

On March 29, 2005 representatives of the Mellon Bank met with representatives of the Federal Reserve System to discuss their concerns with the pillar 1 treatment of operational risk capital under the proposed Basel II capital accord. Officials from the Mellon bank repeated the views and analysis in their comment letters on the previous Basel II ANPR and in the publication that they funded “The Risk of Operational Risk-Based Capital: Why Cost and Competitive Implications Made Basel II’s Requirement III-Advised in the United States”, Financial Guardian Group, February 2005.

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THE RISK OF OPERATIONAL RISK-BASED CAPITAL:

Why Cost and Competitive Implications Make
Basel II's Requirement Ill-Advised in the
United States

Financial Guardian Group

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The operational risk sections of Basel II are so technical that policy-makers can easily miss their major, adverse impact. With a potential U.S. cost of \$67 billion, the new capital requirement is all burden and no benefit. Indeed, it creates a perverse incentive against effective disaster preparedness – key on 9/11 – because essential resources will be diverted from critical infrastructure protection to capital compliance. Because the regulatory capital charge is sharply different from the amount of capital the market thinks right to buttress operational risk, banks subject to it will also experience serious adverse consequences. Competitive issues abound — in fact, one analyst has called Basel II the new “weapon of choice” in bank M&A. This could lead to undue industry concentration, with negative systemic risk and customer service impact. The solution? Better bank regulatory safety-and-soundness standards – backed by strong enforcement at home and abroad.

KEY POINTS

- Regulatory capital is a key driver of business decisions, especially regarding who acquires whom and what lines of business banks enter into or exit. The sweeping rewrite of regulatory capital known as Basel II is already driving M&A and other critical strategic-planning decisions in the EU because the rules there are imminent. They will have the same observable impact in the U.S. when the rulemaking process draws closer to conclusion.
- It is critical to get Basel II right. Market distortions resulting from the new rule cannot easily be undone. If artificial regulatory capital incentives drive banks out of key business lines, customer service damage will not quickly be reversed because it will take considerable time for banks to re-enter the line after regulators reverse their capital rule. Even worse, banks that merge because of artificial regulatory capital incentives – not genuine market forces – cannot be resurrected after regulators right the capital wrong. Thus, the banking system could suffer permanent damage unless the Basel II framework is carefully implemented.
- Differences between regulatory capital and economic capital (the amount of capital market forces dictate for risk) drive these competitiveness factors. The new operational risk-based capital charge in Basel II is dramatically different from the effective economic capital decisions evident in the market. It will thus be a major driving force for specialized banks that will see a sharp increase in regulatory capital because of this new charge.
- Specialized banks are active in business lines like asset management, custody and payment processing. Non-banks are major competitors in these businesses, and the fact that this new regulatory capital charge doesn't cover them will give them a major advantage over banks. Diversified banks, for which this charge is less significant, could also become major acquirers of specialized banks. Consolidation creates numerous risks, not the least of which are potential conflicts of interest.
- A recent Federal Reserve staff study mistakenly concludes that the operational risk-based capital (ORBC) charge may not have a competitive impact. The study does indicate that measuring ORBC is very difficult and that the actual Basel II impact is an “open question.” Its assessment that non-banks hold economic capital for operational risk is based on inference and does not reflect the major problems measuring risk which has been separately acknowledged by the Federal Reserve when assessing bank readiness for the capital proposal. The study also fails to account for the substantial burden associated with a bank charter, arguing that lower bank capital ratios are solely the result of the “federal safety net.” If this were true, most non-banks would be banks.

- U.S. banks have been global leaders in their business lines, but the new operational risk-based capital charge puts them at a major disadvantage because of the way Basel II will be implemented in the U.S. A capital charge for “legal risk” has serious adverse competitive impact, as does the fact that U.S. regulators will strictly enforce the new rules even as offshore ones may not.
- The new operational risk-based capital charge also creates perverse incentives against effective contingency planning and disaster preparedness because resources are finite and increased capital requirements decrease the availability of funds for these critical, and generally even more important, needs.
- The right solution? Operational risk clearly should be addressed in the safety-and-soundness pillar of the Basel Accord, eliminating the proposed new regulatory capital charge unless or until the regulatory capital charge is proved to be well aligned with economic capital allocation. Additional disclosures can also protect the market from operational risk and ensure that regulators have more information about it.

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I. The Basel Framework

The Basel Accord is an international agreement governing the capital adequacy of banks operating globally. The Switzerland-based Bank for International Settlements (BIS) first established these international capital standards, generally referred to as “Basel I,” in 1988. Due to certain inadequacies in the first Accord, namely that it did not accurately reflect the diverse risks taken by banks, the BIS’s Basel Committee in 1998 decided to undertake a comprehensive rewrite. The new Basel Capital Accord, “Basel II,” uses a new three-Pillar architecture to achieve this goal. It includes:

- Pillar 1: minimum regulatory capital requirements;
- Pillar 2: enhanced supervisory review of an institution's capital adequacy and internal assessment process; and
- Pillar 3: market discipline through public disclosure of various financial and risk indicators.

Last summer, the Basel Committee released the final version of this new framework which is to be used as a blueprint for implementation in individual countries.¹ The framework significantly revises the capital requirements for various risks, potentially increasing or decreasing them significantly for individual institutions. The Basel Committee, however, has calibrated the overall Basel II framework in hopes of keeping the current 8% risk-based capital (RBC) ratio in place for the banking industry as a whole. For the first time, the Basel RBC standards will apply not only to banks, but also to bank parent companies. In addition, the new rules will, for the first time, impose regulatory capital charges for operational risk (Basel I only covers credit and market risk). Interestingly, Basel II continues to count interest-rate risk under Pillar 2 rather than impose a capital charge, even though it is far easier to measure than operational risk. As shown in the U.S. S&L disaster as well as in the isolated failure of a number of banks, interest-rate risk – in sharp contrast to operational risk – is a proven cause of major banking crises.

Under Basel II, institutions are allowed three approaches to assessing credit risk and three for assessing operational risk. However, the Accord is only a framework, and national supervisors may diverge from it, in some cases significantly. For example, the U.S. regulators (the Federal Reserve Board, the Office of the Comptroller of the Currency, the Office of Thrift Supervision, and the Federal Deposit Insurance Corporation) are only allowing institutions to use the most advanced approaches to operational and credit risk.

¹ *International Convergence of Capital Measurement and Capital Standards: a Revised Framework*, Bank for International Settlements, Basel Committee, June 26, 2004.

Specific U.S. Concerns

The selective way the U.S. plans to apply the Accord,² along with the unique nature of the U.S. banking system, raise two fundamental issues exclusive to the U.S. Because of the cost and sophistication required to implement the most advanced approaches, U.S. regulators will only require a “core”³ group (approximately ten) of the largest and most complex depository institutions to comply with the new standards. All other banks and savings associations are given the option either to opt in to the new Accord or to remain in compliance with Basel I. An additional 10 to 30 institutions are expected to voluntarily comply with the new standards, while the remaining 9,000+ institutions are thought by regulators likely to stay under the Basel I framework.

This bifurcated capital regime creates numerous competitive disparities as Basel II institutions will see their capital reduced in lines of business in which they compete with smaller Basel I banks and savings associations. For example, Basel II banks will be required to hold a fraction of the capital that a Basel I bank does for assets like residential mortgages, a vital line of business for smaller institutions. Although the U.S. regulators have announced plans to modify the Basel I standards to alleviate some of these concerns, details of this effort are not yet available.

U.S. regulators, unlike EU and Japanese ones, also require banks to hold a minimum level of capital in addition to the requirements of Basel I. These requirements are expected to remain in place even after Basel II is implemented.⁴ This “leverage” requirement is a basic percentage of capital (5%) against all on-balance sheet assets regardless of risk. The U.S. also imposes an additional 10% risk-based capital requirement for banks to be classified as “well-capitalized.” Institutions that fail to meet either the leverage or RBC well-capitalized requirements become subject to a number of serious sanctions and restrictions. Although the new Accord may have the effect of generally lowering capital requirements internationally, the leverage and RBC “well-capitalized” standards could force U.S. institutions to hold considerably more capital than their international counterparts irrespective of what they might hold under Basel II.

This competitiveness problem, highlighted below, is exacerbated by the fact that U.S. banks – in sharp contrast to EU ones – compete every day against firms outside the bank capital rules in key lines of business. Although the leverage and RBC well-capitalized standards served a purpose with Basel I and its much more cumbersome approach to assessing capital, these standards – particularly the 10% RBC one – should be readjusted to reflect the fact that some banks operating under the more risk-sensitive Basel II will, in fact, be very well capitalized even if they hold less capital. Federal Reserve Chairman

² *Risk-Based Capital Guidelines; Implementation of New Basel Capital Accord*, Office of the Comptroller of the Currency, Board of Governors of the Federal Reserve System, Federal Deposit Insurance Corporation, and Office of Thrift Supervision, August 4, 2003.

³ The U.S. regulators define “core” banks as those i) with total banking assets of \$250 billion or more or ii) total on-balance-sheet foreign exposure of \$10 billion or more.

⁴ *U.S. Implementation of Basel II Framework; Qualification Process – IRB and AMA*, Office of the Comptroller of the Currency, Board of Governors of the Federal Reserve System, Federal Deposit Insurance Corporation, and Office of Thrift Supervision, January 27, 2005.

Greenspan noted the problem of retaining the leverage standard at a hearing last year before the Senate Banking Committee. When asked by Sen. John Corzine (D-NJ) whether a leverage requirement undermines the goal of mirroring economic risk with regulatory capital, Chairman Greenspan agreed that a true risk-based capital system cannot coexist with a leverage one. He said that eventually a risk-based capital system would need to be fully implemented.⁵

The Operational Risk Based Capital Proposal

Under Basel II, operational risk (OR) is defined as:

“The risk of loss resulting from inadequate or failed internal processes, people and systems, or from external events. The definition includes legal risk, which is the risk of loss resulting from failure to comply with laws as well as prudent ethical standards and contractual obligations. It also includes the exposure to litigation from all aspects of an institution’s activities. The definition does not include strategic or reputational risks.”⁶

This approach raises many questions – the first of which is how a regulatory capital charge can be assigned to a type of risk for which even the definition is complex, subjective, and controversial. Many in the industry believe that OR definitional and measurement techniques are not yet developed enough to support a set capital charge for OR. For example, one industry expert recently noted, “It’s absolutely true that we are still in the infancy of understanding everything about operational risk.”⁷ Even the BIS’s own Risk Management Group and Committee on the Global Financial System contends that OR cannot be defined or accurately measured and that attempts to do so have already distracted significant industry and supervisory resources from urgently needed improvements.⁸ The Group of Ten concurs, noting, “[T]he term ‘operating risk’ is a somewhat ambiguous concept that can have a number of definitions.... Operating risk is the least understood and least researched contributor to financial institution risk.”⁹ Finally, the ratings agency Standard & Poor’s also weighed in, noting that, “The lack of consistent industry-wide operational loss data represents a large obstacle to the

⁵ *An Examination of the Current Condition of the Banking and Credit Union Industry*, Senate Banking Committee, Testimony of Federal Reserve Board Chairman Alan Greenspan, April 20, 2004.

⁶ *Supervisory Guidance on Operational Risk Advanced Measurement Approaches for Regulatory Capital*, Office of the Comptroller of the Currency, Board of Governors of the Federal Reserve System, Federal Deposit Insurance Corporation, and Office of Thrift Supervision, July 2, 2003.

⁷ *For Basel Opt-Ins, It’s Time to Gather Data*, Damien Paletta, American Banker, January 21, 2005, quoting Charles Taylor, director of operational risk at the Risk Management Association.

