

Roundtable Discussion: Reflection on Twenty Years of Bank Regulatory Reform

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Banking is now, and has always been, a risky business.” This succinct and cautionary statement was the first sentence of the executive summary of *Perspectives on Safe and Sound Banking: Past, Present, and Future*, a book written in 1986 on the eve of a troubled time in banking but still relevant in today’s more stable banking environment. The book’s five authors were commissioned by the American Bankers Association “to undertake a comprehensive study of the issues surrounding the safety and soundness of the banking industry and the efficacy of its regulatory system.” The five academic consultants divided the task of writing the report among themselves, reviewed each other’s work, and came to a consensus on policy options and recommendations. These recommendations have in many ways served as a blueprint for the changes in banking’s regulatory framework that have occurred in the twenty years since the book’s publication.

At the August 2006 conference celebrating the twentieth anniversary of *Perspectives on Safe and Sound Banking*, the five authors gathered once more to reflect on the state of the banking industry. In their comments on the following pages, they assess how legislative and regulatory changes during the past two decades have reshaped the banking landscape, and they weigh in on what tasks remain to ensure that the banking system, and the larger financial system with which it has become so intertwined, remains healthy.

Looking Back Twenty Years: What Changed, What We Wrote, and What We Did and Did Not Accomplish

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I reread our book, *Perspectives on Safe and Sound Banking: Past, Present, and Future*, with some concern that I might be dismayed and disappointed at what we wrote. After all, we should have learned more in the past twenty years, knowledge that would allow us to avoid some mistakes and misunderstandings. Or, since the world we analyzed has changed during this time, some of our conclusions and prescriptions might be dated or even irrelevant. Since I had not looked at the book for twenty years, I read it almost as if it were written by other authors. Much to my relief and delight, with a few exceptions that I note later, I found the book to be quite good and still largely relevant. We introduced the discussions with a substantial amount of financial history and the findings of empirical studies and based most of our policy conclusions on this record. Indeed, we wrote our recommendations after essentially completing the book, so they were based on our narrative rather than the narrative having been structured to support predetermined conclusions.

Since 1986 the United States has seen some important changes. These include a complete unraveling of the savings and loan industry, the failures of commercial banks in the late 1980s, and the Financial Institutions Reform and Recovery Act of 1989, enacted in reaction to the failures. The Federal Deposit Insurance Corporation Improvement Act of 1991 (FDICIA) was the most important regulatory change because it established a system of structured early intervention and resolution. In 1994 the Riegle-Neal Interstate Banking and Branching Efficiency Act finally brought nationwide branch banking to the United States. The 1999 Financial Services Modernization Act (Gramm-Leach-Bliley) essentially repealed the sections of the Banking Act of 1933 (the Glass-Steagall Act) that separated commercial and investment banking and established financial holding companies that could include banks, insurance companies or agencies, and securities firms as subsidiaries. In addition to the legislative changes, the Internet and electronic banking have changed and continue to change substantially the way banking and other financial services are delivered to consumers.

We first considered bank failures. I think we correctly identified the principal causes, including debunking the role of bank runs and emphasizing fraud as an important contributor. Fraud and malfeasance still is important, and, from recent experience, it appears that the banking authorities are still not dealing with it effectively. We suggested that failures could be dealt with more efficiently with trusteeships, wherein expected losses would be deducted from the balances of uninsured deposits and other debt (“haircuts”), rather than with FDIC-funded purchase and assumptions (P&As). This proposal was adopted in the Competitive Equality Banking Act of 1987 in the form of bridge banks. Furthermore, FDICIA now provides for the resolution of insolvent banks in the least costly manner, which largely obviates P&As. We also recommended that an institution be closed before the market value of its net worth declined below 1 or 2 percent. This recommendation was adopted, albeit for book-value net worth, by FDICIA. As noted later, I now wish we had suggested a higher level, at least 3 percent, since book or even market values of net worth tend to be overstated when a bank is experiencing severe financial distress.

The role and reformation of deposit insurance were and still are linked to concerns about bank failures. The experience of savings and loan failures in the early 1980s caused many observers to question the desirability of deposit insurance since it allowed insolvent savings and loans to continue operations and even expand. We rejected, correctly I believe, some alternatives that were proposed (such as privately provided deposit insurance). We called for risk-adjusted premiums based on off- as well as on-balance-sheet items. Capital requirements now include off-balance-sheet obligations. The Basel I capital requirements, adopted in 1988, are based on risk-adjusted assets, which are a form of risk-based deposit insurance. A small degree of risk-adjusted deposit insurance was adopted (as mandated by FDICIA), and the FDIC has recently proposed a system of risk-based deposit insurance premiums. I regret now that we urged the adoption of these premiums. It is very difficult for well-meaning and professionally capable banking regulators to determine the magnitudes and application of such premiums since (as Basel I and the struggles over Basel II have shown) it is very difficult for them to establish metrics that meaningfully measure risk. Furthermore, as experience also shows, it is even more difficult to keep political considerations from distorting the risk-assessment system.

Following the publication of *Safe and Sound Banking*, George Kaufman and I worked on a paper that changed my opinion about how the deposit insurance fund could best be protected.¹ In that paper (prepared for an American Enterprise Institute conference), we developed structured early intervention and resolution (SEIR) for regulating bank capital that largely obviated the need for deposit insurance and, hence, the need for risk-based deposit insurance premiums.

