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Inside

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Supervisory Insights

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Issue at a Glance

Vol. 3, Issue 1 Summer 2006

Articles

Regular Features

Letter from the Director

Supervisory Insights has now entered its third year of publication. As indicated in our first issue in June 2004, our goal is to provide a discussion forum on how regulatory policy is put into practice in the field, to share best practices, and to communicate information about emerging issues bank supervisors are facing. While we are witnessing the longest period in FDIC history without a bank failure, we continue to face new challenges. In this issue of *Supervisory Insights*, we address a number of those challenges.

Increasing risks in institutions' operational environments have contributed to an evolution in operational risk management practices. While traditional internal processes, audit programs, and insurance protection to address operational risk remain of paramount importance, recent operational risk management practices have included a significant trend toward more quantitative measurement. "Operational Risk Management — An Evolving Discipline" explores the various views on operational risk management, as well as the inclusion of a charge for operational risk management as part of the risk-weighted assets calculation under the Basel II framework.

The ability to respond to, and recover from, business disruptions is critical to the survival of institutions and to the customers and communities they serve. The past two hurricane seasons tested Gulf Coast institutions' business continuity plans. In 2005, 280 financial institutions, with approximately $270 billion in total assets, were operating in the areas affected by Hurricanes Katrina and Rita. The vast majority of these institutions were well run, had strong management teams, implemented sound backup contingency plans, and were well capitalized. Even so, six months after the storms, 214 institutions were still reporting some lingering effects, including closed branches and the need for temporary locations. "Banks and Hurricanes: A Look Back" discusses some of the challenges faced by institutions along the Gulf Coast, how they met those challenges, and the prominent role of their business continuity plans. We hope that this article will provide some context as banks prepare for the 2006 hurricane season.

This issue of *Supervisory Insights* also contains the third and final article in a series on fraud, the resultant losses to institutions, and the enforcement actions taken by the FDIC. The first article focused on a review of the enforcement action process and the increase in enforcement action activity since 2002. The second article discussed two cases of insider misconduct and highlighted internal control weaknesses that facilitated the misconduct. This final article, "Enforcement Actions Against Individuals: 2005 — A Year in Review," presents information on a year's worth of enforcement actions, including information on the extent to which these enforcement actions addressed fraud committed by senior bank management. While there were no bank failures in 2005, fraud, specifically fraud perpetrated by insiders, has been a contributing factor in many bank failures. We hope this series of articles will be of interest to banks' boards of directors and the executive officers responsible for implementing the boards' policies, as they review their systems of internal controls and reporting to ensure that they are adequate to identify and deter wrongdoing.

This issue's "From the Examiner's Desk" discusses how the new pricing information reported by mortgage lenders with the Home Mortgage Disclosure Act data has changed the fair lending supervisory and examination processes. The "Accounting News" feature highlights the key provisions of Statement of Financial Accounting Standards No. 123 (Revised) (FAS 123(R)) and its effect on banks' reported earnings and capital levels. The article also provides examples illustrating the basics of accounting for employee stock options awarded after FAS 123(R)'s effective date.

We encourage our readers to continue to provide comments on articles, to ask follow-up questions, and to suggest topics for future issues. All comments, questions, and suggestions should be sent to **SupervisoryJournal@fdic.gov.**

Sandra L. Thompson
Acting Director
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Operational Risk Management: An Evolving Discipline

Operational risk is not a new concept in the banking industry. Risks associated with operational failures stemming from events such as processing errors, internal and external fraud, legal claims, and business disruptions have existed at financial institutions since the inception of banking. As this article will discuss, one of the great challenges in systematically managing these types of risks is that operational losses can be quite diverse in their nature and highly unpredictable in their overall financial impact.

Banks have traditionally relied on appropriate internal processes, audit programs, insurance protection, and other risk management tools to counteract various aspects of operational risk. These tools remain of paramount importance; however, growing complexity in the banking industry, several large and widely publicized operational losses in recent years, and a changing regulatory capital regime have prompted both banks and banking supervisors to increasingly view operational risk management (ORM) as an evolving discipline. Of particular note is the application of quantitative concepts, similar to those used to measure credit and market risks, to the measurement of operational risk.

This article provides an introduction to operational risk, outlines the current state of ORM, and describes different quantification approaches in this evolving field.

Operational Risk Defined

The definition of operational risk continues to evolve, in part owing to its scope. Before attempting to define the term, it is essential to understand that operational risk is present in all activities of an organization. As a result, some of the earliest practitioners defined operational risk as every risk source that lies outside the areas covered by market risk and credit risk. But this definition of operational risk includes several other risks (such as interest rate, liquidity, and strategic risk) that banks manage and does not lend itself to the management of operational risk per se. As part of the revised Basel framework,[1] the Basel Committee on Banking Supervision set forth the following definition:

> *Operational risk* is defined as the risk of loss resulting from inadequate or failed internal processes, people, and systems or from external events. This definition includes legal risk, but excludes strategic and reputational risk.

While the Basel Committee's definition includes what the Committee considers to be crucial elements, each bank's definition for internal management purposes should recognize its unique risk characteristics, including its size and sophistication, as well as the nature and complexity of its products and activities. In cooperation with industry participants, the Basel Committee has identified the seven operational risk event types, shown in Table 1.[2]

An Evolving Banking Landscape

The operational environment for many banks has evolved dramatically in recent years. Deregulation and globalization of

[1] Basel Committee on Banking Supervision (Basel Committee), *International Convergence of Capital Measurement and Capital Standards* (the revised Basel II framework), November 2005, Paragraph 644. Available at www.bis.org/publ/bcbs118.htm.

[2] The event types and abbreviated examples presented in the table appear in the Basel Committee's *Sound Practices for the Management and Supervision of Operational Risk*, Paragraph 5. Available at www.bis.org/publ/bcbs86.pdf.

Table 1

Loss Event Types and Examples	
Event Type	**Examples**
Internal fraud	Employee theft, intentional misreporting of positions, and insider trading on an employee's own account
External fraud	Robbery, forgery, and check kiting
Employment practices and workplace safety	Workers' compensation and discrimination claims, violation of employee health and safety rules, and general liability
Clients, products, and business practices	Fiduciary breaches, misuse of confidential customer information, money laundering, and sale of unauthorized products
Damage to physical assets	Terrorism, vandalism, earthquakes, fires, and floods
Business disruption and system failures	Hardware and software failures, telecommunication problems, and utility outages
Execution, delivery, and process management	Data entry errors, collateral management failures, incomplete legal documentation, and vendor disputes

financial services, the proliferation of new and highly complex products, large-scale acquisitions and mergers, and greater use of outsourcing arrangements have led to increased operational risk profiles for many institutions. Technological advances, including growth in e-banking transactions, automation, and other related business applications also present new and potentially heightened exposures from an operational risk standpoint.

Available data support the idea that banks' operational environments are getting riskier. Chart 1 depicts data gleaned from the 2004 Loss Data Collection Exercise (LDCE)[3] conducted in preparation for the U.S. implementation of the Basel II capital framework. Despite certain inherent limitations in the data, such as differences in data availability among the reporting banks and improvements in data capture methods over the collection period, it appears that in aggregate loss amounts have increased since collection efforts began. For example, 20 participating banks reported operational losses of $15 billion in 2004, surpassing the previous high of $5 billion in losses reported by 17 institutions in 2002.

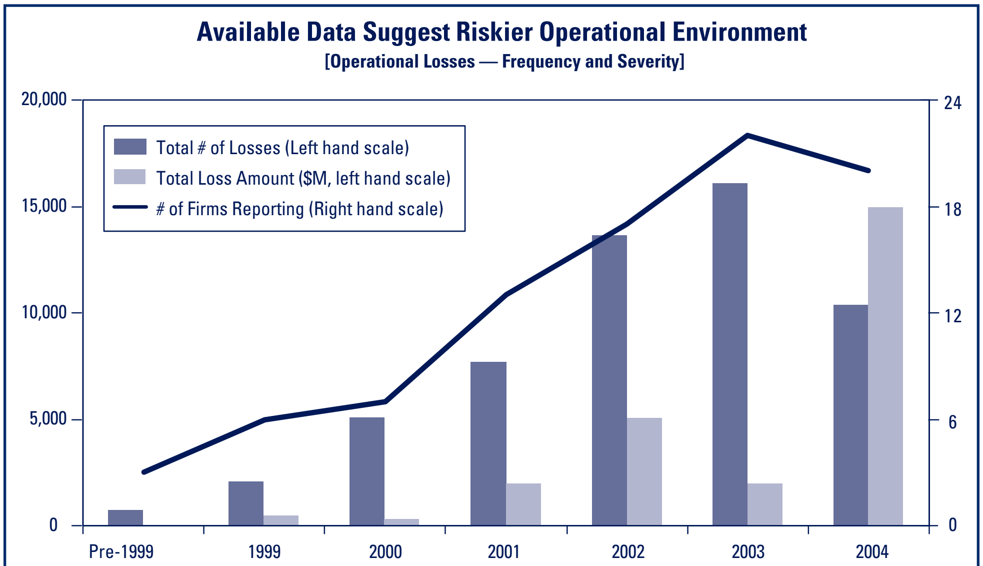
Losses associated with operational risk events can be large. Some well-known examples are the collapse of Barings Bank due to fraudulent trading and the substantial legal settlements entered into by Citigroup and JPMorgan Chase with regard to the Enron and WorldCom matters. The business disruptions and financial impacts resulting from Hurricane Katrina and the September 11 terrorist attacks also exemplify how major, unforeseen events can materially affect a bank's operations.

[3] The 2004 LDCE was a voluntary survey that asked respondents to provide data on individual operational losses through June or September 2004 to enable the banking agencies to assess the potential impact of Basel II on capital for U.S. banking organizations. The results of the survey can be found at www.bos.frb.org/bankinfo/qau/pd051205.pdf and www.bos.frb.org/bankinfo/conevent/oprisk2005/defontnouvelle.pdf. Additional information regarding the LDCE is at www.ffiec.gov/ldce.

Operational Risk

continued from pg. 5

Chart 1



Source: 2004 Loss Data Collection Exercise[3]

Controlling Operational Risk

Traditional ORM practices, which most banks employ today, rely on internal processes, audit programs, and insurance protection to counterbalance operational risk. They are based largely on the assumption that intelligent, educated people can, through their intuition, identify their organization's significant risks, corresponding controls, and associated metrics.[4] In such environments, business lines manage their operational risks as they see fit (using a "silo approach") with little or no formality or process transparency.

Some larger banks have gone beyond the silo approach by establishing centralized departments or groups responsible for focusing on particular segments of operational risk, such as operating processes, compliance, fraud, business continuity, or vendor management/outsourcing. While this evolution has improved overall risk awareness, it tends to promote a natural segmentation of risk awareness, because risks are categorized along functional lines. This approach can create significant operational risks if management fails to consider end-to-end processes.[5]

More recent ORM practices are founded on the view that intuition alone is not sufficient to drive the ORM process. In this view, ORM practices must extend to quantitative measurement, including historical loss data, formal risk assessments, statistical analysis, and independent evaluation.[6]

A common framework at the largest U.S. banks combines the traditional silo approach with an enterprise-wide oversight function. The enterprise-wide (or corporate) function designs and implements the bank's ORM framework, which serves as the structure to identify, measure, monitor, and control or mitigate operational risk. The framework is defined by the risk tolerance determined by the board of directors, as well as the

[4] Ali Samad-Khan, "Fundamental Issues in OpRisk Management," *OpRisk & Compliance*, February 2006.

[5] Eric Holmquist, "Scaling Op Risk Management for SMIs: How to Avoid Boundary Disputes," *OpRisk & Compliance*, January 2006.

[6] Ali Samad-Khan, "Fundamental Issues in OpRisk Management."

formal operational risk policies outlining roles and responsibilities, data standards, risk assessment processes, reporting standards, and a quantification methodology.[7] Business line managers continue to "own the risk," but risks are identified through formal self-assessments. The risk assessments are designed to capture end-to-end processes as well as generate an understanding of the risks in individual processes and products. Table 2 compares the two approaches to ORM.

The primary value of such ORM techniques, as demonstrated by a growing number of institutions using them, is their application to decision making and risk management. Specifically, the use of a well-integrated ORM framework can do the following:

- Increase risk awareness and mitigation opportunities, which may minimize potential exposure
- Assist in evaluating the adequacy of capital in relation to the bank's overall risk profile
- Enhance risk management efforts by providing a common framework for managing the risk

Quantifying Operational Risk: Roots in Economic Capital

As ORM continues to evolve into a distinct discipline, efforts to quantify operational risk have gained momentum. A number of large financial institutions have been working to quantify operational risk for several years as part of their economic capital frameworks. They have developed and implemented economic capital models to allocate capital to different business segments based on a variety of risk factors (e.g., credit, market, interest rate, operational). However, within these internal capital measurement and management

Table 2

Comparison of Traditional and Modern Operational Risk Management[8]

Traditional Practice	Emerging Practice
"Silo-ed" business unit risk management	Integrated corporate risk management (CRM)
Business line managers "own the risk"	CRM supplements and reinforces business line risk ownership
Ad-hoc or no risk self-assessment	Uniform risk assessments across business units facilitated by CRM
Voluminous performance indicators	Core set of key risk and performance metrics/escalation triggers
Too much or too little information; inconsistent business unit reporting	Concise, uniform reporting to senior management and the board of directors
Reliance on qualitative processes to improve risk management	Use of quantitative information (potential operational risk exposure) and risk assessments to improve risk management

[7] The Basel Committee, *International Convergence of Capital Measurement and Capital Standards*, Paragraph 663(b).

[8] Table adapted from *Operational Risk: Regulation, Analysis, and Management* by Carol Alexander (2003), p. 15. Financial Times Prentice Hall. London.

Operational Risk

continued from pg. 7

processes, there is great variation in methods used and levels of sophistication, ranging from largely qualitative or judgmental approaches to complex statistical modeling. With respect to operational risk, in particular, many of the measurement techniques have traditionally focused on proxies such as gross income to estimate capital allocations.

While few institutions have incorporated operational risk quantification systems into their economic capital models, ongoing work in this area is becoming increasingly important given the anticipated implementation of a new regulatory capital framework known as Basel II. This new framework, which has been under development since the late 1990s and is approaching international adoption, is intended to align capital levels more closely with underlying risks. This general intention is consistent with the broad goal of most economic capital frameworks.

Operational Risk Becomes Part of Regulatory Capital

Under the Basel II framework, institutions (both mandatory and opt-in)[9] will be required to determine an appropriate operational risk charge, along with credit and market risk charges, as part of their risk-weighted assets (RWA) calculation. Each institution's estimate of its operational risk exposure will, subject to supervisory approval, directly affect its risk-based capital (RBC) ratio.

Under the existing regulatory capital regime (Basel I), which was adopted in 1988, there is no explicit charge for operational risk. In determining RBC ratios, financial institutions calculate RWA on the basis of prescribed percentage allocations for on- and off-balance sheet credit exposures and for certain market risks. It could be argued that operational risk and other risks were implicitly accounted for in the calibration of the minimum ratio thresholds for the various Prompt Correction Action categories[10] (e.g., 4 percent Tier 1 capital to average adjusted balance sheet assets for the "Adequately Capitalized" designation), but they are not considered in determining a bank's capital ratios.

