be so large that the Federal Reserve thought that an unmanaged failure of LTCM could endanger the stability of markets. In the aftermath it was found that LTCM had worked around several of the basic risk management principles that banks had been following. The Counter Party Risk Management Policy Group produced a report analyzing the additions to risk management procedures that were needed to prevent a recurrence of an LTCM type problem. These additional principles focused primarily on the amount of exposure that LTCM had with each of the banks. In addition, the report recommends that exposures be calculated based on a liquidation (bankruptcy) type situation. Banks that were applying these ideas and focusing on their largest exposures and the ability of those counter parties to produce the cash to settle their positions while under duress may have been the ones who escaped large losses from the Enron bankruptcy.

In the UK, the Institute of Chartered Accountants formed a committee to articulate a systematic approach to the risk management problem. Their approach was not specific to banks or financial services but applies to all companies in all industries. The committee was chaired by Nigel Turnbull and came to be known as the Turnbull Report. Unique to this report is the idea that a risk management control system should have cost-benefit logic applied to it.

In Canada, the Office of the Superintendent of Financial Institutions regulates federal banks, insurance companies and pension plans. In 1998, OSFI issued a series of guidelines under the heading "Standards of Sound Business Practices." These guidelines were issued regarding credit risk, interest rate risk, foreign exchange risk, liquidity risk and liability risks. Earlier (1995) guidelines had dealt with derivatives best practices. Those standards generally follow along with the bank practices, but specifically add legal, operations and systems risk management to the list of worries. In addition, OSFI has documented underwriting and liability standards of practice.

CRMPG Report on LTCM

1. Counter party information sharing
2. Confidentiality of shared information
3. Monitoring leverage, market risk and liquidity levels of counter parties
4. Appropriate level of risk management expertise
5. Liquidation-based estimates of exposures
6. Stress testing
7. Collateral to/from counter parties
8. Valuation & exposure management
9. Senior management responsibility
10. Large exposure risk reporting
11. Regular analysis of risk concentration
12. Risk management model assumptions understood by senior mgt

Turnbull Report

1. Risk management is the collective responsibility of the whole board
2. Firms should have a sound system of internal controls in order to safeguard shareholders interests and company assets
3. Need for board to review controls at least annually
4. Risks should be regularly assessed
5. Assessment should include risk management, operation and compliance as well as financial controls
6. Board review should include:
   - Nature & extent of the risks of the company
   - Extent of acceptable risks (risk limits)
   - Likelihood of risks
   - Company ability to reduce incidence & impact of risks
   - Cost / benefit of controls
   - Effectiveness of control systems
   - Effectiveness of risk mgmt actions taken

In 1999, OSFI published their supervisory framework. This document explains the interrelationship of the regulatory review of risk management and control of a company with the general supervisory framework. The OSFI framework includes both strategic and operational risk along with the financial risks addressed by the other standards summarized above.

Currently, the UK Financial Services Authority (FSA) is developing a complete revision to their regulatory approach to banks, insurance companies, investment managers, and advisors that is based on category of risk rather than on industry. Their intention is to regulate each risk the same regardless what type of company has that risk. The FSA expects each insurance company to

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OSFI Standards of Sound Business Practices

General Risk Management Principles
1. Documented policies and procedures
2. Management involvement
3. Board involvement
4. Internal inspection
5. Legal issues
6. Operations and systems risk

Management of Market Risk
1. Exposure limits
2. Measurement of market risk
3. Defined uses of market instruments
4. Value at risk for unhedged positions
5. Simulations of historical events and future possible events
6. Frequent measurement

Management of Credit Risk
1. Exposure limits
2. Measurement of credit risk exposure
3. Netting
4. Settlement risk
5. Liquidity risk

establish a separate independent "risk assessment" group with underwriting, claims, actuarial, accounting and legal expertise to report directly to the board on insurance risks. In addition, to their modules on credit, liquidity, market and operational risk, the FSA has identified a "group risk."