SEIR delineates levels of the ratio of capital to assets (including off-balance-sheet items) that specify when the banking authorities may and when they must intervene in a bank’s operations. When the bank’s capital/assets ratio is over 10 percent, we suggested that there should be minimum regulation and supervision. The banks would be subject only to general reporting and examination requirements. When the ratio declines to 6 percent, regulatory supervision and monitoring would be more intensive. The authorities would have discretion to reduce or suspend dividend payments and payments to the bank’s holding company and other affiliates. The bank would

1. See George Benston and George Kaufman, “Risk and Solvency Regulation of Depository Institutions: Past Policies and Current Options,” Monograph Series in Finance and Economics, Salomon Center, New York University Graduate School of Business, Monograph 1988-1, 1988.

have to prepare and implement a business plan to raise its capital/assets ratio to at least 10 percent. Should the ratio decline further but still be above 3 percent, the authorities would no longer have discretion, thus obviating moral hazard wherein political pressure or their own desire to put off difficult decisions results in forbearance. The authorities would have to require that the bank suspend dividend payments and interest on and redemption of subordinated debt and fund flows to its parent or affiliates. When the ratio declines below 3 percent, resolution of the bank would be mandatory. We expected that resolution would happen rarely since bank owners would have strong incentives to protect their remaining capital by taking actions to recapitalize, sell, merge, or liquidate the bank before the authorities had to take it over. The exception, we expected, would be situations in which the numbers constructing the capital/assets ratio were fraudulent. Hence, we recommended examinations, statistical analyses, and attestations by independent public accountants to uncover such situations before a bank became insolvent.

We also recommended that capital be measured in terms of market values and that subordinated debentures be counted fully as regulatory capital, as did *Safe and Sound Banking*. Both in our paper and in the book, we pointed out that numbers that do not reflect current economic values provide wrong signals to both regulators and bankers. We urged that subordinated debentures be included fully in capital largely because this inclusion would eliminate the principal cost of the higher capital by allowing banks to hold capital where its cost (interest) is deductible from taxable income. We also pointed out, though (as did the book), that banks' difficulties in replacing maturing subordinated debentures and interest on those obligations would provide the authorities with useful signals on the banks' risk as well as a form of risk-adjusted deposit insurance premiums.

Our basic SEIR proposal was included in FDICIA, albeit at lower capital ratio levels than we suggested. Unfortunately, both capital based on market values and the subordinated debt proposal have not yet been adopted. Indeed, the authorities have not even taken advantage of the market values that banks now report to shareholders. The Financial Accounting Standard Board's Statement of Financial Accounting Standard (SFAS) 107 requires banks to report in footnotes the fair values of financial instruments. SFAS 115 requires banks to report the increases and decreases in the market values of securities held for sale in comprehensive income and the fair values of securities held to maturity reported in a footnote. Regulatory capital could easily be based on these market value numbers rather than on book values, if the authorities so chose.

Several chapters of *Safe and Sound Banking* were devoted to the organization of banking supervision and regulation. We examined the Federal Reserve's lender-of-last-resort function and documented that the Fed had loaned funds to banks experiencing financial distress at subsidized rates, a practice we criticized. We recommended that such lending would best be made by the deposit insurance agency because its incentive to protect the deposit insurance fund would lead it to make optimal decisions. A second-best procedure was for the Fed to lend only on sound collateral at market rates. This recommendation, but not our first choice, was adopted in FDICIA.

We reviewed the evidence on risks, conflicts of interest, and concentration of power and their relation to bank holding companies and their nonbank affiliates. This review led us to conclude that the deposit-insured banking organization should be restricted to activities whose risks can be assessed and easily monitored. Because the evidence indicated that holding company affiliates tend to be operated as a group, we recommended imposing risk regulation and risk-based insurance premiums on the consolidated entity.

Considering the advantages of SEIR and higher capital requirements that include subordinated debt, I now would limit supervision and regulation to depositories and be concerned with other affiliates only to the extent of fund transfers from the depositories to other companies owned by controlling shareholders. I would have the Bank Holding Company Act repealed. Supervision and regulation would restrict the depositories' activities only if these were so undiversified and risky that a negative outcome might exhaust the depositories' economic capital before the authorities could intervene to have the capital restored or the depository taken over.

The numbers banks report as their capital must be trustworthy. We examined evidence on the efficacy of bank examinations for assessing the risks and legality of

banks' activities, verifying the numbers reported, and giving banks incentives to report their financial data honestly and accurately. As noted earlier, we emphasized the importance of fraud as a cause of bank failures and reviewed evidence that pointed to the banking agencies' weaknesses in discovering and reducing frauds. Unfortunately, many of these criticisms still appear to apply since fraud is still an important cause of failures.

Finally, we considered several proposals for reorganizing the structure of banking supervision and deposit insurance. We discussed such issues as the cost of regulation, including the imposition of fees by the Office of the Comptroller of the Currency but not by the other supervisory agencies, and incomplete cooperation among the banking agencies that allowed insolvent institutions to avoid being closed expeditiously. We also pointed out that deposit insurance premiums were charged against all deposits even though only deposits of \$100,000 or less were insured and that all deposits of very large banks were de facto insured since they were considered to be "too large to fail." We then reviewed various proposals, particularly the task force chaired by (then) Vice President George Bush. The task force recommended giving the Federal Reserve authority to regulate and examine all nonproblem state-chartered banks and "international class" bank holding companies, creating a new agency that would regulate and supervise national banks and their holding companies, and limiting the FDIC to dealing with problem and insolvent banks. The FDIC countered that it should examine all federally insured banks, thrifts, and their affiliates.

We rejected combining the federal agencies into a single supervisory and regulatory agency or making the Federal Reserve or FDIC the chief regulator. Rather, we recommended that the Federal Reserve's examination and supervision operations be transferred to a new agency; the Fed would no longer supervise banks and bank holding companies. The new agency and the other federal banking agencies would be given that portion of the deposit insurance funds that were contributed by the banks and thrifts each supervised, and the agencies would be authorized to deal with and close problem banks. Banks could shift to another agency, with its permission. Thus, the supervisory agencies would have both the incentives and the ability to structure regulations that would both attract members and protect its deposit insurance fund. Unfortunately (but, given the strong incentives of bureaucracies to protect their turfs, not surprisingly), this proposal has not yet been taken seriously. I still hope, though, that it will be adopted in my lifetime since I hope to live for a long time and continue my association with those great colleagues who, together, researched, argued about, and wrote *Perspectives on Safe and Sound Banking: Past, Present, and Future*.

Neither capital based on market values nor the subordinated debt proposal has yet been adopted; the authorities have not even taken advantage of the market values banks now report to shareholders.

