

Supervisory Insights

Devoted to Advancing the Practice of Bank Supervision

Vol. 6, Issue 2

Winter 2009



Inside

Interest Rate Risk

CRA Examinations

Customer Information
Risk Assessments

Regulatory and
Supervisory Roundup



Supervisory Insights

Supervisory Insights is published by the Division of Supervision and Consumer Protection of the Federal Deposit Insurance Corporation to promote sound principles and best practices for bank supervision.

Sheila C. Bair
Chairman, FDIC

Sandra L. Thompson
Director, Division of Supervision and Consumer Protection

Journal Executive Board

George E. French, Deputy Director and Executive Editor

Christopher J. Spoth, Senior Deputy Director

John H. Corston, Acting Deputy Director

Robert W. Mooney, Deputy Director

Thomas E. Peddicord, Acting Deputy Director

Thomas J. Dujenski, Regional Director

Doreen R. Eberley, Regional Director

Stan R. Ivie, Regional Director

John M. Lane, Acting Regional Director

James D. La Pierre, Regional Director

M. Anthony Lowe, Regional Director

James C. Watkins, Acting Regional Director

Journal Staff

Kim E. Lowry
Managing Editor

Daniel P. Bergman
Financial Writer

John A. George
Financial Writer

Supervisory Insights is available online by visiting the FDIC's Web site at www.fdic.gov. To provide comments or suggestions for future articles, request permission to reprint individual articles, or request print copies, send an e-mail to SupervisoryJournal@fdic.gov.

The views expressed in ***Supervisory Insights*** are those of the authors and do not necessarily reflect official positions of the Federal Deposit Insurance Corporation. In particular, articles should not be construed as definitive regulatory or supervisory guidance. Some of the information used in the preparation of this publication was obtained from publicly available sources that are considered reliable. However, the use of this information does not constitute an endorsement of its accuracy by the Federal Deposit Insurance Corporation.

Issue at a Glance

Volume 6, Issue 2

Winter 2009

Letter from the Director 2

Articles

Nowhere to Go but Up: Managing Interest Rate Risk in a Low-Rate Environment 3

Interest rate risk (IRR) is inherent to banking. However, too much IRR can leave capital and earnings vulnerable to rate changes, particularly for those financial institutions in a weakened financial condition. In light of the current environment, where rates are near historic lows, it is critical that financial institutions maintain a strong and effective IRR management program. This article reviews IRR measurement systems and highlights best practices for measuring, monitoring, and controlling IRR.

Not Just Adding Up the Numbers: Achieving CRA Objectives in Challenging Times 16

Community Reinvestment Act examination procedures call for examiners to consider the economic circumstances and other constraints faced by an institution and encourage management to adopt innovative responses to community needs. This article explains how examiners should balance concerns about a low volume of loans with the existence of a strong strategic focus on qualitative factors, such as the impact of a lending and community development program that meets particularly challenging community needs.

Regular Features

From the Examiner's Desk: Customer Information Risk Assessments: Moving Toward Enterprise-wide Assessments of Business Risk 24

The results of information technology examinations often indicate financial institutions struggle with conducting effective customer information risk assessments. Recent phishing attacks are one example of the critical need to safeguard information assets. This article describes three types of risk assessments, identifies areas for improvement often observed by examiners, and discusses the supervisory response to deficiencies.

Update to the From the Examiner's Desk feature in the Summer 2009 issue of *Supervisory Insights*

In "Changes to Regulation Z Afford Increased Consumer Protections," several amendments to Regulation Z were discussed, including the prohibition against making a higher-priced mortgage loan based on the value of the consumer's home without considering the borrower's ability to repay the loan. With respect to a higher-priced mortgage loan with a balloon payment due in less than seven years, the article raised questions about how these loans would be underwritten, given the exclusion from the presumption of compliance, and the creditor's obligation to consider the borrower's ability to repay the loan (including the ability to satisfy the final balloon payment). http://www.fdic.gov/regulations/examinations/supervisory/insights/sisum09/examiners_desk.html

In response to questions regarding compliance with this underwriting standard, the Federal Reserve Board (FRB) clarified its "ability to repay" requirement as it relates to the balloon payment of a short-term, higher-priced balloon mortgage loan. The FRB clarified that the requirement for a creditor to assess a consumer's ability to repay a loan is satisfied if the creditor has verified the consumer's ability to make regular monthly payments and verified that the consumer likely would be able to satisfy the balloon payment obligation by refinancing the loan or through income or assets other than the collateral. Specifically, on November 9, 2009, the FRB issued written guidance to its examiners clarifying Regulation Z's "repayment ability" standard as it applies to balloon mortgage loans. See FRB CA Letter 09-12: <http://www.federalreserve.gov/boarddocs/caletters/2009/0912/caltr0912.htm>

The FRB clarifies: (1) short-term, higher-priced balloon mortgage loans that are prudently underwritten (i.e., based on a consumer's repayment ability from sources other than the collateral) are not prohibited, (2) a creditor does not have to verify that the consumer has other assets and/or income at time of consummation sufficient to pay the balloon payment when it comes due, and (3) in addition to verifying the consumer's ability to make regular monthly payments, a creditor should verify that the consumer would likely be able to satisfy the balloon payment obligation by refinancing the loan (or through income or assets other than the collateral).

Regulatory and Supervisory Roundup 31

This feature provides an overview of recently released regulations and supervisory guidance.

Letter from the Director

As this issue of *Supervisory Insights* goes to press, nearly a year has passed since the tumultuous fourth quarter of 2008. In many ways, the crisis is still with us as the federal banking agencies continue to deal with an increasing caseload of problem and failing banks.

One legacy of the financial crisis is the variety of special federal liquidity programs to support the financial services sector and the availability of credit that remain in effect. Among the most important manifestations of the government's commitment to support market liquidity is the Federal Reserve's target rate for federal funds. That target rate declined by about 400 basis points during 2008, and it has remained between 0 and 25 basis points for an extended period.

Historically low short-term interest rates create an incentive for some banks to play the yield curve by funding longer-term assets with shorter-term liabilities. In this issue of *Supervisory Insights*, "Nowhere to Go but Up: Managing Interest Rate Risk in a Low-Rate Environment" describes how banks are becoming more liability sensitive and vulnerable to increases in short-term rates. This development is of particular concern due to the adverse impact that greater exposure to interest rate risk can have on banks' earnings and capital—two areas already under pressure from deteriorating asset quality. The article describes the current interest rate environment, identifies the types of interest rate risk, and highlights best practices for measuring, monitoring, and controlling this increasingly prevalent form of risk.

This issue of *Supervisory Insights* also focuses on the Community Reinvestment Act (CRA), which requires institutions to help meet the credit needs of their communities. Examiners sometimes find it difficult to assess the responsiveness of a bank's lending program, as CRA examination procedures may emphasize the volume of loans rather than the quality of lending activities. "Not Just Adding Up the Numbers: Achieving CRA Objectives in Challenging Times" discusses the goal of the Act in the context of the current weak economic environment and highlights procedures for appropriately evaluating the quality of large- and small-bank lending programs.

Ensuring the security of information assets and systems continues to challenge financial institutions, particularly in light of increasingly sophisticated cyber attacks. The development of comprehensive and effective risk assessments is critical to each bank's ability to identify potential internal and external threats to information systems. "Customer Information Risk Assessments: Moving Toward Enterprise-wide Assessments of Business Risk" discusses three approaches to risk assessments, identifies potential shortcomings, and describes appropriate regulatory responses.

We hope these articles will be a valuable resource and continuing reference for our readers. As always, we look forward to your feedback as well as your suggestions for topics in future issues. Please e-mail your comments and suggestions to SupervisoryJournal@fdic.gov.

Sandra L. Thompson
Director
Division of Supervision and
Consumer Protection

Nowhere to Go but Up: Managing Interest Rate Risk in a Low-Rate Environment

Amid what many believe is the worst financial crisis since the Great Depression, financial institutions face a challenging credit and earnings cycle. Understandably, many bank managers and boards of directors are focusing efforts on areas of immediate concern, such as liquidity and deteriorating asset quality. However, evidence suggests that more financial institutions currently are taking on higher levels of interest rate risk at a time when short-term rates are near historic lows, which could leave them significantly exposed to changes in interest rates.

Interest rate risk (IRR)—the potential for changes in interest rates to reduce a bank's earnings or economic value—is inherent to banking. However, too much IRR can leave bank capital and earnings vulnerable, particularly for those financial institutions in a weakened financial condition. Interest rate fluctuations affect earnings by changing net interest income and other interest-sensitive income and expense levels. Interest rate changes affect capital by changing the net present value of a bank's future cash flows, and the cash flows themselves, as rates change.

Recent FDIC Call Report data suggest financial institutions are becoming increasingly liability sensitive and, therefore, more exposed to increases in interest rates. Factors contributing to heightened IRR are earnings pressure to offset losses and higher loan loss provisions; elevated volumes of longer-term, primarily mortgage, assets held in portfolio; and heavy reliance on short-term and wholesale funding sources that are generally more rate sensitive and less stable

than traditional deposits. Under these circumstances, a significant increase in interest rates could prove troublesome to financial institutions not actively managing their IRR exposure.

In light of the current environment, it is critical that financial institutions maintain a strong and effective IRR management program that helps mitigate exposure. This article describes the current interest rate environment and its relevance for the banking industry's IRR profile. The article then reviews IRR measurement systems and cites best practices for measuring, monitoring, and controlling IRR.

Much of the discussion in this article about the management of IRR exposures is drawn from existing interagency guidance, the 1996 *Policy Statement on Interest Rate Risk (Policy Statement)*.¹ The article does, however, provide additional observations about best practices for IRR management. The best practices are noted from institutions with strong IRR management frameworks and are drawn from the authors' experience, as well as observations from FDIC examinations.

The Current Rate Environment and Bank Interest Rate Risk Exposure

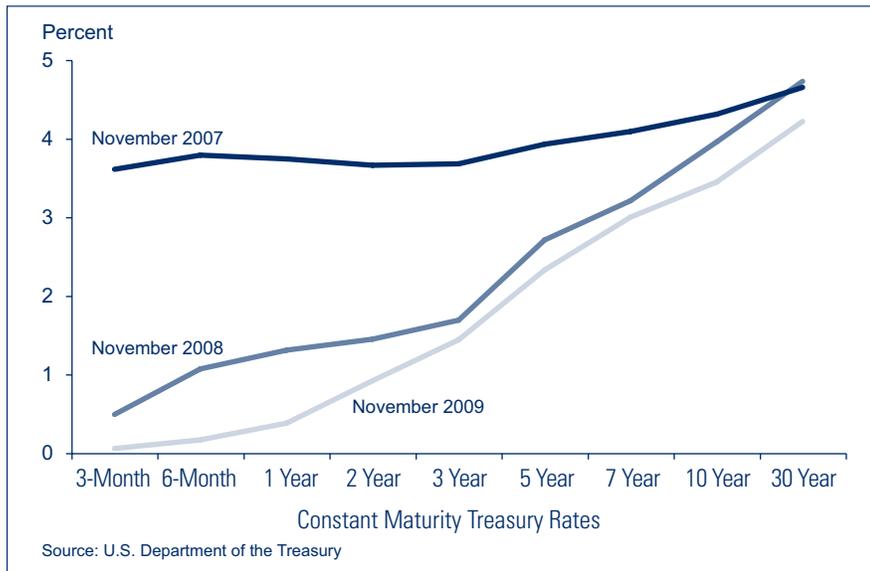
In the years before the current crisis, interest rates steadily increased as the Federal Reserve began to tighten monetary policy, which was eased in the wake of the 2001–2002 recession. The onset of the financial crisis in 2007 prompted the Federal Reserve to take a significantly more accommodative policy

¹ The 1996 interagency *Policy Statement on Interest Rate Risk* remains the primary supervisory tool for assessing an institution's IRR management framework and position. The guidance was released under FDIC Financial Institution Letter (FIL)-52-1996, titled "Joint Agency Policy Statement on Interest Rate Risk," (<http://www.fdic.gov/news/news/financial/1996/fil9652a.html>). Also, see the FDIC *Risk Management Manual of Examination Policies* (section 7.1), http://www.fdic.gov/regulations/safety/manual/section7-1_toc.html. International standards are set forth in the Basel Committee on Banking Supervision's 2004 *Principles for the Management and Supervision of Interest Rate Risk*, <http://www.bis.org/publ/bcb108.pdf?noframes=1>.

Interest Rate Risk

continued from pg. 3

Chart 1: The Yield Curve Has Steepened Considerably



stance through a reduction in the federal funds rate, among other initiatives. Longer-term interest rates did not decline commensurately, however, so that the yield curve steepened considerably over the last two years (see Chart 1).

Currently, short-term inflationary expectations are subdued. However, it is widely expected that, as the economy recovers, short-term interest rates will eventually return to more normal levels. For example, one prominent survey of economists forecasts 2010 to end under a higher and flatter yield curve. The forecast projects the federal funds rate to increase gradually while longer-term rates remain at or near current levels.²

A rising rate environment can reflect stronger economic growth, good news for an economy in recession. However, rising short-term rates can compress net interest margins (NIMs) as financial institutions are forced to reprice funding; some assets lose value as a result. Thus, although bank earnings currently are benefiting from a steep yield curve, a change in monetary policy or inves-

tor sentiment could have a significant adverse effect on financial institutions not actively managing their IRR exposure.