⁸ *Credit Risk Transfer*, Committee on the Global Financial System, Bank for International Settlements, January 2003 and *Sound Practices for Management and Supervision of Operational Risk*, Basel Committee on Bank Supervision, Risk Management Group, February 2003.

⁹ *Report on Consolidation in the Financial Sector*, Group of Ten, January 2001.

development of a statistical methodology that could carry the analysis beyond the qualitative and enable regulators to measure and compare OR across banks.”¹⁰

Regardless of the criticism, the Basel Committee has gone forward and finalized its OR proposal. As noted above, the Committee offers three different approaches. The “basic indicator” and “standardized” approaches assign a simple charge for OR based on the gross income of the institution. These approaches will not be allowed in the U.S. due to warranted concerns over their validity. Instead, U.S. regulators will apply only the advanced measurement approach (AMA), which will require banks to develop highly complex and rigorously tested internal models to calculate the capital charge. Although significantly more sophisticated than the other two approaches, this one also has its problems, including its limited recognition of risk mitigation (e.g. contingency planning and insurance) and the reliability of its complex internal models.

Specific Problems

In addition to the general U.S. competitiveness issues on which this paper principally focuses, the OR proposal has been the subject of numerous serious methodological complaints and criticisms. Some of these concerns are outlined below.

It is very difficult, if not impossible, to quantify the risks posed by events such as rogue traders, terrorist attacks and natural disasters. How does one quantify the risk posed by a 9/11-type attack or a tsunami? As a result, many in the industry, as well as those in the supervisory community have questioned the Accord’s quantitative approach to OR. Specifically, the following concerns have been raised by the regional Federal Reserve Banks:

- The Federal Reserve Bank of Chicago filed a comment with the Basel Committee on a previous draft of the framework which makes clear the numerous problems with the proposed version of ORBC. It states, “Definitions of operational risk categories continue to evolve, and while some banks and organizations have begun collecting data, this process has not been systematized.”¹¹
- The Federal Reserve Bank of Richmond also filed a comment noting that OR can be, “[A] difficult risk to quantify and can be very subjective.”¹²
- The Federal Reserve Bank of San Francisco has argued, “[A] key component of risk management is measuring the size and scope of the firm’s risk exposures. As yet, however, there is no clearly established, single way to measure operational risk on a firm-wide basis.”¹³

¹⁰ *Basel II: No Turning Back for the Banking Industry*, Standard & Poor’s, Commentary and News, August 26, 2003.

¹¹ *Federal Reserve Bank of Chicago Response to BIS Capital Proposal*, Federal Reserve Bank of Chicago, May, 2001.

¹² *The New Basel Accord Second Consultative Package, January 2001*, Federal Reserve Bank of Richmond, May 30, 2001.

¹³ *FRBSF Economic Letter*, Federal Reserve Bank of San Francisco, January 25, 2002.

- The Foreign Exchange Committee, which is sponsored by the Federal Reserve Bank of New York, concludes that “[U]nlike credit and market risk, operational risk is very difficult to quantify.”¹⁴

These Federal Reserve Bank conclusions have been buttressed by academic research. A Cambridge University study determined that, “No data now exists for evaluation of operational risk events similar to Barings, Daiwa or LTCM. The possibility of effectively pooling such data across institutions seems unrealistic for many years to come and is statistically invalid without further research.”¹⁵ Furthermore, U.S. scholars have stated, “Private insurance and process regulation would be more effective than capital requirements for regulating operational risk.”¹⁶

In fact, the industry has historically managed operational risk through future margin income (FMI), pricing and reserves, as well as through insurance. In the case of legal risk, which is discussed further below, U.S. banks are required to establish significant reserves to offset potential penalties. Similarly, natural disasters or manmade ones, to the extent foreseeable, are offset with insurance – a proven form of risk mitigation as demonstrated in the Basel Committee’s Risk Management Group’s most recent operational risk loss data collection exercise.¹⁷ While insurance is partially recognized as a potential mitigant by Basel, pricing, reserves and FMI – which cover the overwhelming majority of operational losses – are not. Thus, the Accord fails to recognize that operational risk is already well handled through various techniques and without threat to solvency.

The Basel Committee and the U.S. regulators have acknowledged the point noted above for credit risk. Like operational risk, expected losses related to loans or investments are first addressed through reserves and, then, earnings. Credit risk is also often covered by credit risk mitigation, including guarantees. The final Basel II rules and the pending U.S. proposal will only require that credit risk capital be held for unexpected losses, allowing insurance, reserves, FMI and pricing to account for expected ones. This creates a serious inconsistency within the Basel rules – credit risk-based capital covers only unexpected loss, but the proposal mandates ORBC for both expected and unexpected losses despite the fact that expected losses are handled in the same fashion in both of these risk areas. Further, the Basel II framework’s advanced models make sense for credit risk unexpected loss; it is well understood through widely-accepted models based on clear measurement techniques. In sharp contrast, there are no universally accepted models for unexpected operational losses. As noted above, one industry expert recently commented that, “It’s absolutely true that we are still in the infancy of understanding everything about operational risk.”¹⁸ Further, the Federal Reserve itself has found wide discrepancies

¹⁴ *Management of Operational Risk in Foreign Exchange*, The Foreign Exchange Committee, March 2003.

¹⁵ *Operational Risk Capital Allocation and Integration of Risks*, The Judge Institute of Management, Cambridge University, Elena Medova, 2001.

¹⁶ *The Regulation of Operational Risk in Investment Management Companies*, Charles W. Calomiris and Richard J. Herring, Investment Company Institute – Perspective, September 2002.

¹⁷ *The 2002 Loss Data Collection Exercise for Operational Risk: Summary of Data Collected*, Bank for International Settlements, Basel Committee, March 2003.

¹⁸ *For Basel Opt-Ins, It’s Time to Gather Data*, Damien Paletta, American Banker, January 21, 2005.

among banks assembling the data needed to implement the Accord. For example, a senior Fed official recently admitted that few of the banks participating in the U.S. regulators' "loss data collection exercise"¹⁹ (a necessary premise for the ORBC rule) have the information Basel II will require.²⁰

Because Basel II includes legal risk in its definition of OR, U.S. institutions will be particularly hard hit. Banks operating in the United States generally face a far broader range of regulation outside the banking area than their foreign competitors. This includes laws regarding tort liability, discrimination, suitability and others that have no EU equivalent. Since the U.S. legal system poses the highest litigation risk of any G-10 country, U.S. banks will likely be required to set aside far more capital for OR than their foreign competitors. They will be forced to do this despite the fact that U.S. securities laws already require holding reserves for material legal risks and there is no evidence that these types of legal risks have adversely affected the safety and soundness of any U.S. bank. As Credit Suisse notes, "Firms with significant activities in the United States could be put at a competitive disadvantage due to the increased litigation risk resulting from the U.S. judicial system."²¹

As discussed in more detail below, the Basel rules in general, and the ORBC charge in particular, have significant economic impact. The revisions to the credit risk-based capital standards are, in broad terms, an appropriate and necessary cost because of the need to improve the relationship between regulatory and economic capital. To the degree that risky credits bear more regulatory capital, these costs are appropriate and offset by the reduction in capital for low-risk assets. However, the ORBC charge could cost U.S. depository institutions as much as \$67 billion without any positive benefit and with many negative implications.²²

The Pillar 1 ORBC charge would actually increase, not reduce, risk. There is no agreed-upon calculation for OR, especially catastrophic risk. The costly catastrophic risk charge would divert resources from proven forms of OR mitigation – contingency planning, redundancies, controls and procedures, insurance, etc. – that are accepted as the best ways of managing these risks. For example, Credit Suisse has noted:

"Operational risk is mainly driven by the quality of the control environment of a bank. Consequently, it is best dealt with not with equity capital but with effective corporate governance, adequate internal control structures, business continuity planning, audit compliance and other qualitative tools as well as with insurance."²³

¹⁹ *2004 Operational Risk Loss Data Collection Exercise*, Federal Financial Institutions Examination Council, October 2004.

²⁰ *For Basel Opt-Ins, It's Time to Gather Data*, Damien Paletta, *American Banker*, January 21, 2005.

²¹ *Basel II Implications for Banks and Banking Markets*, Credit Suisse Economic & Policy Consulting, July 29, 2003.

²² See Section III for a more detailed discussion.

²³ *ibid.*

This perverse incentive to choose capital has the potential to divert finite resources away from needed investment in risk management systems and infrastructure, which ultimately leaves the financial system less secure.

It is also very unlikely that the new capital rules can and will be applied uniformly across national borders. EU regulators are now hinting that their standards could be weaker than the Basel ones, raising additional potential risks. Even the U.S., which has the world's strongest and most robust levels of supervision, could face challenges implementing the Accord, and the ORBC charge in particular. For example, the FDIC and former Comptroller John Hawke have both expressed concern over FDIC and OCC ability to implement the Accord respectively noting, "Since operational risk has never been broken out as a specific capital charge, we're going to have to develop exam procedures and some standards as to what we would expect to see from a bank..."²⁴ and "The potential for evenhanded application around the Basel II countries is somewhat questionable."²⁵

Timeline

The Basel Committee intends its new framework to be implemented at year-end 2006.²⁶ However, the more complex advanced approaches will be delayed for an additional year. U.S. regulators initially pushed for the delay to ensure that the final U.S. rules can reflect any changes warranted by their studies of the Accord's impact. Banks using the advanced options will need to run them parallel with Basel I for one year and then apply floors on the amounts of capital that must be held. These floors are expressed as a percentage of the capital that would be required under Basel I. The following chart details how this will work:

	From year-end 2005	From year-end 2006	From year-end 2007	From year-end 2008
Less Advanced Approaches	Parallel Calculation	95% floor on capital reductions	90% floor	80% floor
Advanced approaches for credit and/or operational risk	Parallel calculation or impact studies	Parallel calculation	90% floor	80% floor

U.S. regulators are moving on a timetable different from other countries and are currently conducting an array of studies measuring the potential impact of Basel II. The agencies plan to release a notice of proposed rulemaking on U.S. implementation of the Accord in

²⁴ *In Focus: Three Years Early, Basel II's Effects Already Widespread*, Hannah Bergman, American Banker, December 20, 2004.

²⁵ *Sharp-Eyed Bankers Spot Error in Basel II Formula*, Damian Paletta, American Banker, January 7, 2005.

²⁶ The EU is pushing their start dates back one day to January 1, 2007 and January 1, 2008 rather than December 31, 2006 and December 31, 2007 to avoid extra costs for banks whose financial years end on December 31.

June 2005, with release of a final rule planned for June 2006. Proposed domestic capital revisions for non-Basel II banks are also expected to be offered and finalized around the same times. The agencies now plan to have Basel rules in place by January 1, 2007, which is consistent with the Basel schedule, but the ANPR notes that this could change if comments or data warrant further delay.