Quantifying Operational Risk

The Basel II framework outlines three quantitative approaches (shown in Table 3) for determining an operational risk capital charge: the basic indicator approach, the standardized approach, and the advanced measurement approach.

The first two approaches are simple and generate results on the basis of predetermined multipliers (percentages of gross income[11] for an entire entity or for individual business lines). The advanced

[9] As noted in the August 2003 Advanced Notice of Proposed Rulemaking (ANPR), the Basel II framework in the United States applies to large, internationally active banking organizations. Mandatory banks are defined as those with total assets of $250 billion or more or total on-balance-sheet foreign exposure of $10 billion or more. Such banks must apply advanced credit risk and operational risk approaches. Banks not subject to advanced approaches on a mandatory basis ("opt-in" banks) may voluntarily apply those approaches. The ANPR is available at www.fdic.gov/regulations/laws/publiccomments/basel/index.html.

[10] The ratio thresholds for the Prompt Corrective Action categories are included in Subpart B of Part 325 of the Federal Deposit Insurance Corporation (FDIC) Rules and Regulations. Subpart B, issued by the FDIC pursuant to section 38 of the Federal Deposit Insurance Act, establishes a framework of supervisory actions for insured depository institutions that are not adequately capitalized. This subpart is available at www.fdic.gov/regulations/laws/rules/2000-4500.html#2000part325.101.

[11] Gross income is defined in Paragraph 650 of the revised Basel framework as net income plus net noninterest income. This measure should be gross of any provisions (e.g., for unpaid interest); be gross of operating expenses, including fees paid to outsourcing service providers; exclude realized gains and losses from the sale of securities; and exclude extraordinary or irregular items, as well as income derived from insurance. The calculations for the basic indicator and standardized approaches are based on average gross income figures over a three-year period, excluding periods in which gross income is negative or zero.

Table 3

Basel II Approaches to Calculating Operational Risk Capital

Basic Indicator Approach	Standardized Approach	Advanced Measurement Approach (AMA)
Supervisor-specific parameters	Supervisor-specific parameters	Bank-defined parameters
Bank-wide measure	Business line measure	Supervisor establishes quantitative and qualitative standards
Exposure indicator based on gross income (15 percent multiplier)	Exposure indicator based on gross income (multipliers vary by business line and range from 12 percent to 18 percent)	Significant flexibility
		Examples: • Loss distribution approach • Scenario based • Extreme value theory

Ease of Use ⟷ Potential Risk Sensitivity

measurement approach (AMA) differs from the other two approaches in that it explicitly attempts to estimate a bank's operational risk exposure (aggregate operational losses faced over a one-year period) at a soundness level consistent with a 99.9 percent confidence level.[12] That is, in theory there should be only a 1-in-1,000 probability that a bank's operational losses during a year will exceed the AMA-estimated amount. Despite the statistical challenges, banks typically select a confidence level between 99.96 percent and 99.98 percent for economic capital modeling, which is generally equivalent to the expected insolvency rate for "AA" rated credit.

Banks adopting an AMA will effectively calculate operational risk capital using a value at risk (VaR) approach common in both market risk and credit risk management. The U.S. banking agencies have not mandated the use of any particular quantitative methodology; however, each institution employing an AMA must use the following four elements in arriving at its operational risk capital estimate: internal data, external data, scenario analysis, and business environment and internal control factors.

Conceptually, the operational risk capital estimate can be expressed as protection against expected and unexpected future losses at a selected confidence level, with some provisions for offsetting portions of this exposure through reserves or other permitted mitigation techniques (namely insurance). This relationship is reflected graphically in Chart 2 using the loss distribution approach (LDA), a common quantification method.

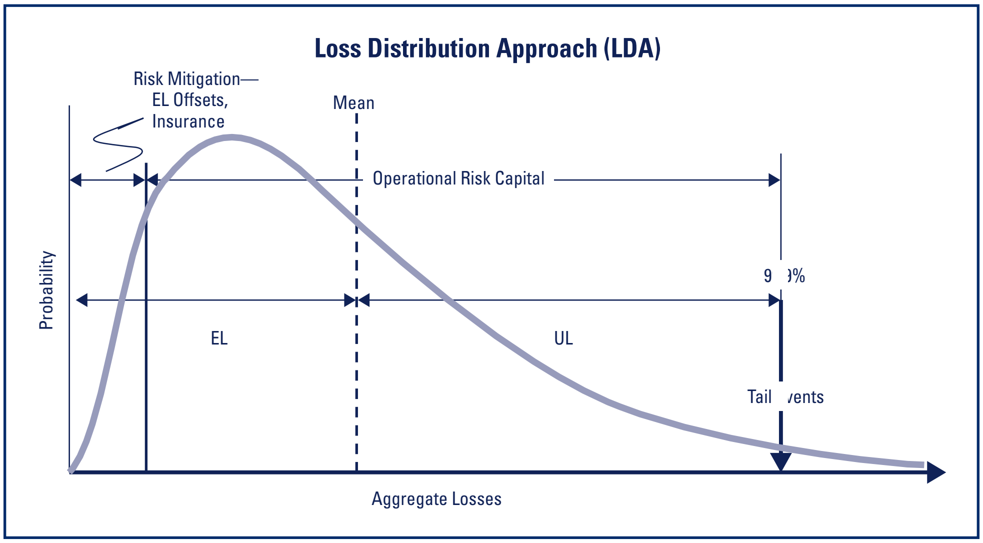
Expected losses (EL) are reflected on the chart as the portion to the left of the dotted line marking the mean of the distribution. The dotted line represents the mean or expected value of the aggregate distribution of potential losses. Loss

[12] As noted in the August 2003 ANPR, the AMA will be the only permitted quantification approach for U.S.-supervised institutions (neither the basic indicator nor standardized approaches will be allowed).

Operational Risk

continued from pg. 9

Chart 2



levels falling in the EL category are typically highly predictable and stable, and generally arise under normal operating circumstances. Banks may potentially use capital-like substitutes (such as eligible reserves per Generally Accepted Accounting Principles) or other conceptually sound methods to offset some portion of EL.

Unexpected losses (UL) on the chart are the area to the right of the dotted line. Migrating to the far right of the UL category (or the tail of the distribution) provides an increasingly high level of confidence that the estimate captures the appropriate degree of severity.

The Loss Distribution Approach

The LDA, or a hybrid thereof, has emerged as the most common statistical method to estimate a bank's operational risk exposure. Through the LDA, banks combine the four AMA elements with appropriate qualitative and quantitative adjustments to derive their operational risk exposure estimates.

Example: A global institution has five major business lines, one of which is the consumer banking group (CBG). For simplicity we will consider only one business line, which is equal to the bank's unit of measure.[13] CBG has collected 25,000 loss events over the past five years, with the majority defined as high-frequency, low-severity events. To understand its full exposure over the next year, the CBG will consider risks (both internal and external) that may not be represented in the internal data. For example, over the last year, several banks in the same business line have been sued for breaches of customer information and have settled for sums in excess of $1 billion. Additionally, the CBG has developed new product offerings and acquired several banks during the year. The business line should consider this information either by using external loss data directly or by using the information to develop scenarios. The data from these sources are combined using statistical methods to estimate operational risk exposure. The CBG should also incor-

[13] A unit of measure represents the level at which a bank's operational risk quantification system generates a separate distribution of potential operational losses. For example, a unit of measure could be represented by a business line, loss event types, or a combination of both.

porate changes into its residual risk (inherent risk less controls), as well as any risk mitigation offsets.

Quantification Challenges

Ongoing supervisory reviews and other recent industry studies indicate that progress has been made in quantifying operational risk. However, major challenges remain, particularly with respect to addressing problems resulting primarily from data paucity. The primary quantification issues are as follows:

- Properly identifying units of measure
- Collecting adequate data (regarding frequency and severity) for each unit of measure
- Calculating statistically significant parameters for each loss distribution
- Describing dependencies across units of measure if there is to be any diversification effect
- Determining how to incorporate and weigh each of the four required AMA elements within the modeling framework

ORM — Unique to Each Bank

Operational risk has emerged as a distinct discipline in response to Basel II, the increasing number of large operational losses, and the growing size, sophistication, and complexity of the banking industry. Regulators expect banks that adopt Basel II to develop and implement comprehensive ORM, data and assessment, and quantification processes that are appropriate to the nature of their activities, business environment, and internal controls.

The proposed operational risk capital rules and supporting guidance[14] establish broad regulatory expectations while enabling each bank to tailor its framework to its unique organizational structure and culture. The embedded flexibility will require regulators to exercise considerable judgment as they consider the appropriateness of the chosen ORM framework.

The vast majority of banks will continue to calculate regulatory capital under Basel I or Basel I-A (proposed)[15] guidelines, neither of which has an explicit operational risk capital component. Nevertheless, many of the risk management principles being employed by the largest U.S. banks can be used to some degree by any institution regardless of size. The fundamental goal is the same: increasing operational risk awareness and determining the means to minimize the institution's potential exposure.[16]

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[14] The proposed operational risk capital rules are contained in the August 2003 ANPR. In conjunction with the ANPR's issuance, the U.S banking agencies released proposed supervisory guidance to provide additional detail regarding supervisory standards for operational risk management programs that will satisfy the qualification requirements outlined in the ANPR. The proposed supervisory guidance is available at www.fdic.gov/news/news/financial/2003/fil0362.html.

[15] In October 2005, the U.S. banking agencies issued an ANPR to solicit comments regarding a new capital framework for banks that do not adopt the Basel II accord. This proposed framework, sometimes referred to as Basel I-A, is designed to modernize the risk-based capital rules and minimize potentially material differences in capital requirements between banks that adopt Basel II and banks that remain under existing rules. The ANPR is available at www.fdic.gov/news/news/press/2005/pr10105a.html.

[16] Eric Holmquist, "The Fundamentals of Operational Risk Assessments," *OpRisk & Compliance,* December 2005.

Banks and Hurricanes: A Look Back at the Storms of 2004–2005

As the 2006 hurricane season approaches, bankers are reviewing plans for maintaining operations in the event of a severe storm. A look back at some bankers' experiences during the storms of the 2004–2005 seasons may provide context for this planning process. While the 2005 hurricane season was exceptionally severe, it illustrated the challenges banks may face in doing business in the aftermath of a hurricane or, potentially, other disasters.

This article is not a regulatory guide to business continuity planning. Rather, it is an informal compilation of experiences, and thoughts about the challenges and planning options illustrated by those experiences. Looking at how some institutions met the challenges arising from the 2004 and 2005 storms may be of interest to other bankers as they prepare for the future.

Storms Challenge Business Continuity Plans

Preparing for a hurricane is challenging enough, but to remain fully prepared, storm after storm, for the resulting flooding and associated tornadoes takes a great deal of effort and determination. Many communities had not yet fully recovered from the destruction of the 2004 season's hurricanes[1] when 2005 brought Dennis in July, Katrina in August, and Rita in September. The resulting devastation left large portions of five states without power, communications, supplies, or reliable transportation systems. The compounding effects of losing both critical infrastructure and supporting industry segments resulted in a prolonged recovery period — much longer than many business continuity plans (BCPs) addressed.

The scale of the devastation, unexpected complications, and prolonged recovery periods from these storms have caused many banks to reconsider critical recovery priorities. Some of the most significant problems banks encountered were unavailable personnel, inadequate cash supplies, and loss of communications, power, and multiple banking facilities.

Personnel

One of the first things many banks realized is that even with a comprehensive BCP, a working back-up facility, and current copies of data files, people were needed for effective recovery operations. As the hurricanes approached, many bank employees evacuated. Management's first task following the hurricanes was to ascertain the safety and whereabouts of their employees.

After Hurricane Charley, bank officers at one large Florida community banking organization acted as a clearinghouse, taking inventory and coordinating the availability of lodging and supplies among the staff. Management established a program to locate every employee, ascertain their immediate needs, and make provisions to meet those needs. They matched employees without housing to those whose residences were still habitable. The bank obtained necessary items and set up a storehouse where employees could have whatever goods they needed. Management coordinated a daily potluck food program and even arranged for child care. Thanks to these efforts, bank employees could focus on the recovery of bank operations instead of personal needs. The bank's main office opened within days, damaged but functional, and powered by a generator.

[1] Hurricane Charley made landfall on August 13, 2004, as a category 4 storm; Frances on September 5 as a category 2; Ivan on September 15 as a category 3; and Jeanne on September 26 as a category 3.

For larger operations, such as service providers with multiple locations, employees from areas affected by the hurricanes were shifted to corporate sites outside the disaster area. Whenever possible, work was shifted with employees. In one instance, the data center president, besides providing work space to the bank, took in the bank president's family until other arrangements could be made.

Staffing shortages also affected supporting services such as transportation, communication, and security. Infrastructure support staffs were especially stretched to their limits by the storms of 2005. Police and security firms were dealing with life-threatening emergencies. Securing damaged facilities immediately after the disaster became the banks' responsibility. In several instances, bank officers stayed near or in bank buildings until more permanent arrangements to secure the buildings could be made.

Meeting the challenge. The experiences of 2004 and 2005 emphasize the importance of appropriate methods to identify and meet the needs of employees and their families so employees can focus on recovery operations. Without the availability of key recovery and operations personnel, timely recovery of critical operations will not be possible. Craig De Young, president of Charlotte State Bank, Port Charlotte, Florida, believes, *"The initial primary focus must be on the health and safety of your staff to ensure they are all accounted for and have a roof over their head as well as access to food and water. Once you have their personal needs addressed, the likelihood of having a workforce to operate your institution vastly improves."*

The 2005 experience especially illustrates the desirability of having backup (redundant) personnel for key operational positions and responsibilities and having plans to use personnel from unaffected areas, if possible. Mr. De Young offers this advice: *"…detailed maps are in all employee files so employees can be located after a disaster. Those maps should not solely rely on names for roads (since signs are rarely remaining) but instead the number of roads or blocks from major intersections or landmarks so locations can be found in extreme conditions."* The importance of being prepared to work with regulatory and emergency management personnel to locate missing employees and get recovery personnel into affected areas cannot be overemphasized.

Cash

Power and communications failures prevented electronic forms of payment, such as debit and credit card use. Without electronic access to funds, credit cards, debit cards, and even checks became useless. Cash quickly became the only viable means of payment, but cash was often in short supply. Getting additional supplies of cash into storm-damaged areas where transportation was limited and security services stretched thin posed difficulties. Consumers and employees remaining in affected areas desperately needed additional cash to make critical purchases.

Meeting the challenge. The storms reveal the importance of proper planning for customer and employee cash needs, as well as consideration of distribution methods, storage locations, and security of the cash. Banks with comprehensive customer awareness programs to help prepare their customers for a disaster had a smoother transition to the recovery phase of their BCPs. Providing information on regulatory and other government resources and Web sites also helped customers identify other avenues for critical services.

continued from pg. 13

Communications

Voice communications. During and after many of the storms, traditional voice phone circuits were down. In addition, state and federal emergency response authorities commandeered cell phone circuits to manage relief efforts. The Government Emergency Telecommunications Service (GETS) Card Program[2] provided some limited voice communications for institutions that had made arrangements in advance. While text messaging via the cell phone networks was still possible, the only reliable means of voice communication for many people working on recovering operations was two-way radio or satellite phone.

Calling trees proved useless as the impact of the hurricanes spread employees far and wide. Some banks posted emergency Web sites to disseminate information to employees, as well as to inform customers of temporary locations and service plans. Other banks used pre-established toll-free phone numbers for employees to report in and obtain information.