In fact, recent financial reporting suggests that financial institutions, particularly small to midsize institutions, are becoming more liability sensitive, which elevates their exposure to rising rates. On the liability side of the balance sheet, long-term funds remain scarce due to investor reluctance to lock into such low returns. On the asset side, as a result of the continued dislocation in the secondary and commercial real estate markets, financial institutions are holding longer-term assets, primarily residential mortgage assets.

Maturities of Bank Assets Are Lengthening

On the asset side of the balance sheet, more financial institutions are holding higher volumes of longer-term assets.³ For almost 20 percent of banks, longer-term assets comprise more than half of assets. This is up from 2006, when longer-term assets made up the majority of assets at only 11 percent of banks (see Chart 2).

The current lengthening of asset maturities is due in part to market dynamics in the wake of the credit crisis. Before the deterioration of the mortgage markets, a large percentage of small and midsize financial institutions (those with under \$10 billion in assets) originated mortgages and sold them to larger financial institutions, which then pooled and securitized the loans. This model, designed to transfer credit risk from financial institutions to the capital markets, resulted in large concentrations of mortgage-related assets at the largest institutions. The largest financial institutions also originated mortgage loans, often offering products with which the community financial institu-

² *Blue Chip Financial Forecast*, Vol. 28, No. 11 (November 1, 2009). Refer to http://www.alacrastore.com/storecontent/Blue_Chip_Financial_Forecasts-Blue_Chip_Financial_Forecast_Vol_28_No_11-2097-71.

³ Longer-term assets are defined here as those maturing or repricing in three or more years.

tions could not compete. Instead, small and midsize financial institutions found a niche in commercial real estate lending, specifically construction and development (C&D) loans, which were kept on their books. However, during the past several quarters, small and midsize financial institutions have increased their exposure to long-term mortgage loans and mortgage-related securities and have reduced concentrations in C&D loans. Although this process has been critical to managing credit risk within the industry, replacing C&D loans, which tend to have a shorter duration than mortgage assets, with assets that have similar repricing characteristics has been challenging (see Chart 3).

The shift in the asset mix increases the interest rate exposure of many institutions, especially those with less than \$10 billion in total assets.⁴ Mortgage-related assets present unique risks because of borrowers' ability to prepay the mortgages before the contractual term. Because prepayment rates slow when rates rise, the duration of lower-coupon, fixed-rate mortgages will extend, and financial institutions will be locked into these lower-yielding assets for longer periods. Moreover, during the next few years, mortgage exposures at small and midsize financial institutions could increase if federal programs aimed at bolstering the housing market are wound down (see *Option Risk* text box).⁵

Use of Less Stable Funding Sources Remains High

Today, although bank funding sources are more diverse, they continue to be rate sensitive. During the past 15 years, core deposit growth generally has

Chart 2: A Large Percentage of Banks Have Increased Exposure to Assets with Extended Maturities

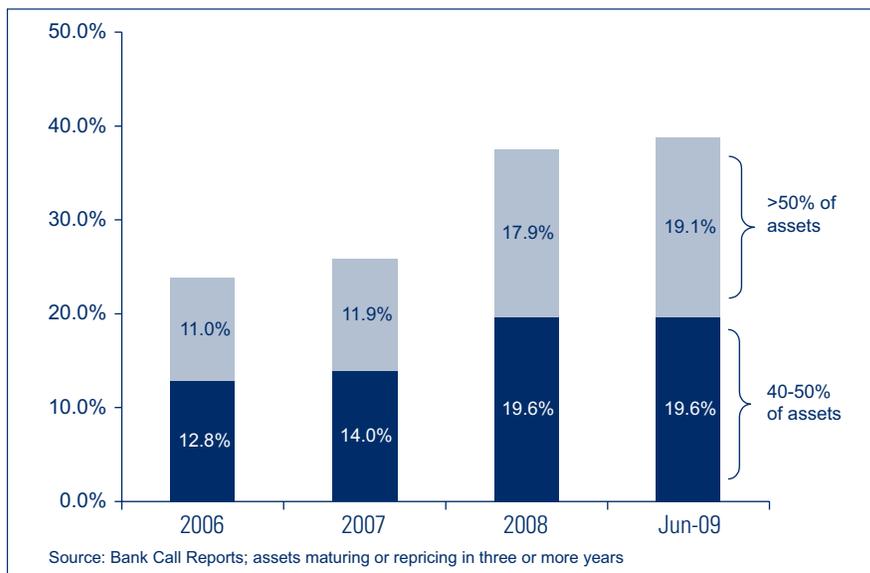
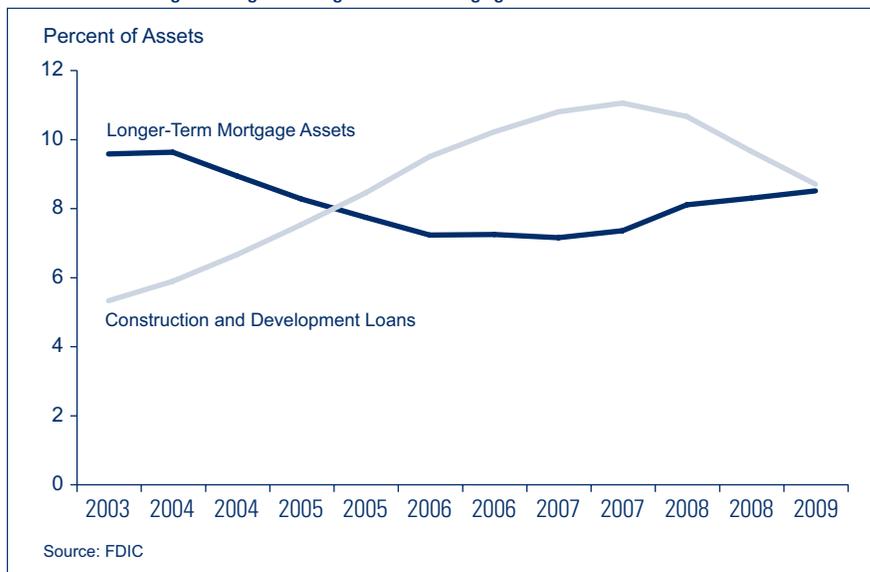


Chart 3: Institutions with Less than \$10 Billion in Assets Are Shrinking C&D Portfolios, but Are Increasing Holdings of Longer-Term Mortgages



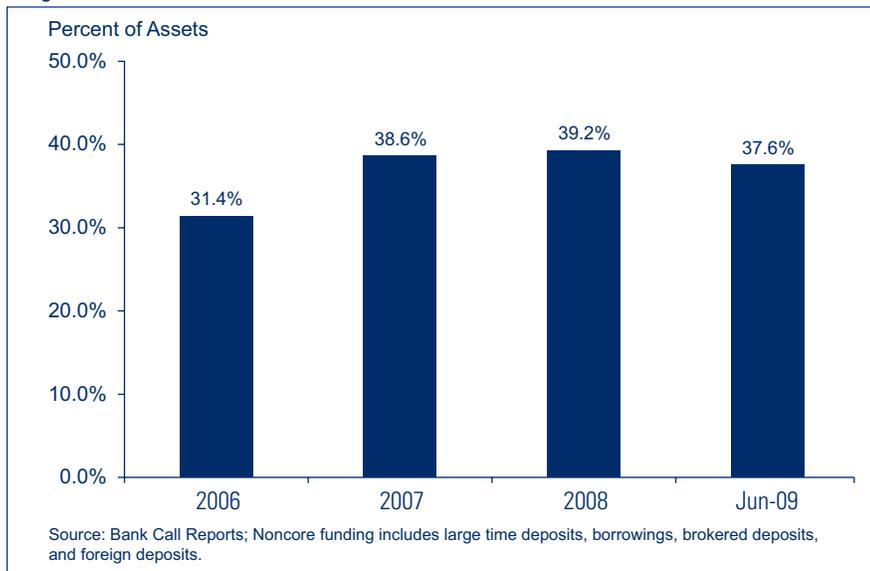
⁴ The decline of adjustable-rate mortgage originations and the process of large financial institutions bringing off-balance sheet (for example, structured investment vehicle) assets on balance sheet also are factors driving the increase in longer-term assets.

⁵ To free up liquidity among mortgage originators, the Federal Reserve established the Mortgage-Backed Securities (MBS) Purchase Program beginning January 5, 2009 and set a goal of buying up to \$1.25 trillion of agency MBS, which also helped lower mortgage rates. The New York Fed has purchased more than \$790 billion of agency MBS since the program began, which represents nearly half of all domestic mortgage originations in 2009. As the federal programs are scaled back, MBS prices and yields will normalize, and MBS bank holdings are anticipated to continue to increase.

Interest Rate Risk

continued from pg. 5

Chart 4: Noncore Funding Remains a Significant Funding Source for Institutions Where Longer-Term Assets Are More than 40 Percent of Total Assets



remained flat.⁶ In response, financial institutions have turned to other funding sources such as noncore deposits and wholesale funding products, which tend to be driven by yield.⁷ If market conditions change, noncore deposit customers may rapidly transfer funds elsewhere, and wholesale funds may reprice quickly.⁸ The risk is particularly high for those institutions with a high concentration of longer-term assets, or about 40 percent of the industry (see Chart 4).

Moreover, some less stable funding sources are fundamentally more complex than core deposits. For example, certain wholesale funding agreements contain

embedded options, such as call dates, that would be exercised in a rising rate environment. Embedded options are typically beneficial to the provider of funds. They can be disadvantageous, however, to the recipient of funding who loses a below market cost funding source (see *Option Risk* text box).

Historically, the primary hedge against IRR for most financial institutions was a stable deposit base over which banks had significant pricing power. Today, however, competition for loans and deposits has diluted pricing power as commercial banks and thrifts compete for customers with credit unions, insurance companies, and other financial firms. Moreover, advances in technology and product delivery channels have limited the relationship and direct contact with many customers. As a result, it is more challenging for institutions to match funding terms with assets or structure the balance sheet mix to offset IRR mismatches effectively. Additionally, banks could see their funding costs rise to maintain and attract deposits.

Another factor that could contribute to higher funding costs in a rising interest rate environment would be the marketplace response to an unwinding of special federal liquidity programs established during the crisis. These government support programs, directed at mitigating the effects of considerable investor risk

⁶ In the wake of the financial crisis and implementation of higher insurance limits and programs such as the Temporary Liquidity Guarantee Program, which guaranteed non-interest bearing transaction deposits, a significant amount of deposits came into the banking system. Going forward, it is anticipated that some portion of deposits will leave the banking system as customers search for higher yields.

⁷ Generally, the relative stability of funding is difficult to determine with precision from Call Report data, and "noncore" funding cited here is only a rough estimate. The stability of each bank's funding mix should be assessed on a case-by-case basis using all available data on product characteristics, including management deposit stability studies.

⁸ Many financial institutions offer certificates of deposit through listing services and deposit accounts through Internet channels. These deposits, if less than \$100,000, will not fall within the technical definition of "brokered" or "noncore," and are not identified as volatile funding sources in regulatory reports. Nevertheless, these deposits exhibit many of the same rate sensitive and volatility characteristics as brokered deposits. Therefore, Chart 4 likely understates the actual increase in dependency on volatile funding sources. These points re-emphasize the importance of a closer evaluation of deposit stability characteristics.

Option Risk

An option gives the holder the right, but not the obligation, to buy, sell, or in some manner alter the cash flow of an instrument or financial contract. Option risk results when a financial instrument's cash flow timing or amount can change as a result of a decision taken by a counterparty, typically in response to changes in interest rates. This can negatively affect earnings or the economic value of equity by reducing asset yields, increasing funding costs, or reducing the net present value of expected cash flows.

Options may be distinct instruments, such as exchange-traded and over-the-counter contracts, or they may be embedded within the contractual terms of an instrument. Examples of instruments with embedded options include callable or puttable bonds (such as callable U.S. Agency securities), loans that give borrowers the right to prepay balances without penalty (such as residential mortgage loans), and deposit products that give customers the right to withdraw funds at any time without penalty (such as Money Market Demand Accounts).

Typically, financial institutions are the option sellers and the customers are the option buyers, or option holders. Options, both explicit and embedded, held by bank customers are generally exercised to the advantage of the holder, not the bank. If not adequately managed, the asymmetrical payoff characteristics of options can pose risk to the option seller.

