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## SPECIAL YEAR-END ISSUE

# Stress Testing as a CRE Risk Management Tool, Part III

*by James Adams, Supervising Examiner, and Sharon D. Wells, Assistant Examiner*

This article concludes our three-part series on the use of stress testing as a risk management tool for banking organizations with high levels of CRE concentrations. Earlier in our series, we introduced the benefits and foundations of stress testing (Part I, Second Quarter 2008) and suggested ways to stress test unique segments of the CRE portfolio (Part II, Third Quarter 2008). This final segment highlights the critical role of the board of directors and senior management in the process, from developing policies and procedures to utilizing the information to direct mitigation strategies and contingency plans. In addition, we will briefly discuss how this information fits within the strategic planning process.

**The Role of Senior Management and the Board of Directors**

The board of directors has the ultimate responsibility for the level of risk assumed by an institution and its overall risk management program. This includes oversight of the stress testing program. The board of directors ensures that the stress testing program is meaningful, effective, and fully supported by the senior management team. The depth and degree to which the board will be involved in the process will largely depend on the size of the institution. Some institutions may have a risk management committee, which actually includes board representation, to oversee the program. Senior management is responsible for the day-to-day oversight of the stress testing program.

**Policies and Procedures**

Effective policies and procedures must be developed in order to manage risk successfully. The development of policies, performance measures, and monitoring procedures must coincide with the institution's strategic plan and the board's risk appetite. Policies and procedures are not steadfast guidelines, but they may be changed periodically to reflect the changes in the risk profile of the institution or in its external environment.

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FEDERAL RESERVE BANK OF PHILADELPHIA

# Supervision Spotlight

## Financial Crisis Spurs Extraordinary Response and Hastens Regulatory Reform

*by Michael E. Collins, Senior Vice President*

The turmoil that has rocked the U.S. financial system and set off global shockwaves has set the stage for a period of profound change that will transform the financial landscape in ways that were, until recently, unimaginable. Wall Street stalwarts that were seemingly unassailable have either vanished or been assimilated into other entities, the market's acceptance of the investment bank model is diminished, and we have seen government intervention in the financial markets on a scale unprecedented since the Great Depression.

Although we don't have a clear picture of what the financial landscape will ultimately look like, one thing is certain: the pendulum has swung decidedly in the direction of more regulation. This regulation will likely focus on making the financial system less vulnerable and increasing market transparency, especially with regard to the innovations—hedge funds, off-balance sheet entities, credit default swaps, etc.—that were lightly or unregulated and contributed heavily to the crisis of confidence that is reshaping our financial markets.

The deepening of the financial crisis over this past summer and early fall led to the passage of the Emergency Economic Stability Act, or EESA, which provided new tools to help stabilize the markets, rekindle lending, and restore confidence in the financial system. A key provision of EESA authorized the Troubled Asset Relief Plan, or TARP, which allows the Treasury to inject capital directly into the banking system by purchasing up to $250 billion in senior preferred shares of qualifying banks and thrifts. While there are no stipulated restrictions on how participating banks may use the funds, the ostensible goal of the program is to increase the amount of credit available to U.S. households and businesses. Participating banks must also agree to adopt the Treasury's standards on executive pay and corporate governance. A number of Third District institutions have expressed an interest in the program, which is open to institutions of all sizes.

The FDIC, meanwhile, is using its existing powers to complement the Treasury's capital relief efforts through a new program that will guarantee senior unsecured debt issued between October 14, 2008, and June 30, 2009, for a period of three years for all FDIC-insured institutions and their holding companies.

In addition to the tools provided under EESA and TARP, the Federal Reserve continues to implement other measures to ease pressures and promote market liquidity through its existing authority. Most recently, the Federal Reserve has introduced three temporary lending programs designed to enhance money fund and money market liquidity. These include the ABCP Money Market Liquidity Facility (AMLF), the Commercial Paper Funding Facility (CPFF), and the Money Market Investor Funding Facility (MMIFF). The AMLF allows institutions to finance purchases of high quality, asset-backed commercial paper from money market mutual funds. Under the CPFF, the Federal Reserve Bank of New York will finance the purchase of unsecured and asset-backed commercial paper from eligible issuers through primary dealers. Under the MMIFF, the Federal Reserve Bank of New York will extend loans to five private sector special purpose vehicles to finance the purchase of eligible assets, such as large bank CDs, bank notes, and commercial paper, from eligible investors.

The dramatic events that have unfolded in recent months have underscored in the minds of many the need to revise and reform the U.S. financial regulatory structure for the 21st century. The existing regulatory structure is highly complex and reflects its evolution over the past seven decades in response to financial crises, industry practices, regulatory gaps, and various attempts to modernize the financial system. It has often been described as a regulatory patchwork that comprises numerous regulators at the federal and state level, some with overlapping responsibilities and some in direct competition with each other. Its ad hoc nature has created disparities in how different entities involved in similar activities are regulated, with some being heavily regulated, while others are either lightly regulated or not regulated at all.

Most observers agree that the U.S.'s current regulatory structure is suboptimal and has not kept pace with industry practices and marketplace innovations over the past several years. Some argue that it has not successfully accommodated the changes in financial markets resulting from the interconnectedness brought about by increased globalization and the rise of large financial services conglomerates involved in a broad range of financial services.[1]

Congressional leaders have recently declared their intention to overhaul the financial regulatory system in the coming year, and Treasury Secretary Paulson has urged Congress to move forward with implementing the Treasury's vision for a comprehensive, new regulatory system, "Blueprint for a Modernized Financial Regulatory Structure."[2] The Treasury's blueprint would streamline the existing structure by creating three distinct regulatory bodies whose responsibilities are determined by the regulatory objectives of market stability, prudential regulation, and consumer protection.