Data processing. The widespread communications outages resulting from the storms imposed considerable challenges, especially for banks that relied on real-time communications with data processing service providers. For those banks and branch offices, connectivity with the data processing facility was critical to conduct routine banking business. Institutions without manual backup systems or external electronic systems located out of the area were unable to conduct business.

One data processing service provider in Florida experienced widespread loss of communication to a significant number of its client banks during Hurricane Charley. The service provider switched the banks' network connections to alternate communication paths using Permanent Virtual Circuit (PVC) technology, which rerouted the circuits. As a result, the affected banks were reconnected to the data center by the following business day.

After the 2005 hurricanes, many banks and their backup facilities were so severely damaged that business operations had to be moved to facilities outside the affected area. Establishing network communications with these facilities posed new challenges that the use of PVCs could not address. Eventually, the banks working with the service provider established a secure virtual private network, allowing communications using a standard Internet connection.

Transaction items and management reports. In both 2004 and 2005, electronic transmission of batch items and report distribution were impossible for a number of banks for an extended period. During localized disasters, the physical movement of these items is inconvenient but possible. With the impact of the storms resulting in traffic jams, gas shortages, and security issues, delays of a day or more were not unusual. Getting transaction items to processing sites and providing reports to management became problematic. Institutions that had planned for remote image capture were better able to keep information flowing.

Meeting the challenge. Effective BCPs consider that normal land lines and cellular networks may be down for extended periods. The 2004–2005 hurricane seasons demonstrated the importance of being prepared with alternative communication methods. Two-way radios, satellite phones, wireless personal digital assistants (PDAs), text messaging, and the GETS Card Program were all used to varying degrees.

[2] FDIC FIL-84-2002, Financial and Banking Information Infrastructure Committee's Interim Policy on the Sponsorship of Private Sector Financial Institutions in the GETS Card Program, issued August 6, 2002.

Emergency Web pages, which had been developed in advance and stored off-site, also proved successful and could be easily updated and posted on the bank's Web site. Darby Byrd, president of Orange Savings Bank, Orange, Texas, noted, *"We posted our emergency contact phone numbers on our on-line banking site as a communication tool. Almost immediately phone calls started pouring in."*

Incorporating communications of government agencies also served as useful supplements to many banks' BCPs. Federal and state regulatory bodies are often highly visible, and can communicate information over major media outlets, including television and radio. Regulators can use those outlets to inform the public of information available through their Web sites and emergency call centers.[3]

Keeping data and transactions moving and management reporting flowing after the storms proved critical to banks' recovery. Banks with BCPs that included arrangements for alternative communication paths were better able to keep backroom operations going and to give management the information necessary for recovery. Banks that had capability for remote image capture also had more information available during recovery.

Power

Availability of power was one of the areas of emphasis during business continuity planning for Y2K. Many institutions included in their BCPs arrangements for alternative power sources (multiple vendors), acquired generators, and made plans for fuel deliveries. However, few, if any, plans anticipated the widespread failure of a power grid, such as occurred in 2005. With portions of the power grid inoperable, down-line power plants, transmission lines, and power distribution centers were all affected.

Even banks with generators had problems with flooding and fuel shortages. Many generators and switching stations were in basements, which were subject to flooding. Banks with working generators soon found their fuel reserves running low. For many, deliveries of fuel became an ordeal, with delays measured in hours or even days. In some cases, deliveries of fuel and other essential services were diverted for humanitarian and emergency efforts.

Meeting the challenge. While the 2004 experience led many banks to invest in alternative power sources, such as generators, 2005 highlighted the importance of the location and fueling of such power sources, including alternative fuels (e.g., propane and natural gas) for generators. Limited power and uncertainty about fuel deliveries were paramount in decisions about which equipment and facilities were powered following the storms, and even whether, and to what extent, operations needed to be scaled back during the recovery period.

Facilities

The breadth of the devastation affected every aspect of business operations, including rendering many brick-and-mortar facilities unusable, at least temporarily. Some institutions came up with unique solutions. For example, after Hurricane Katrina destroyed their facilities, several institutions in Baton Rouge and Kenner, Louisiana, cooperated to open a shared facility so they could serve their customers and instill confidence that they were coming back. In Lafayette, Louisiana, one institution allowed a competitor to use a teller

[3] After Hurricane Katrina, the FDIC established a 24-hour emergency consumer call center to answer questions. The emergency call center operated from September 8 until November 30, 2005. Calls after that time were routed through the normal "Ask FDIC" call center.

continued from pg. 15

station at its branch office to conduct business. One Florida-based service provider allowed a client bank and a competing service provider to set up temporary operations at its data center facilities after Hurricane Charley.

Immediately after Hurricanes Katrina and Rita, federal and state banking regulators worked with the Department of Homeland Security and law enforcement to arrange for bank officers to get into restricted areas so recovery plans could be refined and temporary facilities opened. In some rural areas, state officials helped bankers to enter the areas and assess their damage. Additionally, unprecedented cooperation between state and local agencies helped to expedite building permits and inspections for temporary facilities.

The existence, location, and capacity of an adequate disaster recovery facility are critical to any BCP. Fortunately for most of the affected banks, capacity limitations at the recovery facility never became a serious problem, as cooperation allowed for the movement of work to locations that had adequate staff and equipment. However, the locations of these facilities were important. Some banks' recovery facilities were too nearby and were destroyed by the same storm. Others were too far away, which hindered recovery because of delays in recovery staffs' transportation to the facilities.

Meeting the challenge. The broad geographic areas affected by the storms demonstrate the importance of the location of banks' recovery sites. Banks that recovered operations quickest had recovery sites outside the expected disaster area and had planned that recovery team members would be sent to the site before the storms. "Buddy bank" arrangements also proved successful. In these arrangements, partnering banks are far enough away from each other that a single disaster is unlikely to affect both, but not so far that such an arrangement is useless. Each bank benefits from having a prearranged facility to serve customers and establish basic operations during the recovery process.

Effective BCPs Are Formal, Flexible, and Open-Ended

The 2004–2005 hurricane seasons highlight the importance of enterprise-wide, comprehensive BCPs to the survival of an institutions and its ability to serve customer needs. Most banks in the Gulf Coast region had reasonable BCPs. Still, better testing of the continuity plans and recovery procedures could have identified problems ahead of time. The *Business Continuity Planning IT Examination Handbook*[4] issued by the Federal Financial Institutions Examination Council (FFIEC) on May 22, 2003, contains extensive guidance on business continuity planning for banks. The FDIC maintains hurricane-specific guidance on its Web site.[5]

The FFIEC guidance stresses that the development of a successful BCP requires a commitment of sufficient resources and delegation of authority by senior management and the board. The guidance states that a plan should be thoroughly and rigorously tested under realistic disaster scenarios, include sufficient employee training measures, and be updated on an ongoing basis to ensure that it remains relevant. Steve Feller, vice president and head of Enterprise Services Center Disaster Recovery Operations at Harland Financial Solutions, provides this advice: *"It is important that a bank and its service provider work together throughout the life cycle of business continuity planning. Every step of the planning*

[4] See http://www.ffiec.gov/ffiecinfobase/html_pages/it_01.html.

[5] See http://www.fdic.gov/hurricane/index.html.

Storm-Related Challenges and Options

Personnel

- Coordinating activities to locate employees and provide for their personal needs
- Cross-training employees to increase options

Cash

- Prearranging for employee and customer demand
- Planning to secure, store, and distribute cash with limited power, staff, and security
- Communicating the availability and location of cash to customers and regulators

Communications

- Addressing alternatives: text messaging, satellite phones, and two-way radios
- Participating in the GETS Program (FIL-84-2002)
- Using emergency Web pages to keep employees and customers informed

Power

- Carefully considering location of generators
- Planning for limited access to fuel for extended periods
- Using alternative fuels (propane, natural gas)

Facilities

- Considering "buddy bank" arrangements
- Ensuring that the backup site is far enough away, but not too far
- Coordinating with regulators to expedite the establishment of temporary facilities

General

- Working together (bankers, regulators, and state agencies) to accomplish more
- Anticipating the unexpected

process is an opportunity for both to learn together. That is why testing is so important — it creates opportunities to find out what doesn't work. When I have a test that doesn't work as planned, I tell my team that is a successful test, meaning that I want to find that out now rather than during a real event. I stress learning how to respond quicker and recover faster from every opportunity."

No one plan is perfect for all situations. Effective BCPs are flexible and allow for modifications during execution. The more information they include, the better prepared management will be to address the unexpected.

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Enforcement Actions Against Individuals 2005: A Year in Review

This is the third and final article in a series addressing insider fraud and enforcement actions. The first article[1] presented an overview of the enforcement action process; the second[2] presented two enforcement action case studies. This article will present details on a calendar year of enforcement actions against individuals, focusing on the losses to institutions and the importance of oversight at all levels of a financial institution as a deterrence to insider fraud. Some representative fraud cases are included to illustrate how fraudulent activities have been carried out for a number of reasons, including personal gain, to conceal the deteriorating condition of a bank customer, or to protect an individual's position in the financial institution. Fraud has been a contributing factor in many bank failures, as financial institutions are not always able to recover from fraudulent activities.[3] This article will look at the importance of board oversight of senior bank management,[4] who were responsible for 80 percent of the fraud losses[5] identified in these enforcement actions in 2005.

Overview of Enforcement Actions Issued in 2005

In 2005, the Federal Deposit Insurance Corporation (FDIC) issued 84 enforcement actions against individuals. The enforcement actions included Orders of Removal/Prohibition, Orders to Pay Civil Money Penalty, and Orders to Pay Restitution. Some respondents were issued an Order of Removal/Prohibition with a joint Order to Pay Civil Money Penalty or Order to Pay Restitution. Of the enforcement actions issued in 2005, 63 percent were stand-alone Orders of Removal/Prohibition and 5 percent were stand-alone Orders to Pay Civil Money Penalty. A total of 32 percent of the Removal/Prohibition cases involved either a joint Order to Pay Civil Money Penalty or a joint Order to Pay Restitution.

The individuals against whom the FDIC issued enforcement actions in 2005 caused 68 financial institutions to incur a combined total loss of $67 million.[6] The following comments present the FDIC's 2005 removal/prohibition action cases with a focus on loss to financial institutions. The cases are divided into three categories to show the loss impact of fraudulent activities perpetrated by individuals subject to the enforcement actions.

2005 Removal/Prohibition Orders Classified by Loss

The enforcement actions issued in 2005 (with the exception of the stand-alone Orders to Pay Civil Money Penalty) are grouped into categories on the basis of the gross amount of loss to the financial institution:

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1 Enforcement Actions Against Individuals in Fraud-Related Cases: An Overview, Supervisory Insights 2, Issue 1, Summer 2005. Available at https://www.fdic.gov/regulations/examinations/supervisory/insights/sisum05/sisummer05-article2.pdf.

2 Enforcement Actions Against Individuals: Case Studies, Supervisory Insights 2, Issue 2, Winter 2005. Available at https://www.fdic.gov/regulations/examinations/supervisory/insights/siwin05/siwinter05-article3.pdf.

3 There were no bank failures in 2005.

4 For this article, senior bank management includes the following positions of director, chairman of the board, president, chief executive officer, and chief financial officer.

5 For this article, loss is the gross loss to the bank from fraud and/or misapplication of funds, before any reimbursement such as restitution or a blanket bond payment.

6 The loss amounts discussed in this article represent only losses related to enforcement actions the FDIC issued in the 2005 calendar year, not industry-wide fraud-related losses to financial institutions.

- Category 1: losses totaling $1 million or more
- Category 2: losses totaling $250,000 to $999,999
- Category 3: losses totaling $249,999 or less. This category also includes cases with no loss to the bank, but in which the institution's depositors were or could have been prejudiced[7] or the respondent received financial gain or other benefit.

The categories also contrast the various factors related to the enforcement action cases and highlight the impact of fraud perpetrated by senior bank management. Table 1 provides a breakdown of the categories and the resulting losses.

Category 1

With total losses of approximately $54.5 million, the enforcement action cases in Category 1 represented the greatest loss to financial institutions. It is notable that most cases in Category 1 were perpetrated by senior bank management, including board chairmen, presidents, and internal directors. This category includes fraud schemes that were carried out by more than one insider and for which the FDIC issued Orders of Removal/Prohibition against each respondent. Some fraudulent activities involved both the chairman of the board and the president. The most significant loss in this category was approximately $34 million, which led to the bank's insolvency and eventual merger into another financial institution. Excluding this case, the total loss for Category 1 is approximately $20 million, and the average loss adjusts to $2.3 million. While the Category 1 median misconduct period is 5.3 years, two cases at the upper limit are a misconduct period of 14 years with a bank loss of $1.5 million, and a misconduct period of 20 years with a bank loss of $1.6 million. There are also cases in this category that occurred within a one-year period and still resulted in significant loss to the financial institution. The median age for Category 1 respondents was 56; no respondent in this category was less than 40 years of age. Approximately half the total losses in Category 1 were used by respondents for their personal benefit. The remaining losses were primarily loan losses suffered by the institutions as a result of the fraudulent insider activity.

Table 1

Removal/Prohibition Orders Classified by Loss — 2005

	Total Loss	Number of Cases	Number of Institutions with Losses	Average Loss per Institution	Personal Gain (Percent of Total Loss)[a]	MedianPeriod of Misconduct Before Discovery[b]	Recovery of Loss (Percent of Total Loss)[c]
Category 1	$54,500,000	12	10	$5,450,000	51 percent	5.3 years	3 percent
Category 2	$8,600,000	20	19	$453,000	48 percent	3.6 years	18 percent
Category 3	$4,100,000	48	39	$105,000	93 percent	2.6 years	31 percent

[a] Personal gain refers to the total loss amount of each category that was used for the personal benefit of the respondents.
[b] Discovery refers to the date the misconduct was discovered. Fraudulent activities have been discovered by bank personnel, auditors, and FDIC examiners.
[c] Recovery of loss refers to recovery from restitution or bond claim payment as of the date the enforcement action was issued.

[7] Defined by Section 8(e) Removal and Prohibition Authority of the Federal Deposit Insurance Act.

continued from pg. 19

Category 2

Category 2 involves 20 cases and a total loss of approximately $8.6 million. While only two cases in this category involved senior bank management, the remaining cases included various other levels of bank management, including assistant vice presidents, vice presidents, assistant cashiers, branch managers, senior loan officers, and loan officers. As with Category 1, the fraudulent activities of individuals in management positions caused the greatest financial loss. The youngest respondent in this category was 30 years of age; the median age of the respondents was 47. The highest loss of the category, $800,000, occurred over a ten-year period, and the insider responsible for the loss was the bank's president. As with Category 1, funds used by respondents for their personal benefit represented approximately half of the total losses in Category 2.

Category 3

This category includes 39 cases with a total loss of approximately $4.1 million. Category 3 also includes nine enforcement action cases in which there was no monetary loss to the financial institution. However, the no-loss cases resulted in personal gain or benefit to the respondents, and the institutions' depositors were or could have been prejudiced. Most of the no-loss cases involved senior bank management. The respondents in Category 3 ranged from a chairman of the board to a teller/proof operator. The youngest respondent was 23; the median age was 43.