Options embedded in assets, liabilities, and off-balance sheet derivatives can create IRR. Embedded options can alter an

instrument's cash flow when interest rates fluctuate, and can be in many instruments and products, including the following:

- Mortgage-backed securities
- Callable bonds
- Structured notes
- Mortgage loans
- Consumer loans
- Derivatives
- Non-maturity deposits
- Federal Home Loan Bank borrowings
- Trust preferred securities

On the asset side of the balance sheet, prepayment options are the most prevalent embedded option. Most residential mortgage loans and many consumer loans impose little or no prepayment penalty on borrowers. Financial institutions also may permit the prepayment of commercial loans by not enforcing prepayment penalties. Prepayment options create the risk of contraction or extension of maturities. When rates decline, borrowers will exercise call options by prepaying loans, and a bank's asset maturities will shorten when the institution would prefer them to extend. Conversely, when rates rise, borrowers will not prepay their loans, locking the bank into a lower-yielding asset and making it difficult for the bank to shorten asset maturities. Contraction and extension risk also are present in a similar fashion when financial institutions invest in mortgage-backed securities and other bonds with call options. A bank that maintains a large portfolio of loans

and securities with embedded call options heightens IRR due to a substantial increase in the unpredictability of the cash flows.

Instruments with embedded call options can demonstrate negative convexity. Convexity describes the nonlinear element of the price/yield relationship—in other words, the imperfect correlation between price and yield associated with fixed-income instruments. The price of a bond with negative convexity will increase more slowly than the rate at which yields decline and will fall faster than the rate at which yields rise. In contrast, a bond with positive convexity will rise in price faster than the rate at which yields decline and will fall in price slower than the rate at which yields rise. Option-free instruments display positive convexity.

The liability side of the balance sheet also contains embedded call options. Most commonly, these embedded options take the form of withdrawal rights in non-maturity deposit (NMD) accounts. Customers have the option to withdraw funds at any time. These withdrawal option rights may be exercised more frequently during periods of volatile interest rates. For instance, when interest rates rise, the market value of the customer's deposit generally declines because changes in the rate paid on NMDs lag increases in market rates. As a result, the customer may initiate a withdrawal and reduce a source of funding for the bank. Of course, the bank can change the rate paid on NMDs, which can be viewed as a type of option as well. These liability-side options can result in repricing risk if the deposits are used to fund earning assets with different repricing characteristics.

aversion, effectively reduced the interest spreads financial institutions had to offer to attract funding. As markets normalize, and to the extent emergency federal liquidity programs are phased out, interest spreads offered by financial institutions to attract funds could experience upward pressure.

The confluence of these balance sheet and economic trends has contributed to an increased asset/liability mismatch and set the stage for potential earnings deterioration if interest rates rise. Therefore, it is critical that financial institutions have and maintain on an ongoing basis an effective risk management system.

Principles of Sound Interest Rate Risk Management

To manage IRR exposure effectively, financial institutions must have timely and accurate information about the exposure of their balance sheets to changes in interest rates. The board of directors should set the risk tolerances and set policies that measure, monitor, and control IRR exposures. Senior management is charged with implementing the approved guidelines, using appropriate measurement systems, managing positions to meet established risk limits, and reporting IRR exposure. Management also is charged with providing a system of sound internal controls and appropriate independent reviews to, among other objectives, validate the robustness of their forecasting models.⁹ The formality and sophistication of an institution's IRR management should be commensurate with its level of risk exposure and the complexity of its holdings and activities. Management should periodically assess the institution's business strategies and new products or initiatives and the IRR implications to ensure the risk management process, including the measurement model, remains appropriate.

Financial institutions with the most robust interest rate risk measurement systems quantify IRR by applying various assumptions about future interest rates, economic conditions, and customer behavior to their current balance sheet position.¹⁰ The intricacy of the measurement system should vary depending on the size, complexity, and business model of the institution. Three types of measurement tools generally provide the foundation for IRR analysis: gap models,

economic valuation of equity (EVE) models, and earnings simulation models.

Different levels of sophistication characterize each model category, and within categories complexity can vary. A model's sophistication usually depends on the technical and mathematical formulas underlying the measurement system and the characteristics and types of assumptions used. Models differ in how they capture and reflect the four fundamental types of IRR (see text box on *Types of Interest Rate Risk*). The following is an overview of gap, EVE, and earnings simulation models:

Gap Analysis Models: Gap analysis measures the difference between the amount of interest-sensitive assets and interest-sensitive liabilities that will reprice (on a cumulative basis) during a given time horizon. If a bank has a negative gap, the amount of liabilities repricing in a given period exceeds the amount of assets repricing during the same period, thus decreasing net interest income in a rising rate environment. The gap ratio can be expressed as the percentage risk to net interest income by multiplying the gap ratio by the assumed rate change. The result estimates the change to the NIM. For example, a bank has a negative 15 percent one-year average gap. If rates increase 2 percent, then the NIM will decline 30 basis points (15 percent x .02). This estimate assumes a static balance sheet and an immediate, sustained interest rate shift.

Gap models are relatively simple to prepare and understand. However, they are limited, as they typically cannot measure the effects of embedded options, yield curve twists, and

⁹ "Joint Agency Policy Statement on Interest Rate Risk," <http://www.fdic.gov/news/news/financial/1996/fil9652a.html>.

¹⁰ The assumptions used to derive output are key components of a bank's measurement system. Numerous assumptions can be included in IRR measurement systems, including the projected level of interest rates, non-maturity deposit price sensitivity/decay rates, prepayment speeds, and customer behavior.

Types of Interest Rate Risk

There are four fundamental types of interest rate risk:

Repricing risk results from timing differences between coupon changes or cash flows from assets, liabilities, and off-balance sheet instruments. For example, long-term fixed-rate securities funded by short-term deposits may create repricing risk. If interest rates change, then deposit funding costs will change more quickly than the yield on the securities. Likewise, the present value of the securities (i.e., their market price) will change more than the value of the deposits, thereby affecting the value of capital.

Basis risk results from weak correlation between coupon-rate changes for assets, liabilities, and off-balance sheet instruments. For instance, LIBOR-based deposit rates may change by 50 basis points, while prime-based loan rates may change by only 25 basis points during the same period. Basis risk originates

from the potential for market differences when a position denominated in one currency (USD) is used to offset an exposure marked to another (Euro).

Yield curve risk results from changing rate relationships between different maturities of the same index. For example, a 30-year Treasury bond's yield may change by 200 basis points, but a three-year Treasury note's yield may change by only 50 basis points during the same period.

Option risk results when a financial instrument's cash flow timing or amount can change as a result of a decision exercised by a borrowing or lending counterparty, typically in response to market interest rate changes. This can adversely affect earnings by reducing asset yields or increasing funding costs, and it may reduce the net present value of expected cash flows.

basis risk.¹¹ Gap analysis can help management visualize the time frames in which repricing risk may occur, but it should not be the primary analytical tool for assessing IRR.

Economic Value of Equity Models:

EVE models reflect the net present value of the institution's assets, liabilities, and off-balance sheet cash flows. EVE models provide insights into a bank's longer-term IRR position. More advanced versions of EVE models, if administered correctly, can capture all types of IRR. Financial institutions should use EVE models capable of capturing the level of risk and optionality they have assumed.

EVE models range from simple to sophisticated, depending on the assumptions used to derive outputs, and have advantages and shortcomings. The most basic EVE models use straightforward rate and cash

flow assumptions that are simple to understand and easy to design. Basic EVE models work well for noncomplex financial institutions with simple balance sheets. However, these simple models often provide inaccurate valuations of embedded options, possibly understating risk, and should not be used to assess more complex instruments.

Earnings Simulation Models: Earnings simulation models measure the effects interest rate changes will have on interest income or net income. Simulation models reflect a bank's income performance over time and can, if properly calibrated, capture the four types of IRR. Earnings simulation models show the estimated potential effects on earnings and often are regarded by financial institutions as having more utility than other models. Many financial

¹¹ Some variations of gap, known as "dynamic gap" models, do attempt to capture some of these risks.

Interest Rate Risk

continued from pg. 9

institutions rely on earnings simulation as the primary tool to measure, manage, and control IRR exposure. However, managers should be aware that some optimistic assumptions can be embedded in these models that can affect their output. Managers who review these models should outline the rationale for determining key assumptions and any changes to assumptions and report to the Asset/Liability Management Committee (ALCO), or similar management committee.

Model outputs should proactively identify risks that could deplete current capital buffers or indicate the level of future earnings at risk. Further, measurement systems should enable management to recognize risks stemming from new and existing business strategies and have clear and well-understood linkages between changes in interest rates and resulting

changes in earnings and capital (see text box on *Interest Rate Risk Mitigation Strategies*).¹² To properly measure IRR, models should be calibrated to reflect that not all assets will repriced simultaneously. For example, variable-rate assets with embedded caps or floors, where the current interest rate is well beyond the repricing limit, will behave more like fixed-rate assets until interest rates again approach the band where they can adjust.

Scenario Analysis and Stress Testing

IRR should be considered under a range of potential scenarios, including ones in which the balance sheet is stressed or shocked significantly. Stressed situations are those that reflect significant movements in interest rates. The output should reflect the subsequent effect of such scenarios on earnings (earnings simulation results) and the underlying economic value of the bank's assets, liabilities, and off-balance sheet items (EVE results).

The goal of stress testing is to identify risk, not necessarily to estimate the most likely interest rate scenario. The 1996 *Interagency Policy Statement* requires that management consider "meaningful stress situations" when modeling IRR, providing for illustrative purposes a ± 200 basis point rate change over a one-year period. Many institutions have adopted this scenario as the basis for stress testing. However, in many cases, a ± 200 basis point parallel shock will not be sufficient for stress testing exposures. An interest rate shock of at least ± 300 basis points would be more representative of a severe movement in interest rates, given the frequency and magnitude of observed

Chart 5: The Fed Funds Rate Has Spiked in Multiple Periods Over the Past 55 Years



¹² Financial institutions should use caution when combining budgeting and IRR modeling methodologies. Financial planning and budgeting models often contain loan growth and funding assumptions that, when incorporated into interest rate measurement models, can mask underlying risk exposures. Management should run a "no growth" scenario to ensure the current position is measured. Since budgeting and risk management have different objectives, they should be evaluated differently.

Interest Rate Risk Mitigation Strategies

Interest rate risk management is imperative if exposure exceeds risk limits or capital and earnings prove insufficient to withstand adverse changes in interest rates. In such cases an institution should reduce its interest rate risk exposure, increase its capital, or both. The primary tools for reducing interest rate risk exposure are balance sheet alteration and hedging.

Balance sheet alteration is the most commonly used IRR management method. Strategies include acquiring liabilities and assets that have similar repricing, maturity, and option characteristics. This strategy is called cash flow matching, or matched funding. Another strategy, duration matching, attempts to align the duration of assets with the duration of liabilities. Duration measures the sensitivity of a financial instrument's value to changes in interest rates. Duration depends on the timing and size of an instrument's cash flows, and, other things equal, is higher for long-maturity instruments.

Hedging strategies often involve using derivatives instruments. Examples of derivatives are forward loan sales, swaps, futures, forwards, cap options, floor options, collars, and swaptions. The most common derivatives used to hedge IRR are swaps and forwards.¹³ These derivatives can reduce

an institution's IRR if used correctly. For example, a swap can effectively shorten the duration of a commercial loan portfolio, reducing an asset/liability mismatch. Conversely, a bank could lengthen the effective duration of its floating-rate wholesale liabilities by entering into a swap where a floating-rate stream of payments is exchanged for a fixed-rate stream.

Hedging with interest rate derivatives can be complex. If used incorrectly, derivatives can compound risks rather than hedge them, and institutions should not use derivatives strategies without understanding the risks and how cash flows will perform under a variety of scenarios. Banks using derivatives should incorporate the following in a board-approved policy outlining the bank's hedging strategy:

- Permissible strategies and types of derivative contracts
- Risk limits for hedging activity, such as position limits (gross and net), maturity parameters, and counterparty credit guidelines, and procedures for monitoring those limits
- Names of individuals authorized to initiate hedging transactions and establish limits of authority

- Description of how management will hedge the asset or liability in question, measure effectiveness and ensure sufficient compliance with the technical accounting guidance that governs hedging activity, most notably Financial Accounting Standards Board Statement 133 and its amendments

Banks that have not previously engaged in derivatives-based hedging activities have used outside consultants to assist in the establishment of such a strategy. Institutions that do this are reminded of the risks of excessive reliance on third parties to perform vital bank functions.¹⁴ The bank's board and management are accountable for the results of any derivatives strategy, regardless of whether the strategy is recommended by a third party. The expectation for fully understanding the risks of the derivatives strategy is not diminished by the use of a third party, and any bank using derivatives hedging strategies should adhere to sensible policy limits. Community banks should use derivatives for risk mitigation and not for speculative purposes, to increase balance sheet exposures, or as profit centers.

historical interest rate movements. For example, 30 percent of one-year periods between 1955 and 2008 have experienced changes in interest rates of more than 200 basis points.¹⁵ Further, during that extended period, rates changed by more than 300 basis points almost 16

percent of the time, and more than 400 basis points about 9 percent of the time (see Chart 5).