II. Why Regulatory Capital Matters

As Basel II has become more controversial, especially in the face of criticism at U.S. Congressional hearings, some advocates of the revised RBC standards started to argue that regulatory capital mattered little to the competitiveness of banks or the pricing of the products they offer. These assertions were striking in light of all of the rhetoric from bank regulators at the start of the Basel rewrite. Then, regulators argued that the old rules needed to be reformed precisely because differences between regulatory and economic capital were creating areas of “arbitrage” – that is, banks were changing business plans to take advantage of areas where RBC was lower than economic capital requirements, exiting lines of business where RBC was too high. As the Bank for International Settlements has found, “[The influence of regulatory capital on competitiveness of banks] was in fact one of the key factors behind the international efforts to harmonize capital standards in the 1980s.”²⁷ Ending capital arbitrage was also key to the entire Basel II process, as the then-Chairman of the Basel Committee, former New York Federal Reserve Bank President William McDonough made clear when he said, “[T]he financial world has changed dramatically over the past dozen years, to the point that the Accord’s efficacy has eroded considerably. Its broad brush approach to differentiating credit risk encouraged banks to undertake regulatory arbitrage transactions.”²⁸

How Regulatory Capital Arbitrage Works

Capital – regulatory or economic – is of course not the sole criterion by which banks make M&A or product decisions. Other factors – local market demand, interest rates that drive funding and pricing decisions and liquidity, for example – are also major strategic drivers. However, at the end of all of these considerations, capital again comes to the fore. Morgan Stanley has noted that, “Needless to say, it’s a basic tenet of all business investment that capital should pursue the highest return.”²⁹ This means that, all things being equal, a bank will go into businesses where regulatory capital is lower than economic capital because this permits higher leverage and, therefore, greater profit.

On the flip side, Moody’s has observed that, “[H]olding excessive levels of capital will impair the financial performance of a bank and thereby impact upon its competitiveness.”³⁰ When regulatory capital is higher than economic capital, a bank will

²⁷ *Bank Capital Regulation in Contemporary Banking Theory: A Review of the Literature*, João A C Santos, Bank for International Settlements, Working Paper No 90, September 2000.

²⁸ *Update on the Major Initiative to Revise the 1998 Capital Accord*, William McDonough, Federal Reserve Bank of New York, June 19, 2000.

²⁹ *Basel 2: the Final Frontier*, Morgan Stanley Equity Research Europe, June 4, 2003.

³⁰ *Moody’s Analytical Framework for Operational Risk Management of Banks*, Moody’s Investors Service, January 2003.

exit that business because it cannot sustain desired return in the face of competitors who can hold less capital because the market accepts the economic capital allocation-decision as the appropriate offset to product risk.

Regulatory arbitrage has been a significant factor in U.S. and global financial markets since Basel I was finalized in 1988, making it clear that any differences between regulatory and economic capital left after Basel II will similarly restructure the markets. The Bank for International Settlements³¹ and a Federal Reserve staffer³² found that there were four main types of regulatory capital arbitrage after Basel I: “cherry picking,” securitization with partial recourse, remote origination and the use of indirect credit enhancements. They also noted the use of credit derivatives/synthetic securitizations and short-term lending, a finding confirmed by others. For example, one study recently noted that:

“For banks, an additional benefit is that securitization reduces the level of regulatory capital required... If existing risk-based capital rules require too much capital for low risk loans and too little capital for higher risk loans, we would expect to see the lower risk loans securitized and the higher risk loans retained in portfolio... Thus, our analysis supports the regulatory capital arbitrage explanation for asset securitization.”³³

A recent paper from another BIS group, the Joint Forum, also confirmed the importance of regulatory capital in business decisions when it concluded that, “The second motive for [credit risk transfer or CRT] activity is that regulatory capital requirements on credit risk are often above the economic capital the market requires to bear the risk. Banks cited reducing regulatory capital as a motive for their participation in CRT markets....”³⁴

As the BIS and Federal Reserve staff papers also noted, banks can reduce their regulatory capital requirements merely by originating and holding credit risk positions on their trading books, again an increasingly significant market phenomenon with sweeping impact on the relative competitiveness of commercial versus investment banks.

A quick example here points to the critical importance of getting regulatory capital right. Following the adoption of Basel I, commercial paper backup revolvers with a 365 day or greater term became almost prohibitively expensive, because the Basel I capital rules require that capital be held against such facilities. Conversely, pricing became ultra-competitive for facilities with a term of less than one year, since Basel I did not require capital for such structures. Of course, unlike lines of business like asset management,

³¹ *Capital Requirements and Bank Behavior: Impact of the Basle Accord*, Bank for International Settlements, Basel Committee, April 1999.

³² *Emerging Problems with the Basel Capital Accord: Regulatory Capital Arbitrage and Related Issues*, David Jones, *Journal of Banking and Finance* 24, 2000.

³³ *Does Regulatory Capital Arbitrage or Asymmetric Information Drive Securitization?* Brent W. Ambrose, Michael LaCour-Little, and Anthony B. Sanders, November 18, 2003.

³⁴ *Credit Risk Transfer*, Bank for International Settlements, The Joint Forum, October 2004.

unregulated, non-banking institutions do not compete in this market. As a result, unrestrained by the need to conform pricing to levels set by unregulated competitors, pricing for revolvers stabilized at levels determined by the regulatory capital requirement of the banking industry providers. It is unclear what the effect of the capital regime would have been if banks were competing with non-banks at the time. This uncertainty makes it imperative that Basel II is correct before it is implemented. Once banks are driven out of a business line, they are generally loath to return because of all the start-up costs and the negative earnings they'll experience during the ramp-up stage. Thus, the financial market will be dramatically affected for years to come by the regulatory arbitrage options permitted under Basel II, and no change will likely be greater than that of specialized banks competing with non-bank providers.

Does Basel Mean Bigger?

Consistent with assertions that regulatory capital doesn't determine product decisions – incorrect, as demonstrated above – some Basel II advocates have also argued that the new rules will have no impact on merger-and-acquisition (M&A) activity. This assertion is also incorrect. And, it's an even more risky assertion that regulatory capital doesn't affect line-of-business decisions. As noted, once a bank exits a line of business because of RBC anomalies, it may be years before banks re-enter the business, if they choose to do so at all. However, once a bank franchise is gone, it's gone for good. Thus, any errors in bank RBC that result in consolidation or banks' business line purchases by non-banks mean that the banking system will stay as restructured, even if major policy objectives are jeopardized by this consolidation.

Because regulatory capital drives profit expectations, it is also a key determinant of which banks win or lose in those business lines. When banks hold more regulatory capital because, as will be the case with smaller ones remaining under Basel I in the U.S., their ability to compete against the biggest banks winning large credit risk regulatory capital reductions under Basel II is seriously affected. Similarly, diversified banks – the biggest of the big – can afford to engage in a line of business with unduly high RBC because this cost can be cross-subsidized by drops in RBC in other business lines. A specialized bank, in contrast, cannot offset the impact of inappropriately high RBC, making it difficult to continue as a free-standing franchise. A recent Federal Reserve study has suggested that it may be appropriate for specialized banks to hold higher ORBC than diversified ones based on the view that such institutions carry higher operational risk.³⁵ However, specialized banks in fact devote massive resources to controlling operational risk because doing so is essential to their business. As larger, focused banks, they can and do invest heavily in operational risk controls. It is critical to remember that – in sharp contrast to credit risk – operational risk is not taken to enhance profit; controlling it is instead the key for specialized banks. It is for this reason that the largest cases of recent operational risk cited in the Federal Reserve paper are, in fact, at diversified banks, not specialized ones.

³⁵ *The Potential Impact of Explicit Basel II Operational Risk Capital Charges on the Competitive Environment of Processing Banks in the United States*, Scott Chu, Patrick de Fontnouvelle, Victoria Garrity, and Eric Rosengren, Federal Reserve Bank of Boston, January 12, 2005.

Consolidation in the U.S. banking system is hard to dispute when it is the result of natural market forces like improved technology that create economies of scale. However, it is quite another thing when consolidation results from –or worse – is even driven by, artificial regulatory action. In 2002, an analyst predicted that, “As a result of Basel II... consolidation in the banking industry will accelerate from the pace it has followed for the past 20 years. From 1980 to 2000, the top 10 firms doubled their market share from 20 percent to 40 percent. We believe that in the next five years, the top 10 firms will again double their market share, this time to 80 percent.”³⁶

This consolidation creates potentially serious systemic risk, since the failure of one large bank could suddenly throw financial markets into disarray and create a huge drain on the federal deposit insurance system. A fundamental axiom of portfolio theory is that diversification reduces risk, and it thus follows that the more banks there are in the United States, the less potential systemic risk. To the degree that aspects of Basel II promote consolidation, therefore, the RBC system will have the unintended consequence of increasing risk – not reducing it as hoped.

Consolidation in the U.S. banking system could also have adverse implications for industry customers. The U.S. has long had thousands of small banks and savings associations, in sharp contrast to the European Union, Canada and Japan. These areas, along with most others outside the United States, have banking systems dominated by as few as five giant banks. As a result, these banking systems consistently lag the U.S. in innovation, especially in developing products and services aimed at average consumers, in particular, those previously underserved by traditional commercial banks. Local economic needs are also far less well served in countries with a few nationwide banks than in the United States, where small banks in rural areas are often the bulwark of regional economic development. When banks consolidate and exit local markets, unregulated entities – finance companies, for example – often enter with potentially adverse consequences on the quality and cost of credit.

As noted, Basel II gives diversified banks an edge in lines of business on which regulatory capital is set too high in relation to economic capital. As a result, these big banks could well swallow up specialized ones. The likelihood of this will be magnified as larger banks approach the 10% deposit cap limit³⁷ and must go outside their retail and commercial operations in search of growth in other areas. This will not only increase the size of the nation’s biggest banks, exacerbating the systemic risk and customer service problem noted above, but will also lead to potentially serious conflicts of interest that adversely affect bank customers. Banks active in securities underwriting, for example, may have an incentive to persuade asset-management customers to purchase certain equity issues – a hazard not run when a bank specializes solely in client asset management and, as a result, can make truly objective judgments about appropriate investments. Many recent cases of operational risk in the financial industry have demonstrated the potency of potential conflicts in diversified institutions and the

³⁶ *Financial Services Sector Braces for Basel II*, Andy Efstathiou, CIO Magazine, July 2002.

³⁷ 12 U.S.C. § 1831u.

difficulty regulators and law enforcement authorities have in containing them. These conflicts also create legal and reputational risk for the institutions involved. Again, Basel II could thus actually increase risk, not reduce it, to the degree that unduly high RBC promotes concentration and consolidation.

The U.S. Basel II rules remain a work in progress, making their M&A impact somewhat speculative. As a result, it is not yet a meaningful factor in the marketplace. However, these M&A phenomena have already been observed in the European Union, where Basel II is now set for implementation on January 1, 2007. In looking at one recent major M&A transaction, an investment bank concluded:

“Basel II can be a strategic weapon: SCH's proposed takeover of Abbey provides the first hint. . . . This means that for a period of time, capital adequacy has the potential to be a new battleground for competition far more than it has been in the past – the weapon of choice is the efficiency of capital. Banks that find they require less capital under Basel II to maintain ratios at the norm will satisfy investors by either redeploying the capital to higher RWAs or by giving the capital back to shareholders (in both instances driving down the capital ratios). Banks that find they need more capital to maintain a normal level can either raise capital or reduce RWAs (in both instances driving up capital ratios). . . . Put this in the context of continuing bank consolidation, and Basel II starts to look like a catalyst for increased M&A activity.”³⁸

Confirming this, one analyst recently noted that, “Basel II is likely to give significant skews in probable capital release. . . . This is likely to contribute to increased mergers and acquisition activity as more sophisticated banks take the opportunity to acquire less advanced competitors. . . . Indeed, we expect regulatory capital synergies to emerge alongside cost and cross-sell synergies in the M&A story”³⁹

The M&A impact observed so far in the EU is not confined to institutions as a whole. Line-of-business impact is also evident, with big banks able to acquire Basel II-favored lines of business from smaller ones not able to achieve all of the capital benefits in Basel's advanced models. For example, the *Financial Times* reports:

“The secretive world of private banking for the super-rich will be one of the winners from the proposed Basel II rules on capital adequacy, according to Pierre Mathé, head of Société Générale's private banking division. Mr. Mathé predicted the accounting change in 2006 would trigger a

³⁸ *Q-Series®: Basel II – New Capital Guidelines*, UBS Investment Research, August 2004.