While we don't know how much, if any, of the blueprint lawmakers may choose to use as a framework, some broad themes are emerging. The crisis has made evident that we face considerable challenges in predicting market conditions with a high degree of confidence. Any new regulatory framework should be agile enough to give regulators the flexibility they need to adapt to industry practices and respond effectively to market developments. The crisis has also made apparent that capital and liquidity rules need to be strengthened and consumer protec-

Michael E. Collins, Senior Vice President

[1] "The Structure of Financial Supervision: Approaches and Challenges in a Global Marketplace," Deloitte, October 6, 2008, available online at: <www.deloitte.com/dtt/cda/doc/content/us_fsi_banking_G30%20Report%20Fact%20Sheet_Oct2008(1).pdf>.
[2] Available online at: <www.ustreas.gov/press/releases/reports/Blueprint.pdf>.

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# Capital Planning for Community and Regional Banking Organizations

*by Shaconda Walker, Senior Examiner*

The landscape of the banking industry has experienced drastic changes over the last 18 months. The rapid succession of massive devaluations in certain assets, freezing of credit markets, and deposit runoffs, to name a few, have brought about volatile conditions, causing even the largest of financial institutions to collapse. Given this backdrop, banking organizations have been challenged with containing credit risk, ensuring access to liquidity, and maintaining sufficient capital.

While liquidity and credit risk challenges command heightened attention, capital adequacy remains the cornerstone for a safe and sound institution. Institutions are encouraged to review capital planning practices to ensure that capital levels are, among other things, appropriate to support risk profiles and absorb unanticipated losses or declines in asset values in turbulent markets. It is also important to develop or revise capital policies to incorporate the results of the planning process. Although external influences cannot be controlled, capital planning activities can help an institution to be more prepared for both the expected and unexpected. The following topics should be considered when performing capital assessment activities.

**Strategic and Financial Considerations**

Strategic planning is one of the board and management's most important functions and should be considered when evaluating the institution's capital needs. The strategic plan usually outlines the bank's capital base, desirable capital levels, and external capital sources.[1] Capital should also be evaluated in view of projected asset growth and dividend payout targets. Above all, the nature and magnitude of risks that the board and management are willing to accept should be taken into account when determining appropriate capital levels.

An institution's financial condition could negatively impact capital levels and ratios. Institutions should consider the severity of problem and classified assets, loan concentrations, and the adequacy of the allowance for loan and lease losses.[2] Poor earnings performance could make it difficult to internally generate capital, while net losses erode the capital base. Other financial factors, such as off-balance-sheet items, should also be reviewed. Capital levels should be adequate to support assets that would result from a significant portion of these items being funded on the balance sheet in a short time.[3]

**Risk Assessment**

All material risks should be identified and measured consistently to assess the current and prospective risk profile. The risk profile should be a compilation of the six major risks: credit, market, liquidity, operational, legal, and reputational. From there, an assessment of the six risks should incorporate banking functions, business lines, activities, products, and legal entities from which significant risks emanate.

As an example, consider an institution with a sizeable credit card operation. In this institution, credit card volume is originated for securitization purposes to provide liquidity. While securitizations may have been successful in the past, capital adequacy should be considered in the event market conditions prevent credit card receivables from being securitized and

[1] "Assessment of Capital Adequacy," *Commercial Bank Examination Manual*, available on the Board of Governors' website at: <www.federalreserve.gov/boarddocs/supmanual/cbem/200804/0804cbem.pdf>.

[2] See footnote 1.

[3] See footnote 1.

sold. In essence, an evaluation should be made to determine whether warehousing the credit cards on the balance sheet for a longer period of time would significantly impact capital ratios.

An assessment of the six risks should result in a comprehensive risk-based view of the organization. After evaluating the potential impact to capital, capital levels could be adjusted or contingency plans put in place, as necessary, to reflect the risk profile.

**Stress Testing**

An institution should perform stress tests or a sensitivity analysis on certain investment securities and loan portfolio segments, as necessary. This practice will help to quantify the impact of changing economic conditions on asset quality, earnings, and capital. The sophistication of stress testing practices and sensitivity analysis should be consistent with the size, complexity, and risk characteristics of the asset(s).[4]

As an example, consider an investment security that has significantly depreciated for several months. Although there may be an indication that the security may soon be designated as other-than-temporarily impaired, the bank's management decides to continually monitor the asset. In this case, it would be prudent for management to also perform stress tests. Management would be able to assess the potential impact on capital ratios if an impairment charge were to be taken.[5]

The unexpected market and economic events of 2008 significantly diminished access to various capital sources.

**Bank Holding Company Considerations**

It is a normal course of business for holding companies to generate cash flow through dividend payments upstreamed from their bank subsidiaries. The dividends are generally used for corporate activities, such as interest payments on debt, corporate dividend payments, mergers and acquisitions, and operating expenses. Capital planning activities should ensure that capital at the bank is maintained at appropriate levels to sustain its risk profile.

For banking organizations that are designated as financial holding companies (FHCs), management must be mindful that the institution's FHC status could be jeopardized if any of its subsidiary banks fall below a well-capitalized position.

**Contingent Capital Sources**

The unexpected market and economic events of 2008 significantly diminished access to various capital sources. Once again, it is prudent to develop several alternative options to raise capital in an expedited manner, if necessary. Options should include internal and external sources. In the event that external sources are not available or are cost-prohibitive, the focus must be placed on improving capital levels internally. The solution may be to retain earnings rather than pay dividends, sell assets, or restructure the balance sheet.

**Conclusion**

Although the above-mentioned topics do not comprise an all-inclusive list, they reflect issues that are common amongst most banking organizations. Once an assessment of relevant factors is complete, there should be an indication of whether additional capital is necessary. To be most effective, capital planning should also be performed periodically and reviewed by the board of directors. Financial institutions are strongly encouraged to be prudent in conducting capital planning activities in order to be better prepared for both the expected and unexpected. ☐

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[4]SR Letter 07-01, *Interagency Guidance on Concentrations in Commercial Real Estate*, is available on the Board of Governors' website at <www.federalreserve.gov/boarddocs/srletters/2007/SR0701.htm>.