Examiners have observed that financial institutions with the strongest IRR identification and risk management programs

¹³ Several exchange-traded hedging options are available to community banks that in certain circumstances could help reduce a bank's exposure to IRR. For example, the Chicago Mercantile Exchange and affiliated Chicago Board of Trade offer swaps, options, and futures based on LIBOR and U.S. Treasury notes, as well as other interest rates. Over-the-counter (OTC) or bilateral agreements are another option, often available to community banks through correspondent banks and sometimes Federal Home Loan Banks. Although they are currently more widely used and often are simpler for banks to manage, OTC derivatives can present larger counterparty risk (the risk that the party holding the other side of a transaction will not be able to make good on its commitment) than those traded on an exchange.

¹⁴ See "Guidance for Managing Third-Party Risk," FDIC FIL 44-2008, <http://www.fdic.gov/news/news/financial/2008/fil08044.html>.

¹⁵ Year-over-year change in the effective Fed Funds rate. Federal Reserve H.15 data.

Interest Rate Risk

continued from pg. 11

have used interest rate shocks of ± 400 basis points or more as a benchmark and run multiple interest rate change scenarios. Scenarios also should include immediate interest rate changes, which are necessary to capture all of the bank's option risk (such as call and prepayment risks), which may be harder to detect in scenarios that assume gradual increases in rates. Additionally, scenarios that consider non-parallel changes in the slope of the yield curve and at different points across the curve are recommended.

The risk profile of an institution will influence the types of stress testing scenarios that will be necessary to measure exposures adequately. As such, smaller institutions and those with less complex risk profiles may be able to run fewer and less complicated scenarios.

Assumption Testing

Robust measurement of IRR requires that management frequently assess the reasonableness of a model's underlying assumptions. Although this may seem basic, a best practice for strong IRR management is ensuring that the assumptions match the characteristics of the bank's profile. Management assumptions should reflect the characteristics of bank assets and liabilities and not categorically rely on generic assumptions provided by a vendor. In fact, reliance on vendor-provided assumptions that do not reflect the bank's profile is a common IRR management weakness cited by FDIC examiners.

It is important that management use model assumptions that adequately reflect the risk profile of the institution's positions and products. Effective management regularly reviews model assumptions to ensure they are reasonable and accurate. Assumptions should be well documented. Backtesting, or comparing model-predicted output to actual results, is one way to check the reasonableness of assumptions. Preferably, the backtesting

period will be a period of stress or large rate changes. If past estimates of IRR exposure deviate significantly from actual performance, different assumptions may be appropriate. In such cases, management should recalibrate its assumptions to ensure the model remains effective.

A model may have many assumptions. At a minimum, two basic assumptions that should be included and continually evaluated for reasonableness are asset prepayments and non-maturity deposit price sensitivity/decay rates. Customer behaviors differ in various markets. As a result, financial institutions with robust IRR measurement systems perform both historical and forward-looking analyses to develop supportable assumptions that are relevant to their market and business plan.

Earnings simulations are dependent on new business assumptions—mix, maturity, and options. Assumptions about product growth can mask IRR exposure that exists in the balance sheet and off-balance sheet positions. For instance, a liability-sensitive bank may show earnings increases during periods of rising interest rates if favorable new business product assumptions are used in the model. Alternatively, earning asset growth funded with wholesale liabilities (leverage strategy) can earn higher yields, despite adverse changes in interest rates. Therefore, well-managed institutions will run and report to their ALCO or similar committee a static or “no growth” scenario. To gain additional insight, some financial institutions choose to supplement the static model with a dynamic model that assumes growth in new business. However, such dynamic models may be more relevant for profit planning than for identifying IRR risk. Additionally, other items should be considered when setting assumptions and running model scenarios, such as yield curve shifts and twists, how asset quality under changing rate scenarios can influence assumptions, customer behavior, and non-interest income

Assumptions

Yield Curve Changes and Twists

Most financial institutions have a balance sheet structure that benefits when the yield curve is positive, normal, or upward sloping. For the typical bank, a flattening yield curve or a further inversion of the yield curve, if already flat or inverted, likely poses the greatest risk to future earnings. To capture this risk, financial institutions should model for potential nonparallel changes in the yield curve. Such a model might consider a 400 basis point spontaneous increase in short-term interest rates (for example, three years and less) combined with no change in longer-term interest rates (more than three years). Financial institutions should occasionally run supplemental models with different pivot points to identify which point best captures their risk.¹⁶

Asset Quality

Increases in market interest rates can increase the rate of default on loans, adversely affecting asset quality. Financial institutions also should consider credit risk and pricing in IRR models. For example, if a particular institution has a large credit card portfolio, a wider range of assumptions related to this exposure would be expected in an earnings simulation

model. In such a case, management might decide either to increase default assumptions under a 400 basis point rate shock scenario or not to reprice certain loan portfolios due to credit risk constraints.

Customer Behavior

Appropriate assumptions about the interest rate sensitivity of non-maturity deposits play a key role in evaluating the IRR profile, even for traditionally stable deposit relationships. As previously discussed, financial institutions may have less pricing power and thus less control over balance sheet mix adjustments than they enjoyed in the past.

Non-Interest Income

Many financial institutions also consider the potential effects of interest rate movements on non-interest income as an offset or a “built-in” hedge to IRR. For example, a bank with exposure to falling long-term rates may see higher prepayments as mortgage borrowers refinance, but at the same time experience a significant jump in non-interest income from increased mortgage refinancing. A bank likely would include this offsetting IRR impact, if substantial, in the monitoring report(s).

fluctuations under changing rates (see *Assumptions* text box).

One method used to determine the implications of model assumptions is sensitivity testing. A sensitivity test alters a key assumption to show how such a change can affect model output. Effective risk managers use sensitivity testing to pinpoint the critical assumptions, which offers them insights about how assumptions influence measurement results. To be meaningful, a sensitivity test must alter the key assumptions significantly enough to change model output. As a best practice, assumption sensitivity testing should be done at least annually and

results should be presented to the ALCO or a similar senior management committee, and the board.

Internal Controls

An effective system of internal controls should include enforcing official lines of authority and appropriate segregation of duties. The system of internal controls should also include periodic independent review and validation of the measurement system. Independent review, which may be included in the internal or external audit function, should be performed on a regular basis to ensure the integrity and accuracy of

¹⁶ The three-year pivot point example is an observed practice at certain institutions running effective non-parallel yield curve twists. If a bank has more pronounced balance sheet exposure at different durations, then the use of a different pivot point could be justified.

Interest Rate Risk

continued from pg. 13

the IRR management process, including board reporting. One of the most common IRR management weaknesses cited by FDIC examiners is the lack of an adequate independent review.

Although the scope and formality of the independent review and model validation will depend on the size and complexity of the institution, its activities, and balance sheet composition, even smaller financial institutions should ensure that an independent party is reviewing the IRR measurement and reporting. Smaller institutions that do not have internal audit functions or lack the resources to outsource reviews can meet the 1996 *Policy Statement* guidelines by having a qualified staff member—*independent of the IRR process*—perform the reviews.

Internal control review should assess data inputs and assumptions for accuracy, completeness, and reasonableness. As illustrated earlier, assumptions can make or break the model output and are critical to generating sound estimates of IRR exposure.

In the absence of a third party, validation testing may also be performed by members of management who are independent of the primary IRR management function. Many institutions use backtesting to help them validate risk measurement calculations and model outputs. In-depth validation of the mathematical code and technical aspects of the model is typically not performed at smaller, noncomplex institutions, which often rely on third-party vendors and software packages to measure IRR. Instead, these institutions should request third-party review reports or audits of the service provider's model. Third-party vendors typically provide such reports to clients upon request as a matter of course. The

FDIC considers it a best practice for institutions to request and, if available, review such reports on an annual basis.

Alternatively, the validation review could include a review of the model by a separate entity, or a run of a separate model from that used at the institution. The latter process can offer insight about a model's validity and is referred to as "benchmarking." The models and inputs will not be identical but should be similar. The results of the alternate (benchmark) model are compared to the results of the model used for IRR management to identify any potential inconsistencies. This process may be costly, but it is often used by larger or more complex financial institutions or those with significant IRR exposure.

Financial institutions with large IRR exposures or with concerns about internal controls, model management, or model efficacy may be required to engage in a more formal external review. This would likely involve one or both of the methods described above.

Conclusion

Financial institutions should be vigilant in their oversight and control of IRR exposures. Given the current low interest rate environment, it is important that financial institutions plan for likely increases in interest rates and take steps to mitigate and control the associated risks. Concentrations of longer-maturity assets funded with shorter-maturity liabilities can stress an institution's earnings, liquidity, and capital in a rising rate environment. Financial institutions should be prepared to manage the risk of declining yield spreads between longer-term investments, loans, and other assets and shorter-term deposits and other

liabilities. If capital and earnings provide insufficient protection against adverse changes in interest rates, a bank should take steps to reduce its IRR exposure, increase capital, or both.

Suzanne L. Clair

*Senior Capital Markets
Specialist
Division of Supervision and
Consumer Protection
sclair@fdic.gov*

Alison T. Touhey

*Financial Economist
Division of Supervision and
Consumer Protection
atouhey@fdic.gov*

Lemoine J. Turbeville

*Senior Examiner
Division of Supervision and
Consumer Protection
lturbeville@fdic.gov*

The authors wish to thank Andrea N. Plante, Senior Quantitative Risk Analyst, Division of Supervision and Consumer Protection, for her valuable contributions to this article.

Not Just Adding Up the Numbers: Achieving CRA Objectives in Challenging Times

Even as the national economy begins to show signs of a rebound, many local housing and small business credit markets are recovering slowly. The economic downturn of the past few years resulted in reduced loan volumes at many financial institutions, including lending considered during Community Reinvestment Act (CRA) examinations. Rising levels of past-due loans and charge-offs are putting earnings and capital pressures on more institutions, and increasing the need for hands-on attention in working with strapped borrowers who are facing the consequences of reduced housing values and employment disruptions.

Despite these challenges, financial institutions can continue to achieve strong ratings under the CRA if they review their strategy and consider new approaches to meeting community credit and service needs, including a strong focus on existing qualitative standards. For example, lenders implementing new approaches to mortgage loan modifications or addressing emerging community development credit needs in conjunction with economic recovery programs are demonstrating the kind of innovation likely to result in strong CRA ratings. CRA examination procedures call for examiners to consider the particular economic circumstances and other constraints faced by an institution and encourage creative responses to community needs. When determining a rating, concerns about a reduced volume of loans may be balanced by the strong impact of a carefully designed program focused on meeting particularly challenging community needs.

Background

The CRA provides that regulated financial institutions have continuing and affirmative obligations to help meet the convenience and needs, including the credit needs, of the communities they serve.¹ The focus of the first CRA regulation in 1978 was on serving the credit needs of low- and moderate-income (LMI) areas, while adhering to safe-and-sound banking practices. After receiving extensive public comments in response to notices of proposed rule-making in 1993 and 1994, the federal banking agencies—the Office of the Comptroller of the Currency, the Federal Reserve Board, the Federal Deposit Insurance Corporation and the Office of Thrift Supervision (collectively, the agencies)—promulgated final regulations in 1995 that included a focus, not only on geographically defined low- and moderate-income areas, but also on low- and moderate-income people and small businesses and farms, particularly the very small enterprises that have a limited access to capital.²

The concept of community development also has become central to CRA examinations. The rule's definition of community development includes affordable housing, community services targeted to low- and moderate-income individuals, as well as activities to promote economic development by financing small businesses and small farms.³ The definition also includes activities that revitalize and stabilize LMI areas, distressed or underserved non-metropolitan middle-income areas, and major disaster areas.

¹ 12 U.S.C. 2901 *et seq.*, <http://uscode.house.gov/download/pls/12C30.txt>.

² See 43 Fed. Reg. 47146 (Oct. 12, 1978), 58 Fed. Reg. 67466 (Dec. 21, 1993), 59 Fed. Reg. 51232 (Oct 7, 1994) and 60 Fed. Reg. 22156 (May 4, 1995).

³ See 12 C.F.R. § 345.12(g), <http://www.fdic.gov/regulations/laws/rules/2000-6500.html>.

Originally, the evaluation of an institution's performance was based on 12 assessment factors that addressed the process banks used to identify community needs and the results of that process. The banking industry criticized the inconsistency in evaluation standards and documentation requirements, while community groups questioned the lack of results-oriented criteria. To respond to these issues and implement new public disclosure requirements, the agencies significantly revised the examination standards in the mid-1990s. These changes established a set of quantitative data comparisons for housing and small-business loans.

For large banks (which CRA currently designates as those with assets over \$1.1 billion), the standards were divided into three tests: lending, which constitutes 50 percent of the rating; and community development investments and services, which each account for 25 percent. Small banks (which CRA currently designates as those with under \$277 million in assets) were given a streamlined test focused on lending and lending-related activities. Later still, in 2005, a new category of intermediate small banks (with asset size exceeding the current small bank size standard, but under the large bank standard) was created using the small bank lending test and a new community development test.⁴

These changes did not alter the long-standing principle that the **responsiveness** of lending products and services to community needs (especially for LMI areas, LMI borrowers and small businesses) and the **soundness and sustainability** of this lending are complementary, not competing, goals. The Interagency Examination Procedures and the ratings guidance that accompanies them emphasize that examiners should look at the **quantity and quality** of CRA-related activities, and evaluate them within the

context of the bank's capabilities, safe-and-sound banking practices, and the needs of the community.

