

Notes

Capital-Based Regulation and U.S. Banking Reform

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I. INTRODUCTION: THE INFLUENCE OF INTERNATIONAL EFFORTS TO ESTABLISH MINIMUM CAPITAL RATIOS FOR BANKS ON THE CONTINUING BANKING REFORM DEBATE

The American banking system is today in the midst of a prolonged crisis, its worst since the Great Depression. Legislative efforts to bring about regulatory reform of the industry have centered on the need to avoid further massive losses to the deposit insurance fund and the need to restore competitiveness to the nation's system of 13,000 banks.

Some of the same problems that have plagued the U.S. banking industry recently—including severe competition among banks and from nonbanking financial products—have increased pressure on banks operating internationally for some time. The increase in transnational banking activity in the past two decades¹ and the pressures of severe competition² have led to mechanisms to

1. Some of the changes associated with the internationalization of banking are due to technological advances that have facilitated rapid cross-border capital transfers. One concern is that financial instability in one country could quickly infect the banking industry worldwide. See Grace W. Chang, Note, *The Proposed Risk-Based Capital Framework: A Model of International Banking Cooperation?*, 11 *FORDHAM INT'L L.J.* 777, 780 (1988).

2. In the past decade, the same technological advances that have increased the transnational movement of funds have reduced banks' comparative advantage in access to financial information. See *infra* note 46 and accompanying text. Thus, the securitization of lending—bundling loans into a ratable collateral pool backing a securities issue—has also accompanied the “disintermediation” of international lending away from banks. *Recent Innovations in International Banking*, 26 *BANK OF ENG. Q. BULL.* 209, 210 (1986). For a discussion of why banks have historically been able to rely upon some borrowers' willingness to pay interest

coordinate regulation of banks at the international level.³ Efforts among national regulatory authorities to address problems associated with stress⁴ on the international banking industry in one key area—capital adequacy regulation—have now influenced domestic banking reform initiatives in the United States.

On the international front, the Basle Committee on Banking Regulations and Supervisory Practices (Basle Committee) of the Bank for International Settlements (BIS)⁵ unveiled in December 1987 a preliminary agreement by the central bank governors of twelve countries for a risk-based capital framework that set minimum capital-to-assets ratios for banks operating internationally.⁶ As it stands, this agreement (the Basle standard) represents an important first step in ensuring the soundness of the banking industry and a common international basis for regulation.⁷

In the United States, the Basle minimum capital ratios themselves were incorporated into federal banking regulations two years ago and thus apply to all American banks and bank holding companies.⁸ However, early in 1991, both the Treasury Department and backers of the Senate banking bill, S. 543, took the further key step of adopting the capital adequacy principles of the Basle standard as the basis for broad banking reform proposals. Elements of these proposals were incorporated into the Comprehensive Deposit Insurance Reform and Taxpayer Protection Act (Comprehensive Reform Act), under which capital adequacy will become a sufficient criterion for government intervention in troubled institutions.⁹ Significantly, the Treasury had put forth

rates higher than the return on securities of equivalent risk, see Eugene Fama, *What's Different About Banks?*, 15 J. MONETARY ECON. 29, 30, 38-39 (1985). In short, the demand for "tradable assets has encouraged the growth of securities markets at the expense of direct bank lending." *Innovation in International Banking*, 26 BANK OF ENG. Q. BULL. 225, 228 (1986); see also Jeffrey Bardos, *The Risk-based Capital Agreement: A Further Step Towards Policy Convergence*, FED. RESERVE BANK OF N.Y. Q. REV., Winter 1987-88, at 26.

3. Nations sought policy convergence to ensure that all institutions are caught within the supervisory net, to eliminate regulatory drift toward the lowest common denominator, to remove incentives for banks to shift operations to countries with lax supervision, and to ensure competitive equity among international banks. Maximilian J.B. Hall, *The BIS Capital Adequacy "Rules": A Critique*, 169 BANCA NAZIONALE DEL LAVORO Q. REV. 207 (1989).

4. See generally *The Many Facades of BCCI*, ECONOMIST, July 13, 1991, at 81 (recounting classic failure of international coordination of bank supervision).

5. See *infra* note 49.

6. Bank for International Settlements, *Proposals for International Convergence of Capital Measurement and Capital Standards* (Dec. 1987), reprinted in 27 I.L.M. 530 (1988) [hereinafter *Basle Committee Proposal*].

7. The goal, according to the BIS, was "to replace the diversity of existing national regulations for measuring capital adequacy . . . [with] a single internationally accepted standard and, by this means, to help strengthen the soundness of the international banking system as well as to remove a source of competitive inequality between banks arising from differences in regulation." *Activities of the Bank*, in BANK FOR INT'L SETTLEMENTS, 59TH ANNUAL REPORT (1989).

8. The Basle standard was adopted by the Federal Reserve on March 15, 1989 at 12 C.F.R. §§ 208.1-.127 & app. A-B (1991); 12 C.F.R. 160-88 app. A-B (1991).

9. Comprehensive Deposit Insurance Reform and Taxpayer Protection Act, Pub. L. No. 102-242 (1991). As a practical matter, the most important aspect of this legislation was the section 101 recapitalization of the Bank Insurance Fund. *Id.* For the original Bush administration proposals, see generally U.S. DEP'T OF

in its original proposal a blueprint for the most far-reaching banking reform, which included capital-based regulation, in more than half a century; the original S. 543 featured parallel, though less extensive, reforms.

The need to reduce federal deposit insurance system¹⁰ losses¹¹ has been the impetus behind capital-based regulatory provisions of the Comprehensive Reform Act, which will reduce the incentives for banks to take lending risks. Controlling risk-taking by banks is essential given that recent large bank failures¹² have left the deposit insurance fund in its worst state since its creation sixty years ago.¹³ Indeed, the legacy of the thrift crisis and the costs it has imposed upon the taxpayer provided great support for enactment of mandatory supervisory restrictions based upon a bank's capital position.

Some policy analysts have expressed reservations about the effectiveness of capital-based regulation—which entails harsh regulatory sanctions, including dividend and growth restrictions and forced conservatorship—because many seemingly well-capitalized banks failed or reorganized during recent years,¹⁴ including several major Texas institutions.¹⁵ What these critics have overlooked is that weak supervision has been a problem generally;¹⁶ capital-based

THE TREASURY, MODERNIZING THE FINANCIAL SYSTEM: RECOMMENDATIONS FOR SAFER, MORE COMPETITIVE BANKS 12-15 (1991) [hereinafter MODERNIZING THE FINANCIAL SYSTEM]. See also *U.S. Plans Radical Overhaul of Banks*, FIN. TIMES, Feb. 6, 1991, at 1. For discussion of the Treasury plan and original S. 543, 102d Cong., 1st Sess. (1991), see *infra* notes 130-36 and accompanying text. The Act has already been criticized for failing to take further steps to restructure the banking industry. See, e.g., *Banking Reform in the Dirt*, ECONOMIST, Nov. 9, 1991, at 91; *The Cooks Spoil the Broth*, ECONOMIST, Nov. 30, 1991, at 75. Although improving the competitiveness of U.S. banks was a principal aim of the Treasury plan, it met resistance from small banks who feared growing market concentration toward a European model. Martin Dickson, *Financial Sector Gives Package a Mixed Welcome*, FIN. TIMES, Feb. 6, 1991, at 6.

10. Deposit insurance was introduced as a result of the banking disasters of the 1930's. More than 5000 U.S. banks failed between 1930 and 1932, and 4000 failed the following year. Depositor losses totaled almost \$800 million in 1932 dollars. Federal Reserve discount window lending was ineffective both at stemming the crisis and at preventing a dramatic contraction of the money supply. See MODERNIZING THE FINANCIAL SYSTEM, *supra* note 9, at 1. This experience has silenced those who have argued that so long as there is a lender of last resort a deposit insurance scheme is unnecessary. R. Alton Gilbert, *Market Discipline of Bank Risk: Theory and Evidence*, 72 FED. RESERVE BANK OF ST. LOUIS REV. 3, 5 (1990).

11. Recently, the federal deposit insurance fund has been threatened with insolvency. *U.S. Bank Fund Said to Require \$15 Billion Cash*, INT'L HERALD TRIB., Apr. 27-28, 1991, at 13.

12. The takeover of the three banking companies that Bank of New England controlled became the third largest government bank rescue in history and was expected to cost about \$2.7 billion. *New England Bank Gets Buyout Deal*, INT'L HERALD TRIB., Apr. 24, 1991, at 9; Ron Suskind & Kenneth H. Bacon, *Fleet/Norstar, KKR Win Bank of New England Bidding*, WALL ST. J. EUR., Apr. 24, 1991, at 9.

13. Stephen Labaton, *U.S. Bank Insurance: A \$4 Billion Hole?*, INT'L HERALD TRIB., Apr. 25, 1991, at 9.

14. See Testimony of Robert E. Litan, Senior Fellow, Economic Studies Program, The Brookings Institution, before the Senate Committee on Banking, Housing, and Urban Affairs on the Need for Early Intervention in the Case of Troubled Banks, March 12, 1991, at 1 [hereinafter Litan Testimony] (unpublished testimony, on file with author).