[5]For further discussion on the topic of stress testing, refer to the articles written by Supervising Examiner James Adams and Assistant Examiner Sharon Wells in the Second, Third, and Fourth Quarter 2008 issues of *SRC Insights*, available online at <www.philadelphiafed.org/bank-resources/publications/src-insights>.

From The

# Examiner's Desk

## Monitoring Other-Than-Temporary Impairment Charges in a Challenging Environment

*by Susan Gonzalo, Examiner*

One of the effects of the current turmoil in the financial markets and housing industry has been the marked rise in other-than-temporary impairment (OTTI) charges taken by institutions, as the fair values of many investment securities have fallen drastically below their cost basis. Most notably, Fannie Mae and Freddie Mac preferred and common stock lost almost all of their value after the government takeover of these agencies. This article will provide a refresher on the evaluation, accounting, and reporting related to the other-than-temporary impairment of certain assets.

**Overview**

The increasing severity and duration of unrealized losses on investment securities brought about by the changes in the economic environment have, in turn, led to heightened OTTI analyses by banks and external auditors, as well as increased scrutiny by examiners. Regulatory capital ratios at a number of institutions have fallen below the well-capitalized threshold under the Prompt Corrective Action statute as a result of these impairment charges, requiring several capital-raising activities.

Guidance on other-than-temporary impairment is provided in FAS 115, *Accounting for Certain Investments and Debt Securities*; FASB Staff Position (FSP) No. FAS 115-1 and FAS 124-1, *The Meaning of Other-Than-Temporary Impairment and Its Application to Certain Investments*; SEC Staff Accounting Bulletin (SAB) No. 59, which has been codified as SAB Topic 5M, *Other-Than-Temporary Impairment of Certain Investments in Debt and Equity Securities*; and Emerging Issues Task Force (EITF) Issue No. 99-20, *Recognition of Interest Income and Impairment on Purchased and Retained Beneficial Interests in Securitized Financial Assets*.[1]

The accounting standards require institutions to determine whether impairment is temporary or other-than-temporary. It should be noted that other-than-temporary is not intended to mean permanent. If an OTTI exists, the security should be written down to fair value, the unrealized loss should be reported in earnings for the reporting period, and the fair value then becomes the new cost basis. Subsequent recoveries in fair value should not be recognized in earnings until the security is sold.

**When Is an Investment Impaired?**

An investment is considered impaired if its fair value is less than its cost basis (including adjustments for accretion, amortization, previous OTTIs, and hedging). Impairment is assessed at the individual security level at the date of the financial statements. In most cases, the assessment must be done in each reporting period (annual and interim periods). As presented in the guidance, indicators of possible impairment include, but are not limited to, the following:

- A significant deterioration in the earnings performance, credit rating, asset quality, or business prospects of the issuer
- A significant adverse change in the regulatory, economic, or technological environment of the issuer

[1]Guidance to external auditors is provided in the AICPA's Statement on Auditing Standards No. 92. The glossary entries (under Securities Activities) of the Call Report and the FR Y-9C summarize the related accounting requirements for determining whether impairment on an available-for-sale (AFS) or held-to-maturity (HTM) investment security is other than temporary.

- A significant adverse change in the general market condition of either the geographic area or the industry in which the issuer operates
- A bona fide offer to purchase, an offer by the issuer to sell, or a completed auction process for the same or similar security for an amount less than the cost of the investment
- Factors that raise significant concerns about the issuer's ability to continue as an ongoing concern, such as negative cash flows from operations, working capital deficiencies, or noncompliance with statutory capital requirements or debt covenants

**When Is an Impairment Other-Than-Temporary?**

It is difficult to determine that an OTTI exists, and it requires reasonable judgment by the institution's management based on the facts and circumstances associated with the institution and the individual securities. There are no bright-line or rule-of-thumb tests for determining OTTI. The following are indicators to consider when evaluating whether an impairment is other-than-temporary and that a write-down to fair value is required:

- The length of time and the extent to which the fair value has been less than cost
- The financial condition and near-term prospects of the issuer, including any specific events that may influence the operations of the issuer
- The intent and ability of the institution to retain its investment for a period of time sufficient to allow for any anticipated recovery in fair value.

Management's impairment evaluation process and OTTI determination should be reviewed by the institution's external auditor.

**Disclosure Requirements**

OTTI guidance requires extensive tabular, quantitative, and narrative disclosures for investments having an unrealized loss position for which OTTI impairments have not been recognized. Examples of expected disclosures are: fair value of investments with unrealized losses, amount of unrealized losses, nature of the investment, cause(s) of the impairment, number of investments that are in an unrealized loss position, severity and duration of the impairment, and other evidence that the investment is not other-than-temporarily impaired.

**Implications on Regulatory Capital**

The proper classification of an investment as a debt or equity security has important regulatory capital implications. An institution's accurate reporting of its investments as equity or debt securities determines the regulatory capital treatment of unrealized gains and losses on investment securities, as well as the calculation of risk-weighted factors for these investment securities.

Common and preferred stock should be reported as equity, excluding preferred stock that must be redeemed by the issuer or is redeemable at the option of the investor, which are reported as debt securities. Tier 1 capital will be reduced by unrealized losses on available-for-sale (AFS) equity securities, while the recognition of an OTTI would adversely affect earnings. Unrealized gains on AFS equity securities, however, are not included in tier 1 capital, but can be included in tier 2 capital with some limitations.[2]

Unrealized gains and losses on AFS and HTM debt securities, meanwhile, are excluded from the calculation of tier 1 capital. However, when unrealized gains and losses on debt securities become realized, either when a security is sold at a profit or loss or when an OTTI charge is taken, such amounts are reflected in retained earnings and, thus, in regulatory capital.

The proper classification of an investment as equity or debt securities also affects its corresponding risk-weight category and the calculation of risk-weighted assets used to determine the institution's risk-based capital ratios. For instance, equity securities for government-sponsored entities (GSEs) should generally be risk-weighted at 100 percent, while GSE debt securities are generally risk-weighted at 20 percent.