Hindsight and Foresight about Safe and Sound Banking

ROBERT A. EISENBEIS

At the time of the conference, the author was executive vice president and director of research of the Federal Reserve Bank of Atlanta. These remarks were presented as part of a roundtable discussion at the conference "Safe and Sound Banking: Past, Present, and Future," held August 17–18, 2006, and cosponsored by the Federal Reserve Banks of San Francisco and Atlanta and the founding editors of the Journal of Financial Services Research.

After hearing both the papers prepared for this conference and the discussions that followed the presentations, I want to reflect briefly on several different issues discussed in *Perspectives on Safe and Sound Banking*. I plan to first focus on the issues that were probably, in hindsight, overemphasized, those that were perhaps underemphasized, and those that were not fully appreciated but subsequently turned out to be important. Finally, I want to raise issues that should be on any agenda for the future.

Issues Overemphasized in the Study

Risk-based deposit insurance. A key issue in the finance literature and in the study was the desirability of gearing deposit insurance to risk and using options pricing theory to price that risk appropriately. While risk-based premiums were adopted in the Federal Deposit Insurance Corporation Improvement Act (FDICIA), implementation has proved to be problematic. Premiums are arguably too low and are collected only from more risky institutions. Beyond this, however, are two issues that limit risk-based pricing as a useful means to control risk taking. The first is the realization that appropriate pricing depends upon not only the ability to measure risk but also to close an institution promptly when it becomes insolvent. Second, effective risk monitoring and control involves a trade-off between the costs of monitoring a bank's risk exposure continually against both the expected costs of that monitoring and expected losses should an institution become insolvent between examinations or inspections.

Revisions to regulatory agency structure and lender of last resort. The report recommended several changes in bank regulatory agency structure, including creating a competing deposit insurance option to be administered by the Office of the Comptroller of the Currency, parceling out lender-of-last-resort administration to the insurance agencies using funds drawn from the Federal Reserve, and taking the Federal Reserve out of the prudential supervision area. It probably is not practical to

consider such reforms, given that the United States has still not seen fit to combine depository institution insurance funds, and only the central bank can provide credible lenders-of-last-resort funds. However, two issues are important. First was the suggestion that the insurance funds should have a primary role in banking supervision because they have the strongest incentives to monitor bank risk exposures. In the United States, the Federal Deposit Insurance Corporation (FDIC) is in the first loss position should a failure occur. It also, under FDICIA, is acting as the agent for other banks that stand to lose should FDIC funds be exhausted. Second, this view on supervision stands in stark contrast to how deposit insurance and supervisory responsibilities are apportioned in the European Union, where generally deposit insurers are not involved in supervision.

Issues Underemphasized in the Study

Prompt corrective action. While the study did argue that institutions should be closed via a prompt corrective action (PCA) scheme before net worth fell to zero, the importance of PCA combined with structured early intervention and resolution (SEIR)—a concept that evolved later—as perhaps the best way to protect taxpayer interests was not fully realized. These concepts and their link to banking soundness have proved important not only in the United States, where they have been codified under FDICIA, but also as a framework for dealing with supervision and prudential soundness issues in a cross-border banking world.

Accounting issues. The report argued for market-value accounting, which, when combined with PCA and SEIR, is necessary to protect the taxpayer from the costs of regulatory forbearance. The importance of market-value accounting, or at least the need to calculate the market value of banks' equity, has yet to gain much traction in regulatory circles. Much attention has been given to the problem of implementing market-value accounting. But more focus has been directed to capital adequacy, which turns out to be diverting the attention of regulatory agencies from the fundamental problems of measuring net worth. Putting the valuation issue front and center, especially in a global environment with more and more derivatives and other exotic financial assets coming together, looms as the critically important—but as yet unrecognized—problem for banking supervisors.

Controlling regulatory incentives. One of the key problems in the past has been the tendency of regulatory and supervisory agencies to engage in forbearance toward troubled institutions. FDICIA requires the FDIC to minimize failure costs to taxpayers and requires disclosure and explanations when losses do occur. However, banking regulators—with differing mixes of goals and responsibilities—can still be faced with conflicts of interest and agency problems, which can sometime lead to less-than-optimal decisions in dealing with troubled institutions. Indeed, Eisenbeis and Wall (2002) have shown that many institutions are still closed with losses to the insurance fund, suggesting that PCA is not always having its desired outcome. Kane, for example, has devoted considerable attention to controlling regulatory incentives, which remains a problem both in the United States and abroad (see Hovakimian, Kane, and Laeven 2003; Kane 1988, 1989, 1991, 2000, 2003, 2006).

Consolidated risk management. The report argued that regulatory approaches that attempted to separate risk taking within a bank holding company structure—either to protect bank subsidiaries from risk taking in sister banks or from risks in nonbanking subsidiaries—were fruitless. Subsequent developments show that increasingly banking organizations are consolidating risk management and operations functions so that subsidiaries and affiliates are not operationally independent of each

other. This trend suggests that the report's conclusion about how conceptually to approach the supervision of complex institutions rings truer today than ever and should be an important focus of banking supervision and risk control going forward.

Underappreciated Issues

Over the past twenty years the financial system has evolved in ways that have changed its structure and risk profiles, significantly changing the way that institutions take on risk and control their risk exposures. Three such developments were underappreciated by authors at the time in terms of either the speed or significance with which they might affect bank safety and soundness. The first was the removal of McFadden Act restrictions on interstate banking and the speed and manner in which the banking system structure changed. Within a few short years, bank mergers significantly reduced the number of banking organizations, increased the size of the largest institutions, and concentrated their headquarters, principally in New York and Charlotte, North Carolina. The events of 9/11 in particular exposed the potential vulnerability of such concentration and the risks to a smooth functioning of our financial markets should one or more large institution experience financial difficulties.

The second underappreciated development was the spread of computer-related technologies in combination with the explosion of intellectual technologies in the form of financial engineering. This development radically changed both institutions' risk profiles and their ability to evolve and price assets and liabilities that had previously been provided only in bundled form or not at all. The resulting decoupling of the apparent risks—through the use of new derivative instruments—associated with given assets and liabilities traditionally inferred by looking at balance-sheet measures or direct inspections via the examination process no longer necessarily reflects an institution's true riskiness.