15. MODERNIZING THE FINANCIAL SYSTEM, *supra* note 9, at 7.

16. For example, the Federal Reserve has decided to expand its authority to regulate foreign banks operating in the United States in response to loopholes that permitted the development of a relationship between the Bank of Credit and Commerce International (BCCI) and the Washington-based First American Bankshares. BCCI was indicted on money-laundering charges in 1988. Jim McGee, *Fed Focuses on Foreign Banks in U.S.*, INT'L HERALD TRIB., May 11, 1991, at 14.

regulation will remove at least one dimension of regulatory discretion.¹⁷ The Treasury Department's declaration that capital is "the single most powerful tool to make banks safer" reflects this theory that the Basle minimum capital ratios can be used in conjunction with regulatory sanctions to punish reckless banks.¹⁸ Unfortunately, other ills of the banking industry will remain.

Support for the capital adequacy proposals came from policymakers seeking to devise ways to increase the international competitiveness of American commercial banks while ensuring that these institutions would not fund prospective nonbanking activities with insured deposits.¹⁹ Current thinking is that wide-scale deposit insurance—and de facto protection of all deposits—is inconsistent with a healthy industry.²⁰ The availability of the deposit insurance fund to protect deposits of less than \$100,000 encourages bank managers to make risky investments.²¹ In this respect, capital-based regulation can be understood as a means of addressing regulatory capture by the banking industry.²² But the present fascination with capital adequacy has meant that other structural deficiencies in the U.S. industry, such as interstate branching restrictions, have not received adequate attention.²³

Part II of this Note provides a general discussion of the role of capital in banking decisions. Part III covers the development of the Basle standard, its legal status, its anticompetitive implications, and its shortcomings as a method of risk assessment. Part IV evaluates the ability of capital-based regulation to address problems in the U.S. banking system.

17. One appeal of capital-based regulation is that it appears to hold the promise of breaking a cycle of regulation, financial industry avoidance and circumvention of regulation, and reregulation. See Edward J. Kane, *Interaction of Financial and Regulatory Innovation*, 78 AM. ECON. REV. 328, 332-33 (1988). Capital-based regulation also promises to reduce the time lag between bank distress and FDIC action, which has hidden the scope of industry problems. Litan Testimony, *supra* note 14, at 2 n.6.

18. New research has supported the relationship between capital adequacy and bank health. MODERNIZING THE FINANCIAL SYSTEM, *supra* note 9, at 12.

19. Louis Uchitelle, *Shifting the Risk in U.S. Banking*, INT'L HERALD TRIB., Feb. 22, 1991, at 11.

20. Augmenting the role of capital is one means of increasing market discipline of bank activity. For others, see Gilbert, *supra* note 10.

21. When regulators permit insolvent institutions to remain in business, they only exacerbate this problem. Litan Testimony, *supra* note 14, at 4.

22. George J. Benston, *International Bank Capital Standards 4* (Aug. 1989) (unpublished manuscript presented at the Joint Universities Conference on Regulating Commercial Banks, Canberra, on file with author). In the banking context, some have identified a "nondisclosure regime" in the federal regulatory oversight of bank lending risks. Albert J. Boro, Jr., Comment, *Banking Disclosure Regimes for Regulating Speculative Behavior*, 74 CAL. L. REV. 431 (1986). Boro sees confidence in the banking system as "an intangible good that depositors demand and banks [supply]"—a mode of analysis which, he argues, is useful for understanding runs on banks and why regulators seek to avoid runs at all costs. *Id.* at 446.

Significantly, capital-based regulation has not solved the most important banking problems in the United States today, which include finding ways for banks to enter securities and insurance activities that have been prohibited to them. Although capital-based regulation will, of course, improve the bank capital levels, the major structural difficulties facing the industry will continue because of the willingness of legislators to sidestep politically difficult issues (such as removing barriers to the securities industry) by considering only reforms based upon relatively uncontroversial regulatory principles.

23. The Treasury proposal would have allowed nationwide branch networks within three years, subject to state limitations. See *London Takes the Sanguine View*, FIN. TIMES, Feb. 6, 1991, at 24.

II. THE KEY ROLE OF CAPITAL IN THE BANK BALANCE SHEET

Capital represents the amount and type of financial resources of a particular institution.²⁴ The bank regulator ensures that, over time, a bank can sustain extraordinary losses and remain solvent.²⁵ Government efforts to regulate bank capital reflect the tension between the need for prudential risk management and the need to produce an acceptable return for investors.²⁶ Because regulatory authorities seek to minimize bank insolvency, capital requirements tend to be based upon a worst case or bad times projection.²⁷ There are several forms of capital that provide the necessary cushion for a bank in times of financial crisis.²⁸

Although the Basle standard relates capital to assets, it has been suggested that capital should relate to the liability side of the balance sheet because deposits represent the part of a bank's financial condition with the greatest potential volatility.²⁹ The risk involved in banking is that of not being able to meet withdrawals through asset sales. The true gauge of correct capitalization is the extent to which liabilities match assets: the closer the match, the less capital needed.³⁰

24. Capital is in general a form of protection of repayments and a safeguard against distribution of assets, money, or shares in a way that compromises the interests of creditors (and nonparticipating shareholders) and/or may render the enterprise insolvent. The legal capital structure of an enterprise parallels the contractual and legal rights and order of priority of distribution for different classes of shareholders upon liquidation. For a discussion, see Joseph J. Norton, *Capital Adequacy Standards: A Legitimate Regulatory Concern for Prudential Supervision of Banking Activities?*, 49 OHIO ST. L.J. 1299, 1304-05 (1989).

25. From the perspective of debtholders, capital cushions them from unexpected losses. Debtholders gain protection from the equity cushion that must be exhausted before firm losses eat into their principal. Shareholders, in theory, want to keep their capital-to-assets ratios lower rather than higher because, given constant earnings, a bank's return on equity increases as capital decreases.

The relative amounts of debt and equity comprising capital are, of course, important from bankruptcy and agency perspectives as well. Institutions with higher debt levels are more likely to be forced into bankruptcy through the contractual rights of debtholders. On the other hand, these same institutions are more inclined to engage in risky activities because equity holders gain the residual benefit of such ventures while debtholders assume all of the risk. Finance theory assumes that the cost of capital does not depend upon relative amounts of debt and equity. But these agency problems associated with relatively higher debt levels actually do affect the cost of capital.

Critics of the Basle definition of capital have argued for a greater role for subordinated debt on the ground that holders of this instrument have no incentive to see greater institutional risk-taking. Banks' need to go to the market to sell their debt imposes discipline, as does the debtholders' knowledge that they will not be able to withdraw their funds immediately. See Benston, *supra* note 22, at 16-18.

26. See generally Norton, *supra* note 24, at 1304-05.

27. In theory, capital requirements operate to limit growth, hinder dividend payments, and lead banks to seek greater returns through higher risk investments. But the U.S. experience demonstrates that, in practice, poorly capitalized institutions tend to have dispositive credit losses. See *infra* notes 127-29 and accompanying text.

28. Nonredeemable common stock that has no contractual right to bank earnings provides the best form of capital. Other forms, such as preferred stock, can limit the flexibility of management if a bank's financial position begins to deteriorate. See Richard M. Buxbaum, *Preferred Stock-Law and Draftmanship*, 42 CAL. L. REV. 243, 253-57 (1954).

29. Norton, *supra* note 24, at 1309.

30. Another approach to regulating capital might be to focus upon concentrations of large loan exposures. *Id.* at 1309-10.

Regardless of the form it takes, bank capital performs a key function of enhancing the security of bank liabilities and bolstering public confidence in the safety and soundness of the industry. In an environment of deposit insurance, capital operates in much the same way as an insurance deductible, which shields the insurance fund from initial losses and counters the "moral hazard" of risk-taking associated with the insurance safety net.³¹ In the United States, the presence of the deposit insurance safety net seems to have permitted banks to run down their capital levels.³² Indeed, financial institutions covered implicitly or explicitly by the government insurance safety net have much lower capitalization than those without such backing, such as insurance companies, securities brokers/dealers, and short-term credit companies.³³

Strong capitalization will result in the following tangible benefits for the banking industry:³⁴ (1) *Reducing incentives for banks to take excessive risks*: Low bank capitalization in a deposit insurance environment exacerbates the moral hazard dilemma. Banks and their owners, who have relatively little at stake, will be tempted to gamble with insured funds in order to increase their return on equity. Such institutions can obtain easy access to deposits by offering slightly above-market-rate interest on large deposits. Whereas risky credits that turn bad ultimately result in few losses for the thinly capitalized bank and its owners, risky credits that perform offer a high return and improve the bank's situation. (Qualitative evaluations of bank capital focus upon credit risk³⁵ as the root of most problems associated with troubled banks and high losses.³⁶) (2) *Placing a buffer in front of the taxpayer in an environment of deposit insurance*: In the case of bank failure, losses that bank capital can absorb preserve the deposit insurance fund. (3) *Lessening misallocation of credit*: The tempta-

31. See William A. Lovett, *Moral Hazard, Bank Supervision and Risk-Based Capital Requirements*, 49 OHIO ST. L.J. 1365, 1381 (1989).

32. Over the last 150 years, the ratio of aggregate capital to total assets in the banking system has declined from a high of about 50% to current levels well below 10%. Although some of this decline in capitalization can no doubt be attributed to the increasing efficiency of the industry, the perception of government guarantees presumably allows banks to operate with a small capital buffer. MODERNIZING THE FINANCIAL SYSTEM, *supra* note 9, at 12.