³⁹ *Basle II Prompts Strategic Rethinks*, Thomas Garside and Christian Pederson, Euromoney, December 2002.

new round of consolidation in the fragmented private banking market, which provides discrete wealth management services and advice to the seriously well-off whose assets are worth at least €1m. He expected more deals to be done in a sector where the 10 biggest companies account for only 10 percent of the market. There are already signs of smaller private banks in Germany and Switzerland being snapped up by larger groups, such as UBS and Deutsche Bank, which both completed takeovers last month. Mr. Mathé said merger activity is being driven by the rising costs of investing in new computer systems, needed to satisfy increasingly picky customers and demanding regulators, which are forcing smaller banks to consider selling out. ‘The consolidation movement is already under way. This is due to several reasons, one of which is that smaller private banks are being squeezed as their costs rise faster than their revenues.’⁴⁰

One Federal Reserve study has attempted to refute these M&A implications.⁴¹ However, that study had numerous flaws. Indeed, the study itself notes that, “Results of the two tests are, with a few exceptions, statistically insignificant, and, in cases where results are statistically significant, quantitative magnitudes are small.” Further, the last study on which the Federal Reserve relied for its findings was based on pre-2002 data – well before the height of the recent bank M&A activity and with no consideration of the two-track capital standards proposed under Basel II in the U.S. The capital regime analyzed in the Federal Reserve study – the one still in place – has consistent RBC for all banks and savings associations regardless of size and/or business strategy, thus making reliance on it for conclusions about capital impact under Basel II highly questionable if not altogether unacceptable.

⁴⁰ *Rules Aid Bankers to Super-rich*, Martin Arnold, Financial Times, January 2, 2005.

⁴¹ *Will the Proposed Application of Basel II in the United States Encourage Increased Bank Merger Activity? Evidence from Past Merger Activity*, Timothy H. Hannan and Steven J. Pilloff, Finance and Economics Discussion Series, Federal Reserve Board, February 2004.

III. Costly Nature of the ORBC Requirement

As demonstrated above, regulatory capital has profound market impact when it differs from economic capital allocations dictated by market forces. Even small differences can provide a competitive edge in business lines where profit is often measured in basis points. However, the high cost of regulatory capital differences is also a major driver of overall market impact, a driver recently recognized by the Office of the Comptroller of the Currency. It noted that, “At the OCC, we have made a preliminary determination that this rulemaking will be a ‘significant regulatory action’ for purposes of Executive Order 12866.” This means that – rightly – the Office of Management and Budget (OMB) must review the formal Basel proposal to determine if its costs are absolutely necessary or if the rule’s goals can be accomplished in a more cost-effective, less-burdensome fashion.

The overall economic cost of the ORBC requirement increases still further when the cost of the capital requirement is translated into the larger economy. Insured depositories, of course, leverage capital into lending and related activities. The high cost of the ORBC requirement discussed in detail below will reduce the amount of lending that banks undertake, adversely affecting individual and corporate customers through reduced credit availability and/or higher funding costs.

The ORBC charge should come in for particularly careful review as Basel II’s economic impact is considered. As discussed in detail above, the Pillar 1 ORBC charge is highly problematic because of difficulties associated with measuring OR and the perverse incentives that will result from an arbitrary regulatory capital charge. ORBC’s prohibitive and unnecessary cost also argues for quick action to eliminate its arbitrary capital requirement and instead, to address OR and any necessary regulatory capital through the increased supervision section of the Accord’s Pillar 2.

Academics have concluded that, “the ORBC charge could cost U.S. banks \$50 - 60 billion without any positive benefit and with many negative implications.”⁴²

Our calculations confirm the very high cost of the ORBC charge. We assume that, as expected, the top twenty-five U.S. banks will either be required to come under the Basel II rules or will opt into them. These banks currently hold \$517 billion in regulatory capital.⁴³ The Basel Committee has estimated that a Pillar 1 ORBC charge could add approximately 13% in regulatory capital.⁴⁴ Based on this, the current ORBC proposal would cost U.S. banks approximately \$67 billion. Given the proposed retention of the leverage and well-capitalized test – as well as the limits on recognizing ANPR benefits –

⁴² *Sizing Operational Risk and the Effect of Insurance: Implications for the Basel II Capital Accord*, Andrew Kuritzkes and Hal Scott, June 18, 2002. This determination assumes: Total Risk Weighted Assets (RWA) for the U.S. banking system are approximately \$5.9 trillion. The total regulatory capital requirement is fixed at 8% of RWA. The proposed 12% calibration would imply \$56 billion of regulatory capital for operational risk.

⁴³ Third quarter, 2004 data. See www.ffiec.gov.

⁴⁴ *Third Quantitative Impact Survey of the New Basel Accord*, Bank for International Settlements, Basel Committee, October 1, 2002.

any offsetting credit RBC reductions are, at best, hypothetical over time and most unlikely at the outset of the new rules.

The high cost of the ORBC requirement comes atop the considerable one associated with Basel II implementation. EDS estimates the total implementation cost for Basel II will exceed \$11 billion by the end of 2005.⁴⁵ For the credit risk portion alone, the Financial Services Authority estimates that the UK banking industry will need to spend several hundred million pounds on just information technology systems.⁴⁶ Broken down by individual institution, consulting firms Mercer, Oliver, Wyman and Accenture both believe costs could run as high as \$200 million per bank.⁴⁷ These costs will be particularly significant for banks using the advanced models – the only ones, of course, permitted in the United States.

⁴⁵ *Impact of the New Basel Accord*, Christoph Sidler and Gabriel David, EDS, January 2003.

⁴⁶ *Banks face heavy IT bill over Basel II*, Deborah Hargreaves, Financial Times, January 27, 2005.

⁴⁷ *Basle II Prompts Strategic Rethinks*, Thomas Garside and Christian Pederson, Euromoney, December 2002; and *Basel II Requires a Billion Rand*, Acumen, January, 2003.

IV. Adverse Competitive Implications of the ORBC Charge

We have demonstrated above that regulatory capital differences from economic capital allocation can have significant market impact. We have also noted that a Pillar 1 ORBC charge will be very costly – at least \$50 billion, and \$67 billion by our estimation. Arguably, all of this still would not matter if all competitors were subject to the Pillar 1 ORBC charge, and thus, all were impacted equally. However, as shall be demonstrated below, players exempt from the ORBC charge are major factors in key lines of business hard-hit by the ORBC charge. Thus, the regulatory capital arbitrage effect noted above is a serious problem, with potentially adverse implications for customer service, market structure and effective financial regulation. As one investment bank has concluded, “Regulated banks that must comply with capital requirements are... placed at a competitive disadvantage within the financial services market.”⁴⁸

A recent Federal Reserve study attempts to refute assertions that the ORBC charge will have an adverse impact on specialized banks. However, many data limitations and other methodological problems lead the study’s authors to acknowledge that their conclusions are “narrative,” not “empirical.” The study also cautions that:

“...[T]he effect of Basel II implementation on actual capital held is still an open question. The practice of economic capital allocation is not universal, the market may not always require banks to hold sufficient economic capital and an increase in minimum regulatory capital may lower a bank’s excess regulatory capital buffer below the level desired by bank management.”⁴⁹

We shall address specific assertions in the Federal Reserve study below, but here we point to the study’s suggestion that, “although our analysis of capital ratios *suggests* that U.S. processing banks are most likely to be able to accommodate the new charge for operational risk without increasing total actual capital levels, the analysis is not definitive.”⁵⁰ Given this and since, as we have asserted, it is difficult – if not impossible – to resurrect failed banks should regulatory capital prove a competitive problem, then caution – that is, a Pillar 2 approach – is essential for operational risk.

Major Role of Non-Bank Competitors

⁴⁸ *Basel II Implications for Banks and Banking Markets*, Credit Suisse Economic & Policy Consulting, July 29, 2003.

⁴⁹ p.32 *The Potential Impact of Explicit Basel II Operational Risk Capital Charges on the Competitive Environment of Processing Banks in the United States*, Scott Chu, Patrick de Fontnouvelle, Victoria Garrity, and Eric Rosengren. January 12, 2005.

⁵⁰ p.v. *ibid.*

As noted, the ORBC charge will have its most dramatic impact on lines of business on which specialized banks focus, as these banks cannot offset the cost of the ORBC charge with any of the credit RBC reductions which diversified banks anticipate. *The Economist* confirmed this when it found that, “Specialized banks will be among the main losers under the new Accord due to the OR element.”⁵¹ Because they also often emphasize businesses in which non-banks are major participants, specialized banks cannot insulate themselves as well as those institutions can from the ORBC charge. An example:

“Consider . . . a bank that runs a virtually risk-free tracker fund through a fund management subsidiary. It would have to incur an operational risk charge, although its competitors in the non-bank sector would not have to do so and would not do so because the operational risk involved in running such a fund is very small. Such a levy would distort the level playing field of banks vs. other non-regulated financial institutions and create incentives for consolidation in the banking sector as well as non-bank spin offs of many bank activities.”⁵²

In instances like these, it is likely that U.S. banks with “brokerage, custodial and asset management arms may well have to play on an unlevel playing field with non-bank competitors, banks outside the application of Basel II and, finally, banks in jurisdictions which may interpret the [AMA] differently.”⁵³ As a result, analysts have observed that, “With capital requirements increasing, non-bank competitors might move into the areas of asset management and custody.”⁵⁴

The Federal Reserve study cited above disputes these assertions, in part because it finds that non-banks in some key lines of business hold more capital than banks. However, the study does note that data on non-banks are inconsistent and, in some critical areas, non-existent. It also concludes, where it does find reliable data, that such higher capital ratios are evidence of higher operational capital at non-banks, buttressing claims that economic capital for operational risk can be quite high. However, the study cites no data on how much of the cited capital at non-banks is, in fact, held for operational risk. All of the institutions carry many other risks – market, liquidity and interest-rate risks importantly among them.

There is another serious difficulty comparing bank and non-bank capital ratios not addressed in the Federal Reserve study. Not only is non-bank equity held for many risks other than operations, but non-bank assets are also far from comparable. Most non-banks

⁵¹ *Deep Impact - Judging the Effects of New Rules on Bank Capital*, *The Economist*, May 8, 2003.

⁵² *An Academic Response to Basel II*, Jon Danielsson, Paul Embrechts, Charles Goodhart, Con Keating, Felix Muennich, Olivier Renault and Hyun Song Shin, London School of Economics: Financial Markets Group, May 2001.

⁵³ *The New Rules of the Game: Implications of the New Basel Capital Accord for the European Banking Industries*, Mercer Oliver Wyman, June 2003.

⁵⁴ *Basel II: Implications for the Financial Services Industry*, John Drzik, Presentation at the Institute of International Finance Basel Sessions, June 17, 2003.

that focus on processing have very few assets – after all, the investments they hold in asset management or mutual funds are owned by others and the funds they process similarly are not their own. Investors take many of the risks related to these assets, including operational ones. Thus, both sides of the capital ratio at non-banks make comparison quite difficult to banks, including processing ones.