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[2]The amount that can be included in tier 2 capital cannot exceed 45 percent of the institution's pretax net unrealized holding gains on AFS equity securities.

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# How Can a Bank Protect Its Reputation During Uncertain Times?

*by William J. Brown, Enforcement Specialist*

In the fourth quarter 2007 issue of *SRC Insights*, I discussed how a financial institution should identify, measure, and mitigate reputational risk. I defined and interpreted it and introduced a few key elements for managing reputational risk. One important point was understanding how a financial institution's reputation can be tarnished. The demise of Northern Rock, Britain's first bank run in 140 years, was used as an example of this. As liquidity dried up both here and throughout the world during last summer's global credit crisis, word leaked out that Northern Rock had approached the Bank of England to obtain emergency funding as customers withdrew billions in currency. Northern Rock became a victim of reputational risk. I concluded that article by stating that reputational risk is regarded as the greatest threat to a company's market value.

Fast-forward 12 months later, and so far this year, two government-sponsored entities, three investment banks, and an insurance and finance company all have fallen victim to the Wall Street crisis. Focusing on the banking industry, at the time of this writing, 17 banks have been taken over by the FDIC so far this year—more than the previous five years combined and the most since 1992.

This article adresses how to protect your institution's reputation in bad times. Many factors create and influence an institution's reputation, including financial performance, corporate governance, code of ethics, regulatory compliance, communications, culture, and crisis management. Crisis management is a key issue during difficult economic times.

Most banks have typically been reactive rather than proactive when faced with bad news that could hurt their reputation. In other words, the concern for an institution's reputation usually comes as a response to a negative event, rather than from planning and implementing a program proactively.

This past summer, $32 billion Indy Mac Bank's collapse was indirectly caused by a deposit run that began and continued after a public release of a letter to the banking agencies that expressed serious concerns about Indy Mac's future viability. As thousands of customers were withdrawing their funds at Indy Mac, investors throughout the country were dumping the stocks of many other banks. One of the biggest fears of banks was that depositors, seeing what was happening on Wall Street, would begin to remove their funds. This could create liquidity problems very quickly for even reasonably healthy banks.

Recently, several major insurance companies saw their values shrink with a huge sell-off in insurance stocks due to a U.S. Congressman's comment on "a major insurance company, one with a name that everyone knows, that's on the verge of going bankrupt," according to Dow Jones newswires.[1] Several insurance companies were forced to do damage control by issuing press statements to dispel the notion that the rumor was about them.

It is well-known that a company's reputation can be a delicate thing; even the slightest tarnish can affect your customers' and shareholders' perception and result in reduced business activity and, ultimately, a lower share price. Not having the right systems in place to react can turn a small issue into a full-scale reputation disaster. Financial institutions throughout the country are starting to focus more attention on protecting their reputations during turbulent times.

The following list offers a few high level suggestions on how to protect your institution from a possible reputation crisis. Granted, small community banks may not be able to afford the infrastructure to manage a crisis like larger institutions, but the message should

[1]Petruno, Tom, "Sen. Reid's Loose Lips Sink Insurance Stocks," *Los Angeles Times*, October 3, 2008.

be abundantly clear: there's not much time to waste in fixing the issue that caused the reputational risk.

1. First, it is critical that an effective communications policy be in place, which includes the processes for tracking and responding to the issues effectively. The policy may include a system for maintaining effective communication among shareholders, the board of directors, employees, and customers. Each group must be quickly apprised of any critical event.
2. The communications policy should also outline roles and responsibilities. Establish a crisis management team to react to any negative event that impacts your organization.
3. It is essential to have a bank spokesperson to conduct media interviews with a prepared written statement. This will ensure that your spokesperson does not deviate from the intended message.
4. A question and answer document should also be prepared, setting forth your bank's stance and providing strict guidelines for your bank's comments, to ensure that one clear and concise message is communicated.
5. Honesty is the best policy. Be open, but never admit liability or speculate.
6. Keep the statements simple and factual, covering why the issue has surfaced and what the organization is doing about the issue.
7. Along the same lines, ensure that your organization's statements are easy to understand so there is little chance to be misunderstood.
8. Whatever the issue, the organization must react to it from the start. An institution is more likely to lessen potential damage and achieve a favorable outcome if it takes appropriate action early on.

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## Where to Find Information on FDIC Insurance Coverage

A few weeks ago, $307 billion Washington Mutual Bank (WaMu) was closed by the OTS, and the FDIC was named receiver. JP Morgan Chase subsequently acquired WaMu in a transaction that was facilitated by the FDIC and came at no cost to depositors.

The OTS blamed a lack of liquidity for WaMu's failure, as customers systemically withdrew more than $16 billion of deposits in the nine days preceding its closure. "What we need to do is understand what got WaMu into trouble in the first place," OTS Chief Operating Officer Scott Polakoff told CNBC in an interview.[1] Mr. Polakoff elaborated that the OTS may have fallen short in educating consumers about the FDIC. "It's critical that depositors understand FDIC insurance and be comforted by the FDIC insurance," he said.

Information for bankers and depositors on FDIC insurance coverage on deposits can be found on the FDIC's website: <www.myFDICinsurance.gov>. Recently, legislation was passed to raise basic FDIC insurance from $100,000 to $250,000 per depositor.[2] A depositor can have more than $250,000 at one bank and still be fully insured, provided the accounts meet certain requirements. MyFDICinsurance.gov provides guidance about how these limits work.

The FDIC also encourages bank deposit customers to use EDIE the Estimator, an online tool available at <www.fdic.gov/edie/index.html>, which provides customized information about insured accounts. Customers without online access may call 1-877-ASK-FDIC toll-free for further assistance. ☐

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[1]Zawacki, Tim, "OTS in Damage-Control Mode on WaMu Failure," MarketWeek, SNL Financial, LLC, September 26, 2008.