33. *Id.* The low capitalization of banks derives in part from the fact that the bulk of their assets do not fluctuate in value—so that assets easily equal liabilities under normal conditions. Capital in a financial institution is like an inventory that absorbs net profit or loss. In institutions that hold marketable assets, the net profit in any accounting period fluctuates—merely because asset values fluctuate, generating paper profits or losses. Banks, however, hold mostly nonmarketable assets, which should be valued, most of the time, at face value. Thus, in the case of banks, the inventory that absorbs fluctuations in net accounting profits often can be much smaller proportionally than that for other financial institutions.

34. The following six points are outlined in *id.* at 13.

35. U.S. regulators have observed that even when bank difficulties have been traced to other factors, such as mismanagement or macroeconomic trends, the outcome has nonetheless been credit losses. As a result, noncredit portfolio risks such as trading risks are not addressed in quantitative capital standards, but through the bank examination process. Gary Haberman, *Capital Requirements of Commercial and Investment Banks: Contrasts in Regulation*, FED. RESERVE BANK OF N.Y. Q. REV., Autumn 1987, at 1, 8.

36. Credit risk considerations have dominated the evolution of capital standards in the United States because banks deal with customers with a range of financial strength and because marginal credit losses are viewed as acceptable business costs. *Id.*

tion for owners and managers of a poorly capitalized bank to seek risky, high-return assets can lead to a misallocation of resources toward risky investments. The result can be an oversupply of funds available for high-risk ventures but, in turn, an artificially low supply of capital for less risky loans, leading to higher interest rates for these activities.³⁷ (4) *Avoiding credit crunches*: In an economic downturn, a well-capitalized bank will probably not have to contract its asset base in the face of nonperforming loans. Rather, such a bank will probably be able to absorb any losses and to maintain its previous lending levels. (5) *Increasing long-term competitiveness*: Capital also gives banks the financial flexibility to respond to the industry environment. Moreover, and somewhat counterintuitively, banks with higher capital ratios have tended to enjoy a higher return on equity.³⁸ Of course, the direction of causation, in some cases, is likely to be such that strong performance by an institution enhances capitalization.³⁹ (6) *Lowering the probability of bank failure*: Finally, by definition, adequate capital guards against bank failure.⁴⁰

Given the role of capital in the bank balance sheet, regulation of bank capital ratios at both the domestic and international level is a means of ensuring bank health. The most significant regulatory initiatives were first taken at the international level; the resulting capital standards have been adopted in the United States and have broadly influenced U.S. banking reform efforts.

III. THE BASLE STANDARD OF MINIMUM CAPITAL RATIOS

The greatest significance of the Basle standard of minimum capital ratios in the United States, as will be discussed in Part IV, is that failure to meet the standard has become a criterion for broader regulation of and supervisory intervention into the activities of American institutions.

Section A explains how the Basle standard was developed to address supervisory gaps in the capital adequacy regulation of internationally active commercial banks. Section B discusses the soundness and stability and "competitive equality" goals, the legal operation of the Basle standard, and how it may restrict access to the industry. Section B also considers the theoretical soundness and practical worth of the Basle standard's risk measurement scheme,

37. If enough weak banks follow these trends, they may compel even strong institutions to compete on these terms, and skewed interest rates will characterize the lending market. MODERNIZING THE FINANCIAL SYSTEM, *supra* note 9, at 13.

38. See *infra* note 129 and accompanying text.

39. Conversely, if a lender makes bad loans, losses will diminish capital, although it may appear that low capitalization is inducing poor performance.

40. Nevertheless, capital cannot impose further burdens upon a bank in times of financial stress. For example, dividend payments on stockholders' equity can be suspended when the bank's capital is under pressure. Haberman, *supra* note 35, at 7.

given (1) that risks are always appraised independently of actual lending and (2) that risks should be appraised *a priori* rather than from past experience.⁴¹

A. *Development of the Basle Standard*

1. *Increased Risks for Banks Operating Internationally*

In a closed or domestic banking system, institutions must manage their flow of assets in such a way that they can meet depositor calls. This job may be easier for institutions in a system in which there is a close association between banks and central authorities. But, in any case, participation in international activities can introduce a significant source of instability into the operations of the typical institution. The institution may not enjoy the recognition internationally that it does within the domestic economy and may not have a stable role. In turn, the stability of funding for its international business may be easily threatened. In short, liquidity problems for a particular institution can arise abroad despite an apparently secure position at home.

The danger in international banking in the mid-1980's centered on the implications of a shift from bank to bond market finance, the development of instruments that escaped the supervisory net, and the problem of risk assessment in the face of new technologies. Combined, these developments presented cause for concern about loan asset quality and the general state of bank portfolios. The problem was that since the 1970's, as banks increased their role internationally, domestic supervision of banks had not kept pace with banks' expanded activities. National supervisory authorities faced increasingly complex banking structures and differences in domestic regulatory philosophies. Moreover, each of these national authorities was largely reluctant to change its regulatory policies lest it erode any competitive advantage of its own banking industries.

In the past decade, the severe competitive pressures of the international banking business have affected both the capitalization and the liquidity of banks.⁴² For example, to manage their liquidity, banks have increased their reliance upon volatile purchased funds in place of short-term liquid assets. Moreover, because banks' corporate clients have increasingly raised money in

41. Within portfolio finance theory, the supplanting of the capital assets pricing model (CAPM) by the arbitrage pricing theory (APT) is based upon this need for an expectational, *ex ante* model rather than one that, like the CAPM, can only be written in *ex post*, realized terms. The APT is a multifactor equilibrium pricing model that makes a statement about the relationship between expected returns of assets and the common features of those assets. The CAPM's deficiency is that it does not describe investor behavior in the marketplace and isolates the market as the sole source of risk. *See generally* Phillip H. Dybvig & Stephen A. Ross, *Yes, The APT Is Testable*, 40 J. FIN. 1173, 1174-77, 1180-82 (1985).

The Basle standard is based upon risk assessment rules that are largely mechanical and rely upon the record of the past—the Committee's sense of the historical quality of certain types of assets, such as that of residential mortgages in most member countries. *See Basle Committee Proposal, supra* note 6, at 539.

42. Brian Quinn, *The Management of Liquidity*, Address Before the SEANZA Forum of Banking Supervisors, Sydney (Mar. 23, 1988), in 28 BANK OF ENG. Q. BULL. 236, 237 (1988).

capital markets, rather than from bank loans, banks have become more willing to enter into large commitments in order to retain their best customers, thus reducing their portfolio diversification. Finally, as the securitization of bank assets has increased, banks' role as controlled risk takers has waned as their role as risk managers has grown.⁴³

The rate of global integration, structural change, and domestic deregulation in the international financial system accelerated dramatically in the 1980's. First, an increasing proportion of credit flows began to assume a marketable form.⁴⁴ In addition, the volatility of interest rates and exchange rates during the 1970's and 1980's created a demand for hedging instruments, which have not appeared, for the most part, on bank balance sheets: hence, regulatory concern about banks' off-balance sheet risk increased.⁴⁵

Although the global integration of financial markets came about as a result of deregulation in the 1980's, technological advances lowered the cost of transactions in terms of both providing access to information and linking exchanges. Problems arose because many of the new instruments were not caught within the supervisory net of national regulation.⁴⁶

2. *Early Work of the Basle Committee to Promote Joint Supervision*

Against this backdrop, a watershed event occurred. In 1974, one of the largest privately owned German banks, Bankhaus I.D. Herstatt, which had assets of about \$900 million, collapsed. This event heightened concern, which had existed since the development of Euromarkets in the early 1960's, over the vulnerability of a system in which interbank lending predominated.⁴⁷ The

43. *Id.*

44. *Recent Innovations in International Banking*, *supra* note 2, at 209-10; *see also* M.K. Lewis, *Off-Balance Sheet Activities and Financial Innovation in Banking*, 167 *BANCA NAZIONALE DEL LAVORO Q. REV.* 387-410 (1988).

45. Financial futures were introduced in the mid-1970's. Eurodollar interest-rate futures have been a more recent development and have featured substantial bank participation. Interest-rate and currency swaps, developed in 1981 in connection with capital market transactions, were soon traded in their own right—to a level of \$200 billion in 1985. *Recent Innovations in International Banking*, *supra* note 2, at 209-10.

46. Moreover, the complexity of these instruments increased the difficulty of risk measurement. By 1986, it was clear that the shift to marketable assets had implications for the quality of bank portfolios and long-term credit decisions. An immediate concern of central authorities such as the Bank of England was how to supervise and manage risk when the nature of that risk was changing with the introduction of new technologies and financial instruments. Innovation in International Banking, Speech of the Governor at the London International Capital Markets Conference (May 7, 1986), in 26 *BANK OF ENG. Q. BULL.* 225 (1986).

Competition in the international banking business also drove innovation. Fierce competition among firms offering similar products has characterized the industry. Although the major loci of activity are New York and London, institutions from all major financial centers participate. In many instances, banks and securities firms have competed with analogous products. Thus, the bargaining power of bank clients, both borrowers and investors, is high, and innovation for banks is a means of obtaining a competitive advantage.