Senior Bank Management — The Primary Cause of Fraud-Related Losses

The total loss to financial institutions resulting from the conduct of individuals against whom the FDIC issued enforcement actions in 2005 was approximately $67 million. Senior bank management was responsible for 80 percent of those losses. Clearly, the significance of those losses emphasizes the need for strong board oversight of senior bank management, including fellow directors. Insiders in senior management positions have perpetrated fraudulent schemes for personal gain, to conceal the deteriorating financial condition of loan customers, and to protect their positions. The following examples illustrate some of the fraudulent activities conducted by senior bank management.

- A former director, president, and chief executive officer (respondent) presented a $500,000 construction loan to the board, and the loan was approved. The respondent diverted more than $200,000 of the line of credit to himself (personal gain) and to friends for speculative business transactions. The respondent also released the guarantor of the loan. When the respondent presented the loan to the board for renewal, the loan was unsecured; however, the respondent did not disclose the unsecured nature of the loan to the board. The respondent repaid the diverted funds; therefore, the bank did not suffer a loss on the credit. However, the respondent received economic benefit from the balance of the diverted funds. The respondent was able to commit the fraud primarily because of the lack of appropriate disclosure to the board of directors and the lack of verification requirements for loan disbursements.
- A former director (respondent) used business checking accounts that he controlled at the bank and at a second financial institution to carry out a check kiting scheme between the two institutions. The respondent's transactions were included in the bank's kite suspect report; however, due to poor internal controls, the situation was never reported to the board. The two banks suffered a combined loss of $1 million on the overdrawn balances

(respondent's personal gain). The respondent eventually made full restitution for the loss.

- A former director, president, chief executive officer, and chairman of the bank's loan committee (respondent) extended loans totaling more than $5 million to one borrower in violation of the bank's internal lending limit. The respondent exceeded the lending limit by dividing the loans among various relatives of the borrower; however, proceeds of the multiple loans were funneled to one deposit account. The respondent did not disclose to the board that the loans were for the benefit of a single borrower or that the source of repayment for all loans was the same. The respondent substituted loan customer names on bank records so that it appeared the bank was complying with its lending limit. The respondent also falsified loan documents and failed to inform the board of the true purpose of the credits. As a result of poor internal controls, the respondent was able to fund loans in excess of his authorized lending authority without prior board approval. The bank suffered a loss of $1.4 million on the loans; the respondent had no personal gain.

- A former director and executive vice president (respondent) embezzled funds by issuing cashier's checks and making offsetting entries to a general ledger receivables account. The respondent then deposited the cashier's checks into his personal accounts at another financial institution. This process was repeated numerous times. The respondent concealed the growing receivables account by manipulating bank records before the end of a calendar quarter, at month-end, and before a regulatory examination. During these periods, the respondent would clear out the receivables account with offsetting false entries to both legitimate and fictitious loan accounts. The respondent was able to conceal the fraud activity due to the bank's internal control deficiencies and his management position. The bank suffered a loss of $1.6 million and personal gain to the respondent was the same.

- A former chairman of the board and a former president (respondents) engaged in hazardous lending practices in the bank's automobile financing portfolio. Due to weak internal controls, the respondents circumvented the bank's normal loan procedures and the bank's loan policy. The respondents acted outside of the bank's loan policy, as they were the only approving officials on the subject loans. The respondents funded the loans without the appropriate documentation to support a funding decision, and funding was provided without confirming a borrower's ability to pay. The bank suffered a loss of $1.3 million. One respondent, who had a financial interest in the business that benefited from the loans, obtained personal gain.

- A former chairman of the board/majority shareholder and a former president/chief executive officer (respondents) engaged in a nominee loan scheme that exposed the bank to losses of more than $30 million. The former president/chief executive officer originated the nominee loans knowing their true purpose, and the respondents presented the loans to the board of directors without disclosing their true nature. The proceeds of the nominee loans were used to make a fraudulent capital injection into the bank and to refinance nonperforming loans. Even though limited financial information was presented for these loans, the board approved many of them on the basis of the respondents' recommendations. The respondents were able to conceal the true purpose of the loans because the former chair-

continued from pg. 21

man of the board dominated the affairs of the bank. Loans referred to the bank by the respondents were almost always approved regardless of their lack of documentation, financial analysis, or appropriate underwriting. The more than $30 million in nominee loan losses caused the bank's insolvency.

Oversight — The Deterrence to Insider Fraud

Ultimate responsibility for preventing fraud rests with the board of directors, which must create, implement, and monitor a system of internal controls and reporting. The board also appoints executive officers, who share the responsibility for the financial institution's well-being. As demonstrated above, the most significant losses have been perpetrated by senior bank management; therefore, the board must ensure that appropriate controls are in place throughout the institution and must actively review the activities of senior management. Most of the cases described above reflect the lack of appropriate board disclosure, poor internal controls, or dominance of the board by a single individual. As stated in the first two articles of this series, bank employees in positions of trust can exploit internal control weaknesses to conduct improper activities. Strong management oversight and thorough audit and loan review programs are essential to identifying and deterring wrongdoing.

Although not all fraud can be prevented, procedures should be established whereby suspicious activity of any insider is reported to senior bank management and the board. Refer to the text box for key directorate responsibilities. In addition, the board should develop operational policies and require management to adhere to the policies. For example, deviations from the board's approved loan policy, which generally provides guidelines regarding officer lending authority and loan documentation requirements, should be approved by the board, or an individual or committee designated by the board. Most important, the board should question and investigate the actions of insiders that do not conform to the board's policies, or that are of a suspicious nature.

A board of directors' primary responsibilities are formulating sound policies and objectives for the bank and effectively supervising the bank's affairs and welfare. The circumstances surrounding each of the 2005 enforcement actions issued by the FDIC indicate that an estimated $67 million in losses might have been avoided or reduced by sound board oversight and supervision and strong audit programs.

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Key Director Responsibilities in Deterring Fraud

- **Internal Controls and Audit Program.** Establish a strong audit program. Sound internal controls and audit functions are essential to inform the board of the adequacy and effectiveness of accounting, operating, and administrative controls of ongoing operations. The Winter 2005 issue of *Supervisory Insights*[8] discusses the components of a strong internal audit program. In addition, the FDIC's Director's Corner Web site provides access to various guidance and resources on auditing and internal controls.[9]

- **Director Supervision.** Establish procedures that require operational information to be reported to the board in a consistent format and at regular intervals. Board-requested information should include, but is not limited to, reports of internal and external audit, general portfolio composition, capital growth, loan limits, loan losses and recoveries, and policy exceptions. In addition, the board should establish committees such as a loan or audit committee to supervise key operations more closely and report to the board.

- **Institution Culture.** Establish a culture of open communication between the board, management, and bank employees. In such a culture, a bank employee may inquire about a suspicious activity of senior management and have an avenue to report the situation to the board, whether directly or through a fraud hotline.[10]

- **Suspicious Activity Reports.** Report to the board any Suspicious Activity Reports (SARs) filed and record the SAR filing in the board minutes. SARs play a crucial part in the removal/prohibition of insiders who have committed frauds against financial institutions. Part 353 of the FDIC's Rules and Regulations requires banks to file a SAR with the Financial Crimes Enforcement Network (FinCEN) when insider abuse is suspected, regardless of the amount involved. The SAR must be filed no later than 30 calendar days from the date the suspicious activity was detected.

- **Director Training/Education.** Directors should participate in appropriate training to expand their knowledge of the various banking areas and stay current with changes in banking laws and regulations. Directors are encouraged to participate in the FDIC's Director's College Program, which provides training in director responsibilities. The Director's College Program is held several times a year, at various locations nationwide. The FDIC Director's Corner Web site provides information on the Director's College Program and other resources for bank directors.[11]

[8] Enforcement Actions Against Individuals: Case Studies.

[9] www.fdic.gov/regulations/resources/directorscorner/index.html.

[10] FIL-80-2005, Fraud Hotline: Guidance on Implementing a Fraud Hotline. Available at www.fdic.gov/news/news/financial/2005/fil8005.html.

[11] www.fdic.gov/regulations/resources/directorscorner/index.html.

From the Examiner's Desk . . . Two Years After: Assessing the Impact of the New HMDA Reporting Requirements

This regular feature focuses on developments that affect the bank examination function. We welcome ideas for future columns. Readers are encouraged to e-mail suggestions to ***SupervisoryJournal@fdic.gov.***

Two years have passed since the Federal Reserve Board's (FRB) latest revisions to Regulation C,[1] the implementing regulation for the Home Mortgage Disclosure Act (HMDA),[2] became effective. Among the changes made by the FRB, the most notable required reporting on loan pricing data. This article discusses the impact of the latest changes to Regulation C on fair lending examinations and on the HMDA examination process. The article also provides information on some of the most common HMDA violations identified since the implementation of the new requirements.

With the advent of these changes, the FDIC now has additional information to consider in the scoping and focusing of fair lending examinations. According to a September 13, 2005, Federal Financial Institutions Examination Council (FFIEC) press release, 8,853 institutions reported HMDA data for 2004. Depository and for-profit nondepository institutions must report HMDA data depending on their asset size, extent of business in a metropolitan statistical area, and whether or not they offer residential mortgage lending. For 2004, the asset threshold[3] for depository institutions was $33 million. The FDIC oversees approximately 2,800 HMDA reporters, or nearly 32 percent of all HMDA reporters.

HMDA was enacted in 1975 to provide the public with loan data that would assist in determining whether institutions were serving the housing needs of their communities. It also provided an enhanced tool for examiners and others to use in identifying discriminatory lending practices, and assisted public officials in distributing public-sector investments.[4] Even with the new data, however, it is important to note that analysis of the data alone cannot identify discriminatory lending practices. The HMDA data, while providing some good red flag indicators, does not include information on the creditworthiness of borrowers or other criteria (such as loan-to-value ratios or credit scores) that a bank may use in pricing loans. The new collection and reporting requirements, however, do provide an improved starting point for identifying potential discriminatory practices.

Fair Lending and the New Data

The new requirements garnering the most attention and having the most effect on the fair lending examination process are the reporting of the following:

[1] On January 23, 2002, the Federal Reserve Board (Board) adopted a final rule amending Regulation C, effective January 1, 2003. See 67 FR 7222, February 15, 2002. The Board subsequently delayed the effective date of the amendments until January 1, 2004. See 67 FR 30771, May 8, 2002.

[2] 12 U.S.C. §2801, et seq.

[3] Section 203.2 (e)(1)(i) of Regulation C provides that the Federal Reserve Board will adjust the exemption threshold for depository institutions annually based on the year-to-year change in the average of the Consumer Price Index for Urban Wage Earners and Clerical Workers (CPIW), not seasonally adjusted, for each 12-month period ending in November, rounded to the nearest million.

[4] 12 C.F.R. §203.1(b).

- Rate spreads
- Home Ownership and Equity Protection Act (HOEPA)[5] applicability
- Modified racial/ethnic categories

Rate spreads have been added to the reporting requirements to help identify loan pricing practices that may warrant further investigation. Rate spreads are reported if the spread between the loan's annual percentage rate and the Treasury yield equals or exceeds 3 percentage points for first-lien loans or 5 percentage points for subordinate-lien loans.[6] The data are reported for all originations of home purchase, dwelling-secured home improvement, and refinance loans.

HMDA reporters must also report the HOEPA status of loans. HOEPA loans have unusually high interest rates or fees. Identifying these loans helps examiners detect abusive practices that have accompanied some of these loans in the past.

The racial/ethnic categories have been revised to reflect recent changes to the Office of Management and Budget (OMB) racial and ethnic standards for federal statistics and administrative reporting, and to conform to Census Bureau definitions. Instead of five mutually exclusive categories that combine race and ethnicity, applicants now designate their ethnicity ("Hispanic" or "Not of Hispanic Origin") separately from race. Applicants may also indicate more than one racial category. Additionally, lenders must now ask applicants their ethnicity, race, and sex in applications received by telephone, mail, or over the Internet.[7] These changes allow examiners to identify and compare applicants on the basis of race and ethnicity more accurately.

Table 1 provides summary information on changes to HMDA data collection and reporting requirements.

Examination Impact

Fair Lending Examination Procedures

Examiners consider pricing systems and discretionary pricing practices in conjunction with the new pricing data as a part of the scoping process whenever they examine *any* HMDA reporter. When significant disparities[8] are found in a system that permits pricing discretion, a comparative loan file analysis is conducted to determine the reason for the pricing differences.

FDIC's headquarters staff [9] reviews the data annually for all HMDA reporting institutions to identify institutions that appear to have particularly strong indicators of possible discrimination in the pricing of one or more loan products. These institutions undergo increased scrutiny and may receive an accelerated fair lending examination, including a comparative file analysis.

[5] HOEPA, contained in the Riegle Community Development and Regulatory Improvement Act of 1994, Pub. L. 103-325, was enacted in response to anecdotal evidence of abusive lending practices in the home-equity lending market. HOEPA imposes certain disclosure requirements, as well as some substantive limitations, on certain home-equity loans with rates and fees above a certain percentage or amount. HOEPA is implemented through the Federal Reserve Boards' Regulation Z, including 12 C.F.R. §226.31, §226.32, and §226.34.

[6] 12 C.F.R §203.4(a)(12).

[7] Lenders were required to ask applicants their race, national origin, and sex in applications taken entirely by telephone effective January 1, 2003. The revised ethnicity and race categories did not take effect until January 1, 2004. See 67 FR 43217 and 67 FR 43218.

[8] A determination of significant disparities typically involves a statistical analysis conducted by Regional and headquarters fair lending specialists and statisticians.

[9] The FDIC's Division of Supervision and Consumer Protection works closely with statisticians and economists in the Division of Insurance and Research to develop screening techniques to identify institutions that exhibit an unusually high risk of pricing discrimination against one or more racial/ethnic minority groups or women.

From the Examiner's Desk . . .

continued from pg. 25

Table 1

HMDA Data Changes, Effective 1/1/2004	
Data Element	**Description of Change**
Property type	Requires lenders to identify applications and loans that involve manufactured housing. It is anticipated that reporting these loans separately will help explain differences in denial rates and pricing.
Loan purpose	Redefined the definitions of refinancing and home improvement loans to provide more consistency and reliability of data.
Preapproval requests (Preapprovals should be distinguished from prequalifications, which are not reported for HMDA purposes)	The revisions require lenders to report information on requests for preapprovals of home purchase loans. Data on denied preapprovals will provide more complete information on the availability of home financing.
Lien status	Lenders now must report the lien status of applications and originated loans. These data will be used to help interpret rate spread data and to differentiate between secured and unsecured home improvement loans.
Type of purchaser	For loans originated or purchased and then sold within the same year, the type of entity that purchased the loan must be reported. The types of purchasers have been expanded to increase the usability of the data and provide information about the secondary market.
Coverage rule (Nondepository lenders)	Nondepository lenders must report if they originated home purchase loans, including refinances, equaling at least $25 million in the preceding calendar year.
Application information	New ethnicity categories, "Hispanic" and "Not of Hispanic Origin," were created, and the race categories were revised to reflect changes to OMB standards. Lenders also must now ask for ethnicity, race, and sex in applications taken by telephone, mail, or Internet.
Additional data items	For loan originations, lenders must now report the rate spread between the annual percentage rate and the yield on comparable Treasury securities, if the spread exceeds or equals 3 percentage points for first-lien loans or 5 percentage points for subordinate-lien loans. Lenders must also report whether a loan is subject to the Home Ownership and Equity Protection Act.
HMDA sampling and resubmission procedures	New HMDA fields to the list of key fields include the following: • Property type • Request for preapproval • Ethnicity, race, and sex of the applicant and co-applicant • Type of purchaser • Rate spread • HOEPA status • Lien status These fields are considered critical to the integrity of analyses of the overall HMDA data.