Agency Guidance for CRA Supervision

The Interagency CRA Examination Procedures vary in focus and emphasis by bank size and type. However, CRA evaluations consistently:

- Consider performance in the context of economic conditions, bank capacity and condition, and the specific needs of the assessment area under review;
- Assess the volume of lending inside the assessment area and the distribution of lending to LMI areas and borrowers as well as to small businesses and farms;
- Review the extent to which activities are responsive to the particular needs in the assessment area, including the impact they have on LMI people and very small businesses;
- Consider community development activities that include lending, investments, and services in support of LMI areas and people and small businesses, including their responsiveness and impact;
- Evaluate how these activities are undertaken within the framework of safe-and-sound practices; and
- Consider any illegal, abusive, and discriminatory practice that reduces the positive impact of CRA initiatives.

In the current environment, it is particularly important that examiners pay close attention to an institution's responsiveness to community needs and the quality of its loans. First, examiners should evaluate how an institution responded to declining lending volume (its own or in its market) during a time of

⁴ See 70 Fed. Reg. 44256 (Aug. 2, 2005) and 12 C.F.R. § 345.26(c), <http://www.fdic.gov/regulations/laws/rules/2000-6500.html>.

CRA Examinations

continued from pg. 17

broad economic slowdown and, in many cases, community-specific economic distress. A proactive institution will have developed a strategy to adapt its activities to economic conditions, by considering emerging needs and determining how to respond given its capacity and condition.

Second, because lending that does not fully consider the borrower's ability to pay creates serious adverse consequences for borrowers, communities and lenders, examiners must evaluate CRA performance in the context of consumer compliance and safety and soundness. Examiners should consider whether loans are safe and sound and whether they involve any unfair, illegal, or discriminatory practices. Such an evaluation ensures that loans benefit the borrower and the community, and therefore support the purpose of the CRA. The CRA always has focused on meeting credit needs in a safe-and-sound manner, and the results of recent studies show that loans made in their assessment areas by lenders subject to the CRA have performed better than those made by independent mortgage companies.⁵

With this information in mind, how should examiners approach their evaluation? The first step is developing a performance context.

Performance Context

In developing the performance context, demographic and economic information on the assessment area is assembled, and community needs are considered. Community characteristics and needs may be changing during a time of economic turmoil. To update the context information, examiners should consult state and local non-profit organizations with financing programs focused on small business, affordable housing, foreclosure

prevention or economic recovery and development; governments and housing authorities; and organizations actively monitoring abusive practices and tracking complaints.

Another aspect of the performance context is considering how institutions similar to the one under review are adjusting to community conditions. Examiners should request information from community contacts on how other lenders are responding to foreclosures, small business needs, and community development opportunities. Examiners should evaluate other recent CRA Public Evaluations to update their understanding of how the bank under review compares to others in the area dealing with adverse economic conditions.

Examiners also must consider the capacity and constraints of the bank, particularly its financial condition. Because of the increase in supervisory actions that have occurred in the current adverse economic environment, compliance and safety-and-soundness examiners should continue to work closely to appropriately document the context of affected institutions. The existence of an enforcement action or required remedial action for safety and soundness does not in itself justify a reduction in the institution's commitment to prudent CRA lending or alternative lending-related activities. A significant, disproportionate reduction in attention to LMI areas or borrowers or small businesses or an increase in out-of-area lending warrants follow up with management and may indicate CRA performance is less than Satisfactory. The great majority of institutions are pursuing lending and other community development strategies taking into account the opportunities and constraints in their markets. Some of these approaches are illustrated below for large and intermediate small banks.

⁵ Elizabeth Laderman and Carolina Reid, "CRA Lending During the Subprime Meltdown," Federal Reserve Bank of San Francisco, in *Revisiting the CRA: Perspectives on the Future of the Community Reinvestment Act*, published by the Federal Reserve Banks of Boston and San Francisco, February 2009.

Large Bank Lending Test

Having created a performance context, examiners assess key aspects of bank performance within that frame of reference. The Large Bank Lending Test rating matrix consists of seven elements. Four of these factors are quantitative: (1) overall lending activity levels; (2) lending in the assessment area compared to outside the area; (3) geographic distribution, particularly to LMI areas; and (4) borrower distribution according to borrowers' income, with a focus on LMI borrowers or the revenue of the business (especially those under \$1 million in annual revenue).

During a time of economic contraction, the quantitative factors in the lending test should be compared to an updated performance context and current aggregate lending data. The distribution of lending during the examination period, particularly in LMI areas or to LMI borrowers, compared to other lenders, is first assessed to identify disproportionate declines or gaps. The examiners then consider underlying causes. For example, a sharp curtailment in housing lending in LMI areas compared to all areas could indicate the lender has not considered strategies to meet the needs of LMI borrowers in the new environment. In 2008, the percent of Federal Housing Administration (FHA) lending compared to total Home Mortgage Disclosure Act (HMDA) lending increased, and the ability of lenders to sell other high loan-to-value (LTV) products in the secondary market declined significantly. A lender that increased its role in FHA (or Rural Housing or State-guaranteed) lending responded to both needs and constraints. A lender with declining volume that did not consider government lending may not be as responsive to the LMI segments of its community.

The remaining three Large Bank Lending Test rating factors are qualitative: (1) responsiveness to highly economically disadvantaged geographies and low-income persons and small businesses; (2) community development lending; and (3) product innovation or flexibility tailored to serve the needs of the assessment area. These factors are discussed below, and the inset boxes on *Quality Factors* provide suggestions for examiner inquiry.

- **Responsiveness to highly economically disadvantaged geographies and low-income persons and small businesses.** This factor applies to each type of lending considered in the examination, particularly home mortgage, small business, consumer, and community development. Examiners should request that financial institutions identify whether and to what extent their product marketing, delivery, and design respond to the needs of borrowers and the local community. Institutions may provide information on such products or programs as:
 - *Small consumer loans.* In June 2007, the FDIC issued guidance (see FIL-50-2007⁶) that encourages banks to consider small consumer loans that meet the needs of LMI borrowers. Furthermore, FDIC examiners will consider information provided on small-dollar loans even if the institution has not provided other data on consumer lending.
 - *Effective mortgage modification programs.* These programs represent an example of how responsiveness to community and individual borrower circumstances, in the context of safe-and-sound underwriting, can benefit borrowers and lenders. The success of these initiatives, particularly in LMI areas, may be more critical now than at any other time.

⁶ Affordable Small Dollar Loan Products: Final Guidelines, June 19, 2007, <http://www.fdic.gov/news/news/financial/2007/fil07050.html>

■ **Community development (CD) lending.** Examiners measure a financial institution's CD lending activity by evaluating quantitative factors, such as the number and dollar amount of CD loans. Examiners also consider the CD lending opportunities available to an institution. Qualitative factors for evaluating an institution's CD lending include the responsiveness to area needs and the degree of leadership an institution demonstrates. Responsiveness can be shown, for example, by an institution's collaboration with community development leaders in its assessment areas to find solutions to area problems, including those resulting from the economic downturn. Leadership requires more than board membership. A leader works to design and structure the most appropriate financing for a particular project, and uses bank financial commitments to leverage support from other private and public participants.

■ **Innovation and flexibility to serve assessment area credit needs, consistent with safe-and-sound practices.** To be innovative, an activity does not need to be "new" but rather could be modified to respond to changing needs. For example, if the bank made small adjustments to an existing loan modification program to make it more successful over time, that program remains innovative and flexible.

Overall, qualitative factors can be as important as quantitative measures. Examiners may conclude that a highly responsive and targeted program is making as much of an impact in the community as a program with greater volume that is less targeted to area needs. Of course, institutions with greater size and capacity should be evaluated using a higher standard for quantitative and qualitative factors than smaller institutions with limited capacity.

Large Bank Services and Investments: The results of the services and investments tests contribute significantly to an

institution's performance evaluation. As with lending, especially CD lending, the quality and responsiveness of services and investments are key to a strong rating. Community contacts that assist in identifying opportunities and leadership in CD lending also should be asked for input on services and investments.

Intermediate Small Bank (ISB) Performance Standards

Intermediate small banks are covered by the small bank lending test and a community development test. Qualitative factors, particularly responsiveness, are especially important in the community development test.

The community development test represents half the ISB's evaluation. Examiners assess the number and amount of qualified loans and investments; the extent of community development services, including those for LMI areas and borrowers; and the responsiveness of these activities given community needs, opportunities, and bank capacity. The examiner evaluates the responsiveness of the bank's activities compared to needs identified by the bank and the performance context developed by the examiner.

If a bank has a thoughtful, well-designed community development strategy, it may combine loans, investments, and services to leverage investments from public and other private participants that result in measurable positive impacts on community needs. On the other hand, a program developed without strong community relationships, and, for example, that relies simply on investments in mortgage-backed securities, does not respond to particular community needs. Such limited efforts should prompt an examiner to discuss with the institution responsiveness to local community credit needs and opportunities to work more effectively with local or state-level community development resources.

Quality Factors: Housing and Small Business Lending

- Has the bank reviewed whether it can adapt current products to meet recent credit market challenges, for example, by using or increasing use of FHA programs for mortgages or Small Business Administration (SBA) programs to support local employment?
- Is the bank taking a significant role in state and local economic development programs that address the needs of firms that would qualify for SBA or state assistance? This could be considered small business or CD lending, depending on loan size.
- Is there an example of a product or program that is particularly responsive to local economic needs and conditions? Has volume in this product been consistent with opportunities identified in the performance context? The examiner should consider requesting community feedback on this question.
- Does the bank have a record of effectively making loan modifications, and is there an affirmative effort to include LMI borrowers and areas?
- Is preserving home ownership an element of the bank's agenda in the wake of the mortgage crisis; did the bank support specific initiatives; and are there demonstrated results?
- Has the bank identified whether there are areas that are being hard hit by foreclosures, and has it worked with local organizations to promote neighborhood stability with demonstrated results?
- Is the bank ensuring that all of its products and programs are consistent with Compliance requirements (including Unfair and Deceptive Acts or Practices, Equal Credit Opportunity Act, Fair Housing Act, Truth in Lending Act and, for housing loans, Home Ownership and Equity Protection Act and Real Estate Settlement Procedures Act) and safe-and-sound underwriting practices?
- If the bank makes credit cards available to small firms, is it ensuring the products are compliant and do not involve unfair or deceptive practices?
- Does the bank work with existing non-profit or quasi-public or private intermediaries in the state or assessment area to further small-business lending goals, and do these entities view the bank as a significant contributor?
- Does the bank evidence a commitment to broad-based outreach in small-business segments that may not have existing banking relationships to ensure the bank is not limiting service to long-standing clients and word of mouth?
- Is the bank working with any micro-lending initiatives where new or very small entrepreneurs receive small loans and other technical support?
- Has the bank offered a small loan program consistent with FIL-50-2007, "Affordable Small-Dollar Loan Products: Final Guidelines"?

Larger scale and small-scope loans and investments can be responsive to community needs. For example, an institution may participate in a state-wide community development organization with a broad geographic mandate that includes the assessment area. Such an organization can leverage a larger pool of capital to make larger and more diversified investments and better support a qualified professional staff. At the same

time, small-dollar grants for non-profit organizations working in local churches and schools to improve access to mainstream financial services for LMI people could meet an important need, particularly if the bank designs complementary savings incentives and accounts.

Before drawing a conclusion about the community development test, the examiner should review the performance context, including evaluating how a

Quality Factors: Community Development

- Can bank management explain and validate how the loan or investment supports community development initiatives, including affordable housing, small business development, or community facilities and services that address the needs of LMI individuals?
- Does the bank evaluate and proactively pursue community development opportunities so that community development leaders in the state, county, community or in non-profit organizations are aware of the bank's interest in supporting community development?
- Does the bank's amount of support for local, state, or regional community development organizations represent an adequate level of involvement given the groups' activities, the role of other similar banks, and the bank's capacity?
- Has the bank's role been critical to the initiation or success of area projects and programs?
- Has the bank been a leader in creating and participating in loan programs or other assistance designed for recovery from a natural disaster or acute economic problems?
- Does the level, scope, responsiveness, and impact of the institution's CD lending and investment represent a significant contribution to meeting community development credit needs given the opportunities?
- Has the bank taken the opportunity to offer facilities, alternative access tools, and technical assistance services that help consumers and small businesses become part of the mainstream and broaden relationships over time? Is the bank measuring success?

bank compares with its peers. But the most critical question the examiner should ask is what the bank is doing to respond to the most important needs of its community, including LMI populations and small enterprises. If the bank's programs evidence a poor response to those needs and are limited, considering its capacity, a less than Satisfactory rating is appropriate.

Considering Loans Not Consistent with Safe-and-Sound Banking Practices

Loans that are not consistent with safe-and-sound underwriting practices will not be favorably considered during a CRA examination. Where examiners have strong evidence that a particular product set or lending activity resulted in loans that were not sustainable, or such lending is or may be subject to formal enforcement action, the effect on the CRA rating could be significant,

depending on the scope and impact of the affected loans.