47. *See* Norton, *supra* note 24, at 1336. By June 1974, Herstatt had incurred massive losses from foreign exchange trading and approached the Bundesbank for assistance. Reorganization attempts failed as poor bank records hindered efforts to ascertain quickly the full extent of Herstatt's losses—which eventually mounted to almost \$500 million. Herstatt was closed on June 26, 1974—as trading continued in New York—leaving some foreign banks exposed.

episode, along with other banking crises, strengthened the hands of those who wished to see strong international banking supervision. In September of that year, the central bank governors of the Group of Ten (G-10) countries met in Basle, Switzerland, and formally established a framework to ensure the long-term health of the international banking system under the auspices of the Basle Committee⁴⁸ of the Bank for International Settlements.⁴⁹

In December 1975, the Committee issued the Basle Concordat (Concordat), which established guidelines for banks operating in more than one country. The Concordat recognizes the primary responsibility of host country authorities for bank supervision but acknowledges the implicit duty of parent country authorities to ensure the solvency and liquidity of the foreign branches of their nationals.⁵⁰ The preeminent goal of the Concordat is to eliminate supervisory gaps and to emphasize that banking authorities should exercise supervisory responsibility⁵¹ rather than simply assuming the role of a lender of last resort.

3. *U.S. Role in Developing the Basle Standard*

Regulatory interest in capital adequacy surfaced in the United States after the banking crisis of the 1930's but has developed into a policy imperative only in the past decade.⁵² Congress recognized in the early 1980's that the money center banks held Latin American debt which, if assigned market value, reflected potential losses that the capital bases of these banks could not absorb. In November 1983, Congress passed the International Lending Supervision Act (ILSA) in response to the increase in sovereign debt exposure of U.S. institutions; the statute required each bank regulatory agency to establish minimum capital ratios for institutions within its jurisdiction and called for regulators to

48. Hall, *supra* note 3, at 208. The Basle Committee, also called the Cooke Committee, after its chairman, W. Peter Cooke of the Bank of England, consists of representatives of central bank supervisory authorities from Switzerland, Luxembourg, and the G-10 countries: Belgium, Canada, France, Germany, Italy, Japan, the Netherlands, Sweden, the United Kingdom, and the United States. For discussion of the institutional framework of the Basle Committee, see Chang, *supra* note 1, at 781-83. The Basle Committee's central aim has been to encourage convergence in bank supervisory practices, although its conclusions do not have legal force. The legal significance of the Committee's actions is the potential for law generation within the countries of the Committee's member banking authorities.

49. The BIS was established in 1930 in Basle. Like the Basle Committee, the BIS has been a forum for supervisory authorities to explore cooperation, an institution to formulate regulatory guidelines, and a vehicle for eliminating risk in international banking. It is also an international financial institution. BIS members include the G-10 countries plus Albania, Australia, Austria, Bulgaria, Czechoslovakia, Denmark, Finland, Greece, Hungary, Iceland, Ireland, Norway, Poland, Portugal, Romania, South Africa, Spain, and Turkey. Chang, *supra* note 1, at 777 n.4, 781 n.28.

50. *Id.* at 781 n.31; see also W. Peter Cooke, *Developments in Co-operation Among Banking Supervisory Authorities*, 3 J. COMP. CORP. L. & SEC. REG. 253, 256 (1981).

51. The Concordat was revised in 1983 to improve joint supervision between parent and host authorities. The revised Concordat, which was widely publicized and distributed, incorporates the principle of parent country authority over all branches and subsidiaries within a single banking entity—consolidated supervision. Chang, *supra* note 1, at 781 n.31.

52. Norton, *supra* note 24, at 1317, 1324-26.

consult with their counterparts in other nations on relevant issues.⁵³ Thus, the ILSA was an initial catalyst for international policy convergence and a vehicle for giving capital adequacy credence as a regulatory imperative.⁵⁴ The Federal Reserve later promulgated uniform capital rules in 1985, in part to address banks' growing off-balance-sheet exposures.⁵⁵

In 1986, the Bank of England entered discussions on convergence of capital standards with the Federal Reserve, the Office of the Comptroller of the Currency, and the Federal Deposit Insurance Corporation (FDIC)—outside of the Basle Committee framework.⁵⁶ The most important step the Bank of England achieved was agreement with U.S. regulators on the establishment of the minimum capital ratio for "internationally active" banks.⁵⁷ The accord published on January 8, 1987 never came into effect but was a stimulus for prompt settlement within the Basle Committee, encouraging cooperation from reluctant countries, such as Japan, as well as others in Europe.⁵⁸

In February 1987, the Federal Reserve published for comment a proposed framework, based on the accord, for evaluating commercial bank and bank holding company capital sufficiency that addressed both on- and off-balance sheet risk⁵⁹ and which would provide a relatively accurate picture of the risk exposure of the individual bank.⁶⁰ The proposal created a capital-to-assets ratio to relate a banking institution's capital to its weighted risk assets.⁶¹

The key to risk-based requirements is lower risk weights for lower risk assets—an approach the Bank of England, the main player in both the U.S.-U.K. and Basle standardization efforts, had applied since 1980.⁶² The risk

53. 12 U.S.C.A. § 3907(a)(1)(b) (1989).

54. Cf. Lyle B. Vander Schaaf, *The International Lending Supervision Act of 1983: Has it Had An Effect on the Latin American Debt Crisis?*, 2 AM. U. J. INT'L L. & POL'Y 689, 705 n.89 (1987) (citing criticism of competitive inequality in international capital standards).

55. Bardos, *supra* note 2, at 26-27.

56. See *Convergence of Capital Adequacy in the UK and US*, 27 BANK OF ENG. Q. BULL. 85, 86 (1987).

57. The Federal Reserve was familiar with the Bank of England's risk-based capital approach and had, in fact, considered adopting a form of it in 1986. Hall, *supra* note 3, at 208; Norton, *supra* note 24, at 1342.

58. *Agreed Proposal of the United States Federal Banking Supervisory Authorities and the Bank of England on Primary Capital and Capital Adequacy Assessment*, 27 BANK OF ENG. Q. BULL. 87 (1987); see also *Convergence of Capital Standards and the Lessons of the Market Crash*, Speech of the Governor to the Overseas Bankers' Club (Feb. 1, 1988), in 28 BANK OF ENG. Q. BULL. 220 (1988). The immediate problem for reaching agreement with the Japanese was that Japan counted a higher percentage of hidden reserves—unrealized gains in securities positions—as capital. Bardos, *supra* note 2, at 28, 29; see also *infra* text accompanying notes 85-86.

59. 52 Fed. Reg. 5119 (1987) (proposed Feb. 19, 1987); see also *U.S. & Britain Propose a Rule on Bank Capital*, WALL ST. J., Jan. 9, 1987, at 3.

60. Haberman, *supra* note 35, at 9 app.

61. The plan dictated that primary capital be "freely available to absorb current losses while permitting an organization to function as a going concern." Capital was divided into two categories: base (core) primary capital and limited primary capital, the latter being limited to 50% of the former. The plan defined base primary capital funds to include common stockholders' equity, general reserves for unindemnified losses, and minority interests in the equity accounts of consolidated subsidiaries. Capital instruments qualifying as limited primary capital included perpetual preferred stock, limited-life preferred stock with an original maturity of at least 25 years, and certain subordinated debt. *Id.*

62. For a general discussion of the risk-weighting system, see Lovett, *supra* note 31, at 1383-86.

weighting of various groups of assets reflects credit risk considerations more than factors of liquidity or interest-rate risk. In so doing, risk weighting takes into account classes of obligors, maturities of assets, and types of collateralization.⁶³ The proposed credit conversion ratio allows a credit-risk-based assessment of off-balance sheet exposure.⁶⁴

In the fall of 1987, the Basle Committee reached preliminary agreement on the minimum standard for risk-based capital. In December 1987, the Committee issued its consultative paper, *Proposals for International Convergence of Capital Measurements and Capital Standards* (Basle proposal).⁶⁵ The framework outlined was similar to that of the U.S.-U.K. accord.⁶⁶ However, the Basle proposal provides that, after a transition period, core capital will consist primarily of common stockholders' equity; loan loss reserves count as secondary capital.⁶⁷ Certain intangible assets other than goodwill will not be deducted from capital.⁶⁸ Subordinated debt is included in tier-two capital, up to fifty percent of core capital.

In July 1988, the central bank governors of the G-10 countries endorsed the system of risk-based capital guidelines for banking organizations under their jurisdictions.⁶⁹ The Basle accord is in its phase-in period—with a capital target

63. Haberman, *supra* note 35, at 10.

A summary of U.S. risk weights for on-balance sheet assets under the U.S.-U.K. accord follows: 0%: cash, domestic and foreign; 10% : short-term (one-year or less) claims upon the U.S. government and its agencies; 25% : cash items in collection, short-term claims on domestic and foreign banks, long-term claims on and guarantees of the U.S. government, claims including repurchase agreements, collateralized by cash or U.S. government or agency debt, local currency claims on foreign governments to the extent that the bank has local currency liabilities; 50% : claims on or collateralized by U.S. government-sponsored agencies, municipal bonds that are general debt obligations; 100% : claims on private entities and individuals, claims on foreign governments that involve transfer risk. *Id.*

64. *Id.* A summary of the conversion factors for off-balance sheet exposures follows: 100% : direct credit substitutions including financial guarantees and standby letters of credit, repurchase agreements and other asset sales with recourse, if not already included on the balance sheet; 50% : trade-related contingencies including commercial letters of credit and performance bonds, other commitments with original maturity over five years, including revolving underwriting facilities; 25% : other commitments with original maturity of one to five years; 10% : other commitments with original maturities of one year or less (swaps, over-the-counter options, and other difference contracts would be treated separately).