Group risk is the risk to a firm arising from its membership in a group of companies. For insurers, this new approach will be a major change in emphasis on risk management. The *Integrated Prudential Sourcebook* containing all of these new risk-based guidelines is due to be published in December 2002. The FSA expects to begin to use the risk assessment approach to direct their audit activities by June 2002 and the entire approach will be effective by 2004.

Operational risk is the final frontier of bank risk management. The banking regulators have been working to impose a new system on banks that requires that they develop and install an operational risk management system comparable to the systems that have been developed for market and credit risks. Banks that do not comply with the new operational risk management requirements will have to continue to hold a large surcharge on their other risk capital for operational risk. Specifics of those operational risk management systems have not been spelled out and it is doubtless that standards emerge as the various banks and the companies serving bank risk management needs develop the systems.

For further information on these best practice reports:

1. Jurion, Philippe; Financial Risk Management Handbook, 2001-2002, Wiley Finance, 2001. Pages 637-648.

2. Crouhy, Michael; Galai, Mark; Mark, Robert; Risk Management, McGraw-Hill, 2001. Pages 1 - 91.

3. Group of 30 (1993), Derivatives: Practices and Principles. New York: Group of Thirty. On the Internet at *www.risk.ifci.ch* .

OSFI Underwriting & Liability Risk Management

OSFI Underwriting & Liability Risk Management Risk Selection
1. Identify risks
2. Product design
   - Limits to risks & options
   - Risk / Return characteristics
3. Underwriting Policies
4. Expectations of Claims
   - Size, Type
   - Frequency

Monitor & Control Risks Assumed
1. Risk Reporting
   - New risks assumed
   - Changes to existing risks
2. Approval Limits
3. Risk Limits
4. Control Process
   - Limits are followed

Claims Management
1. Approval process for claims
2. Claims reports

OSFI Supervisory Framework

Risk Management Control Functions

1. Operational Management
2. Financial Analysis
3. Compliance
4. Internal Audit
5. Risk Management
   - Identification of risks;
   - Measurement systems for risks;
   - Policies and procedures to manage risks;
   - Risk tolerance limits;
   - Monitoring of positions against risk tolerance limits;
   - Reporting of risk monitoring results to senior management & the Board;
6. Senior Management
   - Effective organizational and procedural controls
   - Ensure compliance with approved policies & procedures;
7. Board of Directors
   - Ensure management is qualified and competent;
   - Review and approve organizational and procedural controls;
   - Ensure principal risks are identified and appropriately managed;
   - Provide for an independent assessment of management controls.

4. Bank of England (1995) Report of the Board of Banking Supervision Inquiry into the Circumstances of the Collapse of Barings, London: HMSO Publications. On the Internet at *www.risk.ifci.ch* .

5. Counterparty Risk Management Policy Group (1999), Improving Counterparty Risk Management Practices, New York: CRMPG. On the Internet at *www.counterparty.org*.

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8. Internal Control Working Party (Nigel Turnbull, Chair), Internal Controls: Guidance for Directors on the Combined Code, London: Institute of Chartered Accountants. On the Internet at *www.icaew.co.uk*.

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10. Office of Superintendent of Financial Institutions Canada, Supervisory Framework 1999 and Beyond, (1999), Ottawa: OSFI. On the Internet at *www.osfi-bsif.gc.ca* .

11. Financial Services Authority, Integrated Prudential Sourcebook (2001), London: Financial Services Authority. On the Internet at *www.fsa.gov.uk*.

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FSA Draft Integrated Prudential Sourcebook

1. Written policies on market, credit, liquidity, operational and insurance risk identification, measurement and control.
2. Adequacy of premiums
3. Appropriate matching of assets and liabilities
4. Appropriate stress and scenario testing
5. Counterparty exposure limits for all transactions including reinsurance and credit enhancement
6. Assessment of risk management process by operationally independent, qualified person