For example, loans that do not reflect prudent underwriting standards or comply with regulatory guidance are not considered favorably for CRA purposes. However, if loans were generally reasonably underwritten, and asset quality deterioration is due to local economic factors, they should be given full consideration for a CRA evaluation. If poor underwriting controls resulted in a significant negative impact on CRA-related lending activities and customers or communities of the bank, a less than Satisfactory rating should be considered. In addition, once the preliminary rating has been established, the examination procedures require the examiner to review the results of the most recent compliance examination and determine whether evidence of discriminatory or other illegal credit practices that violate an applicable law, rule, or regulation should negatively affect the institution's overall CRA rating.

Not Just Adding Up the Numbers

It is reasonable to expect that lending volumes will be adversely affected during an economic downturn, including in LMI or economically distressed communities. Institutions with a strategic approach to identifying and serving community needs and that emphasize the quality of their lending and community development financing likely will be most successful in adapting to change. Quality is demonstrated when banks remain committed to providing responsive products consistent with safe-and-sound lending, even in difficult times.

Janet R. Gordon
Senior Policy Analyst
Division of Supervision and
Consumer Protection
jagordon@fdic.gov

From the Examiner's Desk: Customer Information Risk Assessments: Moving Toward Enterprise-wide Assessments of Business Risk

Safeguarding sensitive customer information is both a statutory responsibility and a business imperative for financial institutions. Despite the fact that financial institutions have been required to implement information security programs since mid 2001, the results of information technology (IT) examinations often indicate that institutions struggle with conducting effective risk assessments. In addition, guidance and industry best practices for assessing information security risks continue to evolve, resulting in a variety of approaches to this important business function.

Effective risk assessments are even more important today than they were in 2001. Financial institutions are the target of increasingly sophisticated cyber attacks perpetrated by well-funded criminal enterprises around the world. These cyber attacks target sensitive customer information, as well as other information assets and electronic payment channels, to commit the 21st century equivalent of old-fashioned bank robbery. Stolen customer information is used to make fraudulent credit and debit card purchases, and stolen customer identity credentials are used to compromise electronic payment systems and siphon funds from customer accounts.

This article summarizes three types of risk assessments, identifies issues and areas for improvement often observed by examiners, and discusses the supervisory response to deficiencies.

Background

Section 501(b) of the Gramm-Leach-Bliley Act establishes a requirement for financial institutions to safeguard the privacy of customer financial information.¹ The banking agencies provided guidance on meeting these requirements in *Interagency Guidelines Establishing Information Security Standards (Information Security Standards)*.² The *Information Security Standards* require financial institutions to assess risk to customer information or customer information systems. FDIC examiners (when conducting an IT examination and assigning an IT rating) must assess the quality of an institution's risk assessment methodologies as part of the examination.³

The nature, type, and depth of risk assessments are affected to varying degrees by regulatory requirements, supervisory processes, and industry best practices. As financial institution operating environments, product and service offerings, and outsourcing arrangements differ, risk assessment guidance has taken the approach of setting forth general principles. This flexible approach is needed to accommodate the unique characteristics and risk profiles of financial institutions; however, as a result, the nature and quality of risk assessments vary. Nonetheless, risk assessment approaches typically fall into three categories:

- **Customer information risk assessments**, which seek to comply with

¹ See 15 U.S.C. 6801 and 6805(b) of the Gramm-Leach-Bliley Act and Appendix B to Part 364 of the FDIC Rules and Regulations, <http://www.fdic.gov/regulations/laws/rules/2000-8660.html#fdic2000appendixbtopart364>.

² See FIL-22-2001, "Security Standards for Customer Information," March 14, 2001, <http://www.fdic.gov/news/news/financial/2001/fil0122.html>.

³ For further information, see FIL-81-2005, "Information Technology Risk Management Program (IT-RMP) New Information Technology Examination Procedures," August 18, 2005, <http://www.fdic.gov/news/news/financial/2005/fil8105.html>; and FFIEC IT Examination Handbook, Information Security Booklet, July 2006, http://www.ffiec.gov/ffiecinfobase/html_pages/it_01.html#infosec.

the requirements of the *Information Security Standards* by focusing on risks to customer information or customer information systems.

■ **Information security risk assessments**, which expand on customer information risk assessments by assessing risks to all information assets, as recommended in the FFIEC *Information Security Booklet*.⁴

■ **Enterprise-wide assessments of business risk**, which assess risks across all business lines, including, but not limited to, risks to information security.

Examiners may encounter any of these types of risk assessments and, therefore, should understand their differences and limitations. The next section describes these risk assessment approaches and highlights observations from IT examinations and the supervisory response to deficiencies.

Customer Information Risk Assessments

Customer information risk assessments often represent a “compliance response”—the actions a financial institution takes to meet the requirements of the *Information Security Standards*. To the extent these risk assessments reflect an attempt to comply with minimum standards, they may not fully address the intent of the standards. As a result, they may fall short of identifying and mitigating threats to customer information or customer information systems.

Consistent with the *Information Security Standards*, customer information risk assessments typically are intended to accomplish the following:

1. Identify customer information or customer information systems.
2. Determine reasonably foreseeable internal and external threats to customer information or customer information systems (e.g., threats that may affect the confidentiality, integrity, or availability of customer information in paper-based and electronic form).
3. Determine the likelihood and potential damage of these threats, in terms of cost, time, or reputation, through a quantitative or qualitative analysis.
4. Assess existing policies, procedures, customer information systems, and other arrangements to control risks.

The *Information Security Standards* require banks to address the risks identified by their customer information risk assessment by the use of appropriate controls that should be included in the bank’s information security program. A pre-requisite for such risk-mitigating action is an effective risk assessment. IT examinations, however, often determine that customer information risk assessments fall short in one or more respects. These are discussed below.

Relevant Internal and External Vulnerabilities

Relevant internal and external vulnerabilities, particularly those involving unauthorized or inappropriate employee actions,⁵ often go unrecognized during the customer information risk assessment process. Examples include insufficient separation of duties, excessive user access rights, and inappropriate review of audit logs and account maintenance reports. In addition, vulnerabilities originating from outsourcing or service provider arrangements—another form of trusted

⁴ See FFIEC IT Examination Handbook, *Information Security Booklet*, July 2006, http://www.ffiec.gov/ffiecinfobase/html_pages/it_01.html#infosec.

⁵ These often represent the foundation for fraud or for misappropriation of funds.

third-party relationship—may not be identified as part of a customer information risk assessment. These vulnerabilities include improper encryption of electronic information in transit or in storage at the third-party location, insufficient background checks on third-party employees with access to nonpublic customer information, and insufficient oversight of third parties' subsequent subcontracting of services to entities unknown to the financial institution, including entities that may operate outside the United States.⁶ Also, risk assessments looking for external vulnerabilities should identify the threat posed by cyber criminals using phishing scams and malicious software to compromise customer accounts and fraudulently transfer funds, thereby posing reputation and financial risk to the institution.

Inherent and Residual Risks

Customer information risk assessments may assume that controls are functioning as intended and thus may convey results that could give senior management and the Board of Directors a false sense of security. A key to avoiding unpleasant surprises in this regard is to clearly differentiate between, and adequately assess, inherent and residual risks. Inherent risks are the risks that exist before the application of controls intended to mitigate those risks. Clearly identifying inherent risks is particularly beneficial in making determinations for the scope and frequency of audit and independent reviews—determinations that should be based on a financial institution's assessment of inherent risk without assuming that controls are functioning as intended. Residual risks are those that exist after the application of controls. In this context, risks cannot be completely eliminated, even though layered security may reduce risk to an acceptable level. To evaluate the extent of residual risk, financial institutions should consider

the effectiveness of their administrative controls, such as policies, procedures, and employee training; physical controls, such as locking doors, cabinets, and alarms; and logical controls, such as passwords, encryption, virus protection, and firewalls.

Emerging Risks

As the *Information Security Standards* require financial institutions to periodically evaluate and modify information security programs, management also should ensure that a key component of the program—the risk assessment methodology—is revisited before changes in business lines, service offerings, or outsourcing arrangements occur. Unfortunately, when the risk assessment process is approached as a compliance response to the standards, it may not adequately assess emerging risks. However, when a risk assessment is approached as a value-added process, the resulting document can effectively support key business decisions. A financial institution can reasonably determine whether proposed changes in business lines, service offerings, or outsourcing arrangements can be accomplished within approved risk tolerances, and, if not, what actions should be taken to ensure they are.

Result Reviews

As a financial institution's risk profile evolves, so should its risk assessment results. An opportune time to revisit risk assessment results is when controls are subject to periodic audit or independent review. These reviews should provide evidence that the controls are achieving their intended purpose (i.e., reducing risk as indicated by the risk assessment). In turn, a financial institution is afforded the opportunity to validate the basis for its final risk determinations. For

⁶ See FIL-52-2006, "Foreign-Based Third-Party Service Providers: Guidance on Managing Risks in These Outsourcing Relationships," June 21, 2006, <http://www.fdic.gov/news/news/financial/2006/fil06052.html>.

example, a risk assessment may indicate that controls surrounding the institution's ability to recover from a disaster event are effective and result in a low level of residual risk, while an audit of disaster recovery/business continuity strategies indicates that plans are out-of-date and untested. In this example, the financial institution should revisit residual risk determinations and may need to develop a mitigation strategy to improve the risk profile. Audit/independent reviews also may aid the risk assessment process by identifying other information assets that require protection—a need management may not have previously considered.

Mitigation Plans and Supervisory Corrective Action

Assuming that an element of risk exists after the application of controls, management must determine whether it will accept, transfer (i.e., insure), or further address residual risk by developing mitigation plans for unacceptable risks. The Prouty Approach⁷ is one example of a way to make these determinations based on the loss severity (impact) and the loss frequency (likelihood) of a risk event (see Table 1).

We reproduce this matrix not as an endorsement of this or any specific formulaic approach to risk mitigation, but as a reminder that the customer information risk assessment should not

end with the assessment, but should result in concrete steps to correct material deficiencies. Often, customer information risk assessments remain silent about further actions that may be needed to mitigate residual risk. As a result, the value of the assessment as an effective management tool may be limited.

From a supervisory perspective, the requirement for banks to safeguard customer information is statutory and not subject to management discretion. Therefore, when the bank's information security risk assessment, the results of its internal reviews or audits, or the examiner's own analysis finds that customer information is not adequately safeguarded, corrective action should be required.

According to outstanding IT examination procedures, examiners should address material departures from guidance in the *Information Security Standards*. A financial institution may be subject to criticism in the Risk Management Report of Examination and potentially cited for a contravention of interagency guidance on the Violations of Laws and Regulations page.⁸ Further, as delineated in the Uniform Rating System for Information Technology,⁹ insufficient risk assessment processes may impact a financial institution's assigned IT rating. In egregious instances, a financial institution also may be exposed to Civil Money

Table 1

The Prouty Approach					
		Loss Frequency			
		Almost Nil	Slight	Moderate	Definite
Loss Severity	Severe	Transfer	Reduce/prevent	Reduce/prevent	Avoid
	Significant	Retain	Transfer	Reduce/prevent	Avoid
	Slight	Retain	Transfer	Prevent	Prevent

⁷ Timothy Abram, "The Hidden Values of IT Risk Management," *ISACA Journal*, volume 2, 2009, pg. 4.

⁸ Absence of an information security program, a seriously deficient program, or significant noncompliance with the *Information Security Standards* should be addressed on the Violations of Laws and Regulations page.

⁹ See FIL-12-1999, "Uniform Rating System for Information Technology," February 5, 1999, <http://www.fdic.gov/news/news/financial/1999/fil19912.html>.

Penalties, depending on the degree of noncompliance or management's disregard for securing customer information. However, in less significant instances where a risk assessment only focuses on customer information or customer information systems, examiners should encourage financial institutions to expand risk assessment methodologies beyond customer information to include other information assets, consistent with outstanding guidance.

Information Security Risk Assessments

As noted above, customer information risk assessments often are developed to comply with a specific statutory requirement to safeguard customer information. As such, they often do not include an assessment of risk to other information assets. Examples of such assets, which may be subject to the same threats and vulnerabilities as customer information assets, include, but are not limited to, the following:

- Trade secrets
- Strategic plans and objectives
- Human resource records
- Authentication credentials
- Network topologies/schematics
- Source code libraries
- Proprietary software
- Executive Committee/Board minutes

The disclosure, alteration, or destruction of such information may materially affect the success and viability of the financial institution. As a result, these assets deserve management's consideration under a risk assessment framework.

Information security risk assessments evaluate risk to all information assets, as suggested in the FFIEC *Information Security Booklet*. Security weaknesses are not limited to customer information and customer information systems

and can increase exposures in other operational areas. Further, security concerns in these areas can quickly erode customer confidence and adversely affect the viability of strategically important products and services. For example, a security incident resulting from compromised corporate cash management authentication credentials could affect a financial institution's ability to attract and retain corporate accounts and related lending relationships. As such, financial institutions should ensure that information security risk assessments adequately consider potential risk in all business lines and risk categories.