65. See Hall, *supra* note 3, at 209. Basle standard capital elements for Tier 1 include (a) ordinary common stock and (b) disclosed reserves; those for Tier 2 include (a) undisclosed reserves, (b) asset revaluation reserves, (c) general provisions/loan loss reserves, and (d) hybrid (debt/equity) capital instruments. *Id.* at 223.

66. Like the U.S.-U.K. accord, the Basle Proposal distinguishes between core and secondary capital, establishes broad risk-weight categories, provides risk assessment for off-balance sheet items, and recognizes international capital standards as a step in overall policy convergence. *Basle Committee Proposal, supra* note 6, at 530-39.

67. *Id.* at 532-35. For discussion of the debate over instruments comprising secondary capital, see Hall, *supra* note 3, at 211-14. The Basle Proposal also features a different risk-weighting structure. Domestic government securities maturing within 90 days receive a zero risk weighting. All other domestic government and agency obligations receive a 10% risk weighting. Short-term bank claims receive a 20% risk weighting, as do government-sponsored agency securities, securities of local governments, commercial letters of credit, and assets backed by domestic depository institutions.

68. *Basle Committee Proposal, supra* note 6, at 535-36. Goodwill is only an amortized estimate of future benefits, which a firm developing serious problems may never realize.

69. Convergence of Capital Standards and the Lessons of the Market Crash, *supra* note 58.

of 7.25% of assets (3.25% in core capital)—and will be in effect on December 31, 1992. At that time, the minimum capital-to-assets ratio will be 4.0% for core capital and 8.0% for total capital.

B. *Problems with the Basle Capital Adequacy Regime*

1. *The Inconsistency of the Basle Program with Its Stated Purposes*

The Basle Committee has declared that the purpose of the capital adequacy standard is (1) to strengthen the international banking industry while (2) providing a level playing field for banks competing in more than one country.⁷⁰

The first of these aims reflects the purpose of the Concordat. The soundness and stability goal actually relates to a concern that a disruption in the international banking marketplace will in turn unsettle one or more national banking systems and possibly entire economies.⁷¹ But the relationship that the Basle Committee has implied between individual bank failures and a threat to the stability of the international banking system is somewhat overdetermined.⁷² Although individual bank failures certainly entail costs to owners and creditors, the demise of a single banking organization only leads to systemic problems if depositors begin a run on other institutions without redepositing their funds *anywhere* and central banks refuse to take ameliorating steps to prevent a contraction of credit.⁷³

The second goal of the Basle standard is to reduce international competitive inequities due to differences in capital adequacy and other banking policies. A uniform capital standard, such as the Basle standard, promotes competition among national banking industries by countering subsidies that governments provide banks in the form of underpriced deposit insurance.⁷⁴

But reducing competitive inequality is still an ambiguous goal that often reflects even more ambiguous motives. In the United States, the interest in contributing to the international convergence of capital adequacy standards was a response to the wave of foreign banking operations reaching the country under the Bank Holding Company Act.⁷⁵ At that time, the Federal Reserve Board was already concerned with devising, in consultation with non-U.S.

70. *Basle Committee Proposal*, *supra* note 6, at 530 ("The Basle Committee . . . has, for several years, been working to achieve a strengthening in the capital resources of international banks in order to help strengthen the stability of the international banking system. At the same time, achieving some convergence of capital adequacy standards in national supervisory programs has been increasingly realised to be a desirable objective in order to remove an important source of competitive inequality . . .").

71. Norton, *supra* note 24, at 1357-58.

72. Benston, *supra* note 22, at 5-10.

73. Historically, most panics have resulted from the failure of a central bank to take appropriate action. *Id.* at 6-7.

74. *Id.* at 15.

75. 12 U.S.C. §§ 1841-1850 (1988 & Supp. II 1990).

banking authorities, methods for monitoring the capital position of these institutions.⁷⁶ Although the Basle member countries sincerely sought to boost banks' financial strength and to reduce any advantages to banks in states with lax capital requirements,⁷⁷ even the U.S. Treasury has noted that "the general issue of competitiveness, both domestic and international, is not just a matter of capital standards, but of the entire system of laws, regulations, economic environment, and culture" under which depositories operate.⁷⁸

In any case, the Basle standard actually defines capital very liberally so that, under national enabling legislation, most banks should qualify without much difficulty.⁷⁹ (Those who still must take steps to meet the standard may either have to issue additional subordinated debt or equity or else have to contract their asset portfolios by limiting new lending and/or selling their loans.⁸⁰) In this respect, the "soundness and stability" goal of the Basle standard seems superfluous; moreover, the discretion that national banking authorities will retain to permit various capital instruments will undermine the competitive equality objective.

Although the Basle standard will not fully accomplish its two primary objectives, the Basle experience has suggested the possibilities of international economic policy coordination on a discrete set of issues at a time when the limitations of joint policymaking have become increasingly apparent.⁸¹ Although the Basle Committee has no power to implement changes in national laws, domestic law and policy creation has resulted from the Basle standard.⁸²

Thus, the actual agreement does not particularly further its declared goals. The Basle standard has not nullified competition among national regulators and will not. Regulators will continue to seek ways to promote the interests of their respective industries within the Basle regime.⁸³

76. See Norton, *supra* note 24, at 1333.

77. *Soft on Banks? Regulators Should Resist Pressure to Be Lenient*, ECONOMIST, Feb. 23, 1991, at 18 [hereinafter *Soft on Banks?*].

78. MODERNIZING THE FINANCIAL SYSTEM, *supra* note 9, at II-14.

79. Lovett, *supra* note 31, at 1383.

80. *Soft on Banks?*, *supra* note 77.

81. See, e.g., *U.S. Failure at G-7 Reveals the Limits of Policy Making*, INT'L HERALD TRIB., Apr. 30, 1991, at 1 (lamenting conflict between United States and Germany over interest-rate gap).

82. Chang, *supra* note 1, at 783. Member states must themselves determine whether to enact changes in their domestic statutes. Although the proposal for a risk-based capital framework represents a move toward facilitating international cooperation on bank supervisory matters, it would overstate the significance of the Basle standard to suggest that it represents an agreement among national regulators not to compete. *Id.* at 788. The Basle standard then constitutes only a gentlemen's agreement, which creates expectations of and reliance upon compliance by others. Cf. Oscar Schacter, *The Twilight Existence of Non-Binding International Agreements*, 71 AM. J. INT'L L. 296, 297, 299 (1977).

83. Indeed, the Basle standard, with its accommodations for domestic regulations, validates this process and will contribute to its effect. See, e.g., MODERNIZING THE FINANCIAL SYSTEM, *supra* note 9, at 7-8.

2. *Restrictions on Industry Access Through Regulatory Standardization*

Most major banks in the United States and Europe will have little difficulty meeting the Basle standard by 1993, and many have met it already.⁸⁴ To be sure, standardization has entailed some adjustment.⁸⁵ For example, the Basle standard allows banks to include hidden reserves as capital at a fifty-five percent discount. Under past regulation in Japan, however, banks there could include up to seventy percent of hidden reserves in the calculation of capital.⁸⁶

One reason that adjustment to the Basle standard will not be especially painful is the two-tier definition of capital. As discussed earlier, developing a universal definition of capital became central to reaching agreement during the Basle Committee negotiations. Each country involved had its own definition of regulatory capital, reflecting country-specific accounting practices, banking activities, and supervisory philosophies. (Changes in the definition of capital can greatly affect measured capital ratios within a national banking system and thus alter the market's perception of the financial strength of the banking organizations in that system.⁸⁷) Consequently, a key Basle Committee accomplishment was the development of a definition of capital that would be uniform across countries and yet accommodate the different financial systems affecting each member state's banking industry. By one reading, the two-tier capital scheme reflects this principle of flexibility within the Basle standard.⁸⁸ Whereas Tier one capital is rigidly defined, Tier two capital encompasses a variety of instruments.⁸⁹

The fact that meeting the standard will not be difficult for many banks suggests that a hidden purpose of the Basle standard may be to restrict entrance to the international banking industry. In this respect, the Basle standard can be understood as accommodating the interests of current players to the detriment of aspiring ones, making the banking market less contestable.⁹⁰

It is also interesting that international policy convergence in other areas—such as liquidity management or coordination of securities and banking

84. *Soft on Banks?*, *supra* note 77.

85. See, e.g., *Citicorp May Sell 40% of Ambac Unit*, INT'L HERALD TRIB., Feb. 26, 1991, at 10.

86. Bardos, *supra* note 2, at 28; *Wanna Buy a Loan?*, ECONOMIST, Sept. 15, 1990, at 105; see also Hall, *supra* note 3, at 212; *Bank Regulation Levelling*, ECONOMIST, Dec. 12-18, 1987, at 92.

87. Bardos, *supra* note 2, at 28-29.

88. The U.S. role in the development of the Basle standard is illuminating. By the mid-1980's, the United States was confronted with the fact that other major industrial countries had introduced risk-based capital regulation. However, U.S. regulators were reluctant to raise domestic capital standards substantially for fear of permitting foreign banks operating in America to underprice U.S. institutions. Thus, convergence was perceived as a means of advancing U.S. regulation without undermining the competitiveness of the American banking industry. *Id.* at 27.