Finally, as noted, these institutions are not banks and, therefore, are not covered by all of the bank supervisory standards and ongoing examinations that give investors comfort when dealing with banks. The Federal Reserve study suggests that processing banks are allowed by the market to operate at lower equity/assets ratios than non-banks because of the safety net spread below them. It is, as discussed, far from clear that the ratios at non-banks are, in fact, high with regard to operational risk. However, even if they were, the safety net that the Fed posits leads to this disparity is not a simple, unconditional grant from the U.S. Treasury. It is accompanied by high costs – national bank assessments, on-site examiners, detailed rules for doing business, and many other terms and conditions. If the safety net were as attractive and cost-free as suggested by the Fed, then one would be hard-pressed to understand why any entity would elect a non-bank charter.

In key lines of business, we find the following regarding the role of non-bank competitors:

- 37 of the top 50 asset managers are non-banks;
- 7 of the top 10 defined contribution plan service providers are non-banks;
- 9 of the top 10 401(k) plan administrators are non-banks;
- 9 of the top 10 employee benefit consultants are non-banks;
- 5 of the top 10 wealth managers are non-banks; and
- 4 of the top 9 transfer agents are – yet again – non-banks.⁵⁵

Virtually all of these competitors have no regulatory capital requirements. Also, their assets are, as discussed above, quite different and than those held by banks. Broker-dealers (major competitors in the wealth and asset management business cited above) are subject to SEC net-capital rules, but these are very different from the banking rules and do not impose anything like an ORBC requirement. Further, the broker-dealer standards have been substantially reduced for the biggest investment banks – major players in all the lines of business noted above – in a rule enacted in 2004 by the Securities and Exchange Commission.⁵⁶ This rule creates “supervised investment bank holding companies” and “consolidated supervised entities.” Arguably, these firms are subject to Basel II, and thus, to the ORBC requirement. However, there are major differences between the SEC’s rules and those contemplated by the U.S. banking agencies. Importantly, there will be no leverage requirement, nor any threshold determining who is “well capitalized” on the RBC front – firms under the SEC regime need meet only the “adequate” capital thresholds applicable in the EU. They may also use the less advanced Basel II options – not allowed for big U.S. banks – making the ORBC charge easier to

⁵⁵ See Annex A.

⁵⁶ 17 C.F.R. Part 200 and Part 240.

calculate (if even less aligned with actual risk than the advanced approach). These options ensure that the SEC approach will be less onerous for those large competitors subject to it.

Some have argued that the need for all major players in specialized business lines to maintain high credit ratings obviates the competitive implications noted above. However, the ratings agencies generally do not concur with this finding. For example, Standard & Poor's has noted that, "This [regulatory capital difference] provides an opportunity for trading-oriented financial groups, and particularly U.S. brokers who will be subject to Basel II-compatible rules imposed by the SEC, to operate with higher capital leverage, or to return capital to shareholders in the form of higher dividends or share buybacks." S&P goes on to say that it isn't sure how this will affect market activities, but that any changes in such factors as leverage or dividends could have sweeping impact.⁵⁷

Similarly, Fitch has told the Federal Reserve, "If (and it is not clear that this will be the case) Basel II creates binding capital requirements on operational risk activities (i.e., banks having to hold more capital for conducting the same activities than before), this could theoretically result in some business (particularly some asset/wealth management activities) flowing to less regulated non-bank entities."⁵⁸

The Basel Committee's own sponsor has also found that the OR rule could have potentially serious adverse competitive consequences for banks versus non-banks due to the differences between the regulatory and economic capital allocations for OR. In a recent study, it concluded, "It is possible that the introduction of minimum regulatory capital requirements may have harmed the competitiveness of the banking industry. If capital standards require a bank to maintain an equity position in excess of what it would hold voluntarily, or in response to market pressure, then these standards constitute an external constraint on a bank's operations. In theory, any kind of external interference with the activities of a business firm could harm its short-run profitability or growth and possibly undercut its long-run viability."⁵⁹

Will Banks De-Bank?

Given the competitive implications noted above, some U.S. specialized banks may be forced to "de-bank" – that is, to terminate their bank charters and take advantage of their many other options under U.S. law. These generally are not available to non-U.S. banks, but they also won't be significant because the EU, for example, plans to apply Basel II to all financial services firms regardless of whether they choose to operate as banks or bank holding companies. Thus, the bank/non-bank competitive implications noted above are for the most part solely a U.S. concern.

⁵⁷ *Evolution Not Revolution for Banks*, Standard & Poor's, RatingsDirect, October, 2004.

⁵⁸ Federal Reserve Bank of Boston Meeting with Fitch Ratings, July 15, 2004.

⁵⁹ *Capital Requirements and Bank Behavior: The Impact of the Basle Accord*, Patricia Jackson, Bank for International Settlements, April 1999.

Could specialized banks do what they do without being banks? The large number of major non-bank competitors makes clear that this is in fact a real strategic option. Would such banks have to give up payments-system access (critical to some business lines)? Absolutely not. Again, U.S. law is unusual: limited-purpose banks have payments-system access without coming under bank rules at the parent company level. Arguably, this creates and expands systemic risk – the Federal Reserve has long sought to bring limited-purpose banks like industrial loan companies under full banking regulation because of this fear. If Basel II drives some large specialized banks to exit the bank regulatory framework and take advantage of these loopholes, the Fed’s worries could well be put to the test.

Banks Versus Banks

Another major concern for specialized banks is that, under the U.S. Basel proposal, some banks will come under Basel II and others won’t. As noted, only “core” U.S. banks – the biggest and most internationally active – need come under the Basel II advanced approaches if the U.S. regulators’ proposal is implemented. Again, the U.S. approach is unique: all other major Basel II nations are applying the new capital rules and the less advanced approaches to all banks, regardless of size.

Thus, specialized banks under Basel II will find themselves competing against smaller U.S. banks outside the new rules, exempt from the new capital requirement on OR. Mid-sized banks that could choose to come under Basel II, and thus under a regulatory capital regime better aligned with economic capital for credit risk, may choose to opt in precisely because this exemption gives them a major strategic advantage in the lines of business discussed above – asset management, wealth management, etc. – with the cost of the ORBC requirement offset by big drops in credit RBC. Regulators believe that market pressure will force these mid-sized banks to opt in to Basel II, but this has yet to be proven, and is, in fact, questionable.

Further, mid-sized banks with credit risk portfolios that would experience big regulatory capital hikes – major holdings of equities or subprime loans, for example – could well stay outside Basel II. Such banks could prove formidable competitors to many specialized banks forced under Basel II or electing to opt in to it.

As noted, this “bifurcated” approach is strikingly different than that adopted in the EU and other nations, where all banks must come under Basel II, and with choices provided between the easier standardized, and more complex advanced options. In nations where all banks come under Basel II, competitive consequences within the industry ensue only because of the different Basel options selected. Since this is within a bank’s control, the competitive consequences are similarly of its choosing, and thus of less policy concern. Further, to the degree that the advanced models better align regulatory and economic capital for credit risk, any competitive problems for banks choosing the simpler models may create incentives for them to quickly transition to the more sophisticated options.

There is considerable evidence to support assertions that Basel II will have substantial competitive impact on banks that fall within it in contrast to those outside it. Two former Federal Reserve staff members have recently concluded in an extensive study of Basel II's impact on mortgage lending in the U.S. that smaller banks outside Basel II could suffer serious competitive harm because of the big drops proposed for low-risk mortgages under Basel II.⁶⁰ They note, for example, that, "Some of the business currently done by [Basel II] non-adoptors will be shifted to the adoptors as a result of the regulatory capital advantage."

Foreign vs. U.S. Banks

Another major competitiveness concern is the adverse impact Basel II may have on U.S. banks subject to the most stringent supervisory regime among all of the Basel II signatory nations. As former comptroller Hawke has noted, "This whole thing is enormously complicated. ... In Basel II, the potential for evenhanded application around the Basel II countries is somewhat questionable."⁶¹

The final version of the Basel II Accord remains weak on a meaningful Pillar 2 approach to OR. Thus, it will not encourage supervisors in all participating nations to improve their standards and – where necessary – back them with effective enforcement. In sharp contrast, U.S. banks that fail the arbitrary leverage and well-capitalized tests or the new RBC ones face many serious regulatory and market sanctions. As a result, U.S. banks now hold far more regulatory capital than foreign counterparts, and they would continue to do so under Basel II.

This capital difference puts U.S. banks at a competitive disadvantage because, as discussed above, regulatory capital is a key determinant of pricing and profitability. When the capital standards are credible, higher capital can be offset in the market because counterparties believe the bank is of lower risk and, therefore, a desirable provider of various services. However, a non-credible capital charge – the Pillar 1 ORBC requirement, for example – cannot be offset in the market because counterparties derive no benefit from it and, in addition, multiple providers are available outside the banking system with no ORBC requirements. Therefore, U.S. banks will face serious problems competing against foreign institutions as well as non-banks under a Pillar 1 regime. Again, this is not an appropriate outcome for a policy whose basis remains unproven.

Another major competitiveness concern is the fact that the Basel II ORBC charge will, as noted above, include a calculation for "legal risk." This is, as discussed, a particularly vexatious issue in the U.S. because of our unique framework of tort liability, laws against discrimination and similar statutes. For better or worse, Congress has imposed these standards and Presidents over the years have signed them into law to achieve an array of social policy objectives. A regulatory capital charge should not make these, often very costly, requirements even more burdensome, especially given the fact that this charge

⁶⁰ *Potential Competitive Impacts of Basel II's Treatment of Residential Mortgages*, Paul Calem and James Follain, Presented at the AREUEA Meetings in Philadelphia, PA, January 7, 2005.

⁶¹ *Sharp-Eyed Bankers Spot Error in Basel II Formula*, Damian Paletta, American Banker, January 7, 2005.

provides no offsetting safety-and-soundness benefit. In fact, as discussed, the ORBC charge undermines bank safety-and-soundness because of all of its perverse incentives, even as it creates a serious international competitiveness concern.

The significant disparity between U.S. action and that in many other nations when capital thresholds are missed means that the U.S. must take particular care with new Pillar 1 capital standards here. Our unique and credible enforcement regime should be focused solely on regulatory capital standards that make sense, not the proposed ORBC charge. Pillar 2 treatment ensures appropriate U.S. supervisory flexibility to address individual bank problems without creating an arbitrary threshold standard to which U.S. banks will be held, even as foreign supervisors permit wide variation from the Basel framework.

Annexes

Annex A

BUSINESS LINE RANKINGS OF BANKS AND NONBANKS

Note: All banks are shaded and in bold.