The third development was the growth and expansion of truly global institutions, which now suggest that the origins of risk and vulnerabilities are not only more complex but may oftentimes be more associated with developments in other parts of the world rather than in domestic markets. As a result, better communication, coordination, and sharing of information with non-U.S. regulators are now a necessity. Effective PCA and SEIR procedures to close institutions before net worth becomes negative combined with bankruptcy procedures that empower regulators to close institutions and resolve them promptly hold the greatest promise to limit systemic risk problems and to control financial crises.

Concluding Remarks and Some Key Issues for the Future

Having reflected upon the study and the papers prepared for the conference, I note several issues that would be appropriate to consider as potential agenda items should a similar study be undertaken in the future. The following is a brief list of concerns, in no particular order of importance.

Accounting reform. As mentioned earlier, the key to risk monitoring and control is effective valuation of net worth, which requires not only the ability to value assets and liabilities but also to appropriately consider the interactions among subsidiaries and affiliates within complex organizations and to understand the implications for valuation posed by new derivative instruments and contingent liabilities.

Identity theft and privacy issues. As financial markets become more global and dependent upon electronic transactions, the speed with which funds can be withdrawn from individuals' accounts and from entire banking entities is accelerated. Finding ways to both verify and protect individuals' identities is crucial to ensuring

confidence in electronic payments media. There may be an important role for regulators in this sphere that has yet gone unexplored.

Shrinking role of intermediaries and the growth of capital markets. Many countries are now producing financial stability reports, and increasingly these reports are focusing on the risks and implications of potential systemic problems emanating from financial markets rather than from financial institutions. This concern is a natural reflection of the growing role that capital markets play in financial intermediation relative to financial institutions. Attention now needs to turn to what role regulators and central banks may need

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to play in dealing with such risks as well as the need to better understand cross-market and cross-institution linkages that arise from the trading of instruments, such as derivatives, which now separate out some of the risks that typically had been embedded in financial instruments and loans.

PCA and SEIR as ways to enhance Basel I and Basel II initiatives. Present Basel I and Basel II initiatives have concentrated on the definition and measurement of capital for regulatory purposes and ways to employ them to limit bank risk taking. The benefit of this exercise has been that institutions are now more systematic and concerned about their internal risk measurement schemes and capital allocation methods. Going forward, attention should be given to how to deal with troubled institutions as their capital positions deteriorate and the role that PCA and SEIR might play to limit the negative spillover effects of failure and to better protect the taxpayer from potential liability should major institutions fail and exhaust their deposit insurance funds.

Consolidation risks. The relaxation of interstate banking restrictions and the resulting consolidation of the banking industry has resulted in more concentration in U.S. banking, with most of the nation's largest organizations headquartered in either New York or Charlotte. Should one of these large institutions experience financial difficulty, not only would the prompt resolution of such an institution be extremely difficult, but also the potential drain on the FDIC fund could be enormous because of the large size of these mega-institutions. Additionally, the experience of 9/11 has shown that certain events can actually close down U.S. financial markets and institutions. The concentration of our largest institutions reduces the geographic diversification that our banking system once had. So close attention now needs to be paid to how regulators and the Federal Reserve would respond to a similar event and how we can best ensure that our markets and institutions are robust.

Role of the lender of last resort. As risks to the smooth functioning of the financial system and markets are increasingly likely to be associated with liquidity problems or shocks to particular capital and instrument markets rather than to risks coming from banking organizations, additional consideration should be given to what role, if any, the Federal Reserve should play as lender of last resort in limiting the spread of these risks. In particular, what channels should be employed to provide liquidity? To whom should this liquidity be available? Would basic open market operations be sufficient to cushion markets? What role should central banks generally play in dealing with market liquidity shocks that are transnational in origin?

Cross-border banking. Cross-border banking is growing, and U.S. banking organizations are playing an increasingly important role in the financial systems and markets of other countries. At the same time, most of the world's largest banks are

now conducting significant operations in the United States. As a result, these institutions are now faced with myriad different regulatory regimes, regulators are increasingly dependent upon their counterparts in other countries for information, and the failure of such institutions will have spillover effects in not only their domestic economies but perhaps even greater implications for financial systems that are hosting them (see Eisenbeis 2006; Eisenbeis and Kaufman 2005, 2006). Regulators need a better understanding of how to measure and monitor the risks that these institutions pose as well as to seek ways to harmonize their legal, bankruptcy, regulatory, and supervisory regimes.

REFERENCES

- Eisenbeis, Robert A. 2006. Home country versus cross-border negative externalities in large banking organization failures and how to avoid them. Federal Reserve Bank of Atlanta Working Paper 2006-18, October.
- Eisenbeis, Robert A., and George G. Kaufman. 2005. Bank crisis resolution and foreign-owned banks. Federal Reserve Bank of Atlanta *Economic Review* 90, no. 4:1–18.
- . 2006. Cross-border banking: Challenges for deposit insurance and financial stability in the European Union. Paper presented at the European Commission's third annual Directorate General for Economic and Financial Affairs research conference, "Adjustments under Monetary Unions: Financial Markets Issues." Brussels, September 7–8.
- Eisenbeis, Robert A., and Larry D. Wall. 2002. Reforming deposit insurance and FDICIA. Federal Reserve Bank of Atlanta *Economic Review* 87, no. 1:1–16.
- Hovakimian, Armen, Edward J. Kane, and Luc Laeven. 2003. How country and safety-net characteristics affect bank risk-shifting. *Journal of Financial Services Research* 23, no. 3:177–204.
- Kane, Edward J. 1988. Changing incentives facing financial-services regulators. Paper prepared for a Federal Reserve Bank of Cleveland conference, "Perspective on Banking Regulation."
- . 1989. Changing incentives facing financial-services regulators. *Journal of Financial Services Research* 2, no. 3:265–74.
- . 1991. Incentive conflict in the international regulatory agreement on risk-based capital. In *Pacific-Basin capital markets research*, vol. 2, edited by S. Ghon Rhee and Rosita P. Chang. Amsterdam: North-Holland/Elsevier.
- . 2000. The dialectical role of information and disinformation in regulation-induced banking crises. *Pacific-Basin Finance Journal* 8, nos. 3–4:285–308.
- . 2003. What kind of multinational deposit-insurance arrangements might best enhance world welfare? *Pacific-Basin Finance Journal* 11, no. 4:413–28.
- . 2006. Confronting divergent interests in cross-country regulatory arrangements. Reserve Bank of New Zealand *Bulletin* 69, no. 2:5–17.