Customer information risk assessments and information security risk assessments have similar expectations and limits. Both approaches must identify information assets, determine threats and vulnerabilities, evaluate impacts, and assess controls. Also, information security risk assessments must address many of the same types of issues as customer information risk assessments, including the following:

- Consideration of relevant internal and external vulnerabilities
- Delineation of inherent and residual risks
- Assessment of emerging risks
- Revisiting risk assessment results
- Development of mitigation plans

Given similar expectations and limitations of customer information and information security risk assessments, examination reviews will be similar—with one notable exception. When reviewing an information security risk assessment, examiners also should consider the extent to which management reasonably identifies and classifies information assets. Under a customer information risk assessment, data classification is of less importance, as all information is confidential customer information. However, as an information security risk

assessment expands beyond customer information to include information of varying importance and sensitivity, management should incorporate data classifications (e.g., public, private, sensitive, or confidential) into its methodology. Such effort is necessary to help direct management attention to the information assets that are most sensitive or critical to the business process and thus most deserving of scarce financial and staff resources.

Consistent with the approach taken for customer information risk assessments, examiners should address material departures from guidance in the *Information Security Standards* and implement a similar supervisory response based on the nature of the findings and effectiveness of the risk assessment methodology. Although these deficiencies may not constitute a violation of law or regulation, they can be subject to specific criticism in the Report of Examination and may impact a financial institution's IT rating. Examiners also should encourage financial institutions to ensure that information security risk assessments convey findings in terms of their impact on business risk.

Enterprise-Wide Assessments of Business Risk

Recent efforts to meld enterprise risk management with information security risk management represent a significant opportunity for financial institutions to gain material benefits and economies from their risk assessment methodologies. Such assessments typically incorporate the following:

- Assessing enterprise-wide risks to the business (not only those relating to information security) and how the use of technology relates to those risks;
- Identifying how data are used for critical business processes (sometimes referred to as mapping business processes); and

- Evaluating risk assessment results in terms of their impact on business risk.

This approach helps achieve enterprise-wide goals and objectives and assists senior management and the Board of Directors in understanding and managing risks. Although guidance on this approach remains formative, key steps include:

1. *Identifying enterprise risks* that may affect the institution (typically performed by senior management or the Board of Directors who own the risk).
2. *Defining business processes* that drive enterprise risks.
3. *Assessing business process risks*.
4. *Linking technology to the business processes* (e.g., identifying threats, vulnerabilities, impacts, and controls) and focusing efforts on higher risks that support the business process.
5. *Developing plans and strategies* to further manage business risks and mitigate risks that are outside approved tolerances.

As this process differs from those of a typical customer information risk assessment or information security risk assessment (which usually are structured around the applications or systems that store such information), an enterprise-wide assessment of business risk is best illustrated by an example.

1. *Identifying enterprise risks*—The Board of Directors identifies internal abuse/fraud as an enterprise-wide risk.
2. *Defining business processes*—Management identifies the lending business process as a key driver of the risk of internal abuse/fraud.
3. *Assessing business process risks*—Management identifies the risk of improper boarding of loans and altering payment and past-due status

From the Examiner's Desk

continued from pg. 29

as critical fraud risks within this business line.

4. *Linking technology to the business process*—Based on the risks selected, management evaluates threats and vulnerabilities within the loan application and makes inherent and residual risk determinations after an analysis of controls, which in this case may include access controls, user rights, oversight/independent review processes, and interconnectivity with network and peripheral devices.
5. *Developing plans and strategies*—By completing this assessment and reviewing other enterprise risks, management can focus on higher risks evident in key business processes and adjust the scope of audit/independent review programs accordingly. For example, instead of reviewing access controls and user permissions as part of loan, deposit, and IT general control audits, the Board may prescribe an overall review of logical access controls that focuses on functions most relevant to key business process risks.

Examiners are reminded that existing guidance does not require enterprise-wide assessments of business risk. However, the FFIEC *Information Security Booklet* indicates that financial institutions should ensure that information security risk assessments adequately consider potential risk in all business lines and risk categories. Given the absence of specific guidance, examiners must use judgment in evaluating how enterprise-wide assessments of business risk are used. Examiners also should consider customer information and information security guidance in the *Information Security Standards* and the FFIEC *Information Security Booklet*.

Conclusions

Although customer information risk assessments, information security risk assessments, and enterprise-wide assessments of business risk differ, consideration of their inherent characteristics and limitations creates an opportunity to enhance the effectiveness and usefulness of all three models. In all instances, financial institutions must comply with the requirements of the *Information Security Standards*. Bankers and examiners also need to be cognizant of the potential shortcomings of the more limited forms of risk assessments, such as insufficient internal and external threat identification, improper delineation between inherent and residual risk, untimely assessment of emerging risk, improper revisiting of risk assessment results, and failure to develop risk mitigation strategies as needed. Lastly, to improve the scope of assessments and comply with FFIEC guidance, risk assessments should include all information for which a security breach could materially affect an institution's risk profile. Ideally, risk assessment findings should be tied to business risks more broadly. These efforts will help ensure that senior management, the Board of Directors, and the institution's regulators gain sufficient insight into the institution's true risk posture and help reduce the potential for an unforeseen, escalated risk profile. In view of the sophisticated cyber threats to information assets, effective risk assessments are the foundation on which financial institutions should build a comprehensive and effective risk mitigation program.

Paul M. Onischuk
Examination Specialist (IT)
Division of Supervision and
Consumer Protection
Chicago Regional Office
ponischuk@fdic.gov

Overview of Selected Regulations and Supervisory Guidance

This section provides an overview of recently released regulations and supervisory guidance, arranged in reverse chronological order. Press Release (PR) and Financial Institution Letter (FIL) designations are included so the reader can obtain more information.

ACRONYMS and DEFINITIONS

FDIC	Federal Deposit Insurance Corporation
FRB	Federal Reserve Board
FFIEC	Federal Financial Institutions Examination Council
OCC	Office of the Comptroller of the Currency
OTS	Office of Thrift Supervision
NCUA	National Credit Union Administration
Banking agencies	FDIC, FRB, and OCC
Federal bank and thrift regulatory agencies	FDIC, FRB, OCC, and OTS
Federal financial institution regulatory agencies	FDIC, FRB, OCC, OTS, and NCUA

Subject	Summary
FDIC Adopts Policy Statement on Prudent Commercial Real Estate Loan Workouts (PR-194-2009, October 30, 2009; FIL-61-2009, October 30, 2009)	The FDIC, in coordination with the other federal financial institution regulatory agencies and the FFIEC State Liaison Committee, adopts a Policy Statement supporting prudent commercial real estate workouts. This Statement replaces the <i>Interagency Policy Statement on the Review and Classification of Commercial Real Estate Loans</i> promulgated in November 1991. See http://www.fdic.gov/news/news/financial/2009/fil09061.html .
FDIC Seeks Comment on Proposed Rulemaking Regarding Timing of Payment of Quarterly Risk-Based Prepaid Assessments (FIL-58-2009, September 30, 2009)	The FDIC adopts a Notice of Proposed Rulemaking that would require insured depository institutions to prepay their quarterly risk-based assessments for fourth quarter 2009, and for all of 2010, 2011, and 2012, on December 30, 2009, along with each institution's risk-based deposit insurance assessment for third quarter 2009. Comments were due by October 28, 2009. See http://www.fdic.gov/news/news/financial/2009/fil09058.html .
Joint Agency Request for Comment on Proposed Correspondent Concentration Risks Guidance (FIL-55-2009, September 25, 2009)	The federal financial institution regulatory agencies solicit comment on proposed guidance addressing supervisory matters relating to identifying, monitoring, managing, and performing appropriate due diligence of concentration risks of correspondent institutions. See http://www.fdic.gov/news/news/financial/2009/fil09055.html .
Joint Agency Statement on Results of 2009 Shared National Credits Review (PR-175-2009, September 24, 2009)	The federal financial institution regulatory agencies announce that credit quality declined sharply for loan commitments of \$20 million or more held by multiple federally supervised institutions, according to the 32nd annual review of Shared National Credits. See http://www.fdic.gov/news/news/press/2009/pr09175.html .
FDIC Announces Launch of Foreclosure Prevention Initiative (PR-171-2009, September 16, 2009; FIL-54-2009, September 16, 2009)	The FDIC launches an initiative to help consumers and the banking industry avoid unnecessary foreclosures and stop foreclosure "rescue" scams that promise false hope to consumers at risk of losing their homes. This initiative includes outreach, referral services, and an informational tool kit. See http://www.fdic.gov/news/news/financial/2009/fil09054.html .

Regulatory and Supervisory Roundup

continued from pg. 31

Subject	Summary
FDIC Adopts Final Rule Concerning Temporary Increase of Deposit Insurance Coverage Amounts (FIL-53-2009, September 9, 2009)	This FIL describes the FDIC's adoption of a final rule to reflect the extension of the temporary increase in the standard maximum deposit insurance amount to \$250,000 through December 31, 2013. The final rule also addresses 2008 interim rules regarding revocable trust accounts and mortgage servicing accounts. See http://www.fdic.gov/news/news/financial/2009/fil09053.html .
FDIC Adopts Final Rule Regarding Elimination of Three Transfer Sublimit for Withdrawals from Savings Deposits (FIL-52-2009, September 9, 2009)	This FIL describes the FDIC's adoption of a final rule eliminating the monthly three transfer sublimit for certain types of withdrawals from the savings deposits of FDIC-supervised institutions. Under the final rule, the overall six-transfer limit on preauthorized or automatic withdrawals will continue to exist. See http://www.fdic.gov/news/news/financial/2009/fil09052.html .
FDIC Seeks Comment on Proposed Rulemaking Regarding Alternatives for Effectively Concluding Debt Guarantee Program (PR-166-2009, September 9, 2009; FIL-51-2009, September 9, 2009)	The FDIC adopts a Notice of Proposed Rulemaking (NPR) that reaffirms the expiration of the Debt Guarantee Program of the Temporary Liquidity Guarantee Program on October 31, 2009. Under the NPR, the FDIC solicits comments on whether a temporary emergency facility should be retained for six months after the expiration of the current program. Comments were due September 24, 2009. See http://www.fdic.gov/news/news/financial/2009/fil09051.html .
FDIC Announces Enhanced Supervisory Procedures for Newly Insured FDIC-Supervised Institutions (FIL-50-2009, August 28, 2009)	This FIL describes supervisory changes for state nonmember institutions insured for seven or fewer years (de novo period). The FDIC will now extend the de novo period from the current three-year period to seven years for examinations, capital, and other requirements. See http://www.fdic.gov/news/news/financial/2009/fil09050.html .
Joint Agency Request for Comment on Proposed Regulatory Capital Standards Related to Adoption of FASB No. 166 and FASB 167 (PR-151-2009, August 26, 2009; FIL-49-2009, August 27, 2009)	The federal financial institution regulatory agencies solicit comment on a proposal to better align capital requirements with the actual risk of certain exposures and obtain public comment on the effect on regulatory capital that will result from the implementation of the Financial Accounting Standards Board's Statement of Financial Accounting Standards Nos. 166 and 167. Comments were due September 26, 2009. See http://www.fdic.gov/news/news/financial/2009/fil09049.html .
FDIC Adopts Final Rule Extending the Transaction Account Guarantee Program (FIL-48-2009, August 27, 2009)	This FIL describes the FDIC's adoption of a final rule extending the Transaction Account Guarantee portion of the Temporary Liquidity Guarantee Program for six months, through June 30, 2010. For institutions that elect to remain in the program, the fee will be raised and adjusted to reflect the institution's risk. See http://www.fdic.gov/news/news/financial/2009/fil09048.html .
FDIC Board Approves Final Statement of Policy on the Acquisition of Failed Depository Institutions (PR-152-2009, August 26, 2009)	This Policy Statement provides guidance to investors interested in acquiring or investing in the deposit liabilities of banks or thrifts about the standards they will be expected to meet to qualify to bid on a failed institution. See http://www.fdic.gov/news/news/press/2009/pr09152.html .
FDIC Announces Nationwide Seminars for Bank Officers and Employees (FIL-46-2009, August 10, 2009)	This FIL describes a series of six seminars for bank officers and employees that will provide guidance on how to calculate FDIC deposit insurance coverage for their customers. The seminars will be conducted between August 24 and December 9, 2009. See http://www.fdic.gov/news/news/financial/2009/fil09046.html .