Top Institutional Asset Managers*

1	State Street Global
2	Barclays Global
3	Fidelity Investments
4	Mellon Financial
5	Deutsche Asset Management
6	AIG Global
7	Wellington Management
8	Northern Trust Global
9	Vanguard Group
10	PIMCO
11	J.P. Morgan/Banc One
12	TIAA-CREF
13	Blackrock
14	Citigroup Asset Management
15	Alliance Capital Management
16	Prudential Financial
17	Merrill Lynch
18	Goldman Sachs Asset Management
19	UBS Global Asset Management
20	Credit Suisse Asset Management
21	Legg Mason
22	Bank of America
23	Federated Investors
24	Morgan Stanley Investment Managers
25	GE Asset Management
26	Evergreen Investments
27	Capital Guardian
28	General Motors Asset Management
29	INVESCO
30	American Express
31	Capital Research
32	New York Life Investment Management

33	ING
34	Schroder Investment
35	BNP Paribas
36	MetLife
37	T. Rowe Price
38	Franklin Templeton
39	Janus Capital Group
40	Principal Global Investors
41	Henderson Global Investors
42	F&C Management
43	Dodge & Cox
44	HSBC Asset Management
45	Putnam Investments
46	David L. Babson
47	MassMutual Financial
48	TCW Group
49	CIGNA Retirement
50	Russell Investment Group

*Source: *Pensions & Investments*, May 31, 2004

Top Wealth Managers*

1	Merrill Lynch
2	Smith Barney
3	UBS Wealth Management
4	Wachovia Corporation
5	Charles Schwab
6	Private Bank at Bank of America
7	Fidelity Investments
8	JP Morgan Private Bank
9	Northern Trust
10	Goldman Sachs

* Source: *Barron's*, October 18, 2004

Largest Employee Benefit Consultants*

1	Mercer Human Resource Consulting
2	Watson Wyatt Worldwide
3	Aon Consulting Worldwide
4	Towers Perrin
5	Pricewaterhouse Coopers

6	Deloitte & Touche USA LLP
7	Hewitt Associates
8	Mellon's HR & Investment Solutions
9	Ernst & Young LLP
10	The Segal Company

* Source: *Business Insurance*, May 31, 2004

Largest 401(k) Plan Administrators*

1	Hewitt Associates
2	BISYS Retirement Services
3	Mellon's HR & Investment Solutions
4	Great-West Retirement Services
5	Ceridian Retirement Plan Services
6	Paychex, Inc.
7	The 401(k) Company
8	AccuRecord, Inc.
9	Milliman Inc.
10	ADP Retirement Services

* Source: *Business Insurance*, August 30, 2004

Largest Defined Contribution Plan Service Providers*

1	Fidelity Investments
2	TIAA-CREF
3	Hewitt Associates
4	CitiStreet
5	Vanguard Group
6	Merrill Lynch Retirement
7	Mellon's HR & Investment Solutions
8	ING
9	Nationwide Financial
10	T. Rowe Price

* Source: *Pensions & Investments*, November 29, 2004

Major Transfer Agents*

American Stock Transfer & Trust
Bank of New York
Computershare
Equiserve
Mellon Investor Services

National City Bank
Registrar & Transfer
Wachovia Shareholder Services
Wells Fargo Shareholder Services

* Source: Group Five, Inc.

Annex B

PROPOSED PILLAR 2 FOR OPERATIONAL RISK-BASED CAPITAL

The following proposed Pillar 2 for operational risk is adapted from the Basel Committee's "Sound Practices for the Management and Supervision of Operational Risk" and also draws heavily on the Federal Reserve's SR 99-18. The FGG believes it outlines a comprehensive framework for effective measurement, management and mitigation of operational risk based on allocation of appropriate economic capital against it. Thus, this approach ensures a comparable framework for banks and their supervisors without the numerous hazards resulting from a Pillar 1 ORBC requirement.

As discussed in detail in the accompanying comment letter, the FGG believes U.S. regulators have ample ability to ensure supervisory guidance without resort to the crude capital charge on which some foreign supervisors feel they must rely. Numerous instances in which the regulators have mandated significant sanctions – up to and including closure – in cases of violations of prudential rules make this clear.

PROPOSED PILLAR 2

I. Background

While the exact approach for effective operational risk management chosen by an individual bank will depend on a range of factors, including its size, sophistication and the nature and complexity of its activities, clear strategies and oversight by the board of directors and senior management, a strong operational risk and internal control culture (including, among other things, clear lines of responsibility and segregation of duties), effective internal reporting, and contingency planning are all crucial elements of an effective operational risk management framework for banks of any size and scope.

Deregulation and globalization of financial services, together with the growing sophistication of financial technology, are making the activities of banks and thus their risk profiles more complex. Greater use of automation has the potential to transform risks from manual processing errors to system failure risks, as greater reliance is placed on globally integrated systems. Further, growth of ecommerce brings with it potential risks (e.g., internal and external fraud and system security issues). Large-scale acquisitions, mergers, de-mergers and consolidations test the viability of new or newly integrated systems, while the emergence of banks as large-volume service providers creates the need for continual maintenance of high-grade internal controls and back-up systems. Banks may engage in risk mitigation techniques (e.g., collateral, credit derivatives, netting arrangements, and asset securitizations) to optimize their exposure to market risk and credit risk, but these techniques may in turn produce other forms of risk. Finally, growing use of outsourcing arrangements and the participation in clearing and settlement systems can mitigate some risks but can also present significant other risks to banks.

II. Operational Risk

In sum, all of these types of risk are operational risk, which the agencies define as the risk of loss from inadequate or failed internal processes, people and systems or from external events.

Operational risk includes:

- Internal fraud. For example, intentional misreporting of positions, employee theft, and insider trading on an employee's own account.
- External fraud. For example, robbery, forgery, check kiting, and damage from computer hacking.
- Clients, products and business practices. For example, fiduciary breaches, misuse of confidential customer information, improper trading activities on the bank's account, money laundering, and sale of unauthorized products.
- Damage to physical assets. For example, vandalism, earthquakes, fires and floods.
- Business disruption and system failures. For example, hardware and software failures, telecommunication problems, and utility outages.
- Execution, delivery and process management. For example, data entry errors, collateral management failures, incomplete legal documentation, unapproved access given to client accounts, non-client counterparty non-performance, and vendor disputes.

Operational risk exists in the natural course of corporate activity. However, failure to properly manage operational risk can result in a misstatement of an institution's risk profile and expose the institution to significant losses. In some business lines with minimal credit or market risk (e.g., asset management, and payment and settlement), the decision to incur operational risk, or compete based on the ability to manage and effectively price this risk, is an integral part of a bank's risk/reward calculus.

III. Keys to Effective Operational Risk Management and Mitigation

1. Role of the Board of Directors

The board or a designated committee is responsible for monitoring and oversight of a bank's risk management functions, and should approve and periodically review the operational risk management framework prepared by the bank's management. The framework should provide a firm-wide definition of operational risk and establish the principles of how operational risk is to be identified, assessed, monitored, and controlled/mitigated.

The board of directors should approve the implementation of a firm-wide framework to explicitly manage operational risk as a distinct risk to the bank's safety and soundness. The board should provide senior management with clear guidance and direction regarding the principles underlying the framework, be responsible for reviewing and

approving a management structure capable of implementing the bank's operational risk management framework, and should approve the corresponding policies developed by senior management.

2. Internal Audit

The board (either directly or indirectly through its audit committee) should ensure that the scope and frequency of the internal audit program focused on operational risk is appropriately risk focused.

Audits should periodically validate that the firm's operational risk management framework is being implemented effectively across the firm. The board, or the audit committee, should ensure that the internal audit program is able to carry out these functions independently, free of management directive.

To the extent that the audit function is involved in oversight of the operational risk management framework, the board should ensure that the independence of the audit function is maintained. This independence may be compromised if the audit function is directly involved in the operational risk management process. The audit function may provide valuable input to those responsible for operational risk management, but should not itself have direct operational risk management responsibilities. Some banks may involve the internal audit function in developing an operational risk management program as internal audit functions generally have broad risk management skills and knowledge of the bank's systems and operations. Where this is the case, banks should see that responsibility for day-to-day operational risk management is transferred elsewhere in a timely manner.

3. Role of Senior Management

Senior management must ensure that the board-approved operational risk framework is implemented at all levels of the organization and that all levels of staff understand their responsibilities with respect to operational risk management. Senior management should also have responsibility for developing policies, processes, and procedures for managing operational risk in all of the bank's material products, activities, processes, and systems.

Management should translate the operational risk management framework approved by the board of directors into specific policies, processes, and procedures that can be implemented and verified within the different business units. While each level of management is responsible for the appropriateness and effectiveness of policies, processes, procedures, and controls within its purview, senior management should clearly assign authority, responsibility, and reporting relationships to encourage and maintain this accountability, and ensure that the necessary resources are available to manage operational risk effectively. Moreover, senior management should assess the appropriateness of the management oversight process in light of the risks inherent in a business unit's policy.

Senior management should ensure that bank activities are conducted by qualified staff with necessary experience, independence, technical capabilities and access to resources to carry out their duties. Management should ensure that the bank's operational risk management policy has been clearly communicated to staff at all levels in units that incur material operational risks.

Senior management should ensure that the operational risk management framework is integrated with efforts to manage credit, market, and other risks. Failure to do so could result in significant gaps or overlaps in a bank's overall risk management program.

Particular attention should be given to the quality of documentation controls and to transaction handling practices. Policies, processes, and procedures related to advanced technologies supporting high transactions volumes, in particular, should be well documented and disseminated to all relevant personnel.

4. Operational Risk Identification

Banks should identify and assess the operational risk inherent in all material products, activities, processes, and systems. Banks should also ensure that, before new products, activities, processes, and systems are introduced or undertaken, the operational risk inherent in them is identified.

Risk identification is paramount for the subsequent development of a viable operational risk monitoring and control system. Effective risk identification considers both internal factors (such as the bank's structure, the nature of the bank's activities, the quality of the bank's human resources, organizational changes, and employee turnover) and external factors (such as changes in the industry and technological advances) that could adversely affect the achievement of the bank's objectives.

In addition to identifying the most potentially adverse risks, banks should assess their vulnerability to these risks. Effective risk assessment allows the bank to better understand its risk profile and most effectively target risk management resources.

Amongst the possible tools used by banks for identifying and assessing operational risk are:

- Self or Risk Assessment: a bank assesses its operations and activities against a menu of potential operational risk vulnerabilities. This process is internally driven and often incorporates checklists and/or workshops to identify the strengths and weaknesses of the operational risk environment. Scorecards, for example, provide a means of translating qualitative assessments into quantitative metrics that give a relative ranking of different types of operational risk exposures. Some scores may relate to risks unique to a specific business line while others may rank risks that cut across business lines. Scores may address inherent risks, as well as the controls to mitigate them. In addition, scorecards may be used by banks to allocate economic capital to business lines in relation to performance in managing and controlling various aspects of operational risk.

- Risk Mapping: in this process, various business units, organizational functions or process flows are mapped by risk type. This exercise can reveal areas of weakness and help prioritize subsequent management action.
- Risk Indicators: risk indicators are statistics and/or metrics, often financial, which can provide insight into a bank's risk position. These indicators tend to be reviewed on a periodic basis (such as monthly or quarterly) to alert banks to changes that may be indicative of risk concerns. Such indicators may include the number of failed trades, staff turnover rates and the frequency and/or severity of errors and omissions.
- Measurement: some firms have begun to quantify their exposure to operational risk using a variety of approaches. For example, data on a bank's historical loss experience could provide meaningful information for assessing the bank's exposure to operational risk and developing a policy to mitigate/control the risk. An effective way of making good use of this information is to establish a framework for systematically tracking and recording the frequency, severity and other relevant information on individual loss events.

5. Risk Monitoring

Banks should implement a process to regularly monitor operational risk profiles and material exposures to losses. There should be regular reporting of pertinent information to senior management and the board of directors that supports the proactive management of operational risk.

An effective monitoring process is essential for adequately managing operational risk. Regular monitoring activities can offer the advantage of quickly detecting and correcting deficiencies in the policies, processes, and procedures for managing operational risk. Promptly detecting and addressing these deficiencies can substantially reduce the potential frequency and/or severity of a loss event.

In addition to monitoring operational loss events, banks should identify appropriate indicators that may provide early warning of an increased risk of future losses. Such indicators (often referred to as key risk indicators or early warning indicators) should be forward-looking and could reflect potential sources of operational risk such as rapid growth, the introduction of new products, employee turnover, transaction breaks, and system downtime, among others. When thresholds are directly linked to these indicators an effective monitoring process can help identify key material risks in a transparent manner and enable the bank to act upon these risks appropriately.