The Minimum Requirements for Safe and Sound Banking

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The author is Professor Emeritus of Banking and Finance at the University of Houston. These remarks were presented as part of a roundtable discussion at the conference “Safe and Sound Banking: Past, Present, and Future,” held August 17–18, 2006, and cosponsored by the Federal Reserve Banks of San Francisco and Atlanta and the founding editors of the Journal of Financial Services Research.

It is a fair conclusion to draw from the papers, comments, and discussion at this conference that there is general agreement that the study done twenty years ago correctly identified the issues crucial to a safe and sound banking system. By itself, that fact is not surprising. I would expect that if you lock five economists in a room for a year you will end up with a reasonable analysis of any financial problem. What is more unusual, and more gratifying in this case, is that the study also came up with, according to the comments at the conference, reasonable recommendations for policy actions. Even more unusual, it appears that the recommendations were actually based on the economic analysis. And most unusual, a significant number of the recommendations—and the most significant of them—have been implemented.

My view is that appropriate banking regulatory policy rests on three vertical columns (I would say “pillars,” but that term is taken): a meaningful capital requirement, a good means of monitoring compliance with that requirement, and a closure rule to be enforced when the capital requirement is not met.

There is widespread agreement with respect to the importance of capital but disagreement about implementation of a requirement. The problem is that capital adequacy is affected by risk, and we have not resolved the problem of measuring risk. In fact, we do not even agree on the concept of risk. I have long believed that the relevant risk is loss to depositors and the insurance system, but some believe that risk of failure is also important.

The measurement difficulty is illustrated both by the Basel discussions and by the Federal Deposit Insurance Corporation’s (FDIC’s) proposed risk-based premium system. Our inability to resolve this issue leads to support for keeping the current FDIC Improvement Act (FDICIA) leverage ratio in effect even after Basel is fully implemented, but some analysts fear that American banks will be at a competitive disadvantage if the leverage ratio approach applies only in America.

This issue is important only if one believes that capital is costly and leverage is valuable. Many bankers and analysts argue that it is leverage that allows a low return

on assets to result in a high return on equity. However, George Kaufman has presented evidence that American banks, which have higher capital/asset ratios than foreign banks, not only have higher income/asset ratios, as one would expect, but also have higher income/equity ratios. Finance theory has something to say about this issue—the Modigliani-Miller analysis tells us that, if markets are efficient (as we all believe them to be), leverage does not add to the value of the firm. If that proposition applied in the world of banking, then we could simply require all banks to maintain a high capital ratio, thereby reducing the risk of failure, at no real cost to the banks.

This argument is not abstract. Over the past several years many cases have been argued in the Court of Federal Claims on just this issue. The litigation grows out of

Regardless of the accounting and reporting system, appropriate monitoring by the banking agencies must be concerned with fraud.

the acquisitions of failed thrift institutions during the 1980s, in which the acquirers were allowed to count goodwill arising from purchase accounting as capital. This practice was prohibited by the Financial Institutions Reform and Recovery Act

(FIRREA) in 1989, and the Supreme Court ruled that this legislation represented a breach of contract by the government for which the acquirers could sue for damages. The government argued, with Merton Miller as one of its expert witnesses, that the loss of this regulatory capital represented no economic loss since the affected institutions could simply replace the lost capital by raising “real” capital in the market at “zero” net cost—zero because in efficient markets the cost of the liabilities or equity raised is exactly offset by the expected earnings on the cash acquired. (Miller conceded that the plaintiffs were damaged to the extent of the transaction costs—investment banking and legal fees—of the capital raising.) While the litigation is not finished, enough cases have been resolved to conclude that the courts have accepted this position. Perhaps Basel would have a different outcome if the U.S. delegation had included significant representation from the Justice Department instead of relying solely on the banking agencies, which lack Justice’s familiarity with finance theory.

A way of resolving this issue was strongly endorsed by the authors of *Perspectives on Safe and Sound Banking*. Subordinated debt provides a cushion that protects depositors and the deposit insurance system yet allows banks to be as leveraged as they or the market believes optimal. But this proposal brings us back to the concept of risk that I mentioned earlier—subordinated debt, with its fixed charges, does nothing to prevent failure. If one is concerned with bank failure as a social problem (and not solely with losses to depositors or insurers), then only equity will do.

The importance of a closure rule is widely recognized now, but it was not as well understood twenty years ago. The concept is simple: If capital is greater than zero, there is no loss to depositors from failure; the logical rule is that closure must occur before capital becomes negative. The authors spent a good deal of time in considering this issue. Conceptually, one could close a failing bank at the time its net worth hits zero (that is, the market value of assets equals the market value of liabilities), but, clearly, the ability to measure assets and liabilities and to monitor a bank closely enough to find that precise moment to act does not exist or would be prohibitively expensive. While we did not use the terms “prompt corrective action,” or even “structured early intervention and resolution,” we did call for closure “when the market value of net worth goes below some low, but positive, percentage, such as 1 or 2 percent of assets.”

The problem with this sort of closure rule is that there must be a reliable system to measure capital. Historical cost accounting just doesn’t work for this purpose (though it is probably better suited for financial institutions than for other firms in

which fixed assets make up a large part of the portfolio). Market-value accounting is clearly better if functioning markets exist. They do for the securities that compose part of a bank's portfolio and for mortgage loans that may make up a larger part. No functioning markets exist for most of the other loans and assets that banks hold. For most financial assets and derivatives, pricing models can approximate what the market value would be. This approximation is often referred to as fair-value accounting.

George Benston, a certified public accountant, was at first skeptical but did endorse the authors' support for market-value reporting. I did not really understand his skepticism until Enron. I believed that modeling could generate valid figures—if we have market information on an A-rated, ten-year bond and on the shape of the yield curve, it should be simple to come up with a good approximation of the price of a fifteen-year bond of the same company. I recognized then that models can generate errors even if applied honestly and competently, but after Enron it is clear that skepticism toward the use of internally generated models in measuring capital is justified. As we move toward the Basel endorsement of such an approach, this issue becomes more significant.