[2]On October 3, 2008, President Bush signed the Emergency Economic Stabilization Act of 2008, which temporarily raises the basic limit on insurance coverage from $100,000 to $250,000. The legislation provides that the basic deposit insurance limit will return to $100,000 after December 31, 2009. For an overview of deposit insurance coverage reflecting the temporary increase, please go to: <www.fdic.gov/news/news/financial/2008/fil08102a.html>.

# Enterprise Risk Management: Getting Back to the Basics

*by Ivy M. Washington, Senior Examiner*

The current economic downturn—a changing interest rate cycle and an increasing decline in the credit industry—has presented unique risk management challenges for many financial institutions. Because managing corporate risk (specifically, enterprise risk) is, quite possibly, the key component for an institution's continued survival, it is important to understand the elements that make for an effective enterprise risk management program and to adopt the necessary prudential actions that identify, measure, monitor, and control risk. This article will discuss issues around common strategies to address risk and the benefits of implementing an enterprisewide approach to monitor and manage risk exposure.

Combined with increased liquidity pressures, unanticipated credit losses created a negative impact on institutions' capital positions and their ability and willingness to seek capital markets funding.

**The Issues**

As economic problems began to materialize late last year, it became apparent that many financial institutions underestimated or devalued their emerging risks, possibly driven by their overconfidence in how risk and opportunity were being managed. As a result, enterprise risk management programs were either constructed incorrectly or deemed inefficient to address the overall risk approach and appetite for many institutions. Most enterprise risk management programs delved deeply into "hot," or most common, key risks, often avoiding the less transparent—albeit important—risks.

In addition, institutions placed little emphasis on risk correlation, the process of evaluating one specific risk and its impact on other risks, which ultimately led to miscalculations in risk monitoring measurements. Ideally, a risk management program for any financial institution should assess the relationship that a particular risk, such as credit risk, has with other identified risks, such as market or compliance risk.

Whenever significant financial distress occurs, it is often typical for institutions to react to a crisis by identifying and managing the immediate risk exposure, while enterprisewide risk exposure is often neglected. A good example of this rationale surfaced with the current credit downturn. Many institutions employed a reactive approach by enhancing current and instituting new policies and procedures and strengthening underwriting standards. What may have been overlooked with the credit meltdown and the industry's reactive approach, however, was the unexpected impact on liquidity and capital positions, operational controls, and industry reputation. Combined with increased liquidity pressures, unanticipated credit losses created a negative impact on institutions' capital positions and their ability and willingness to seek capital markets funding. The ultimate result was an unequal level of oversight apportioned to credit, liquidity, and capital risk management.

**The Basics of Enterprise Risk Management**

Asking and answering basic questions, like "What can go wrong?," "What will we do if something goes wrong?," and "If something happens, how will we pay for it?," can help any institution understand, assess, and mitigate its corporate risk. Each institution should consider where it stands in regard to enterprise risk management.

**Enterprise risk management defined.** By definition, enterprise risk management is the identification, management, measurement, and oversight of an institution's various business risks. It is a structured approach to managing uncertainty. As such, an institution's enterprise risk management framework should be designed to determine potential uncertainty and how much risk the institution is willing to accept. This concept can only be realized, however, if all of the institution's various risks are reviewed or assessed in collaboration, rather than isolation. One single transaction can have a plethora of other related risks tied to it, and when hidden under an institution's radar, it can have a tremendous domino effect.

**Enterprise risk management in a changing environment.** In today's highly complex and competitive banking environment, an institution's enterprise risk management program should be the quintessential component to its ongoing management and oversight. Enterprise risk management oversight is one of the most fundamental elements of any prudent risk management program. It is management's responsibility to establish strategic objectives and cascade those objectives throughout the corporation. Institutions that have embraced the concept of risk identification using enterprisewide oversight are better positioned to proactively address their risk in any given financial environment.

Historically, many institutions have understood the concept of designing an enterprise risk management program that enables them to maximize their rate of return at an acceptable risk level. With any enterprise risk management program, though, one of the most critical pieces to its effectiveness is understanding the direct relationship between strategic objectives and risk management components.

Effective enterprise risk management should enable the management team to handle any uncertainty or risk through the implementation of strategies and objectives that strike a balance of return and risk. To that accord, an institution's enterprise risk management process must keep pace with a growing and changing risk profile. An enterprise risk management process is a dynamic function and should be modified, validated, and approved as an institution's business plan changes.

An enterprise risk management process is a dynamic function and should be modified, validated, and approved as an institution's business plan changes.

The standard tools used in conjunction with established credit risk management monitoring, for instance, were not suited for the more complex credit products that institutions were offering. In essence, these tools failed to effectively identify impending risk.

**Successful enterprise risk management.** Financial institutions with effective enterprise risk management programs have active board and senior management who not only play a significant role in the adoption and maintenance of the programs, but also accept ownership and promote compliance. Their ability to assess overall risk on an enterprisewide level, understand the risk interconnections, and translate risk assumptions into effective risk mitigants is crucial.

Establishing a culture that acknowledges risk ownership from everyone within the institution is an equally important responsibility of the board and senior management. And having strong board and senior management oversight is a key factor for distinguishing an institution's financial performance.

**Conclusion**

The main objective of any risk management program is to reduce risk. Economic downturns will occur periodically, and implementing a sound enterprise risk management program that incorporates effective risk identification and correlation, remains dynamic, and utilizes active management oversight will provide a better foundation for overcoming adverse financial environments.

If you have any questions on matters related to enterprise risk management, please contact your primary regulatory agency. For those institutions supervised by the Federal Reserve Bank of Philadelphia, please contact Ivy M. Washington (ivy.washington@phil.frb.org) at (215) 574-6642. □

# Stress Testing as a CRE Risk Management Tool, Part III

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| Senior Management's Responsibilities for Overseeing a Stress Testing Program |
|---|
| • Review the portfolio and the external environment and develop a comprehensive risk assessment |
| • Design stress tests based on the risk assessment |
| • Oversee management information systems used in the process |
| • Develop and document assumptions and scenarios incorporated into the stress testing program |
| • Develop and document procedures |
| • Assign staff responsibilities |
| • Ensure that stress tests are conducted and analyzed regularly in accordance with policy requirements |
| • Report the results of stress testing activities to the board of directors |
| • Comply with recommendations made during independent validations |

The board of directors is ultimately responsible for reviewing and approving the stress testing policy and program and establishing limits and maximum risk tolerance levels to be measured in the stress testing process. The policy should be formally documented, approved by the board of directors at least annually, and communicated and reviewed by all affected personnel. A comprehensive policy may include the following key elements.