The frequency of monitoring should reflect the risks involved and the frequency and nature of changes in the operating environment. Monitoring should be an integrated part of a bank's activities. The results of these monitoring activities should be included in regular management reports, as should compliance reviews performed by the internal audit and/or risk management functions. Reports generated by (and/or for) supervisory authorities may also be useful in this monitoring and should likewise be reported internally to senior management, where appropriate.

Senior management should receive regular reports from appropriate areas such as business units, group functions, the operational risk management office and internal audit.

The operational risk reports should contain internal financial, operational, and compliance data that are relevant to decision making. Reports should be distributed to appropriate levels of management and to areas of the bank on which areas of concern may have an impact. Reports should fully reflect any identified problem areas and should motivate timely corrective action on outstanding issues. To ensure the usefulness and reliability of these risk and audit reports, management should regularly verify the timeliness, accuracy, and relevance of reporting systems and internal controls in general. Management may also use reports prepared by external sources (auditors, supervisors) to assess the usefulness and reliability of internal reports. Reports should be analyzed with a view to improving existing risk management performance as well as developing new risk management policies, procedures, and practices.

In general, the board of directors should receive sufficient higher-level information to enable them to understand the bank's overall operational risk profile and focus on the material and strategic implications for the business.

6. Operational Risk Mitigation

Banks should have policies, processes, and procedures to control and/or mitigate material operational risks. Banks should periodically review their risk limitation and control strategies and should adjust their operational risk profile accordingly using appropriate strategies, in light of their overall risk appetite and profile.

Control activities are designed to address the operational risks that a bank has identified. For all material operational risks that have been identified, the bank should decide whether to use appropriate procedures to control and/or mitigate the risks, or bear the risks. For those risks that cannot be controlled, the bank should decide whether to accept these risks, reduce the level of business activity involved, or withdraw from this activity completely. Control processes and procedures should be established and banks should have a system in place for ensuring compliance with a documented set of internal policies concerning the risk management system. Principal elements of this could include, for example:

- top-level reviews of the bank's progress towards the stated objectives;
- auditing for compliance with management controls;
- policies, processes, and procedures concerning the review, treatment and resolution of noncompliance issues; and
- a system of documented approvals and authorizations to ensure accountability to an appropriate level of management.

Although a framework of formal, written policies and procedures is critical, it needs to be reinforced through a strong control culture that promotes sound risk management practices. Both the board of directors and senior management are responsible for establishing a strong internal control culture in which control activities are an integral part of the regular activities of a bank. Controls that are an integral part of the regular activities enable quick responses to changing conditions and avoid unnecessary costs.

An effective internal control system also requires that there be appropriate segregation of duties and that personnel are not assigned responsibilities which may create a conflict of interest. Assigning such conflicting duties to individuals, or a team, may enable them to conceal losses, errors or inappropriate actions. Therefore, areas of potential conflicts of interest should be identified, minimized, and subject to careful independent monitoring and review.

In addition to segregation of duties, banks should ensure that other internal practices are in place as appropriate to control operational risk. Examples of these include:

- close monitoring of adherence to assigned risk limits or thresholds;
- maintaining safeguards for access to, and use of, bank assets and records;
- ensuring that staff have appropriate expertise and training;
- identifying business lines or products where returns appear to be out of line with reasonable expectations; and
- regular verification and reconciliation of transactions and accounts.

Operational risk can be more pronounced where banks engage in new activities or develop new products (particularly where these activities or products are not consistent with the bank's core business strategies), enter unfamiliar markets, and/or engage in businesses that are geographically distant from the head office. Moreover, in many such instances, firms do not ensure that the risk management control infrastructure keeps pace with the growth in the business activity. A number of the most sizeable and highest-profile losses in recent years have taken place where one or more of these conditions existed. Therefore, it is incumbent upon banks to ensure that special attention is paid to internal control activities where such conditions exist.

Some significant operational risks have low probabilities but potentially very large financial impact. Moreover, not all risk events can be controlled (e.g., natural disasters). Risk mitigation tools or programs can be used to reduce the exposure to, or frequency and/or severity of, such events. For example, insurance policies, particularly those with prompt and certain pay-out features, can be used to externalize the risk of "low frequency, high severity" losses which may occur as a result of events such as third-party claims resulting from errors and omissions, physical loss of securities, employee or third-party fraud, and natural disasters.

However, banks should view risk mitigation tools as complementary to, rather than a replacement for, thorough internal operational risk control. Having mechanisms in place to quickly recognize and rectify legitimate operational risk errors can greatly reduce

exposures. Careful consideration also needs to be given to the extent to which risk mitigation tools such as insurance truly reduce risk, or transfer the risk to another business sector or area, or even create a new risk (e.g. legal or counterparty risk).

Investments in appropriate processing technology and information technology security are also important for risk mitigation. However, banks should be aware that increased automation could transform high-frequency, low-severity losses into low-frequency, high-severity losses. The latter may be associated with loss or extended disruption of services caused by internal factors or by factors beyond the bank's immediate control (e.g., external events). Such problems may cause serious difficulties for banks and could jeopardize an institution's ability to conduct key business activities. As discussed below, banks should establish disaster recovery and business continuity plans that address this risk and comply fully with all agency rules, guidance and orders.

Banks should also establish policies for managing the risks associated with outsourcing activities, doing so in full compliance with all applicable agency rules, guidance, and orders. Outsourcing of activities can reduce the institution's risk profile by transferring activities to others with greater expertise and scale to manage the risks associated with specialized business activities. However, a bank's use of third parties does not diminish the responsibility of management to ensure that the third-party activity is conducted in a safe and sound manner and in compliance with applicable laws.

Outsourcing arrangements should be based on robust contracts and/or service level agreements that ensure a clear allocation of responsibilities between external service providers and the outsourcing bank. Furthermore, banks need to manage residual risks associated with outsourcing arrangements, including disruption of services.

Depending on the scale and nature of the activity, banks should understand the potential impact on their operations and their customers of any potential deficiencies in services provided by vendors and other third-party or intra-group service providers, including both operational breakdowns and the potential business failure or default of the external parties.

Management should ensure that the expectations and obligations of each party are clearly defined, understood and enforceable. The extent of the external party's liability and financial ability to compensate the bank for errors, negligence, and other operational failures should be explicitly considered as part of the risk assessment. Banks should carry out an initial due diligence test and monitor the activities of third party providers, especially those lacking experience of the banking industry's regulated environment, and review this process (including re-evaluations of due diligence) on a regular basis. The bank should pay particular attention to use of third-party vendors for critical activities.

In some instances, banks may decide to either retain a certain level of operational risk or self-insure against that risk. Where this is the case and the risk is material, the decision to retain or self-insure the risk should be transparent within the organization and should be consistent with the bank's overall business strategy and appetite for risk.

7. Contingency Planning

Senior management should ensure compliance with all applicable agency rules, guidance and orders regarding contingency planning. Banks should have in place contingency and business continuity plans to ensure their ability to operate on an ongoing basis and limit losses in the event of severe business disruption.

For reasons that may be beyond a bank's control, a severe event may result in the inability of the bank to fulfill some or all of its business obligations, particularly where the bank's physical, telecommunication, or information technology infrastructures have been damaged or made inaccessible. This can, in turn, result in significant financial losses to the bank, as well as broader disruptions to the financial system through channels such as the payments system. This potential requires that banks establish disaster recovery and business continuity plans that take into account different types of plausible scenarios to which the bank may be vulnerable, commensurate with the size and complexity of the bank's operations.

Banks should identify critical business processes, including those where there is dependence on external vendors or other third parties, for which rapid resumption of service would be most essential. For these processes, banks should identify alternative mechanisms for resuming service in the event of an outage. Particular attention should be paid to the ability to restore electronic or physical records that are necessary for business resumption, including the construction of appropriate backup facilities.

Banks should periodically review their disaster recovery and business continuity plans so that they are consistent with the bank's current operations and business strategies. Moreover, these plans should be tested periodically to ensure that the bank would be able to withstand high-severity risk.

IV. Allocation of Appropriate Economic Capital

To a large extent, a robust, diversified earnings stream is often the best protection against both expected and unexpected operational losses. While capital is important, it should only focus on unexpected loss. Expected losses should always be considered as an expense, and covered by revenue, earnings, or reserves. A banking organization's capital should reflect the perceived level of precision in the risk measures used, and the relative importance to the institution of the activities producing the risk. Capital adequacy should be assessed after evaluation of the sum total of an organization's activities, with appropriate adjustments made for risk correlations between activities and the benefit resulting from diversified lines of business that, in aggregate, reduce operational risk to the consolidated organization. Capital levels should also reflect that historical correlations among exposures can rapidly change.

Explicit goals for operational risk capitalization should be included in evaluation of capital adequacy. Goals may differ across institutions, which should evaluate whether their long-run capital targets might differ from short-run goals, based on current and

planned changes in risk profiles and the recognition that accommodating new capital needs can require significant lead time. The goals should be reviewed and approved by the board and implemented by senior management.

1. Assessing Conformity to the Institution's Stated Objectives

Both the target level and composition of capital, along with the process for setting and monitoring such targets, should be reviewed and approved periodically by the institution's board of directors.

2. Composition of Capital

Analysis of capital adequacy should couple a rigorous assessment of the particular measured and unmeasured risks faced by the institution with consideration of the capacity of the institution's paid-in equity and other capital instruments to absorb unexpected losses. Common equity (that is, common stock and surplus and retained earnings) should be the dominant component of a banking organization's capital structure.

Common equity allows an organization to absorb losses on an ongoing basis and is permanently available for this purpose. Further, this element of capital best allows organizations to conserve resources when they are under stress because it provides full discretion as to the amount and timing of dividends and other distributions. Consequently, common equity is the basis on which most market judgments of capital adequacy are made.

Consideration of the capacity of an institution's capital structure to absorb unexpected losses should also take into account how that structure could be affected by changes in the institution's performance, or by the outside economic environment. For example, an institution experiencing a net operating loss — perhaps due to realization of unexpected losses — not only will face a reduction in its retained earnings, but also possible constraints on its access to capital markets. Other issues may arise in relation to use of optionality in its capital structure. Such adverse magnification effects could be further accentuated should adverse events take place at critical junctures for raising or maintaining capital, for example, as limited-life capital instruments are approaching maturity or as new capital instruments are being issued.

3. Examiner Review of Internal Capital Adequacy Analysis

As part of the regular supervisory and examination process, examiners should review internal capital assessment processes at large and complex banking organizations as well as the adequacy of their capital and their compliance with regulatory standards. In general, this review should assess the degree to which an institution has in place, or is making progress toward implementing, a sound internal process to assess capital adequacy. Examiners should briefly describe in the examination report the approach and internal processes used by the institution to assess its capital adequacy with respect to the risks it takes. Examiners should then document their evaluation of the adequacy and

appropriateness of these processes for the risk profile of the institution, along with their assessment of the quality and timing of the institution's plans to develop and enhance its processes for evaluating capital adequacy with respect to risk.

In all cases, the findings of this review should be considered in determining the institution's supervisory rating for management. Examiners should expect complex institutions to have sound internal processes for assessing capital adequacy in place.

Beyond its consideration in evaluating management, over time this review should also become an integral element of assessing, and assigning a supervisory rating for capital adequacy as the institution develops appropriate processes for establishing capital targets and analyzing its capital adequacy as described above. If these internal assessments suggest that capital levels appear to be insufficient to support the risks taken by the institution, examiners should note this finding in examination and inspection reports, discuss plans for correcting this insufficiency with the institution's directors and management and, as appropriate, initiate follow-up supervisory actions.