In conducting a comparative file analysis, examiners consider both race and ethnicity. Selecting a target group (the group suspected of receiving less favorable treatment) that will be the focal point of a fair lending review requires examiner discretion. Selection of both a target group and an appropriate control group (the group suspected to be receiving more favorable treatment) may incorporate both race and ethnicity. For example, a common control group would be non-Hispanic (ethnicity) whites (race). The addition of ethnicity information and the ability of applicants to select more than one race allow a more precisely targeted analysis.

The addition of rate spread and HOEPA information to the HMDA data provides examiners additional tools to scope and focus fair lending examinations. Examiners use the data to compare different lenders in the market and to more readily identify secondary market loans (see purchaser type code changes in Table 1).

In all comparisons, examiners look for differences in how certain target groups are treated compared to an appropriate control group. Appropriate racial/ethnic/sex comparisons are made within each combination of loan type, property type, loan purpose, and lien type. For example, the percentage of loans to non-Hispanic whites for which rate spreads are reported are compared to the percentage of loans to Hispanics for which rate spreads are reported. The average spread for target and control group loans is also analyzed.

Examiners also use the race/ethnicity or sex HMDA data elements in conjunction with the pricing information to determine the need for a steering analysis. A steering analysis determines whether lending personnel guide, or "steer," applicants from a market-rate product for which the applicants may qualify to a less favorable alternative (e.g., a more expensive subprime mortgage product). While guiding an applicant to a loan product that meets that applicant's individual qualifications is not illegal, it can result in fair lending violations when the reason for the referral is not related to the applicant's creditworthiness, but rather to one of the prohibited bases.

For example, a bank may originate loans subject to HMDA reporting through both a mortgage division and a consumer loan division. Loans originated through a bank's internal consumer loan division are typically priced higher, in either rates or fees, than loans sold on the secondary market through its mortgage division. In such situations, examiners consider whether target group applicants are discriminatorily steered to the consumer loan division. In most institutions, part of the loan number on the HMDA-Loan Application Register (HMDA-LAR) will indicate which division originated the loan. The HMDA data field "Type of Purchaser" can also help distinguish between in-house loans, which are often originated out of a consumer loan division, and secondary market loans, which are sold to investors. In addition to the data analysis, customer interviews may be required to substantiate whether steering is occurring. A decision on whether to conduct customer interviews is made only after consultation with senior headquarters staff.

Throughout the fair lending examination process, examiners consult with Regional fair lending examination specialists and, in many cases, headquarters fair lending staff, to ensure that financial institutions receive consistent treatment on both a Regional and a national basis. If a pattern or practice of discrimination is identified, the violation is referred to the Department of Justice (DOJ). The referral provisions of the Equal Credit Opportunity Act (ECOA)[10] require that the federal financial institution regulatory agencies make a referral to the DOJ "whenever the agency has reason to believe that one or more creditors has engaged in a pattern or practice of discouraging or denying applications for credit" in violation of ECOA's general rule prohibiting discrimination. At the FDIC, referral to DOJ is initiated through formal consultations with the Regional office and headquarters in Washington.

HMDA Examination Procedures

Interagency Examination Procedures[11] were revised to address the new HMDA data requirements. Under the new procedures, and consistent with the FDIC's

[10] ECOA, 15 U.S.C. §1691e(g).

[11] Revised Interagency Examination Procedures for the Home Mortgage Disclosure Act, www.fdic.gov/new/news/financial/2004/fil7104b.pdf.

continued from pg. 27

compliance examination focus,[12] examiners now concentrate their review of HMDA compliance on determining the effectiveness of an institution's compliance management system with regard to HMDA data collection and reporting requirements. The data are tested as necessary to determine whether the compliance management system is adequate.

Accurate HMDA reporting is critical. HMDA data are made available to the public to help determine whether institutions are serving the housing needs of their communities and to identify potential discriminatory lending patterns. The new HMDA pricing information has been of significant interest to many public and private groups, including consumer groups, community groups, federal regulators, and congressional committees. In addition, the financial institution regulatory agencies use the data in conjunction with Community Reinvestment Act performance evaluations, as well as fair lending examinations. Inaccurate collection and reporting of HMDA data resulting in significant violations could subject an institution to civil money penalties. The FFIEC interagency examination guidance states that every bank, regardless of asset size, should have comprehensive audit and review procedures to verify the accuracy of its HMDA data.

Through management interviews and reviews of a bank's written policies, internal controls, and HMDA-LAR, examiners determine whether the bank has adopted and implemented comprehensive procedures to ensure adequate compilation of home mortgage disclosure information in accordance with Section 203.4(a-e). Examiners also interview the bank's front-line HMDA personnel and review training records to determine the effectiveness of a bank's policies and training program.

Examiners determine whether the bank has a system for tracking rate lock dates and rate spreads.[13] Examiners also review for written procedures relating to the collection of ethnicity, race, and sex data for all applications received by telephone, mail, or Internet.

Common HMDA Violations

In a December 5, 2005, memorandum, the FFIEC reported that the common reporting errors in the 2004 data pertained to HOEPA status, rate spread, and preapproval codes. (See www.ffiec.gov/hmda/pdf/FFIECguidance2005.pdf.)

A limited review of HMDA examinations since the reporting of the new data revealed that errors in collecting and reporting data elements often resulted in violations of law. Deficiencies noted were similar to those addressed in the December 2005 FFIEC memorandum, with the most frequently cited violations pertaining to the HOEPA status and the rate spread information. For example, some banks incorrectly reported rate spread information for loans that were not subject to Regulation Z. Others inaccurately reported loans as being subject to HOEPA, had erroneous information pertaining to preapproval requests, or failed to collect the ethnicity of applicants.

While violations may reflect errors rather than willful violation of requirements, repeat violations of the same or similar nature in subsequent examinations can result in the assessment of civil money penalties. Further review indicated that the HMDA violations often stemmed from weaknesses in the banks' compliance management systems, including inadequate training, insufficient monitoring, and lack of appropriate audit procedures. Addressing these weaknesses can minimize the potential for future violations.

[12] See "Compliance Examinations: A Change in Focus," *Supervisory Insights* Vol.1, Issue 1, Summer 2004, https://www.fdic.gov/regulations/examinations/supervisory/insights/sisum04/sisummer04-article2.pdf.

[13] The FFIEC's rate spread calculator page provides a good model for a tracking form. www.ffiec.gov/ratespread/default/aspx/.

Conclusion

The latest changes to the HMDA data collection and reporting requirements provide examiners more readily available data for initial analysis, which should improve the efficiency and quality of the fair lending scoping process. Examiners' ability to identify loan pricing concerns that warrant further investigation should be substantially enhanced. Preliminary questions that examiners pose most often include the following:

- To what extent are there disparate rates of higher-priced loans in minority communities, and why?
- What pricing disparities exist among borrowers of different races, ethnicities, or genders, and why?
- Do the disparities reflect important new homeownership opportunities for some borrowers that would not otherwise exist — or unfair treatment?
- To what extent do disparities exist among insured financial institutions, affiliated mortgage companies, or independent mortgage companies that focus on the subprime market?

Information on current HMDA violations indicates the continuing need for bank management to provide appropriate oversight of their banks' HMDA reporting systems to ensure accurate reporting. Institutions that have been successful with their HMDA programs provide effective training, a strong internal monitoring system, and audit procedures that identify and address the underlying causes of violations.

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Accounting News: Accounting for Employee Stock Options

For banking organizations that issue stock options to their employees, January 1, 2006, marked a watershed event. On that date, Statement of Financial Accounting Standards No. 123 (Revised), *Share-Based Payment* (FAS 123(R)), took effect for entities with a calendar year fiscal year and eliminated the choice between two significantly different methods of accounting for employee stock options. Under FAS 123(R), an entity that awards stock options to its employees must recognize the cost of employee services received in exchange for the award, generally based on the fair value of the options. Under previous accounting standards, an entity could choose to adopt the fair-value-based method for measuring the cost of employee stock options or a method that generally resulted in the recognition of no compensation cost. Although an increasing number of banking organizations and other companies had adopted the fair-value-based method in recent years, most entities had continued to apply the latter method, known as the intrinsic value method, for financial reporting purposes. Because of the significance of the changes brought about by FAS 123(R), this article discusses its key provisions and its effect on banks' reported earnings and capital levels.

Key Elements of FAS 123(R)

The Financial Accounting Standards Board (FASB) adopted FAS 123(R) in December 2004 to replace FASB Statement No. 123, *Accounting for Stock-Based Compensation* (FAS 123), which was issued in 1995, and to supersede Accounting Principles Board Opinion No. 25, *Accounting for Stock Issued to Employees* (APB 25), which dates back to 1972. The FASB summarized the provisions of these earlier standards in FAS 123(R) as follows:

> Statement 123 established the fair-value-based method of accounting as preferable for share-based compensation awarded to employees and encouraged, but did not require, entities to adopt it. . . . Statement 123 allowed entities to continue accounting for share-based compensation arrangements with employees according to the intrinsic value method in APB Opinion No. 25, *Accounting for Stock Issued to Employees*, under which no compensation cost was recognized for employee share options that met specified criteria. Public entities that continued to use the intrinsic value method were required to disclose pro forma measures of net income and earnings per share as if they had used the fair-value-based method [to recognize the cost of employee share options in their income statements]. Nonpublic entities that continued to use the intrinsic value method were required to make pro forma disclosures as if they had used the minimum value method or the fair-value-based method for recognition [in their income statements].

FAS 123(R) applies broadly to all share-based payment transactions in which a banking organization or other entity acquires goods or services from an employee or a supplier or other nonemployee by issuing, or offering to issue, shares of its equity, stock options, or other equity instruments.[1,2] In general, it also addresses transactions in which an entity incurs liabilities to an employee or

[1] For such share-based payment transactions with nonemployees, an entity must also follow the guidance in Emerging Issues Task Force Issue No. 96-18, "Accounting for Equity Instruments That Are Issued to Other Than Employees for Acquiring, or in Conjunction with Selling, Goods or Services."

[2] However, FAS 123(R) does not apply to equity instruments held by an employee stock ownership plan (ESOP), the accounting for which is governed by American Institute of Certified Public Accountants' Statement of Position 93-6, *Employers' Accounting for Employee Stock Ownership Plans*.

nonemployee in amounts at least partially based on the price of the entity's equity instruments or that are or may be payable by issuing equity instruments. In addition to employee stock options with a wide variety of characteristics, share-based payment arrangements with employees to which FAS 123(R) applies include stock appreciation rights, restricted stock awards, restricted stock units, performance share plans, performance unit plans, and employee stock purchase plans.

In FAS 123(R), the FASB established two overarching principles that apply to all share-based payment transactions: a recognition principle and a measurement principle. As applied to employee stock options, the first principle provides that an entity must recognize in its financial statements the employee services received as they are received in exchange for the issuance of the options. The entity also recognizes a corresponding increase in equity capital (or, in some cases, liabilities). As these services are consumed, the entity recognizes the related cost in its income statement as expenses incurred for employee services.[3] The second principle states that the stock options must be measured based on their fair value (or, in some cases, a calculated value). FAS 123(R) also provides guidance on the accounting for modifications of awards and the tax effects of share-based compensation arrangements, and it establishes disclosure requirements for these arrangements. The standard's transition rules explain how entities should account for stock options awarded in periods before the effective date of FAS 123(R).

Description of Employee Stock Options

FAS 123(R) defines a "share option" generically as a "contract that gives the holder the right, but not the obligation, either to purchase (to call) or to sell (to put) a certain number of shares at a predetermined price for a specified period of time," and adds that most share options granted to employees are call options. Identifying the terms of stock options awarded to employees is essential to properly account for the options. As the definition indicates, two of the terms are the exercise price of the options (and whether and how it may subsequently be adjusted) and the options' contractual term. The exercise price of most stock options equals the market value of a share of the employer's stock on the date the option is granted. Nevertheless, options can be granted with an exercise price that is greater than or less than the market value of the employer's stock on the grant date. The exercise price also can be adjusted upward or downward in response to changes in an index.

The vesting provisions of an award explain when the employee has the right to exercise the option. For a call option, the option becomes vested when the employee's right to receive shares by exercising the option "is no longer contingent on satisfaction of either a service condition or a performance condition." The end of the stated vesting period for an option would normally occur at the same time the employee has the right to exercise the option, which is typically after a specified number of years of continuous service to the employer. However, besides a service condition, the vesting provisions of an option may also

[3] In some cases, the cost of the option would be initially capitalized into the cost of another asset, which would be recognized in earnings when that asset is later disposed of or consumed. In banks, if options are issued to employees involved in originating loans, a portion of option costs would be included in loan origination costs that are deferred under FASB Statement No. 91, *Accounting for Nonrefundable Fees and Costs Associated with Originating or Acquiring Loans and Initial Direct Costs of Leases*.

continued from pg. 31

include one or more performance or market conditions that must be met in order for an option to be exercisable. A performance condition is a condition determined solely by reference to the employer's operations or activities, such as attaining a specified increase in return on assets or undergoing a change in control. In contrast, a market condition is one that relates, for example, to the achievement of a specified price or intrinsic value for the employer's stock.

For an option with a service condition, an employer can establish either "cliff" or "graded" vesting. Under cliff vesting, employees become fully vested at the end of a specified period, (e.g., after four years of service). Under graded vesting, employees vest at specified rates over a specified period (e.g., 25 percent per year over a four-year vesting period or 50 percent in the first year and 25 percent in the second and third years of a three-year vesting period).

One other significant feature of stock options is their tax treatment for federal income tax purposes. The Internal Revenue Code classifies employee stock options as either incentive stock options (ISOs) or nonqualified stock options (NSOs). To be an ISO, the option must satisfy several statutory requirements. An option that does not satisfy these requirements is an NSO. The tax consequences, both to the employer and the employee, differ for ISOs and NSOs. The vast majority of employee stock options are NSOs.[4]

The Basics of Accounting for Stock Options Under FAS 123(R)

The general rule when accounting for employee stock options under FAS 123(R) is that an employer must measure the cost of services received from employees in exchange for the awarding of the options based on the grant date fair value of the options if they are classified as equity or based on the fair value of the options at each balance sheet date if they are classified as liabilities. Because employee stock options usually are classified as equity, the remainder of this article addresses such options. The employer recognizes the compensation cost for an award of employee stock options classified as equity over "the period during which an employee is required to provide service in exchange for an award," which is termed "the requisite service period," generally with a corresponding credit to additional paid-in capital on the balance sheet.[5,6] The estimation of grant date fair value will be discussed later in this article.

For an award of stock options, the grant date is defined in FAS 123(R) as "[t]he date at which an employer and an employee reach a mutual understanding of the key terms and conditions" of the award. Awards that are subject to approval by the shareholders, the board of directors, or management are not deemed to be granted until the necessary approvals have been obtained. However, if shareholder approval is required but is "essentially a formality (or perfunctory)," actual approval is not needed (assuming any other necessary approvals have taken place). This situation occurs, for example, "if management and the members of the board of directors control enough votes to approve the arrangement."