89. *Id.* at 29.

90. Some studies have demonstrated a positive relationship between a concentrated market structure and enhanced bank performance, although it is not clear that greater concentration leads to more effective collusion among banks. R. Alton Gilbert, *Bank Market Structure and Competition*, 16 J. MONEY, CREDIT & BANKING 617, 618 (1984) (literature on market concentration is inconclusive). *Id.* at 629.

regulation—has not received as much attention.⁹¹ Another issue that merits international banking policy coordination is the nature of consolidated supervision—when all entities in a financial group are subject to some degree of prudential oversight and are covered by standards that measure the adequacy of capital, liquidity, and management.⁹²

In the end, banking regulation remains a national problem, especially in the United States. Here, foreign banks seeking to enter securities activities may be required under banking reform to set up well-capitalized holding companies—a huge expense to meet a regulation that seems to undermine the “level playing field” norm of the Basle regime.⁹³

3. *The Risk-Based Framework and Bank Portfolio Problems*

As discussed earlier, the central principle of the Basle standard is the assignment of lower risk weights to lower risk assets.⁹⁴ The broad categories that the Basle standard sets out were designed with a view to affording national authorities flexibility in implementing the framework. This deference to national authorities reflects the difference in loan quality across G-10 countries and the discretion these authorities have to determine the risk-weighting for obligations of certain domestic public sector entities.⁹⁵

The appeal of risk asset ratios is that they provide an apparently objective basis for risk assessment. The danger of relying upon them for supervisory purposes is that banks’ pricing and other decisions become “based on a set of dubious risk weights and conversion factors, thereby introducing arbitrary distortions into business development” that might actually increase overall portfolio risk.⁹⁶ The attention now given to risk weighting in the United States is significant because it legitimates the trend toward an early intervention policy by making capital requirements appear to be based upon actual, measurable risk.

a. *The Risk-Based Categories and Risk Measurement*

Unless tightened, the current risk-weight categorization may actually encourage risk taking, resulting in both higher credit risk and higher interest-rate risk in portfolios. In particular, the Basle standard does not take ade-

91. See Quinn, *supra* note 42, at 236; Convergence of Capital Standards and the Lessons of the Market Crash, *supra* note 58, at 221-22.

92. Christine M. Cumming & Lawrence M. Sweet, *Financial Structure of the G-10 Countries: How Does the United States Compare?*, 12 FED. RESERVE BANK OF N.Y. Q. REV., Winter 1987-88, at 14, 19.

93. Comprehensive Reform Act, Pub. L. No. 102-242, §§ 214, 215 (1991); see *Japan Banks Keen to Enter U.S. Securities Field*, INT’L HERALD TRIB., May 3, 1991, at 17.

94. Lovett, *supra* note 31, at 1383.

95. *Id.* at 1382-84.

96. Hall, *supra* note 3, at 216. At any rate, relying upon risk asset ratios may have an adverse effect upon the efficiency of portfolio choice, whether or not it affects riskiness.

quate account of variance in risk among different types of assets within the same risk-weight category. For example, weak commercial loan credits have the same risk-weighting as highly-rated ones. A bank may decide to forgo high-quality commercial loans—which have a 100% risk weighting—in favor of more risky government instruments, some of which have a weighting of 20%. In this fashion, banks can continue to chase returns at the expense of portfolio quality.⁹⁷

Moreover, the nature of commercial loan credit risk varies across countries with different financial industry structures. Lending by Japanese long-term credit banks—which maintain intimate, often exclusive, relationships with their clients over decades—is fundamentally different from lending by U.S. and U.K. institutions, which is characterized by arm's length bargaining and a muted role for banks as agents of national competitiveness.⁹⁸ Thus, the strength of the Japanese commercial loan credit as described is that it is perceived to be strong by a lender that has a substantial interest in its strength and, most importantly, a willingness to maintain it. Moreover, assessment of lending to various sectors of the economy is a product of how and why the loans were made. For example, in the 1980's, the speculative bubbles in property markets emerged, in part, because once sectoral loans were made in large quantities, the perception of risk in that sector shifted, making credits in that sector more attractive.

In the United States, the proliferation of highly leveraged financings since the 1980's has had significant implications for the portfolio quality and overall risk exposure of bank participants.⁹⁹ Despite this fact, highly leveraged financings are categorized with other commercial loans for the purposes of determining a bank's capital sufficiency.¹⁰⁰ Such problems cannot be solved by creating new categories, which would result in endless regulatory hair-splitting.

Another problem is that it may not be possible to assess the risk associated with a bank's total operations merely by examining the risk of each component activity. Portfolio theory suggests that combination of risks has a dimension of its own; risks can affect and reinforce each other. Moreover, portfolios that

97. Chang, *supra* note 1, at 791.

98. See RONALD P. DORE, FLEXIBLE RIGIDITIES 66-71 (1986). Dore notes:

[A]vailability of bank credit has been of great importance for Japanese industry because such a high proportion of the capital employed in industry comes through the banking system rather than through the share market. . . . This high gearing pattern is not as dangerous as it would be thought to be in Europe or North America. Between the banks and their corporate customers there are relations of trust and mutual obligations.

Id. at 67.

99. Memorandum from William Taylor, Staff Director, Board of Governors of the Federal Reserve System, Division of Banking Supervision and Regulation, to the Officer in Charge of Supervision at Each Federal Reserve Bank (on Highly Leveraged Financings) (Feb. 16, 1989) (on file with author).

100. The Comptroller of the Currency, the FDIC, and the Federal Reserve Board have declared recently that "participation of banking organizations in highly-leveraged transactions is not considered inappropriate so long as it is conducted in a sound and prudent manner, including the maintenance of adequate capital and loan loss reserves to support the risks associated with these transactions." COMPTROLLER OF THE CURRENCY, FEDERAL DEPOSIT INS. CORP., FEDERAL RESERVE BOARD, GUIDANCE ON HIGHLY-LEVERAGED TRANSACTIONS 1 (Feb. 15, 1991) (interagency statement, on file with author).

are heavy with sectoral lending, and thus have a high covariance among credits,¹⁰¹ run the risk of inadequate diversification.¹⁰²

But the critique that the risk asset ratio (RAR) may be neither necessary nor sufficient to safeguard against insolvency¹⁰³ probably holds less weight than others. Although bank insolvencies have been related to mismanagement, such phenomena are, in effect, credit risk problems. This critique of the RAR is amplified by the fact that there clearly are other possible means of assessing capital adequacy,¹⁰⁴ as demonstrated by U.S. regulatory experience.¹⁰⁵

Moreover, any capital adequacy regulation assumes that the risk inherent in bank assets can be quantified or reasonably assessed. But the Basle risk categories are basically arbitrary and unsupported by portfolio theory.¹⁰⁶

The Basle standard also measures capital according to traditional accounting practices. Thus, certain values for untraded assets are difficult to determine.¹⁰⁷ In addition, accounting rules, which can vary significantly across countries, perpetuate their own perversities. An example in the United States is that, even under a system for mandatory regulatory intervention, bank regulators still retain broad discretion because bank capital is measured using generally accepted accounting principles (GAAP).¹⁰⁸ Instituting market value accounting (MVA) could theoretically check abuses of GAAP.¹⁰⁹

b. *Limits of the Basle Standard in the United States*

The Basle Committee acknowledges that there are limitations to the risk asset ratio scheme and that bank regulators must still take into account interest-rate and investment risk as well as overall portfolio quality.¹¹⁰ But what the

101. See Robert C. Clark, *The Soundness of Financial Intermediaries*, 86 YALE L.J. 4, 50-52 (1976). Modern portfolio theory (MPT) addresses this intuitive notion of the covariance of risks and the need to select assets whose directional risks will balance each other.

102. Cf. James Tobin, *The Theory of Portfolio Selection*, in THE THEORY OF INTEREST RATES 3, 22 (F.H. Hahn & F.P.R. Brechling eds., 1965) (discussing goal of diversification).

103. Hall, *supra* note 3, at 215-17.

104. See David T. Llewellyn, *The Policy Framework: Capital Adequacy*, in MANAGING BANK ASSETS AND LIABILITIES (J.S.G. Wilson ed., 1988).

105. In the 1960's, the Comptroller of the Currency adopted a new approach to capital adequacy regulation that went beyond mechanical formulae, discarding previous practice as arbitrary and inadequate. Although regulators continued to use a seven-to-one assets-to-capital ratio as a guideline, the Comptroller developed a policy of evaluating the capital adequacy of banks on a case-by-case basis, taking into account management quality, asset quality, liquidity, earnings history, ownership strength, and cash flow abilities. Norton, *supra* note 24, at 1318-19.

106. They also reflect political values, such as homeownership, in the form of the 50% risk weight for residential mortgages. And the risk categories do not take adequate account of foreign-exchange and interest-rate risk. Benston, *supra* note 22, at 19. To the extent that the Basle standard does pay lip service to the need for analytic determination of risk categories, it only assigns assets particular risk weights based upon a casual sense of the historical quality of various portfolio credits. See also Dybvig & Ross, *supra* note 41.

107. Benston, *supra* note 22, at 18.

108. Litan Testimony, *supra* note 14, at 4.

109. *Id.* at 5.