Of course, if there is an inclination to commit fraud, reliance on models to determine accounting values provides great opportunities.¹ We know that fraud is a potential problem with any accounting system, but the opportunities to commit fraud are greater when management's judgment, rather than markets, is used to determine values. The tendency to commit fraud is not unrelated to the condition of a bank. During the savings and loan collapse of the 1980s I saw many managements with previously spotless records turn to filing false financial reports. Their intent was (often) not permanent fraud, but they were dealing in what they thought was a temporary, disastrous collapse of real estate prices. If they could avoid writing down an asset for a year, probably its fair or market value next year would be higher (they rationalized). Regardless of the accounting and reporting system, appropriate monitoring by the banking agencies must be concerned with fraud. *Perspectives on Safe and Sound Banking* stressed this point at a time in which bank examiners generally considered fraud to be a matter for auditors rather than examiners.

Although I must confess that the review of the book necessitated by this conference has made me cringe at some passages, I take pride in our ability to identify issues and to point public policy in the right direction. Over recent years we have moved significantly in that direction, but we still have a way to go.

1. In a recent paper, George Benston ("Fair-Value Accounting: A Cautionary Tale from Enron," *Journal of Accounting and Public Policy* 25, no. 4 [2006]: 465–84) explores several examples of the use of fair value accounting by Enron. Most of these examples look like fraud to me, but they passed muster by Enron's auditors (internal and external).

The Etiology of Financial Instability: Then and Now

EDWARD J. KANE

The author is a professor in the finance department in Boston College's Carroll School of Management. These remarks were presented as part of a roundtable discussion at the conference "Safe and Sound Banking: Past, Present, and Future," held August 17–18, 2006, and cosponsored by the Federal Reserve Banks of San Francisco and Atlanta and the founding editors of the Journal of Financial Services Research.

Embedded in our book's subtitle is the idea that economic perspectives on financial institutions, markets, and regulatory schemes are dialectical in nature. By this I mean that measures proposed or adopted to solve problems that particularly bedeviled policymakers in the past reach forward in time to shape the present and to influence how one should think about the future. All three conference papers document ways in which subsequent financial change has transformed the details of our analysis into little more than dust in the wind. Still, our subtitle implicitly asserts that time-traveling is so valuable that sifting through the dust of our ancient study can help one to understand the forces driving financial change today and how these forces might eventually take the industry back into trouble.

I see our "Gang of Five" as a team of economic pathologists that the American Bankers Association (ABA) asked first to diagnose—and only as an afterthought to treat—the origin, nature, and course of an epidemic disease. In the mid-1980s, the symptoms of this under-researched "financial instability/inefficiency syndrome" palpably threatened the jobs of many ABA members. Savvy bankers understood that market pressures generated by insolvent "zombie" thrifts and banks deemed too big to fail were forcing them to bet their banks in ways that might reward their stockholders but put managers' human capital on the line without adequate compensation.

Fred Furlong and Simon Kwan explore the extent to which subsequent federal legislation and cross-country regulatory agreements have incorporated some of the specific therapeutic treatments our Gang suggested. Mark Flannery identifies seven currently worrisome financial stability issues, issues about which the ABA and federal regulators might be sufficiently concerned to issue a request for coordinated academic advice today. Bob DeYoung establishes a longitudinal perspective on these issues by documenting the many ways in which modern banking practices and market environments differ markedly from those of the mid-1980s.

One can gain additional perspective by recognizing that an irreconcilable tension exists between any innovation in regulation and loophole-seeking avoidance activity that might be undertaken by parties that find the innovation burdensome. Regulation begets avoidance activity, and avoidance eventually begets some form of re-regulation.¹ The regulatory adjustments, problems, and market events described in the conference papers unfold and mutate as part of alternating sequences in which either regulation spawns new forms of avoidance (RA sequences) or the growing effectiveness of particular avoidance activities calls for innovative re-regulation (AR sequences).

What I take to be the lasting value of our book lies in its accurately diagnosing what was fundamentally wrong with the U.S. banking system as of the mid-1980s. Our diagnosis was that, across the chain of regulators and regulated institutions, bank and regulatory incentives were severely misaligned with societal interests. With the help of other Shadow Financial Regulatory Committee members such as Richard Aspinwall and Frank Edwards, we managed to sell this diagnosis first to the financial industry and—despite active resistance from accountability-averse incumbent regulators—finally to elected politicians. With respect to the causes of fragility, the heart of our own diagnosis was (1) that the industry needed to hold vastly more private capital and to report this capital more transparently and (2) that federal regulators needed to price and operate the elements of the federal safety net efficiently and to make themselves accountable for doing so. Our book explained how well-lobbied safety-net subsidies, regulatory forbearances, and restrictions on interstate and interindustry competition had engendered unacceptable levels of individual-institution fragility and economic waste.

Because technologies for treating disease evolve and multiply almost as quickly as the character and number of dangerous pathogens, the value of our perspectives cannot be accurately scored by counting the number of the hypothetical therapies we identified that were or were not subsequently adopted. More than a few of the particular treatments that we recommended (for example, proposals for haircutting uninsured depositors, reducing deposit insurance coverages, and reallocating supervisory authority across federal agencies) obviously flew in the face of political reality. We offered these ideas, without hope, as illustrative examples of the types of structural change that could increase market discipline or regulatory accountability. I take satisfaction from the fact that the pieces of safety-net re-engineering that Furlong and Kwan catalogue and expertly dissect—the first Basel Accord (1988), the Financial Institutions Reform and Recovery Act (1989), the Federal Deposit Insurance Corporation (FDIC) Improvement Act (1991), the Interstate Banking and Branch Efficiency Act (1994), the Gramm-Leach-Bliley Act (1999), Basel II (2004), and the FDIC Reform Act (2006)—all address one of more links in the chain of incentive breakdowns that we diagnosed.