In addition, FASB Staff Position No. FAS 123(R)-2, issued in October 2005, makes a practical accommodation for the determination of the grant date. It provides that, assuming all other grant date criteria have been met, there is a presumption that "a mutual understand-

[4] CCH Incorporated, *Accounting for Compensation Arrangements*, 2006 edition, Paragraph 11.8.

[5] In general, compensation cost is recorded as a current period expense, except as described in footnote 3. However, this article follows the convention used in FAS 123(R) of referring to compensation cost rather than compensation expense because of the existence of this exception.

[6] On a bank's balance sheet, additional paid-in capital is typically labeled "surplus."

ing of the key terms and conditions of an award to an individual employee" exists at the date "the award is approved in accordance with the relevant corporate governance requirements" if the employee lacks "the ability to negotiate the key terms and conditions of the award with the employer." It must also be expected that these terms and conditions will be communicated to each individual award recipient "within a relatively short time period from the date of approval" in accordance with the entity's "customary human resource practices."

The terms of the stock option award must be analyzed in order to estimate the requisite service period. When an award includes only a service condition, the requisite service period is presumed to be the vesting period absent evidence to the contrary. However, when such an award has a graded vesting schedule, the employer must make a policy decision about whether to treat the award, in substance, as multiple separate awards, each of which has its own requisite service period, or as one award with a requisite service period that corresponds to that of the last separately vesting portion of the award. Determining the requisite service period becomes more difficult when an award contains performance or market conditions or both because the probability of satisfying these conditions must be assessed. The initial best estimate of the requisite service period must be adjusted over time as circumstances and hence, these probabilities, change. The date at which the requisite service period begins is defined as the "service inception date." Although this date is usually the same as the grant date, in some instances the service inception date may precede or follow the grant date.

Because FAS 123(R) addresses the accounting for share-based payment transactions with both employees and nonemployees, but with certain differences between the two, an employer must determine whether the persons to whom it has awarded stock options are employees for purposes of this accounting standard. An employee is an individual over whom the employer exercises or has the right to exercise sufficient control to establish an employer-employee relationship under applicable law, which for the United States encompasses common law and federal income tax laws. In addition, nonemployee directors who are granted stock options for their services as directors are deemed to be employees for purposes of FAS 123(R) if they are elected by the employer's shareholders or are "appointed to a board position that will be filled by shareholder election when the existing term expires." Options awarded to directors for other services are treated as awards to nonemployees under FAS 123(R).

The total compensation cost that should be recognized over the requisite service period should be only for employee stock options that will actually vest. For example, some employees may leave the employer before the vesting period is over, thereby forfeiting their options. In addition, it may or may not be probable that a performance condition will be achieved. When stock options include only a performance condition for which achievement is not probable, then the options will be treated as not vesting and no compensation cost should be recognized. Stock options that include both service and performance conditions add to the complexity of estimating the number of options that will actually vest. In contrast, FAS 123(R) states that "a market condition is not considered to be a vesting condition," and therefore it does not enter into the estimation of the number of options that will vest. The standard provides instead that "[t]he effect of a market condition is reflected in the grant-date fair value of an award."

continued from pg. 33

Although performance conditions are becoming more prevalent, virtually all stock option awards include a service condition.[7] When estimating at the grant date the number of options that will be forfeited because the service condition will not be met, the employer "considers historical employee turnover and expectations about the future." Because the estimate of forfeitures over the requisite service period may change over time, including on the basis of actual experience after the grant date, the estimated number of options that will vest must be revised if subsequent information indicates that this number is likely to differ from the previous estimate.

Once the employer has determined the grant date of the options, their fair value on that date, the requisite service period, and the number of options that will vest, the total compensation cost of the options can be calculated. For options with cliff vesting, this cost is recognized on a straight-line basis over the requisite service period. For options with graded vesting (and a service condition only), the cost recognition pattern depends on whether the employer's policy choice is to treat the stock option award as one award, to which the straight-line method is applied,[8] or as multiple separate awards, to which an accelerated method is in effect applied. Examples later in this article will illustrate the differences in cost recognition.

If fully vested employee stock options later expire unexercised, which would be the case if the market price of the stock is less than the exercise price of the option, the employer is not permitted to reverse the previously recognized compensation cost.

An entity that is a subsidiary of another company (e.g., a bank that is a subsidiary of a holding company) may award options on its parent company's stock to one or more of its employees as compensation for services provided to the entity. FAS 123(R) observes that "[t]he substance of such a transaction is" that the parent company "makes a capital contribution" to the subsidiary and the subsidiary "makes a share-based payment to its employee in exchange for services rendered." Thus, the subsidiary would account for these stock options by applying FAS 123(R) in its own separate financial statements, including, for a bank, in its regulatory reports.

Estimating the Grant Date Fair Value of Stock Options

FAS 123(R) states that an entity should measure the fair value of a stock option as of the grant date "based on the observable market price of an option with the same or similar terms and conditions, if one is available," but the FASB further notes that market prices generally are not available. In the absence of such prices, fair value must be "estimated using a valuation technique such as an option-pricing model." The standard identifies a "lattice model" (e.g., a binomial model) and a "closed-form model" (e.g., the Black-Scholes-Merton formula) as acceptable option-pricing models and a Monte Carlo simulation technique as another type of acceptable valuation technique. An entity must choose an appropriate valuation technique on the basis of the substantive characteristics of the options it is valuing. The Black-Scholes-Merton model is considered easier to apply because it is a defined equation and incorporates only one set of inputs. As a result, it is the model most commonly in use. The binomial model is more complex and therefore is used less frequently, although its supporters argue

[7] CCH Incorporated, *Accounting for Compensation Arrangements*, 2006 edition, Paragraph 8.7.

[8] When the "one award" policy choice is made, the cumulative "amount of compensation cost recognized at any date must at least equal" the number of options that have vested times their grant date fair value.

that it produces more accurate fair value estimates for options because it can take into account more assumptions and can incorporate multiple inputs.[9]

Whatever model or valuation technique an entity uses for valuing employee stock options, FAS 123(R) specifies six inputs and assumptions that, at a minimum, must be taken into account:

- the exercise price of the option;
- the current price of the underlying stock;
- the expected term of the option; and
- over this term,
  - the expected volatility of the price of the underlying stock;
  - the expected dividends on the underlying stock; and
  - the risk-free interest rate or rates.

An entity must develop reasonable and supportable estimates for the assumptions it uses in the model. FAS 123(R) notes that historical experience should generally be the starting point in developing these estimates, but expectations based on such experience should be modified when "currently available information indicates that the future is reasonably expected to differ from the past." Furthermore, when estimating the expected term of an option, an entity must consider "both the contractual term of the option and the effects of employees' expected exercise and post-vesting employment termination behavior."

Volatility is defined in FAS 123(R) as a "measure of the amount by which a financial variable such as a share price has fluctuated (historical volatility) or is expected to fluctuate (expected volatility) during a period." The standard also cites a number of factors to be considered in estimating the expected volatility of the underlying stock's price. The staff of the Securities and Exchange Commission (SEC) has also issued guidance on volatility in Staff Accounting Bulletin No. 107, *Share-Based Payment* (SAB 107).[10] The outcome of this estimation process is particularly important because the higher the expected volatility, the greater the fair value of an option.[11]

In developing FAS 123(R), the FASB recognized that it might not be practicable for a nonpublic company that awards employee stock options to estimate the expected volatility of its share price because of insufficient historical information about past volatility, for example. In this situation, the nonpublic company will be unable to reasonably estimate the grant date fair value of its stock options. To remedy this problem, FAS 123(R) directs nonpublic companies to account for their stock options based on a "calculated value" rather than the grant date fair value. To determine the calculated value, a nonpublic company substitutes "the historical volatility of an appropriate industry sector index for the expected volatility" of the price of its underlying stock in its chosen option-pricing model. If possible, the industry sector index should reflect the size of the nonpublic company. The use of a broad-based market index is not permissible.

Accounting for the Tax Effects of Stock Options

FASB Statement No. 109, *Accounting for Income Taxes* (FAS 109), establishes the standards for accounting for and reporting the effects of income taxes in financial statements. Under FAS 109, in general, deferred tax assets and liabilities are recognized when there are "temporary differences" between the tax bases of assets and liabilities and their reported amounts in the financial statements.

[9] Tim V. Eaton and Brian R. Prucyk, "No Longer an 'Option,'" *Journal of Accountancy*, April 2005, 66–67.

[10] SAB 107, released in March 2005, can be accessed at http://www.sec.gov/interps/account/sab107.pdf.

[11] CCH Incorporated, *Accounting for Compensation Arrangements*, 2006 edition, Paragraph 7.27.

continued from pg. 35

The tax treatment of employee stock options that are ISOs and those that are NSOs differs, resulting in a different accounting outcome under FAS 109. For an NSO, the more prevalent form of option, the employee typically does not recognize any income for federal income tax purposes until the option is exercised. Upon exercise, the amount by which the fair market value of the stock exceeds the exercise price of the option is ordinary income to the employee, and the employer is normally entitled to a tax deduction for this amount. In contrast, when an ISO is exercised, the employee does not realize any taxable income and the employer does not receive a tax deduction. However, if the employee enters into a "disqualifying disposition" by selling the shares before the end of either of two specified holding periods, the transaction will generate a certain amount of ordinary income for the employee and an equivalent tax deduction for the employer.

Thus, the tax treatment of employee stock options is noticeably different from the financial accounting treatment of options under FAS 123(R). This standard views these differing treatments of NSOs as a deductible temporary difference for purposes of applying FAS 109, which leads to the recognition of deferred tax assets until the option is exercised or expires. However, ISOs do not generate a deductible temporary difference because they do not ordinarily result in tax deductions for the employer. Only when a disqualifying disposition occurs will the employer recognize the tax effects arising from the disposition in its financial statements.

For NSOs, the employer must recognize a deferred tax asset and a corresponding credit to deferred income tax expense each year during the requisite service period. The amount of the deferred tax asset equals the compensation cost recognized during the year times the "applicable tax rate" (i.e., the tax rate "expected to apply to taxable income" in the future year or years when the stock options are expected to be exercised). In addition, FAS 109 requires the employer to determine whether it is more likely than not that some or all of its deferred tax assets will not be realized and, if so, to establish an appropriate valuation allowance.

When the NSOs are exercised, the employer's tax deduction may be greater than or less than the cumulative amount that has been recognized as the compensation cost for the options. In the former case, the amount of any realized tax benefit in excess of the previously recognized deferred tax asset is normally credited to additional paid-in capital (APIC). However, if the tax benefit resulting from the tax deduction arising from the exercise of the options will not be realized because the employer is in a tax loss carryforward position, recognition of this "excess tax benefit" will be delayed until the deduction actually reduces taxes payable.

The accounting can be more complicated when the tax deduction resulting from the exercise of NSOs is less than the cumulative compensation cost for the options, thereby creating a "tax deficiency." In this situation, the amount by which the deferred tax asset associated with the exercised options is greater than the tax benefit from the tax deduction must be written off. To the extent that there is "any remaining additional paid-in capital from excess tax benefits from previous [share-based payment] awards accounted for in accordance with" FAS 123(R) or FAS 123, the write-off is first charged against such remaining APIC. If the remaining APIC is not sufficient to absorb the entire write-off, the remainder of the write-off is charged to income tax expense in the income statement. FAS 123(R) provides guidance on how to determine the amount of the so-called "APIC pool" available to absorb write-offs of deferred tax assets related to tax defi-

Table 1

Treatment of Awards Granted Before the Effective Date of FAS 123(R)		
	Treatment of Awards Granted in Periods Prior to Effective Date of FAS 123(R)	**Restatement of Financial Statements for Periods Prior to Effective Date of FAS 123(R)**
All public companies regardless of accounting method used previously	Must use modified prospective application transition method	May elect to restate using modified retrospective application transition method
Nonpublic companies that used the fair-value-based method for recognition or disclosure purposes under FAS 123	Must use modified prospective application transition method	May elect to restate using modified retrospective application transition method
All other nonpublic companies	Continue to account for awards outstanding at effective date using accounting principles originally applied to those awards, but apply FAS 123(R) to modifications of those awards after the effective date	Restatement not permitted

ciencies, but the calculation process has been criticized as overly complex.[12]

When NSOs expire unexercised, the deferred tax asset associated with these options must also be written off because no tax deduction is generated. The write-off is accounted for as described above for a tax deficiency.

Transitioning to FAS 123(R)

As a result of guidance issued by the SEC in April 2005,[13] public companies other than "small business issuers" were required to adopt FAS 123(R) as of the beginning of their first fiscal year beginning after June 15, 2005, while small business issuers and all nonpublic companies must adopt this standard as of the beginning of their first fiscal year beginning after December 15, 2005. As a result, FAS 123(R) took effect for all calendar year companies on January 1, 2006.

The standard applies to all new stock options and other share-based payments awarded to employees after its required effective date and to prior awards modified after that date. For companies that had awarded share-based payments to employees prior to the effective date of FAS 123(R), different transition methods apply to these awards depending on whether the company is public or nonpublic and on its previous method of accounting for the awards. These methods are summarized in Table 1.

In general, under the modified prospective method, an employer with employee stock options for which the requisite service period has not been completed (i.e., options that are not fully vested) as of the effective date of FAS 123(R) must recognize compensation cost over the portion of the service period remaining after the effective date. The compensation cost must be based on the grant date fair value of those options as calculated under FAS 123.

When the use of the modified retrospective method is permitted, an employer must adjust its prior period

[12] CCH Incorporated, *Accounting for Compensation Arrangements*, 2006 edition, Paragraph 11.43. The SEC staff and the FASB have attempted to provide some relief from the difficulties in calculating APIC pools in SAB 107 and in FASB Staff Position No. FAS 123(R)-3, *Transition Election Related to Accounting for the Tax Effects of Share-Based Payment Awards*, respectively.

[13] See SEC Release 33-8568, *Amendment to Rule 4-01(a) of Regulation S-X Regarding the Compliance Date for Statement of Financial Accounting Standards No. 123 (Revised 2004), "Share-Based Payment."*

continued from pg. 37

financial statements "to give effect to the fair-value-based method of accounting" under FAS 123 such that the "compensation cost [of share-based payments to employees] and the related tax effects will be recognized in those financial statements as though they had been accounted for under Statement 123."

Examples

The following examples illustrate the basics of accounting for employee stock options awarded after the effective date of FAS 123(R). The examples, which are for stock options with a service condition only, contrast the accounting and resulting compensation cost for options with cliff vesting versus graded vesting. The grant date fair values of the stock options are estimated using an appropriate option-pricing model such as the Black-Scholes-Merton formula. Table 2 presents key information for stock options awarded by Bank A and Bank B where the only differences arise from different vesting methods.