110. See Basle Committee Proposal, *supra* note 6, at 110.

banking industry in the United States needs are systemic, holistic risk-reduction methods that address risk factors that may infect a portfolio as a whole. Undiversified portfolios constituted the greatest nonfraud cause of commercial bank failure in the United States in recent years.¹¹¹ However, the United States still lacks nationwide bank branching. Bank branching restrictions clearly contributed to the inability of thrifts to diversify their loans, and, in the 1980's, states with stringent bank branching limits experienced a disproportionately high number of bank failures.¹¹²

If the barriers between the investment banking and commercial banking businesses that the Glass-Steagall Act created are eradicated, the implications of a risk-weighting approach to determine the minimum capital ratios for institutions will be unclear.¹¹³ The question is whether a nonbank parent and its nonbank subsidiaries should be regulated within the same framework. Bank supervisors in most G-10 countries, including the United States, have adopted the consolidation principle with respect to reporting requirements and assessment of bank capital adequacy.¹¹⁴ Consolidation usually extends to securities and nonbanking financial activities conducted within a universal banking framework or in affiliates.¹¹⁵ Substantially different capital rules for the securities and commercial banking industries here may distort competitive pricing.¹¹⁶ New relationships between these two industries will involve the securities industry assuming more credit risk and commercial banks assuming more market and foreign exchange risk.¹¹⁷

IV. CAPITAL ADEQUACY AS A BASIS FOR BANK SUPERVISION

The development of the Basle standard at the international level and the recent adoption of the Basle rules in U.S. banking regulations have led policymakers to begin to make capital adequacy a supervisory criterion for diverse areas of bank regulation. Under the Comprehensive Reform Act, the problems

111. Benston, *supra* note 22, at 20.

112. Regional economies that were adversely affected following downturns in the agricultural and energy sectors brought their banks down with them. And although banks can diversify their assets geographically through "loan production offices," the activities of lending and deposit-taking work best together.

113. See Thomas F. Huertas and Rachel Strauber, *Risk-Based Capital Requirements: Should They Apply to Bank Holding Companies?*, ISSUES IN BANK REG., Summer 1988, at 8. For discussion of how the Treasury proposal would have opened broader activities to well-capitalized institutions, see *infra* note 136 and accompanying text. The most important new bank activities would have been in the securities industry: (1) underwriting and wholesale marketing of securities, and (2) retail brokerage and distribution of securities to investor families.

114. See Cumming & Sweet, *supra* note 92, at 19.

115. *Id.*

116. Capital rules in both of these industries have reflected the nature of each business—neither of which traditionally competed directly with the other. The most important distinction is that between the banking and securities industry time horizons, each reflecting how rapidly managers can adapt to change and adjust their risk profiles. Haberman, *supra* note 35, at 1.

117. Norton, *supra* note 24, at 1313.

of the Basle standard discussed earlier will extend beyond the capital adequacy domain to distort bank supervision in general.

To be sure, there are critics who deplore the use of capital adequacy as a tool of bank regulation;¹¹⁸ however, it is fair to say, given recent statistical research, that although capital is an imperfect indicator of bank health it remains a very useful one.¹¹⁹ What critics have not emphasized to date is that the current focus upon making capitalization a *basis* of broader regulation has diverted attention from more important issues—including removing obsolete regulatory restrictions, such as those upon interstate branching and bank participation in securities and insurance activities—that prevent banks from improving their commercial loan credits, overall portfolio quality, profits, and competitiveness. Addressing these problems directly will prove politically difficult, although the Treasury expected that capital-based regulation would have provided a vehicle for introducing a few banking reforms, including protecting the Bank Insurance Fund, without the need for hard political choices.

Deposit insurance was designed to bolster confidence in the banking system in times of crisis by halting bank runs and preventing losses to small depositors.¹²⁰ But recent experience has vindicated some of the criticisms raised at the inception of the deposit insurance system: although it has provided stability, the federal safety net has essentially “permitted weak, poorly managed institutions to stay in business too long—aggravating losses and misallocating resources to unproductive investments,”¹²¹ with healthy banks and the taxpayer shouldering the resulting costs.¹²² Indeed, for the Treasury, protection of the Bank Insurance Fund is the major impetus behind capital-based regulation.¹²³

118. *Id.* at 1314.

119. *See infra* notes 127-28 and accompanying text.

120. However, in the past decade, 9 of the 10 largest Texas bank holding companies have been reorganized with FDIC or other outside assistance. From 1987 to the end of 1990, the FDIC fund declined from more than \$18 billion to about \$9 billion, forcing Congress to recapitalize the Bank Insurance Fund. MODERNIZING THE FINANCIAL SYSTEM, *supra* note 9, at 5; *see also* James Risen, *U.S. Considers Backing Out of FDIC Plan*, INT'L HERALD TRIB., Apr. 17, 1991, at 9; *U.S. Plan Would Allow Fed to Lend to FDIC*, INT'L HERALD TRIB., Mar. 20, 1991, at 9. The insurance fund's precarious state raised concerns about a possible replay of the savings and loan fund bail-out. *U.S. Adds \$30 Billion in S&L Bail-out Funds*, INT'L HERALD TRIB., Mar. 25, 1991, at 9.

121. MODERNIZING THE FINANCIAL SYSTEM, *supra* note 9, at 5. *But see* Jerry Knight & Sue Schmidt, *U.S. Considers Easing Rules for Troubled Banks*, INT'L HERALD TRIB., June 8-9, 1991, at 13 (questioning early intervention principle as insiders add up costs of closing institutions).

122. Bank insurance costs have escalated for three reasons. First, bank profits have decreased, costs have escalated, and capital levels have declined as a result of regulatory restrictions preventing banks from moving into new areas of business in order to serve the financial needs of their best clients. Second, taxpayer exposure to bank losses has grown as the deposit insurance safety net has expanded, and weak banking institutions have taken greater lending risks. Under the Treasury plan, the proposed reduced scope of deposit insurance—limits on the amount insured per person rather than per account—would have reduced taxpayer exposure. *U.S. Banking Reform: Reduced Scope of Deposit Insurance Will Cut Risk to Tax-payers*, FIN. TIMES, Feb. 6, 1991, at 6. Finally, previous government efforts to impose market discipline on the banking system have proven inadequate.

123. MODERNIZING THE FINANCIAL SYSTEM, *supra* note 9, at 14.

In sum, it is crucial to strengthen the role of capital in the bank regulatory system . . . There should be rewards for firms that build and maintain strong levels of capital, and prompt

Because the Basle standard has already become part of U.S. regulations, adherence to the Basle norms does not loom large in the current regulatory debate; but those who sought to tighten regulatory intervention co-opted the logic of the Basle standard—a method of risk assessment, however weak—as a means of assessing bank health to make other regulatory decisions.¹²⁴

1. *Capitalization as an Index of Bank Health*

The technical debate in the United States, which predates the push for capital-based regulation, has centered on problems of using reported capital as an index of bank health. As suggested, the use of GAAP accounting results in overreporting of bank capital at weak institutions.¹²⁵ A weak bank may also tend to sell those healthy assets that will permit it to record a gain while carrying “underwater” assets at “inflated historical costs.”¹²⁶ The preceding practices were common during the 1980’s, especially in the savings and loan industry. Nevertheless, even with these flaws, reported capital provides a meaningful basis for predicting the well-being of banks. Recent studies for the House Banking Committee on the state of the industry and of the FDIC confirm a correlation between capital position and the probability that a bank will require resolution.¹²⁷ In short, although capital position is not a perfect indicator of future performance, the Barth study suggests a strong statistical basis for the need for close supervision of weakly capitalized institutions. One objection has been that tougher capital adequacy standards will make it harder for banks to earn an acceptable return on equity and, in turn, encourage unwarranted risk-taking. However, at current capital levels this danger does not seem to exist.¹²⁸ Indeed, well-capitalized banks in the United States, due to their overall strength, have enjoyed a higher return-on-equity and lower rates of non-accrual loans than their weaker brethren.¹²⁹

corrective action for firms that fail to do so. There should be new opportunities for banks to build and attract capital, and improved measurement of capital in relation to risk. Over time this should result in a strong, well-capitalized banking system—the best protection for the tax-payer.

Id.

124. Certain Treasury proposals would have permitted well-capitalized banks to embark upon new financial activities through a holding company structure. In order to protect the taxpayer, only the bank itself would have had access to deposit insurance. Peter Riddell, *U.S. Banking Reform: Support for Wider Range of Activities*, *FIN. TIMES*, Feb. 6, 1991, at 6.

125. Litan Testimony, *supra* note 14, at 2.

126. *Id.*

127. JAMES R. BARTH ET AL., *BANKING INDUSTRY IN TURMOIL*, REPORT TO THE FINANCIAL INSTITUTIONS SUBCOMM. OF THE HOUSE COMM. ON BANKING, FINANCE AND URBAN AFFAIRS, 101st Cong., 2d Sess. 59-60 (Comm. Print 1990). This research demonstrated that banks that were weakly capitalized in 1986 were much more likely to fail during the following three years than those with a strong capital position: whereas banks with an equity-to-asset ratio greater than 6% had only a 1-2% chance of undergoing resolution, banks with very poor capitalization—less than 1.5%—had a 40-60% likelihood of resolution. These calculations, based upon a sample of 13,000 banks with less than \$500 million in assets, do not reflect either risk-weighting or off-balance sheet exposures. *Id.*

128. Litan Testimony, *supra* note 14, at 3.

129. *Id.* Of course, strong capitalization may be a *product* of strong performance.