Subject	Summary
<p>Notice of Changes to Regulation Z Regarding Open-End Consumer Credit: Immediate and 90-day Changes (FIL-44-2009, August 6, 2009)</p>	<p>This Notice describes amendments to the Truth in Lending Act (Regulation Z) to establish fair and transparent practices for open-end credit plans. The FDIC expects the institutions it supervises to take appropriate steps to ensure compliance with these new requirements. See http://www.fdic.gov/news/news/financial/2009/fil09044.html.</p>
<p>Statement on Allowance for Loan and Lease Losses; Residential Mortgages Secured by Junior Liens (FIL-43-2009, August 3, 2009)</p>	<p>This FIL reiterates the need for financial institutions to consider all factors that affect collectability of loans secured by junior liens on one- to four-family residential properties in areas where the value of such properties has declined. See http://www.fdic.gov/news/news/financial/2009/fil09043.html.</p>
<p>FDIC Announces Testing of Funding Mechanism for Legacy Loan Program (PR-131-2009, July 31, 2009)</p>	<p>This release announces that the FDIC will continue to develop the Legacy Loan Program (LLP) by testing the LLP's funding mechanism through the sale of receivership assets. See http://www.fdic.gov/news/news/press/2009/pr09131.html.</p>
<p>Joint Agency Release of Revised Questions and Answers Regarding Flood Insurance (PR-127-2009, July 21, 2009; FIL-42-2009, July 21, 2009)</p>	<p>The federal financial institution regulatory agencies and the Farm Credit System are issuing five new frequently asked questions to help financial institutions meet compliance responsibilities under the federal flood insurance laws and regulations. See http://www.fdic.gov/news/news/financial/2009/fil09042.html.</p>
<p>Joint Statement by Secretary of the Treasury Timothy F. Geithner, Chairman of the Board of Governors of the Federal Reserve System Ben S. Bernanke, and Chairman of the FDIC Sheila Bair (PR-121-2009, July 8, 2009)</p>	<p>On March 29, 2009, the Treasury Department, the FRB, and the FDIC announced the designs of the Legacy Loan and Legacy Securities Programs. This Statement describes the continuing progress on implementing these programs, including Treasury's launch of the Legacy Securities Public-Private Investment Program. See http://www.fdic.gov/news/news/press/2009/pr09121.html.</p>
<p>Interagency Statement on California Registered Warrants (FIL-41-2009, July 8, 2009)</p>	<p>This Statement issued by the federal financial institution regulatory agencies provides guidance for financial institutions regarding the regulatory capital treatment for registered warrants issued by the state of California as payment for certain obligations. See http://www.fdic.gov/news/news/financial/2009/fil09041.html.</p>
<p>FFIEC Statement on Regulatory Conversions (FIL-40-2009, July 7, 2009)</p>	<p>This FFIEC Statement reaffirms that charter conversions or changes in the primary federal regulator should be conducted only for legitimate business and strategic reasons. Institutions that intend to change their charter or banking supervisor will continue to seek approval through an application process with the prospective chartering authority and primary federal regulator, in consultation with state authorities. See http://www.fdic.gov/news/news/financial/2009/fil09040.html.</p>
<p>Frequently Asked Questions on Sweep Account Disclosure Requirements (FIL-39-2009, July 6, 2009)</p>	<p>This FIL addresses questions regarding the establishment of practices for determining deposit and other account balances at a failed depository institution and disclosure requirements for certain sweep accounts. See http://www.fdic.gov/news/news/financial/2009/fil09039.html.</p>

Regulatory and Supervisory Roundup

continued from pg. 33

Subject	Summary
FDIC Board Approves Proposed Policy Statement on Qualifications for Failed Bank Acquisitions (PR-112-2009, July 2, 2009)	This proposed Policy Statement would provide guidance to private capital investors interested in acquiring or investing in the assets and liabilities of failed banks or thrifts regarding the terms and conditions of potential acquisitions or investments. See http://www.fdic.gov/news/news/press/2009/pr09112.html .
Joint Agency Release Publishing Final Rules and Guidelines to Promote Accurate Reports About Consumers (PR-111-2009, July 2, 2009)	The federal financial regulatory agencies and the Federal Trade Commission published final rules and guidelines to promote the accuracy and integrity of information furnished to credit bureaus and other credit-reporting agencies. See http://www.fdic.gov/news/news/press/2009/pr09111.html .
Joint Agency Statement Seeking Comment on Proposed Interagency Guidance on Funding And Liquidity Risk Management (PR-107-2009, June 30, 2009; FIL-37-2009, June 30, 2009)	The federal financial institution regulatory agencies issue this proposed guidance to communicate consistent expectations on sound practices for the management of funding and liquidity risks and strengthening liquidity risk management practices. The proposed guidance, when finalized, will apply to all domestic institutions, including banks, thrifts, and credit unions. Comments were due August 29, 2009. See http://www.fdic.gov/news/news/financial/2009/fil09037.html .
Joint Agency Release of Interim Final Rule for Mortgage Loans Modified Under the "Making Home Affordable" Program (PR-100-209, June 26, 2009; FIL 36-2009, June 26, 2009)	In March 2009, the Treasury announced guidelines under the Making Home Affordable Program (MHAP) to promote sustainable loan modifications for homeowners at risk of losing their homes to foreclosure. The interim final rule would provide a common interagency capital treatment for loans modified under the MHAP. See http://www.fdic.gov/news/news/financial/2009/fil09036.html .
Joint Agency Request for Comment on Proposed Revisions to CRA Regulations (PR-98-2009, June 24, 2009; FIL-35-2009, June 24, 2009)	The federal bank and thrift regulatory agencies issued proposed revisions to regulations implementing the Community Reinvestment Act to require agencies to consider low-cost education loans provided to low-income borrowers when assessing a financial institution's record of meeting community credit needs. Comments were due by July 24, 2009. See http://www.fdic.gov/news/news/financial/2009/fil09035.html .
Notice of Proposed Extension of the Transaction Account Guarantee Program (FIL-34-2009, June 23, 2009)	This FIL solicits comment on all aspects of proposed rulemaking addressing two alternatives for the conclusion of the Transaction Account Guarantee program. Comments were due July 23, 2009. See http://www.fdic.gov/news/news/financial/2009/fil09034.html .
Release of Final Amendments to Part 363: Annual Audit and Reporting Requirements (FIL-33-2009, June 23, 2009)	This release describes amendments to Part 363 of the FDIC Rules and Regulations, which sets forth annual independent audit and reporting requirements for insured institutions with at least \$500 million in total assets. See http://www.fdic.gov/news/news/financial/2009/fil09033.html .
FDIC Statement on Third-Party Referrals Promising Above-Market Rates on Certificates of Deposit (FIL-32-2009, June 19, 2009)	This Statement alerts FDIC-insured institutions to be aware of any unsolicited deposits through third-party referrals. Certain insurance companies and other financial firms (third parties) are advertising above-market rates to attract customers while misrepresenting the presence of FDIC insurance coverage. See http://www.fdic.gov/news/news/financial/2009/fil09032.html .

Subject	Summary
<p>Joint Agency Release of Frequently Asked Questions on Identity Theft Red Flags, Address Discrepancies, and Change of Address Regulations (PR-88-2009, June 11, 2009; FIL-30-2009, June 11, 2009)</p>	<p>The federal financial institution regulatory agencies and the Federal Trade Commission are issuing frequently asked questions to help financial institutions, creditors, users of consumer reports, and issuers of credit cards and debit cards comply with federal regulations on identity theft and discrepancies in change of address. See http://www.fdic.gov/news/news/financial/2009/fil09030.html.</p>
<p>FDIC Statement on the Status of the Legacy Loan Program (PR-84-2009, June 3, 2009)</p>	<p>The FDIC formally announces that development of the Legacy Loan Program will continue, but that a previously planned pilot sale of assets by open banks will be postponed. See http://www.fdic.gov/news/news/press/2009/pr09084.html.</p>
<p>Joint Notice of Proposed Rulemaking on Secure and Fair Enforcement for the Mortgage Licensing Act of 2008 (SAFE Act) (FIL-28-2009, June 3, 2009)</p>	<p>The federal financial institution regulatory agencies and the Farm Credit Administration seek comment on the proposed rule regarding the SAFE Act designed to improve accountability and tracking of mortgage loan originators, enhance consumer protection, and reduce fraud. Comments were due July 3, 2009. See http://www.fdic.gov/news/news/financial/2009/fil09028.html.</p>
<p>Joint Agency Release on Proposed Rule Implementing SAFE Act Mortgage Loan Originator Registration Requirements (PR-83-2009, June 1, 2009)</p>	<p>This proposed rule would establish the registration requirements for mortgage loan originators employed by the agency-related institutions, including national and state banks, savings associations, credit unions, Farm Credit System institutions, and certain subsidiaries. The proposed rule also sets forth certain requirements for these institutions, including the adoption of policies and procedures to ensure compliance with the SAFE Act. Comments were due July 1, 2009. See http://www.fdic.gov/news/news/press/2009/pr09083.html.</p>
<p>Regulation Z (Truth in Lending); Early Disclosure Requirements (FIL-26-2009, June 1, 2009)</p>	<p>Revisions to Regulation Z closed-end mortgage early disclosure requirements were superseded by the enactment of the Mortgage Disclosure Improvement Act (MDIA). As a result, the Federal Reserve has revised Regulation Z to incorporate the MDIA amendments. See http://www.fdic.gov/news/news/financial/2009/fil09026.html.</p>
<p>FDIC Tightens and Clarifies Interest Rate Restrictions on Institutions That Are Less Than Well Capitalized (PR-82-2009, May 29, 2009; FIL-25-2009, May 29, 2009)</p>	<p>This release describes a final rule changing the way the FDIC administers its statutory restrictions on the deposit interest rates paid by banks that are less than well capitalized. The new rule is designed to eliminate any subjectivity in the establishment of maximum deposit rates. See http://www.fdic.gov/news/news/financial/2009/fil09025.html.</p>
<p>Consideration of the Special Assessment When Analyzing and Rating Financial Institutions (FIL-24-2009, May 22, 2009)</p>	<p>The FDIC issues this guidance to alert insured financial institutions that the special assessment (as described in FIL-23-2009) is not expected to affect the supervisory component or composite ratings that FDIC examiners assign to institutions. See http://www.fdic.gov/news/news/financial/2009/fil09024.html.</p>
<p>FDIC Adopts Final Rule Imposing a Special Assessment on Insured Depository Institutions (PR-74-2009, May 22, 2009; FIL-23-2009, May 22, 2009)</p>	<p>The FDIC Board voted to levy a special assessment on insured institutions as part of the agency's efforts to rebuild the Deposit Insurance Fund and maintain public confidence in the banking system. The special assessment of 5 basis points on each institution's assets, minus its Tier 1 capital as of June 30, 2009, will be collected September 30, 2009. See http://www.fdic.gov/news/news/financial/2009/fil09023.html.</p>

Regulatory and Supervisory Roundup

continued from pg. 35

Subject	Summary
FDIC Insurance Coverage: Extension of Temporary Increase in Standard Maximum Deposit Insurance Amount (FIL-22-2009, May 22, 2009)	On May 20, 2009, President Obama signed the Helping Families Save Their Homes Act, which extended the temporary increase in the standard maximum deposit insurance amount to \$250,000 per depositor through December 31, 2013. See http://www.fdic.gov/news/news/financial/2009/fil09022.html .
Participants in Debt Guarantee Component of FDIC's Temporary Liquidity Guarantee Program: Inclusion of Minority- and Women-Owned Businesses for Contracting and Underwriting Needs (FIL-21-2009, May 7, 2009)	The FDIC encourages participants in the debt guarantee component of the FDIC's Temporary Liquidity Guarantee Program to consider using qualified minority- and women-owned businesses to support their contracting and underwriting needs. See http://www.fdic.gov/news/news/financial/2009/fil09021.html .
FDIC Announces Expansion of Ombudsman's Office to Assist Customers with Loans at Failed Banks (PR-65-2009, May 5, 2009)	The FDIC announces the creation of a new unit within the Office of the Ombudsman to assist customers with loans at failed banks. The unit will complement the FDIC's efforts to address questions or concerns of borrowers of failed banks. See http://www.fdic.gov/news/news/press/2009/pr09065.html .
Statement on Risk Management of Investments in Structured Credit Products (FIL-20-2009, April 30, 2009)	This FIL reiterates and clarifies existing supervisory guidance on the purchase and holding of complex structured credit products and focuses on supervisory concerns related to these securities. See http://www.fdic.gov/news/news/financial/2009/fil09020.html .
Statement on Classification Treatment for High Loan-to-Value (LTV) Residential Refinance Loans (FIL-19-2009, April 30, 2009)	This Statement establishes that retail loan classifications should be based on the borrower's payment performance, not the value of the collateral, which can rise and fall as market conditions change. See http://www.fdic.gov/news/news/financial/2009/fil09019.html .

Subscription Form

To obtain a subscription to *Supervisory Insights*, please print or type the following information:

Institution Name _____

Contact Person _____

Telephone _____

Street Address _____

City, State, Zip Code _____

Please fax or mail this order form to:

FDIC Public Information Center
3501 North Fairfax Drive, Room E-1022
Arlington, VA 22226
Fax Number (703) 562-2296

Subscription requests also may be placed by calling 1-877-ASK-FDIC or 1-877-275-3342.



Federal Deposit Insurance Corporation
Washington, DC 20429-9990

OFFICIAL BUSINESS
PENALTY FOR PRIVATE USE, \$300

**PRESORTED
STANDARD
MAIL**

Postage &
Fees Paid
FDIC
Permit No. G-36