Example: Compensation Cost with Cliff Vesting

On the basis of the expected forfeiture rate during the vesting period, 34 of Bank A's employees who have been

Table 2

Stock Option Information for Bank A and Bank B

	Bank A (Cliff Vesting)	Bank B (Graded Vesting)
Grant date	January 1, 2006	January 1, 2006
Number of employees granted options	40	40
Stock options granted to each employee	300	300
Total stock options granted	12,000	12,000
Expected forfeitures per year	5 percent	5 percent
Share price at grant date	$50	$50
Exercise price of option	$50	$50
Contractual term of options	10 years	10 years
Vesting	3-year cliff vesting	3-year graded vesting with one-third of the options vesting each year (3 tranches)
Requisite service period (RSP)	3 years	First tranche (1/3 of the options): 1-year RSP Second tranche (1/3 of the options): 2-year RSP Third tranche (1/3 of the options): 3-year RSP
Grant date fair value of options	$18.00 per option	Tranche-by-tranche valuation: $16.00 per option with a 1-year RSP $17.00 per option with a 2-year RSP $18.00 per option with a 3-year RSP Valuation of entire award using a single weighted-average expected life: $17.00 per option
Applicable tax rate	40 percent	40 percent

granted options are expected to vest at the end of this three-year period. This number is determined by multiplying the 40 employees granted options by one minus the expected forfeiture rate raised to the third power (for the number of years in the requisite service period), i.e., $(1 - 0.05)^3$ or 0.95^3.

The total grant date fair value of all options that Bank A expects will actually vest is $183,600, which is the number of options expected to vest (300 options x 34 employees = 10,200 options), multiplied by the grant date fair value of $18 per option. Thus, Bank A must recognize total compensation cost of $183,600 over the requisite service period of three years, one-third of which ($61,200) will be recognized in each of the three years provided there are no changes in the expected forfeitures during that period. Because Bank A expects to generate sufficient future taxable income to realize the deferred tax benefits of its employee stock options, it must recognize income tax benefits of $24,480 each year, which equals its applicable tax rate multiplied by the annual compensation cost ($61,200 x 40 percent). These benefits would essentially be a credit to (a reduction of) deferred income tax expense.

In 2006, Bank A's journal entries to record its compensation cost and deferred taxes would be as follows:

Compensation cost $61,200
Additional paid-in capital $61,200
To recognize compensation cost.

Deferred tax asset $24,480
Deferred tax expense $24,480
To recognize the deferred tax asset for the temporary difference related to compensation cost.

Provided the estimated forfeitures do not change in 2007 and 2008, Bank A would record the same journal entries in each of those two years. At the end of 2008, Bank A must review the actual number of forfeited options and adjust the cumulative compensation cost to bring it into line with the number of options that actually vested.

Example: Compensation Cost with Graded Vesting

Because Bank B's options have graded vesting, the bank must determine the number of employees granted options who are expected to vest in each of the three years. On the basis of the expected forfeiture rate each year, Bank B estimates the number of employees who will vest in 2006, 2007, and 2008 and the number of stock options expected to vest each year as shown in Table 3.

When employee stock options with graded vesting are subject only to service conditions, the employer may choose between two alternatives each for valuing the entire stock option award and recognizing compensation cost for the options, which results in four possible outcomes for each year's cost during the overall vesting period. Under the first combination of alternatives, Bank B estimates the

Table 3

Bank B's Estimate of Vested Stock Options

Year	Number of Employees	Number of Vested Stock Options
	Total at grant date = 40	
2006	40 x (1 – 0.05) = 40 x 0.95 = 38	38 x (300 x 1/3) = 38 x 100 = 3,800
2007	38 x (1 – 0.05) = 38 x 0.95 = 36	36 x (300 x 1/3) = 36 x 100 = 3,600
2008	36 x (1 – 0.05) = 36 x 0.95 = 34	34 x (300 x 1/3) = 34 x 100 = 3,400
		Total vested stock options = 10,800

continued from pg. 39

fair value and recognizes the compensation cost of the options by separating the entire award into its three tranches according to the year in which each tranche vests. This produces the results in Table 4.

By treating the entire award as if it were multiple awards (three in this example) rather than a single award, Bank B recognizes the compensation cost "on a straight-line basis over the requisite service period for each separately vesting portion of the award." This means, for example, that Bank B will recognize the $61,200 compensation cost attributable to the 3,600 options that vest at year-end 2007 proportionately over the two-year requisite service period that it takes for these options to vest. The estimated $183,200 total compensation cost is allocated to 2006, 2007, and 2008 as shown in Table 5.

Using journal entries comparable to those illustrated for Bank A, Bank B would record the amounts of compensation cost allocated to 2006, 2007, and 2008 along with the related deferred taxes each year. For example, the entries for 2006 would be as follows:

Compensation cost	$111,800	
Additional paid-in capital		$111,800

To recognize compensation cost.

Deferred tax asset	$44,720	
Deferred tax expense		$44,720

To recognize the deferred tax asset for the temporary difference related to compensation cost.

The second combination of alternatives available to Bank B would be to take the $183,200 estimated total compensation cost calculated above, but to recognize this total cost on a straight-line basis over the three years of the graded vesting period. Bank B's total compensation cost would be allocated equally to each of

Table 4

Compensation Cost for Three Annual Tranches

Year Options Fully Vest	Number of Vested Options	Grant Date Fair Value per Option	Compensation Cost
2006	3,800	$16.00	$ 60,800
2007	3,600	$17.00	$ 61,200
2008	3,400	$18.00	$ 61,200
Total	10,800		$183,200

Table 5

Allocation of Compensation Cost over Three Years with Tranche-by-Tranche Valuation

	Compensation Cost to Be Recognized in		
	2006	2007	2008
Stock options vesting in 2006	$ 60,800		
Stock options vesting in 2007	$ 30,600	$ 30,600	
Stock options vesting in 2008	$ 20,400	$ 20,400	$ 20,400
Cost for the year	$111,800	$ 51,000	$ 20,400
Cumulative cost	$111,800	$162,800	$183,200

these three years by dividing the total by three ($183,200 ÷ 3 = $61,067 per year).[14]

For the third and fourth combinations of alternatives, Bank B would treat the stock option award as one award and use a single weighted-average expected life for purposes of estimating the grant date fair value of the options, which the bank determines is $17 per option. Bank B could then recognize compensation cost on either a graded or straight-line basis as under the first two alternatives.

As previously calculated, the total number of stock options expected to vest is 10,800. With a value of $17 per option, the total compensation cost of the award is $183,600 for both the third and fourth combinations of alternatives (10,800 options x $17 grant date fair value). If Bank B allocates this cost on a graded basis, one-third of the total cost, $61,200, is allocated to each of the three tranches of the award. This amount is spread over the requisite service period for each tranche as shown in Table 6.

In contrast, if Bank B allocates this $183,600 total compensation cost on a straight-line basis, the cost would be allocated equally to each of the three years over which the options vest by dividing the total by three ($183,600 ÷ 3 = $61,200 per year in 2006, 2007, and 2008).[15]

Regardless of the alternatives Bank B selects for estimating the value of the options and allocating the compensation cost, it must adjust the cost "for awards with graded vesting to reflect differences between estimated and actual forfeitures" in each tranche, including when the final tranche has fully vested.

Example: Exercise of Stock Options

In the example involving Bank A above, the 10,200 stock options vested at the end of 2008 have an exercise price of $50. On December 31, 2010, when the price of Bank A's stock is $70 per share, half the stock options (5,100 options) are exercised. If the par value of Bank A's common stock is $10 per share, Bank A's entry to record the exercise of these options would be as follows:

Cash (5,100 x $50)	$255,000	
Common stock		$51,000
Additional paid-in capital		$204,000

To recognize the issuance of common stock upon exercise of stock options.

Table 6

Allocation of Compensation Cost over Three Years with Valuation Based on Weighted-Average Expected Life

	Compensation Cost to Be Recognized in		
	2006	2007	2008
Stock options vesting in 2006	$ 61,200		
Stock options vesting in 2007	$ 30,600	$ 30,600	
Stock options vesting in 2008	$ 20,400	$ 20,400	$ 20,400
Cost for the year	$112,200	$ 51,000	$ 20,400
Cumulative cost	$112,200	$163,200	$183,600

[14] For options with graded vesting and only service conditions, FAS 123(R) "requires that compensation cost recognized at any date must be at least equal to the amount attributable to options that are vested at that date," which is the case for this second combination of alternatives. However, if half the options awarded by Bank B had vested in 2006, half the total compensation cost would be recognized in 2006.

[15] The compensation cost recognition requirement described in footnote 14 would also apply to this alternative.

continued from pg. 41

In contrast, if Bank A has no-par common stock, it would credit common stock for the sum of the cash proceeds received from the exercise of the options plus the $91,800 previously credited to additional paid-in capital (5,100 options x $18 grant date fair value) during the requisite service period for the options that have been exercised. In this case, Bank A's entry would be as follows:

Cash (5,100 x $50)	$255,000	
Additional paid-in capital	$91,800	
Common stock		$346,800

To recognize the issuance of common stock upon exercise of stock options and to reclassify previously recorded additional paid-in capital.

Bank A is entitled to take tax deductions in 2010 for the difference between the market price of its stock on the date the stock options were exercised ($70 per share) and the exercise price of the options ($50 per share). For the 5,100 options exercised, which are NSOs, the deductible amount is $102,000 [5,100 options x ($70 - $50)]. Because Bank A has generated sufficient taxable income in 2010 to fully use the tax deduction, the $40,800 realized tax benefit of this deduction ($102,000 tax deduction x 40 percent applicable tax rate) will reduce the bank's current income taxes payable. Bank A records the amount by which the $102,000 realized tax deduction exceeds the $91,800 compensation cost previously recognized for the options exercised (5,100 options x $18 grant date fair value) as a credit to additional paid-in capital. The exercise of the stock options also signals the reversal of the deductible temporary difference that originated during the three-year requisite service period when the compensation cost of the options was recognized in Bank A's financial statements. As a consequence, Bank A must eliminate the previously recognized $36,720 deferred tax asset associated with the 5,100 options exercised ($91,800 compensation cost x 40 percent applicable tax rate). Bank A records the following journal entries for these tax effects:

Deferred tax expense	$36,720	
Deferred tax asset		$36,720

To reverse the deferred tax asset for the temporary difference associated with stock options that have been exercised.

Current taxes payable	$40,800	
Current tax expense		$36,720
Additional paid-in capital		$4,080

To adjust current taxes payable and current tax expense for the tax benefit realized from the exercise of stock options and the tax effects of the recognized compensation cost, and to credit the resulting excess tax benefit to additional paid-in capital.

On December 31, 2011, when the price per share of Bank A's stock has fallen to $67, the remaining 5,100 options are exercised. Bank A records journal entries similar to the first two that it recorded above for the stock options exercised one year earlier. However, Bank A's tax deduction for the options exercised in 2011 is $86,700 [5,100 options x ($67 – $50)], which is less than the $91,800 compensation cost recognized for the options exercised (5,100 options x $18 grant date fair value). Although Bank A has generated sufficient taxable income in 2011 to fully use the tax deduction and the resulting $34,680 realized tax benefit ($86,700 tax deduction x 40 percent applicable tax rate), Bank A has a tax deficiency because this realized tax benefit is less than the previously recognized $36,720 deferred tax asset associated with the 5,100 options exercised ($91,800 compensation cost x 40 percent applicable tax rate). Because the exercise of the stock options in 2010 generated an excess tax benefit of $4,080 that was credited to additional paid-in capital, Bank A has an "APIC pool" sufficient to absorb the tax deficiency without having to charge any of the deficiency to current period earnings. The bank would reflect this outcome in the following journal entry:

Current taxes payable	$34,680	
Additional paid-in capital		$2,040
Current tax expense		$36,720

To adjust current taxes payable and current tax expense for the tax benefit realized from the exercise of stock options and the tax effects of the recognized compensation cost, and to charge the resulting tax deficiency against additional paid-in capital.

In the compensation cost example involving Bank B, the stock options had graded vesting. Bank B's accounting for the exercise of stock options would, in concept, be comparable to Bank A's accounting. However, the graded vesting approach adds a degree of complexity. In this regard, the FASB notes that unless Bank B

> identifies and tracks the specific tranche from which share options are exercised, it would not know the recognized compensation cost that corresponds to exercised share options for purposes of calculating the tax effects resulting from that exercise. If an entity does not know the specific tranche from which share options are exercised, it should assume that options are exercised on a first-vested, first-exercised basis (which works in the same manner as the first-in, first-out basis for inventory costing).

Examination Considerations

All banks that award stock options to officers or other employees as part of their compensation must adopt FAS 123(R) for financial reporting purposes, including for their Reports of Condition and Income (Call Reports), as of the effective date of the standard (January 1, 2006, for most banks). When examining a bank that awards a significant number of employee stock options, examiners should gain an understanding of the bank's methods of accounting for the options both before and after the effective date of FAS 123(R), as well as the transition method used for options awarded before the effective date. This understanding will assist the examiner in assessing how the compensation cost of these options affects the bank's earnings and equity capital, particularly when analyzing the bank's earnings trends. Examiners should also recognize that the stock option compensation cost reflected in a bank's income statement is a noncash expense.

Since most banks applied the intrinsic value method of accounting for employee stock options before the effective date of FAS 123(R), these banks will not have included any compensation cost in their "salaries and employee benefits" in 2005 and earlier years.[16] If such a bank is not a public company or a subsidiary of a public company, it will continue to apply the intrinsic value method to employee stock options awarded before 2006 that continue to vest in 2006 and subsequent years unless a previous award is modified. Therefore, a "nonpublic bank" will not begin to reflect any compensation cost in its earnings until it grants a new employee stock option award. In contrast, if the bank is a public company or a subsidiary of a public company and has pre-2006 employee stock options that were not fully vested at the end of 2005, this "public bank" must begin to include the compensation cost of these options in its earnings in 2006 even though it previously applied the intrinsic value method to these options. Therefore, even if the bank does not grant any new employee stock options in 2006, stock option compensation cost will be reflected in its income statement in 2006 and subse-

[16] For stock options awarded to directors for their services as directors, compensation cost for options would be reported with other forms of directors' compensation in "other noninterest expense" rather than in "salaries and employee benefits."

continued from pg. 43

quent years until its pre-2006 options are fully vested.

Under FAS 123(R), all public banks, as well as nonpublic banks that used the fair-value-based method of accounting for employee stock options for recognition or disclosure purposes under FAS 123 prior to 2006, are permitted to adjust prior years' financial statements as if this method had been applied since FAS 123 took effect (the modified retrospective application transition method). However, as noted in the Call Report instructions, "[b]ecause each Report of Income covers a single discrete period, retroactive restatement of prior years' Reports of Condition and Income is not permitted."[17] If a bank applies modified retrospective application for other financial reporting purposes, it should adjust the 2006 beginning balances of additional paid-in capital (surplus), deferred taxes, and retained earnings for Call Report purposes, and it should report the net effect of these adjustments on total equity capital at the beginning of 2006 as a direct adjustment to capital in the Call Report schedule of changes in equity capital (Schedule RI-A).

For a bank that regularly grants stock options to employees, including in 2006, and previously used the intrinsic value method of accounting for these options, an analysis of its earnings will show an increase in "salaries and employee benefits" in 2006 compared to prior years that is attributable to the newly required recognition of compensation cost under FAS 123(R). Whether the 2006 earnings for such a bank include the compensation cost only for options granted in 2006 or also include the cost for any not-yet-fully-vested pre-2006 options depends on whether the bank is public or nonpublic. Examiners should therefore consider the impact of the change in accounting for employee stock options when assessing the trend in overhead and overall earnings over periods that include the transition year of 2006.

In addition, banks are encouraged to prepare a profit plan and budget that addresses the current year and the next operating year. Because all banks that award stock options in 2006 and beyond must recognize compensation cost based on the grant date fair value of the options (and certain banks must do so for pre-2006 awards that vest in 2006 and beyond), examiners should ensure that such banks have adjusted their budgeting process so that projections of "salaries and employee benefits" conform to the requirements of FAS 123(R).