However, adapting regulatory protocols to innovative avoidance activity is an endless task. Every piece of regulatory re-engineering kicks off a series of RARA sequences. Inevitably, the range, size, and speed of regulation-induced innovation runs ahead of the vision and disciplinary powers that regulatory authorities can bring to bear.

Techniques for detecting and resolving the insolvencies of complex multinational institutions remain so embarrassingly improvisational and untested by bureaucratic “fire drills” as to beggar credibility.

1. See, for example, Edward J. Kane, “Technological and Regulatory Forces in the Developing Fusion of Financial-Services Competition,” *Journal of Finance* 39, no. 3 (1984): 759–72.

Within and across countries, what we could call the boundless “complexification” of financial instruments, institutions, and risk-management strategies is creating an increasingly nontransparent environment for shifting risks onto national safety nets. As Flannery stresses, techniques for detecting and resolving the insolvencies of complex multinational institutions remain so embarrassingly improvisational and untested by bureaucratic “fire drills” as to beggar credibility.

Designing and testing protocols for resolving the insolvency of large multinational financial organizations is the most urgent problem facing regulators today. The bigger and more complex a leading bank becomes, the more value its shareholders can extract from country safety nets. This time around, risk-shifting gives individual ABA members much less to complain about because well-polished techniques of incentive contracting and merger deal-making permit bank managers to obtain a fair share of the rewards that stockholders of complex banks can accrue from shifting risks onto country safety nets.

Some Further Thoughts about the Road to Safer Banking

GEORGE KAUFMAN

The author is the John F. Smith Jr. Professor of Finance and Economics in the School of Business Administration at Loyola University Chicago and a consultant to the Federal Reserve Bank of Chicago. These remarks were presented as part of a roundtable discussion at the conference "Safe and Sound Banking: Past, Present, and Future," held August 17–18, 2006, and cosponsored by the Federal Reserve Banks of San Francisco and Atlanta and the founding editors of the Journal of Financial Services Research.

Because they have received much favorable comment from previous speakers, I wish first to remind everyone that prompt corrective action (PCA) and structured early intervention and resolution (SEIR) in the FDIC Improvement Act (FDICIA) in 1991 did not have a very peaceful birth. They were enacted only after a bloody battle in Congress and over the strong opposition of both the banking industry and most bank regulators. But because of the large cost of the bank and thrift crises of the 1980s, these two groups had lost much of their public credibility and influence in Congress. In a rare moment of Camelot, Congress was willing to listen to academics (with the support of the Treasury Department, the Congressional Budget Office, and the General Accounting Office), who promised to effectively "outlaw" bank losses from insolvency through a legal closure rule at positive capital (Benston and Kaufman 1993).

Most bankers and regulators vigorously fought first against enactment, particularly because of the mandatory nature of some of the sanctions and the closure rule, and then after enactment for repeal of a number of important provisions, if not the entire act. Fortunately, both the House and Senate Banking Committees stood firm. Through time, many bankers and regulators have come to appreciate, if not love, PCA/SEIR. Moreover, the underlying principles are being copied in many other countries, at least in word if not always in spirit.

As I reviewed the recommendations we made in the book (Benston et al. 1986), I found myself now not always in agreement with them, although I suspect I was at the time. I attribute this shift to a continuing education of George Kaufman. I am not now enamored with risk-related ex ante FDIC deposit insurance premiums. Outside of fraud, the major loss to the FDIC from bank insolvencies arises from its failure to legally close institutions and place them in receivership on a timely basis while their capital is still positive, either because of a lack of economic capacity (inaccurate or delayed information) or because of a lack of political will. These forces are difficult to capture in risk-based premiums. Moreover, as a number of previous speakers

noted, depositor preference provides a cushion for the FDIC, at least in large banks, in the form of deposits at foreign branches and funds from nondeposit creditors, which are subordinated to the FDIC as long as they are not secured. However, the recently announced FDIC premium proposal, particularly for smaller banks for which fraud is the major cause of failure, focuses almost entirely on the bank's probability of default and not on the loss given default, which is more relevant for gauging the impact of the failure on the loss assumed by the FDIC. These forces may be proxied

in a premium determination model by the average loss rate of the FDIC over the past, say, n years, by size of bank.

The fact that under the old law many banks did not pay any ex ante premiums does not imply that they never paid any premiums. If losses to the FDIC drove its reserve ratio below a specified minimum, then under either the old or the new legislation, the FDIC has to increase premiums to replenish the fund. To achieve more or

In recent years, many of the best minds among bankers, regulators, academics, and consultants have been involved in fine-tuning the Basel II risk weights for different activities, which in the grand scheme of promoting bank safety and soundness may be viewed as an exercise in minutia.

less the same results as the FDIC proposal but with less complexity, it may have been easier to have merely repealed the 1996 provision prohibiting well-capitalized and well-managed banks from paying ex ante premiums and splitting the well-managed cell into separate CAMELS 1 and CAMELS 2 cells.¹

I am also now opposed to risk-based capital requirements for public policy purpose, particularly as specified in Basel II. The basic question is, by which denominator should a bank's capital be scaled—total assets or risk-based? In almost no other industry that I know do analysts or investors compute risk-based capital ratios—not in the auto industry or the oil industry or the airline industry and so on. Thus, even if risk-based capital could be measured correctly, its usefulness could be questioned. And the results of the fourth quantitative impact study (QIS-4) conducted by the regulators for large U.S. banks cast serious doubt on the credibility of the measure computed from the combination of a banks' own individual risk models for probability of default and loss given default and the regulators' model for computing the associated risk-based capital requirement. Similarly viewed banks reported widely different minimum risk-based capital requirements, and the same activity across banks was associated with widely different risk-based capital requirements. The results also suggest that the average capital requirement will decline significantly from Basel I levels and that many of the banks in the test run can satisfy their minimum risk-based capital requirements with less capital than is required to satisfy the minimum leverage ratio to be classified as "adequately capitalized" under PCA.

For these banks the leverage ratio serves as a constraint against lower capital. But few if any analysts argue that there is currently too much capital in the banking system. If anything, most would argue that there is too little. Indeed, other evidence suggests that there is a positive relationship between bank capital and profitability both among all banks in the United States through time and, in recent years, at large banks across countries (Kaufman 2005). Large U.S. banks are both the most capitalized and most profitable. In addition, because the underlying bank risk models are proprietary, they are opaque to outsiders, and the quality of market discipline would be reduced.