**A general purpose statement.** The statement will largely depend on the breadth of the goals the institution expects to achieve through stress testing. An example of a very basic purpose statement is: "The general purpose of stress testing is to determine whether capital sufficiently covers losses and to aid in the development of contingency plans, which ensures capital protection should stress testing results become a reality."

**Designation of authorities, responsibilities, and accountability.** The policy should include assignment of oversight and day-to-day responsibilities associated with the stress testing process. Formal lines of authority and a program that includes separation of duties should be established to maintain the integrity of the process. Authorities assigned as part of the stress testing program should be clearly defined and communicated among the responsible parties.

It is also important for the policy to address required approvals for changes in the methodology, processes, and assumptions within the stress testing program. Any significant changes in the stress testing methodology and related process should be required to be approved, at a minimum, by senior management and, if appropriate, reported to the board of directors.

The policy should also designate authorities for the implementation of risk mitigation strategies. The policy should include the types of remedial or mediation activities allowable under the designated authorities. Some level of materiality should be incorporated so that minor changes can be implemented routinely. Guidelines can be set based on the size of the loss, the level of earnings impact, or capital level change, for example. Results over a certain threshold might include more board involvement in mitigation strategies, while results under a certain threshold may warrant only senior management involvement with a summary provided to the board at the next meeting.

**Minimum scope and core assumption requirements.** The policy should define the scope of the stress testing program. This includes identifying which segments of the portfolio will be subject to stress testing (i.e., all or portions of the CRE portfolio). In addition, core assumptions or scenarios should also be included, with a caveat that additional stress tests should be performed as needed based on changes in the portfolio composition and external environment. Procedures should include detailed assumptions underlying stress tests and how results were derived. The board should remember to consider feedback provided in any independent review of the stress testing program, as it sets these minimum standards in the policy.

**Stress testing frequency requirements.** Include defined standards for the frequency of stress testing (i.e., monthly, quarterly, semiannually, etc.), which will largely depend on the risk profile of the institution. Institutions with weaker levels of capital and heightened sensitivity to stressed scenarios may require more frequent testing, while others may not. Frequency requirements outlined in the policy should be adjusted routinely depending on changes in the institution's risk profile.

**Establishment of limits and tolerances.** Establishing limits and maximum risk tolerance metrics will help the board and senior management with ongoing decisions. The policy should include guidelines which trigger when remedial actions should be taken—for example, when the magnitude of expected losses and the earnings and capital impact of the stresses reach a certain level. Limits should be periodically reviewed as part of the independent review of assumptions; however, adjustments to limits should be well-supported and well-documented to avoid using limit adjustments to effect a more favorable outcome and mask the underlying degree of risk.

Effective reporting is essential to the board's understanding of the stress testing program and its ability to make decisions.

**Reporting requirements.** Effective reporting is essential to the board's understanding of the stress testing program and its ability to make decisions. Reports should ultimately provide the board and senior management with an overview of the **material** areas of risk exposure. Minimum reporting requirements, as highlighted in the policy, will depend on the board's appetite for information; however, at a minimum, they should include variance in the results to limits, a narrative of the drivers of reported metrics, exceptions to policy, and a summary of any **material** remedial actions taken and their outcome.

The board should also indicate how frequently reports are to be reviewed and whether they should be reviewed by the board or a designated committee thereof, such as a risk management committee. Reports should also be shared with other senior managers and business line managers, as appropriate, so they may be aware of potential identified risks as they carry out their assigned responsibilities.

**Independent review requirements.** Considerable changes in market conditions, portfolio distribution, and other factors can invalidate stress assumptions. Independent evaluation will help ensure that the stress testing program remains relevant. Some institutions, depending on their size and the data platforms used, may choose to use an outside vendor to validate the program; however, others may utilize internal resources, such as internal audit or loan review personnel.

Regardless, it is important for the reviewer to remain independent of the stress testing process and have sufficient training in and knowledge of stress testing. An independent review should be completed at least annually, or more frequently if significant changes in the portfolio or the external environment occur. The policy should include a review of the following:

- The adequacy of the scope of the program (i.e., sufficient level or appropriate types of loan exposures)
- The validity of the assumptions used and scenarios applied
- The accuracy, reliability, and completeness of the data inputs, model formulas, and other program infrastructure elements
- The adequacy of the management information system
- The level of stress testing that is incorporated into daily risk management processes
- The appropriateness of policies and procedures
- Whether appropriate authorizations were obtained for significant changes in the program or for remedial or mitigation activities
- The appropriateness and adequacy of stress testing documentation
- The accuracy of results reporting to the board and senior management

Contingency plans define the board-approved actions that the institution must take, should attempts to minimize risk through mitigation strategies fail and worst-case assumptions become true.