4. Relating Capital to the Level of Operational Risk

Banking organizations should be able to demonstrate through internal analysis that their capital levels and composition are adequate to support the risks they face and that these levels are properly monitored by senior management and reviewed by directors. Examiners should review this analysis, including the target levels of capital chosen, to determine whether it is sufficiently comprehensive and relevant to the current operating environment. Examiners should also consider the extent to which the institution has provided for unexpected events in setting its capital levels. In this connection, the analysis should cover a sufficiently wide range of external conditions and scenarios, and the sophistication of techniques used should be commensurate with the institution's activities. Finally, supervisors should consider the quality of the institution's management information reporting and systems, the manner in which business risks and activities are aggregated, and management's record in responding to emerging or changing risks.

As a final matter, in performing this review, supervisors and examiners should be careful to distinguish between a comprehensive process that seeks to identify an institution's capital requirements on the basis of measured economic risk, and one that focuses only narrowly on the calculation and use of allocated capital or "economic value added" (EVA) for individual products or business lines for internal profitability analysis. This latter approach, which measures the amount by which operations or projects return more or less than their cost of capital, can be important to an organization in targeting activities for future growth or cutbacks. It requires, however, that the organization first determine — by various methods — the amount of capital necessary for each area of risk. It is that process for determining the necessary capital that is the topic of this guidance, and it should not be confused with related efforts of management to measure relative returns of the firm or of individual business lines, given an amount of capital already invested or allocated. Moreover, such EVA approaches often are unable to meaningfully aggregate

the allocated capital across business lines as a tool for evaluating the institution's overall capital adequacy.

Annex C

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Executive Director

February 2, 2004

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RE: Suggested disclosure requirements for operational risk in a Pillar 2 environment

Dear Sirs:

The Financial Guardian Group was pleased in our comments on the advance notice of proposed rulemaking regarding Basel implementation (68 Fed Reg 45,900) to include a suggested Pillar 2 approach to operational risk. Since then, questions have arisen about how disclosures would accompany this approach. In this supplement to our comment, we would like to suggest specific disclosures that would promote the comparability goals of the Pillar 1 operational risk-based capital proposal without the rest of the adverse and perverse consequences discussed in the comment letter. It is assumed that, in such an environment, Pillar 1 would continue to govern both credit and market risk, Pillar 2 would govern supervisory oversight, including dimensioning operational risk and related capital requirements, and that Pillar 3 would govern disclosure requirements. We address below what we feel would be appropriate operational risk and capital disclosures.

Within a Pillar 2 operational risk approach, we favor inclusion of those elements discussed in the Federal Reserves Supervisory Release 99-18. At a high level, each institution must have processes to address the “Fundamental Elements of a Sound

Internal Capital Adequacy Analysis.” This would require institutions meaningfully to tie the identification, monitoring and evaluation of risk to the determination of the institution’s capital needs. To support that evaluation, an institution would have to have in place processes to support:

- Identifying and measuring all material risks;
- Relating capital to the level of risk;
- Stating explicit capital adequacy goals with respect to risk; and
- Assessing conformity to the institution's stated objectives.

As in our proposed Pillar 2 approach and SR 99-18, this would be the cornerstone of each institution's process to work with regulators to define an appropriate capital level.

The public disclosures related to this system would address each of these points, and the activities the institution undertakes to accomplish them.

Institutions would discuss as relevant:

- (a) A description of the bank’s operational risk management function, which could include discussion of:
 - Corporate governance;
 - Independence of the risk management function;
 - The design and implementation of the operational risk management framework, including the use of risk policies;
 - Risk identification, measurement and control methodologies;
 - Risk-reporting systems for operational risk; and
 - Strategies to identify, measure, monitor and control/mitigate operational risk.
- (b) Required reviews of the operational risk management processes and measurement systems by internal staff, auditors and external auditors. This review includes both the activities of the business units and of the independent operational risk management function.
- (c) How validation of the operational risk measurement system occurs.
- (d) The role and use of internal and external data, scenario analysis, and event analysis in the institution’s operational risk management function.
- (e) How the institution evaluates exposure to low-frequency, high-severity events.
- (f) The institution’s methods for the review/consideration of business environment and internal control factors potentially impacting the firm’s operational risk profile.
- (g) Steps taken by the institution to mitigate risk in daily business processes, including the use of insurance.

- (h) Techniques for the calculation and allocation of economic risk capital across all risk types, including the role of operational risk capital allocation in the bank's management process and the interaction of operational risk capital with capital allocated for other risk categories.

Thank you for the opportunity to comment on Operational Risk disclosures in a Pillar 2 environment. We would be pleased to discuss this further and assist in the development of a specific proposal for inclusion in the next notice of proposed rulemaking in the United States on Basel and in the final version of the Basel rules. We believe strongly that all of these rules would be significantly improved with a Pillar 2 approach to ORBC, eliminating the current proposal for Pillar 1 requirements, with these expanded disclosure standards ensuring that Pillar 2 is a strong bulwark against this important source of financial risk at banks and their parent companies.

Sincerely,

Karen Shaw Petrou
Executive Director

Cc: Mr. Roger Cole
Federal Reserve Board

Mr. Edward Ettin
Federal Reserve Board

Mr. Richard Spillenkothen
Federal Reserve Board

Mr. Kevin Bailey
Office of the Comptroller of the Currency

Mr. Tommy Snow
Office of the Comptroller of the Currency

Mr. Michael Zamorski
Federal Deposit Insurance Corporation

Mr. Richard Riccobono
Office of Thrift Supervision

Financial Guardian Group Rebuttal to the Federal Reserve White Paper on Operational Risk¹

The Federal Reserve's paper on the expected impact of the Basel II operational risk-based capital charge on specialized banks has numerous flaws. The following document addresses the paper's key conclusions and makes additional points as to why this paper must be cautiously read, and critically examined.

Key conclusions:

With regard to competitive impact:

- Custody banks will not be adversely affected because only banks are in this business, and all will come under Basel II. [p.ii]

COUNTER-POINT: While housed in a bank, custody can be a very small part of a big one (e.g., Citigroup, JPM-Chase); operational risk-based capital (ORBC) will have a far less serious affect on diversified firms and could actually give them an edge over specialized ones. Foreign custody banks, while under Basel II, may get a far less stringent capital charge. Thus, a conclusion about competitive impact for specialized U.S. banks is questionable.

- Asset management-focused banks will not be adversely affected because non-banks hold high equity-to-assets ratios. [p.ii]

COUNTER-POINT: As discussed below, these higher capital ratios are for a wide range of risk, not just operational risk. Further, non-bank asset structure is sharply different than that at banks. Thus, the competitive impact of the ORBC charge cannot be inferred. Further, non-banks are not covered by the costly bank supervisory system (to get far more expensive under Basel II). The market demands extra capital because of this, as well as the federal safety net cited in the study. One must question why these institutions do not become banks if the capital treatment is as advantageous as represented in the study. Furthermore, the non-bank capital ratios cited by the Fed are not analogous to those held by banks because, in most cases, non-banks have very few assets when compared to banks. This allows them to hold a modicum of capital and still retain a high ratio.

¹ *The Potential Impact of Explicit Basel II Operational Risk Capital Charges on the Competitive Environment of Processing Banks in the United States*, Patrick de Fontnouvelle, Victoria Garrity, Scott Chu, and Eric Rosengren, Federal Reserve Bank of Boston, January 12, 2005.

- Only one “processing bank” is significant in the mutual-funds market and that bank “is not expected” to come under Basel II. Thus, the ORBC charge is not a significant competitiveness concern. [p.ii]

COUNTER-POINT: The one bank here – Mellon – is deeply concerned about the adverse competitive impact.

- Wealth management-focused processing banks face significant non-bank competition. This non-bank competition, however, holds high capital that includes a calculation for operational risk. [p.iii]

COUNTER-POINT: Again, these non-bank capital ratios are for many other purposes and are, in part, held because there is no comparable supervisory regime governing them.

- “General” processing includes substantial non-bank competition, but again all this competition is highly capitalized. Also, the non-banks do not benefit from the “federal safety net.” [p.iii]

COUNTER-POINT: Again, the study infers competitive implications from the ORBC requirement by comparison to total capital at non-banks. It also fails to account for the significant costs associated with a bank charter.

With regard to potential capital increases under the Basel II ORBC charge:

- Processing banks now hold more than minimum capital. However, the new charge could reduce desired buffers between regulatory and ample capital, forcing capital increases that increase cost and adversely affect competition. The analysis of the capital cost thus cannot be “definitive.” [p.5]

Authorial caveats include:

- There are no reliable data on ORBC and non-bank capital. The study is thus “narrative,” not “empirical.” [p.3]
- “[T]he effect of Basel II implementation on actual capital held is still an open question. The practice of economic capital allocation is not universal, the market may not always require banks to hold sufficient economic capital and an increase in minimum regulatory capital may lower a bank’s excess regulatory capital buffer below the level desired by bank management.” [p.32]

Additional Points:

- In analyzing competitors, the study does not differentiate between ORBC impact on diversified banks and on specialized ones. Thus, the conclusion that ORBC has no adverse competitive impact where all players are banks does not apply. Diversified banks will see far less ORBC impact because of their wide range of businesses and their expected credit risk-based capital (RBC) reductions. As a result, ORBC may thus give diversified banks an advantage over specialized ones. This is not recognized or addressed by the Fed study.
- The Fed assumes that specialized banks will not be at a disadvantage to big U.S. investment banks because these are expected to become consolidated supervised entities under SEC rules that are comparable to Basel II. However, the SEC rules are sharply different in that they do not include the leverage or 10% RBC “well-capitalized” standards. Thus, these firms will operate at considerable competitive advantage despite the nominal imposition of an ORBC charge.
- Analysis of the EU and other foreign regulatory frameworks assume Basel comparability. However, major supervisory differences, combined with a lack of leverage or 10% “well-capitalized” tests, make foreign systems less binding. Further, the study assumes that the less advanced ORBC approaches will yield higher ORBC, as intended under Basel II. This may not be correct however; studies of the credit risk indicate that the standardized models can lead to lower RBC than the Advanced –Internal Ratings Based approach (A-IRB). Thus, EU and other foreign banks – especially those with high amounts of operational risk – could do better under the simple approaches, and thus have even more of a competitive advantage.
- The study concludes that U.S. and foreign insurers do not have a competitive advantage because most compute an economic capital allocation for operational risk. Again, there is no leverage or 10% test for insurers, nor is there any indication of whether the economic capital allocation comports with the Basel II regulatory one. Since most economic models fully recognize risk mitigation and make other adjustments not in the Advanced Measurement Approach (AMA), the economic capital is likely to be considerably less than the Basel II AMA charge.
- The study assumes that bank capital ratios may be lower than non-banks because of the federal safety net. While possible, investors may also accept lower capital (to the extent this may occur) because of the extensive supervisory burden associated with a bank charter. This will not go away under Basel II; indeed, the associated qualification requirements with Basel II substantially increase this burden. Thus, banks will experience a capital increase at the same time other supervisory costs skyrocket, offsetting the current arguable capital advantage derived from operating specialized processing lines in a bank charter.

- Assumptions regarding non-bank capital assume the higher ratios are for operational risk. In fact, they may well include many other risks (in mutual funds, for example, the buffer to ensure that funds do not “break the buck.”) Thus, a gross comparison between non-bank capital averages and the ORBC charge may be misleading as to the competitive impact of the ORBC charge.
- Conclusions about who holds how much economic capital for operational risk are highly subjective and, as noted, based on little data. Even the Fed’s own authors have found that banks lack enough loss data to make them ready for the AMA. Thus, there are likely to be wide discrepancies among all the economic capital allocation models allegedly used by non-banks, many of which may result in far lower capital than mandated under Basel II.