But, not to be completely negative about the Basel exercises, they have enhanced bankers' and regulators' sensitivity to risk, particularly credit risk. Unfortunately, the work on Basel II has absorbed a substantial number of some of the best minds among

bankers, regulators, academics, and consultants. In the most recent years, many have been involved in fine-tuning the risk weights for different activities, which in the grand scheme of promoting bank safety and soundness may be viewed as an exercise in minutia. The opportunity cost of doing this has been high both in the United States and particularly in other countries. Valuable resources have been diverted from working on more important issues than how best to measure capital ratios, such as how to resolve large banks efficiently with the least cost to society, how to share this information with the public—so that everyone is aware of the rules of the game and adjusts their *ex ante* behavior accordingly—and how to prevent policymakers from changing the rules under pressure and promote accountability. In other countries, excessive attention to Basel has reduced the focus on developing meaningful PCA-type provisions to turn troubled institutions around before insolvency and to resolve them quickly and at least cost when they decline through the minimum capital ratio specified in the closure rule. Indeed, no serious system for imposing sanctions, including legal closure, exists in most other countries for banks that fail to meet the minimum capital requirements. Thus, it is high time to shift the resources from Basel to other, higher-payoff prudential issues.

I have also changed my mind on whether one should protect the bank or the entire parent bank holding company. For purposes of deposit insurance, I would protect only the *de jure* insured claimants of the bank even though the entire organization is managed centrally on a consolidated basis by the parent and risks may be shifted among the different subsidiaries, including the bank or banks. Federal Reserve Regulations 23A and B protect the subsidiary banks from intra–holding company transfers that are not at arms-length prices. The penalties for violation are stiff. If large bank holding companies experience difficulties in subsidiaries other than their banks that may be viewed as systemic, it likely reflects the potential for large fire-sale losses on the sale of their assets. Such problems are best addressed through central bank lender-of-last-resort operations that provide additional liquidity to increase the demand for the assets. However, in today’s highly developed U.S. financial markets, liquidity should be injected almost entirely through open market operations in which the market allocates the injected funds rather than through the discount window. The latter channel has been used frequently to support insolvent as well as illiquid institutions.

It is also interesting to note that although the previous speakers have often credited the book with recommending PCA/SEIR, the book actually recommends only a legal closure rule at positive capital. The broader PCA/SEIR framework that allows the closure rule to be operationally effective by forcing the regulators to become involved and to impose a series of progressively harsher and more mandatory regulatory sanctions before an institution reaches the “critically undercapitalized” level in the closure rule was not developed until later. This addition to the closure rule, which mimics the sanctions markets impose in unregulated industries, permits regulators to attempt to turn banks around before insolvency and buys them time to introduce the sanctions, including legal closure, on a measured basis. The broader proposal came out of another task force on enhanced bank safety sponsored by the American Enterprise Institute a few years later and including some of the same members as the earlier ABA task force (Haraf and Kushmeider 1988; Benston and Kaufman 1988).

Among the important recommendations not mentioned by the previous speakers is one for the establishment of “trusteeship” banks to which the regulators can transfer

1. Under the CAMELS rating system, bank supervisors rate institutions according to six factors: capital adequacy, asset quality, management quality, earnings, liquidity, and sensitivity to market risk.

the appropriate assets and liabilities of insolvent banks perceived too big to sell or liquidate quickly. Such a structure would have helped greatly in resolving the Continental Illinois National Bank failure in 1984. The concept was incorporated in principle in the bridge bank scheme authorized in CEBA of 1987. Temporary federally chartered bridge banks are likely to be increasingly used in resolving very large banks to avoid liquidity losses both to depositors through freezing or delaying access to the par value of their insured deposits and the estimated recovery value of uninsured deposits and to borrowers by delaying access to their credit lines. These operations can be transferred from the insolvent bank to the bridge bank effectively overnight with customers largely unaffected except for possible credit losses to uninsured claimants. That is, physical closure, which is bad, is separated from legal closure, which is good. Moreover, if regulators are able to apply the legal closure rule in time, in the absence of major fraud, credit losses should be minimal if at all.

Finally, the book recommends that the authorities “should publicly announce and follow policies to deal with failures and runs.” I cannot support this recommendation more strongly today. Unfortunately, little has been done to achieve it. As I noted earlier, in the absence of such policies, regulators’ credibility to do the right thing is undermined. In particular, in the absence of well-specified and widely publicized plans to resolve large bank insolvencies efficiently at lowest cost to the insurance fund, the pressure on the regulators at the time of failure to protect all depositors and creditors of the bank and possibly even of the parent holding company will be intense and will likely result in such undesirable and costly action as it has in the past. This result may occur despite the substantial barriers to invoking the systemic risk exemption that have been built into FDCIA. This result is also likely to occur if the regulators have a plan but have not announced it publicly. Of all the items for action that I would put on the agenda for the next twenty years to enhance bank safety and soundness and minimize the societal cost of failure, I would rank this as the most important.

REFERENCES

- Benston, George J., Robert A. Eisenbeis, Paul M. Horvitz, Edward J. Kane, and George G. Kaufman. 1986. *Perspectives on safe and sound banking: Past, present, and future*. Cambridge, Mass.: MIT Press.
- Benston, George J., and George G. Kaufman. 1988. Risk and solvency regulation of depository institutions: Past policies and current options. Monograph Series in Finance and Economics, Salomon Center, New York University Graduate School of Business, Monograph 1988-1.
- . 1993. The intellectual history of the Federal Deposit Insurance Corporation Improvement Act of 1991. In *Reforming financial institutions and markets in the United States*, edited by George Kaufman. Boston: Kluwer.
- Haraf, William S., and Rose Marie Kushmeider, eds. 1988. *Restructuring banking and financial services in America*. Washington, D.C.: American Enterprise Institute.
- Kaufman, George G. 2005. Basel II vs. prompt corrective action: Which is best for public policy? *Financial Markets, Institutions, and Instruments* 14, no. 5:347–57.