**Remedial activities and risk mitigation strategies.** The results of stress testing will typically prompt the implementation of mitigation strategies. Risk mitigation strategies help to soften the potential impact of stressed scenarios should they become an actuality in the future. Practical examples of remedial activities that an institution may choose to undertake include:

- Reducing exposures to certain loan sectors or geographic regions through loan participations, allowing loan run-off at maturity, or reducing or prohibiting certain types of lending
- Strengthening or restructuring individual credits in portfolio sectors with higher identified sensitivity to stress scenarios
- Implementing more rigorous underwriting standards, such as reducing maximum LTV levels or increasing minimum debt coverage ratios for new loans or loan renewals in certain CRE sectors
- Implementing more rigorous credit administration practices, i.e., increasing the frequency of the submission of operating statements and rent rolls for the properties securing the bank's loan (when documents allow), increasing property inspection frequency, routinely inspecting the status of property tax payments, or obtaining updated interim credit bureau information for guarantors
- Increasing loan loss provisions and the ALLL and reviewing underlying assumptions based on newly identified risk exposures presented during stress tests
- Increasing the minimum capital levels beyond policy requirements to provide a buffer
- Pricing for risk

**Contingency Plans**

Contingency plans define the board-approved actions that the institution must take, should attempts to minimize risk through mitigation strategies fail and worst-case assumptions become true. A contingency plan should emphasize the need for capital protection and should include, but should not be limited to, the following elements:

- Definition of events which would trigger implementation of the contingency plan
- Required actions to be performed by management should identified situations occur under a given scenario
- Authorities for making decisions under periods of stress
- Defined responsibilities of staff, management, and the board during stressed conditions
- A list of alternatives for raising additional capital under stressed conditions

- A list of alternative sources of funding should the availability of capital from investors be unobtainable and/or losses result in cash flow shortfalls which require augmentation from outside sources
- Procedures for coordinating timely communications both within and outside the organization during periods of stress
- Guidelines for dealing with outside parties, such as the media, regulators, counterparties, etc.

**Strategic Planning**

Finally, perhaps the most valuable role that the board and senior management can play in emphasizing the importance of stress testing is in their use of the results in the strategic planning process. Stress testing can provide valuable input for future business decisions and can guide institutions as they consider adding new business activities or products and entering new markets, or they can just guide the emphasis to a particular set of activities. Stress testing can also provide insight into whether budgeted earnings and growth should be adjusted to reduce risk.

**Conclusion**

It is our hope that, in utilizing the basic framework presented in this series, board members and senior management at institutions with high CRE concentrations will find that the benefits of stress testing far outweigh the time spent on implementing and maintaining the program. For questions and additional information on adopting or expanding a stress testing program, please contact Jim Adams (james.adams@phil.frb.org) at (215) 574-4325 or Sharon Wells (sharon.wells@phil.frb.org) at (215) 574-2548. ☐

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# Financial Crisis Spurs Extraordinary Response and Hastens Regulatory Reform ...continued from page 3

tions enhanced. New regulation may also attempt to level the playing field to ensure that entities engaged in similar activities will be regulated similarly.

Going forward, there will be more emphasis on sound corporate governance and risk management practices, especially with regard to the measurement and management of firmwide risks. Some have even suggested that the supervisory focus should shift from institutional health to systemic risk. That is, supervisors should assess the practices of institutions based on how practices affect the health of the financial system as a whole, rather than just the health of a specific institution. Other areas of focus may include accounting conventions that result in shifting off-balance sheet entities to on-balance sheet status, measures to better understand and manage complex financial instruments, and the formation of a clearinghouse for over-the-counter derivatives. Regulators and lawmakers will almost certainly continue the debate on how to incorporate much needed transparency into the financial system in a way that still allows for innovation and does not hinder competition.

Our nation's leaders have indicated that the road ahead is likely to be long and difficult, and much work remains. But history has shown that even in the most challenging periods, the financial system ultimately recovers and emerges stronger and more resilient than before.

For more information on EESA and TARP, including on how these programs will be administered, go to <www.treas.gov/initiatives/eesa/>. For more information on the Federal Reserve's money fund and money market lending facilities and other lending facilities, go to <www.ny.frb.org/markets/index.html>. ☐

[3]Summers, Lawrence, "Six Principles for a New Regulatory Order," *Financial Times*, June 1, 2008.

# Monitoring Other-Than-Temporary Impairment Charges in a Challenging Environment *...continued from page 7*

| Risk Management Processes for OTTI Risk Exposure |
|---|
| • Include policies and procedures regarding OTTI assessments, determinations, and documentation appropriate to the size of the institution and the nature, scope, and risks of its investment activities. |
| • Establish internal risk guidelines or thresholds that would trigger an impairment review, such as risk limits on the severity and duration of an unrealized loss. |
| • Clearly define criteria, events, and conditions that lead to OTTI of value. |
| • Ensure that processes are in place for evaluating whether management has the intent and ability to hold an investment until recovery in fair value. |
| • Specify the fair valuation process and the measurement frequency. |
| • Ensure that policies and procedures describe a systematic and objective methodology for performing impairment analysis of all relevant factors. |
| • Consider all available and verifiable information to evaluate the investment's realizable value and whether the decline in value is temporary or other-than-temporary. |
| • Fully document impairment evaluations, including ability and intent to hold an investment, to show how management supports its determinations and complies with the guidance. |
| • Perform more robust, extensive, and frequent impairment analysis as unrealized losses increase in severity and duration over time. |

**Risk Management**

Institutions should have sound risk management processes for identifying, measuring, and managing OTTI risk exposure, and senior management and the board of directors should exercise appropriate oversight of the OTTI function. The table below outlines suggestions for these processes.

Stress testing is another sound risk management practice, particularly during times of deteriorating economic and market conditions. Management should consider likely adverse trends and scenarios on an investment security's fair value and determine the potential impact to both earnings and capital of a temporary impairment or an OTTI, to allow for appropriate capital planning. Institutions that have high concentrations of impaired investments relative to regulatory capital should hold additional capital commensurate with OTTI risk exposure.

**Final Thoughts**

Establishing a policy and related risk management procedures is the first step to managing OTTI risk. It is very important that senior management and the board of directors review and re-approve the OTTI policies and procedures at least annually, and management information systems should appropriately monitor and report OTTI exposure. In addition, internal audit should periodically audit and test the adequacy of internal controls surrounding the OTTI risk management process. Implementing effective management of OTTI risk is an important element to ensuring an institution's safety in a difficult financial environment. ☐

# How Can a Bank Protect Its Reputation During Uncertain Times? *...continued from page 9*

9. And finally, ensure that there is a system in place to record approvals for any documents that are issued publicly. Keep a record, and ensure that only approved and properly trained staff speak to the public.