Table 7

Effect of Compensation Cost of NSOs on Regulatory Capital

	Equity Capital Prior to Recording Entries Related to Stock Compensation Cost	Entries Related to Stock Option Compensation Cost	Equity Capital After Recording Entries Related to Stock Compensation Cost
Common stock (no par value)	$10,000,000		$10,000,000
Additional paid-in capital (surplus)		$61,200	61,200
Retained earnings	7,000,000	(61,200)[a] 24,480[b]	6,963,280
Accumulated other comprehensive income	(1,000,000)		(1,000,000)
Total equity capital	$16,000,000	$24,480	$16,024,480

[a] Compensation cost
[b] Deferred tax expense

[17] See the Glossary entry for "Accounting Changes" on page A-1 of the Call Report instructions.

Although the accounting for stock options under FAS 123(R) results in the recognition of compensation cost that reduces earnings, there is generally a corresponding credit to equity capital (additional paid-in capital) on a bank's balance sheet. Furthermore, for NSOs, after recording the tax effects of the compensation cost, the overall effect of these entries, in most cases, is an increase in the bank's Tier 1 capital.[18] This favorable regulatory capital outcome for NSOs can be illustrated by showing the effects of Bank A's compensation cost and deferred tax journal entries for 2006 (from earlier in this article) on the equity capital section of Bank A's balance sheet (see Table 7).

Finally, when reviewing financial statements submitted by a bank's borrowers, examiners should be aware that these borrowers must also apply the fair-value-based accounting requirements of FAS 123(R) to stock options and other share-based payment arrangements with employees beginning, in general, in 2006. As mentioned above, the compensation cost of these arrangements is a noncash expense and therefore has no effect on the borrowers' cash flow.

Robert Storch
FDIC Chief Accountant, Washington, DC

[18] Tier 1 capital would not increase if a valuation allowance had to be established for the entire deferred tax asset associated with the stock options under FAS 109 or if the incremental increase in the bank's net deferred tax assets was disallowed under the banking agencies' regulatory capital limit on deferred tax assets.

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) or Financial Institution Letter (FIL) designations are included so the reader may obtain more information.

Subject	Summary
Amended Regulations Reflecting Merger of the Bank Insurance Fund and Savings Association Insurance Fund (FIL-36-2006, April 27, 2006; and *Federal Register*, Vol. 71, No. 77, p. 20524, April 21, 2006)	The Federal Deposit Insurance Corporation (FDIC) merged the Bank Insurance Fund (BIF) and the Savings Association Insurance Fund (SAIF) to form the Deposit Insurance Fund (DIF), effective March 31, 2006. This action was pursuant to the provisions in the Federal Deposit Insurance Reform Act of 2005. The FDIC has amended its regulations to reflect the merger.
Updated Compliance (FIL-34-2006, April 19, 2006) and Community Reinvestment Act (FIL-33-2006, April 10, 2006) Examination Procedures	The FDIC issued revised compliance examination procedures that incorporate banker feedback and results of internal reviews. Additionally, the FDIC, the Board of Governors of the Federal Reserve System (Federal Reserve Board), and the Office of the Comptroller of the Currency (OCC) issued new interagency Community Reinvestment Act (CRA) examination procedures for intermediate small banks and revised the existing CRA examination procedures for small institutions, large institutions, wholesale and limited purpose institutions, and institutions under a strategic plan. The CRA examination procedures reflect the significant changes to the CRA regulations that took effect on September 1, 2005.
Comments Requested on Ways to Enhance the Accuracy and Integrity of Information Furnished to Consumer Reporting Agencies (PR 32-2006, March 22, 2006; FIL-31-2006, April 7, 2006; and *Federal Register*, Vol. 71, No. 55, p. 14419, March 22, 2006)	The FDIC, the Federal Reserve Board, the OCC, the Office of Thrift Supervision (OTS), the National Credit Union Administration (NCUA) (collectively, the Federal financial institution regulatory agencies), and the Federal Trade Commission jointly published an Advance Notice of Proposed Rulemaking (ANPR). The ANPR invites comment for the purpose of developing guidelines and rules to enhance the accuracy and integrity of information furnished to consumer reporting agencies, pursuant to Section 312 of the Fair and Accurate Credit Transactions (FACT) Act. Comments were due by May 22, 2006.
Interagency Advisory on Influenza Pandemic Preparedness (FIL-25-2006, March 15, 2006)	The FDIC, the Federal Reserve Board, the OCC, and the OTS (collectively, the Federal banking agencies) issued an advisory to financial institutions and their technology service providers. The advisory is intended to raise awareness of the threat of a pandemic influenza outbreak and its potential impact on the delivery of critical financial services. It also advises recipients to consider this and similar threats in their event response and contingency strategies.
Final Rules on Changes in Deposit Insurance Coverage (PR-29-2006, March 14, 2006; FIL-27-2006, March 28, 2006; and *Federal Register*, Vol. 71, No. 56, p. 14629, March 23, 2006)	The FDIC adopted interim final rules to implement provisions of the Federal Deposit Insurance Reform Act of 2005 pertaining to deposit insurance coverage. The rules raise the deposit insurance coverage on certain retirement accounts to $250,000 from $100,000. The basic insurance coverage for other deposit accounts remains at $100,000. The rules took effect on April 1, 2006.
Interagency Guidance on the Community Reinvestment Act (PR-23-2006, March 2, 2006; FIL-23-2006, March 10, 2006; and *Federal Register*, Vol. 71, No. 47, p. 12424, March 10, 2006)	The FDIC, the Federal Reserve Board, and the OCC published informal staff guidance on community reinvestment in the form of questions and answers. The agencies developed these interagency questions and answers to address several significant revisions to the CRA regulations that took effect on September 1, 2005.
Revised Fair Credit Reporting Act Examination Procedures (FIL-18-2006, February 22, 2006)	The Federal Financial Institution Examinations Council (FFIEC) Task Force on Consumer Compliance approved Fair Credit Reporting Act (FCRA) examination procedures for use in risk-focused compliance examinations. The procedures, which became effective on February 22, 2006, incorporate the new requirements created by the FACT Act.

Subject	Summary
Joint Final Rule on Capital Standards for Securities Borrowing Transactions (FIL-17-2006, February 22, 2006; and *Federal Register*, Vol. 71, No. 35, p. 8932, February 22, 2006)	The FDIC, the Federal Reserve Board, and the OCC issued a joint final rule clarifying the capital treatment for securities borrowing transactions for banks and bank holding companies that are subject to the Market Risk Capital, Rule 12, CFR Part 325, Appendix C. The final rule took effect on February 22, 2006.
Guidance on Hurricane-Related Benefit Fraud (FIL-15-2006, February 14, 2006)	The FDIC provided guidance issued by the Financial Crimes and Enforcement Network (FinCEN) regarding benefit fraud related to the recent hurricanes. The guidance includes possible signs of fraudulent activity to assist financial institutions in identifying hurricane-related benefit fraud. FinCEN also requested that specific words be used in the narrative portion of all Suspicious Activity Reports (SARs) filed in connection with hurricane-related fraud.
Final Guidance Regarding Unsafe and Unsound Use of Limitation of Liability Provisions in External Audit Engagement Letters (PR-11-2006, February 3, 2006; FIL-13-2006, February 9, 2006; and *Federal Register*, Vol. 71, No. 27, p. 6847, February 9, 2006)	The Federal financial institution regulatory agencies issued the final interagency advisory on the unsafe and unsound use of limitation of liability provisions in external audit engagement letters. These provisions may weaken an external auditor's objectivity, impartiality, and performance, and thus reduce the regulatory agencies' ability to rely on the external audit. The final advisory applies to all audits of financial institutions, regardless of the size of the institution, whether the institution is public or not, and whether the audits are required or voluntary.
Interagency Examination Guidance for Institutions Affected by Hurricane Katrina (FIL-12-2006, February 3, 2006)	The Federal financial institution regulatory agencies and the state supervisory authorities in Alabama, Louisiana, and Mississippi jointly issued examiner guidance outlining the supervisory practices to be followed in assessing the financial condition of institutions affected by Hurricane Katrina. The guidance notes that when considering any supervisory response, examiners will give appropriate recognition to the extent to which weaknesses are caused by external problems related to the hurricane and its aftermath.
Guidance on Sharing Suspicious Activity Reports with Controlling Companies (FIL-5-2006, January 20, 2006)	The FinCEN and the Federal financial institution regulatory agencies issued guidance to notify institutions when a SAR can be shared with a holding company or other controlling company, or with the head office of a U.S. branch or agency of a foreign bank. Institutions may share a SAR to discharge their oversight responsibilities with respect to enterprise-wide risk management and compliance with applicable laws and regulations.
Comments Requested on Proposed Guidance on Commercial Real Estate Lending (FIL-4-2006, January 13, 2006; *Federal Register*, Vol. 71, No. 9, p. 2302, January 13, 2006; and PR-27-2006, March 9, 2006)	The Federal banking agencies sought comment on guidance relating to sound risk management practices for concentrations in commercial real estate (CRE) lending. The proposed guidance reinforces existing guidelines for real estate lending and provides criteria for identifying institutions with CRE loan concentrations that may warrant greater supervisory scrutiny. The comment period was extended to April 13, 2006.
Comments Requested on Reducing Regulatory Burden in Rules on Prompt Corrective Action and the Disclosure and Reporting of CRA-Related Agreements (FIL-3-2006, January 11, 2006; and *Federal Register*, Vol. 71, No. 2, p. 287, January 4, 2006)	The Federal banking agencies asked for recommendations on how to reduce regulatory burden on insured institutions in rules relating to Prompt Corrective Action and the Disclosure and Reporting of Community Reinvestment Act-Related Agreements. This request is part of the agencies' effort to identify and eliminate regulatory requirements that are outdated, unnecessary, or unduly burdensome pursuant to the Economic Growth and Regulatory Paperwork Reduction Act of 1996. Comments were due by April 4, 2006.

Regulatory and Supervisory Roundup

continued from pg. 47

Subject	Summary
Guidance to Help Financial Institutions Affected by Wildfires (FIL-130-2005, December 30, 2005)	The FDIC issued supervisory practices intended to facilitate the rebuilding process in areas in Oklahoma and Texas damaged by wildfires.
Comments Requested on Interagency Guidance on Nontraditional Mortgage Products (PR-128-2005, December 20, 2005; FIL-129-2005, December 29, 2005; and *Federal Register*, Vol. 70, No. 249, p. 77249, December 29, 2005)	The Federal financial institution regulatory agencies proposed guidance addressing the potential for heightened risk levels associated with nontraditional mortgage lending and the importance of carefully mitigating those risk exposures. The comment period was extended to March 29, 2006.
Final Rules on Section 312 of the USA Patriot Act (FIL-128-2005, December 28, 2005; and *Federal Register*, Vol. 71, No. 2, p. 496, January 4, 2006)	The FinCEN announced the final regulation implementing the due diligence requirements for the international correspondent banking and the private banking provisions of Section 312 of the USA PATRIOT Act. For new accounts opened by U.S. financial institutions, the final rules were extended to July 5, 2006, and for existing accounts, the rules will be effective October 2, 2006. (See FIL-35-2006, April 24, 2006.) Concurrently, FinCEN released a further notice of proposed rulemaking regarding due diligence procedures for correspondent accounts maintained for certain foreign banks.
Guidance on Filing Notices of Proposed Class Action Settlements (FIL-126-2005, December 21, 2005)	The FDIC issued guidance on new requirements for filing notices of proposed class action settlements involving financial institutions for which the FDIC is the primary Federal regulator.
Guide to Help Financial Institutions Comply with Information Security Guidelines (PR-127-2005, December 14, 2005)	The Federal banking agencies issued a compliance guide to accompany the *Interagency Guidelines Establishing Information Security Standards* (Security Guidelines). This guide summarizes the obligations of financial institutions to protect customer information and shows how certain provisions of the Security Guidelines apply to specific situations.
Final Rule on Medical Information (PR-114-2005, November 17, 2005; FIL-121-2005, December 8, 2005; *Federal Register*, Vol. 70, No. 224, p. 70663)	The Federal financial institution regulatory agencies issued final rules relating to the FACT Act. Section 411 of the FACT Act prohibits creditors from obtaining and using medical information in determining credit eligibility, except as permitted by the financial institution regulatory agencies. Through the final rules, the agencies developed exceptions that will allow creditors to obtain and use medical information in appropriate circumstances. The rules took effect on April 1, 2006.
Amendments to Annual Independent Audits and Reporting Requirements (FIL-119-2005, November 28, 2005; and *Federal Register*, Vol. 70, No. 227, p. 71226, November 28, 2005)	The FDIC amended Part 363 of its regulations by raising the asset-size threshold from $500 million to $1 billion for internal control assessments by management and external auditors. For institutions in this asset range, only a majority of the members of the audit committee (who must be outside directors) must be independent of management. The final rule was effective December 28, 2005.
Revised Trust Examination Manual Available (FIL-118-2005, November 23, 2005)	The FDIC made available its updated *Trust Examination Manual* at www.fdic.gov/regulations/examinations/trustmanual/index.html. The manual also may be purchased in a CD-ROM format.

Subject	Summary
Final Rules on Post-Employment Restrictions for Senior Examiners (PR-115-2005; and *Federal Register*, Vol. 70, No. 221, p. 69633, November 17, 2005)	The Federal banking agencies issued final rules to implement a special post-employment restriction on certain senior examiners. Under the final rules, if an examiner serves as the senior examiner for a depository institution or depository institution holding company for more than 2 months during the last 12 months of employment with an agency or Federal Reserve Bank, the examiner may not knowingly accept compensation as an employee, officer, director, or consultant from that institution. The restriction applies for one year after the examiner leaves the employment of the agency or Reserve Bank. The final rules were effective December 17, 2005.
Comments Requested on Proposal to Modernize Large-Bank Deposit Insurance Determinations (PR-122-2005, December 6, 2005; FIL-2-2006, January 10, 2006; and *Federal Register*, Vol. 70, No. 238, p. 73652, December 13, 2005)	The FDIC sought comment on whether the largest insured depository institutions should be required to modify their deposit systems so that the FDIC may calculate deposit insurance coverage quickly in the event of a failure of one of these institutions. For purposes of the Advance Notice of Proposed Rulemaking, a large institution is one that holds more than 250,000 deposit accounts and $2 billion in domestic deposits. Comments were due by March 13, 2006.
Comments Requested on Proposed Revisions to Statement of Policy on the National Historic Preservation Act of 1966 (FIL-112-2005, November 15, 2005; and *Federal Register*, Vol. 70, No. 200, p. 60523, October 18, 2005)	The FDIC proposed to revise its Statement of Policy (SOP) on the National Historic Preservation Act of 1966 (NHPA) to reflect the FDIC's experience and practices in applying the current SOP and statutory changes to the NHPA and its implementing regulations. The proposed SOP would continue to be relevant to applications for deposit insurance for de novo institutions, applications to establish domestic branches, and applications to relocate domestic branches or main offices. Comments were due by December 19, 2005.
Comments Requested on Proposed Rulemaking on Interstate Banking Federal Interest Rate Authority (FIL-109-2005, November 11, 2005)	The FDIC published a proposed rulemaking to clarify which state laws apply to branches of out-of-state state-chartered banks, and the interest rates state-chartered banks may charge. Comments were due by December 13, 2005.

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