So, what should an institution do when faced with bad news? Institutions of all sizes can work to address the issue that has caused a reputational risk by following these three Cs:

1. Commitment: The institution must lay out—in detail—what it intends to do and commit to resolving or addressing the issue.
2. Communication: The institution must react to and be ready to acknowledge the issue and effectively communicate with its customers, employees, and shareholders.
3. Control: The company spokesperson must show that the bank is in control of the situation and is working with the relevant parties to ensure that it will not happen again.

Remember, reputation is one of your most important corporate assets, but it is also one of the most difficult to protect, especially during uncertain economic times. Following these guidelines will help protect your institution from unnecessary reputational risk. ☐

## The Federal Reserve System Eases the Application Submission Process

Most bankers are familiar with the role of bank examiners in fostering a safe and sound banking system. Less well-known is the world of regulatory applications, in which banking organizations must notify or seek their regulator's approval to engage in new activities, expand through mergers and acquisitions, or establish new branches. These application requirements have arisen from a long history of banking legislation, and they involve a variety of stakeholders.

The Federal Reserve is required to consider certain factors when assessing applications, including the financial condition of the applicant and the company to be acquired, the effectiveness of management, the organization's history of compliance with consumer laws, and any potential anti-competitive effects. Applications often include complex legal documents, which often must be shared with other regulators and may be provided to the public upon request. As a result, applicants are often astounded at the number of copies and amount of paper they must provide when submitting applications.

The Federal Reserve has taken a major step forward in developing an Internet-based system for electronically submitting application documents in a secure environment. Starting in 2009, banking organizations or authorized representatives, such as law firms or consulting firms, can sign up to use E-Apps. Electronically submitting applications offers many benefits, including reduced copying and shipping expenses and faster and more efficient submission of important documents to the Federal Reserve System.

Most applications currently filed by paper submission can be filed electronically, including those for bank holding company mergers and acquisitions, nonbanking activities, state member bank mergers, acquisitions and branch expansions, and international banking applications.

Each Reserve Bank has a local expert to assist in the use of E-Apps. The Federal Reserve Bank of Philadelphia's expert is Senior Applications Specialist Judy Lynn (judy.lynn@phil.frb.org), who can be reached at (215) 574-6171. □

## SR and CA Letters Are Now Available Electronically

We are pleased to advise you that Board of Governors' Supervision and Regulation (SR) and Consumer Affairs (CA) letters are now available to our supervised institutions through the Federal Reserve Bank of Philadelphia's E-Mail Notification Service. These letters address significant policy and procedural matters related to the Federal Reserve System's supervisory responsibilities.

Effective January 1, 2009, we will no longer send copies of these letters via U.S. Postal Service. We encourage you, and other members of your organization, to sign up for this service at http://www.philadelphiafed.org/philscriber/user/dsp_content.cfm as soon as possible.

In addition to receiving e-mail notification for newly released SR and CA Letters, you can also elect to receive notification when publications, circular letters, news releases, and financial services information is added to our website.

Should you have any questions or concerns about this new process, please contact Reed Raymond, Vice President and Chief Administrative Officer, at (215) 574-6483 in our Supervision, Regulation, and Credit Department. For technical questions related to the E-Mail Notification Service, please contact the Reserve Bank's web team through the link on the subscription page. □

## SR Letters for Financial Institutions Issued in 2008

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|---|---|
| **SR 08-1** | *Communication of Examination/Inspection Findings* |
| **SR 08-2** | *Statement to Financial Institutions Servicing Residential Mortgages on Reporting Loss Mitigtion of Subprime Mortgages* |
| **SR 08-3** | *FFIEC Business Continuity Planning Booklet* |
| **SR 08-4** | *Qualification Process for Advanced Approaches Risk-Based Capital Framework Implementation* |
| **SR 08-5** | *Processing of De Novo Bank Membership Applications* |
| **SR 08-6** | *2008 Hurricane Season and Supervisory Practices Regarding Affected Banking Organizations* |
| **SR 08-7** | *Interagency Examination Procedures for the Identity Theft Red Flags and Other Regulations under the Fair Credit Reporting Act* |
| **SR 08-8** | *Compliance Risk Management Programs and Oversight at Large Banking Organizations with Complex Compliance Profiles* |
| **SR 08-9** | *Consolidated Supervision of Bank Holding Companies and the Combined U.S. Operations of Foreign Banking Organizations* |
| **SR 08-10** | *Regulatory Capital Impact of Losses on Fannie Mae and Freddie Mac Preferred Stock* |

**All SR Letters are available at <http://www.federalreserve.gov/boarddocs/srletters/2008/>.**

## The Federal Reserve Adjusts the Rate Paid on Reserve Balances

The Federal Reserve announced on November 5, 2008, that it will alter the formulas it uses to determine the interest rates it pays on reserve balances. The new rate on required reserve balances is equal to the average target federal funds rate over the maintenance period. The rate on excess balances is set to the lowest FOMC target rate in effect during the maintenance period. These changes went into effect on November 6, 2008.

This change supports the Fed's attempts to ease market funding pressures and aids monetary policy objectives. Paying interest on reserves at a rate near the Fed's targeted federal funds rate removes the opportunity cost of holding reserves, thereby providing an incentive for depository institutions to maintain larger reserve balances. This, in turn, gives the Federal Reserve additional funds to support liquidity demand through its expanded lending facilities. It also helps the Federal Reserve manage the federal funds rate by providing an effective floor on the targeted rate. Institutions are less likely to lend to each other at a rate that is lower than the rate paid on reserve balances. The Federal Reserve will make adjustments to the rate paid on reserve balances as evolving market conditions warrant.

The Federal Reserve began paying interest on account balances for required and excess reserves held by depository institutions at Federal Reserve Banks beginning October 9, 2008. This move, authorized under the 2006 regulatory relief legislation with an effective date of 2011, was expedited under the Emergency Economic Stabilization Act of 2008.

Fore more information on interest on reserves, including how to calculate reserve interest payments, go to <http://www.reportingandreserves.org/>. ☐

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