2. *Capital-Based Regulation Proposals*

The banking reform issue in the United States has not been whether capital should be used as an indicator of bank health, but whether it should increasingly provide a basis for much of regulatory reform. Two legislative proposals incorporated into the recently enacted Comprehensive Reform Act provided for early regulatory intervention based upon a bank's capital position: the Treasury Department proposal, which was a worksheet for comprehensive banking reform,¹³⁰ and a bill introduced by Senator Donald Riegle, S. 543.¹³¹ Both schemes were designed to increase supervision as a bank's capital position deteriorated and to direct certain dividend, activity, and growth restrictions. Most importantly, these proposals allowed an insured institution to be placed in conservatorship before it is technically insolvent. Major differences between the Treasury plan and S. 543 concerned (1) how to draft various levels of capital-based regulation, (2) whether intervention is mandatory or discretionary, (3) how the plans approach the "too big to fail" dilemma relating to troubled institutions such as the Bank of New England,¹³² and (4) whether to permit well-capitalized institutions to engage in certain prohibited nonbanking activities¹³³—a privilege ultimately not granted under the new law.

S. 543 was initially based upon only two regulatory tiers; thus, banks falling below the minimum capital ratio would have been forced to suspend dividend payments, limit their growth to ten times new capital, and file a capital restoration plan.¹³⁴ By contrast, the Treasury proposal envisioned a five-tier or "zone" regulatory scheme, providing for greater flexibility to deal with banks barely missing the capital standard.¹³⁵ Zone-1 banks, those surpassing mini-

130. Comprehensive Reform Act, Pub. L. No. 102-242, §§ 131, 133 (1991), adopts most of the Treasury proposals for capital-based supervision except those extending broader powers to well-capitalized banks.

131. S. 543, 102d Cong. 1st Sess. (1991); see also Marc Levinson, *Why U.S. Banks Are Hurting*, NEWSWEEK, Jan. 21, 1991, at 39-41 (observing need for banking reform).

132. See Steve Lohr, *Today's U.S. Banking Fear: 'Silent' Run*, INT'L HERALD TRIB., Feb. 19, 1991, at 9. An important question is whether a refusal to bail out large uninsured depositors in the case of a major bank failure would induce a ripple effect across other potentially troubled institutions.

133. Litan Testimony, *supra* note 14, at 3.

134. Banks whose capital deteriorated further so as to fall below a critical capital ratio would have had their activities restricted and payments to subordinated debtholders suspended; if not recapitalized within 30 days, these banks would have been placed in conservatorship unless the FDIC determined that another course of action would cost less. Nevertheless, banks not regaining the critical capital ratio within a year would have been subject to a mandatory receivership. *Id.* at 4.

135. Zone-2 banks, meeting minimum capital requirements, would have been permitted to expand into these new financial businesses on a case-by-case basis. Zone-3 banks, those failing to meet minimum capital ratios, but not by a margin meriting drastic action, would have been required to file capital restoration plans. Regulators would have had discretion to impose growth and dividend restrictions, to direct a change in management, and to increase supervision. Zone-4 would have included those banks falling substantially below the minimum capital ratio; regulatory imposition of the Zone-3 restrictions would have become mandatory for institutions in this category. Zone-5 banks would have consisted of institutions on the brink of insolvency subject to early receivership or conservatorship. S. 543 also posed the problem of permitting the regulator of the insurance fund to delay putting a bank with capital below the critical ratio into conservatorship based upon the agency's assessment of future costs. Given that the FDIC has tended to

mum capital levels, would have enjoyed broad rights to engage, through affiliates, in what have been prohibited activities, mainly in the securities industry, for the past sixty years.¹³⁶

The decision of regulators to protect all uninsured depositors at the Bank of New England has refocused attention upon the “too big to fail” policy reminiscent of the run upon Continental Illinois several years ago. Although both S. 543 and the Treasury proposal addressed this issue, neither dealt with it effectively. S. 543 prevented the FDIC from paying off uninsured depositors in full but still allowed lending to the troubled banks in question. The Treasury proposal left the issue of uninsured depositor payoffs to joint Department and Federal Reserve Bank case-by-case decisions. Although such escape valves are key in times of crisis to prevent runs, the problem of disparate treatment of large and small banks remains unsolved.¹³⁷

Dealing with the de facto two-tier banking system may require a dual regulatory scheme.¹³⁸ Such a scheme may entail higher minimum capital ratios in each tier for banks and bank holding companies with assets above a certain level.¹³⁹ Another answer may be to require large institutions to maintain a certain amount of their capital in subordinated debt¹⁴⁰ or to obtain reinsurance on a portion of the Bank Insurance Fund’s risk.¹⁴¹

3. *Capital-Based Regulation as Part of the Reform Solution*

Capital-based regulation played a key role in the overall Treasury banking reform proposal, which identified “interrelated parts” of the current problem in the United States: reduced bank competitiveness and financial strength, caused by outdated legal restrictions; the overextension of deposit insurance; a fragmented regulatory system; and an undercapitalized deposit insurance fund.¹⁴² (And although the Comprehensive Reform Act sidesteps the restrictions banks face in the securities and insurance businesses, this issue will certainly be revisited in the near future.)

regard most alternatives to liquidation as cost effective (in the short term), the early intervention goal would have suffered. *Id.* at 6-7.

136. The envisioned holding company structure would still not have permitted banks to engage in universal banking—operating securities and traditional commercial banking businesses under one roof—as is the frequent continental European practice.

137. Uninsured depositors at large banks typically enjoy all of the benefits of the federal insurance fund, whereas uninsured depositors at small banks, such as Freedom National Bank in New York, typically end up suffering losses. This controversy concerns more than simple fairness to the uninsured depositor at small banks. Recent banking problems have not been contained to large banks but have plagued them disproportionately. *Id.* at 7.

138. Many large banks have lost their best customers—corporations with strong credit ratings, often stronger than those of the banks with which they deal—to the securities markets. *Id.* at 8.

139. *Id.*

140. *Id.*

141. Like subordinated debt, reinsurance provides a mechanism for private actors with large financial stakes to assess banks’ financial positions.

142. See MODERNIZING THE FINANCIAL SYSTEM, *supra* note 9, at ix.

The first problem stems from the obsolescence of laws originally designed to protect U.S. banks from nonbank competitors but that now, in the wake of key marketplace innovations, hinder bank competitiveness.¹⁴³ For example, due to the development of instruments such as the money market mutual fund, banks no longer have a protected source of low cost funds.¹⁴⁴ Banks have lost their near monopoly in major commercial and consumer credit activities because of the development of the commercial paper market and securitization and because of competition from nonbank financial institutions.¹⁴⁵ As a result, banks have expanded their credit card and financial advisory operations, offered high interest to depositors, underpriced loans, and reached for riskier credits.¹⁴⁶ A related impediment to industry strength has been that banks have been prevented from achieving geographic diversification in their portfolios due to restrictions on interstate banking. Although some barriers have been substantially eliminated, the continued prohibitions against interstate branching denies banks an efficient vehicle for expansion.¹⁴⁷ The expansion of deposit insurance fourfold in real terms since the 1930's—from \$2500 to \$100,000 per account—has only exacerbated these trends. In addition, bank regulation has deteriorated through effectively weaker capital adequacy controls, the obsolescence of flat-rate deposit insurance pricing, and lax supervisory intervention. Part of the problem stems from competition among the regulatory agencies overseeing the banking industry,¹⁴⁸ which undermines consistency and accountability.¹⁴⁹

The final element of banking crisis has grown out of the preceding problems: the system of deposit insurance leads to excessive taxpayer exposure. But the Comprehensive Reform Act only addresses this last problem by ignoring the other ones. The Treasury had pushed—although certainly not as hard as it could have in the final struggle—four reforms: (1) restoring competitiveness by allowing banks to participate in the full range of financial services; (2) strengthening the role of capital, reducing insurance coverage, and assessing

143. See *infra* note 149; see also Levinson, *supra* note 131, at 39-40.

144. Levinson, *supra* note 131, at 39-40.

145. See MODERNIZING THE FINANCIAL SYSTEM, *supra* note 9, at 6.

146. One outcome has been poor earnings and, thus, a drop in industry capital. *Id.* at 6-7.

147. *Id.* at 7.

148. The Federal Reserve Board has jurisdiction over the slowly shrinking numbers of bank members of the Federal Reserve System, Federal Reserve Act, 12 U.S.C. §§ 241-250 (1988), and bank holding companies, Bank Holding Company Act of 1956, 12 U.S.C. §§ 1841-1850 (1988 & Supp. II 1990). The Office of the Comptroller of the Currency supervises national banks. National Bank Act, 12 U.S.C. §§ 21-42 (1988 & Supp. II 1990). The FDIC has authority over insured state banks. See Federal Deposit Insurance Act, 12 U.S.C. §§ 1811-1832 (1988 & Supp. II 1990).

149. See *Too Many Referees*, *ECONOMIST*, Sept. 15, 1990, at 97 ("How the deposit-insurance scheme is put to rights—whether it is patched up, rebuilt or replaced—matters greatly because it is the back-door way to mending the whole of America's financial system.").

risk-based premiums;¹⁵⁰ (3) streamlining the regulatory system; and (4) recapitalizing the Bank Insurance Fund.¹⁵¹

Ironically, certain new legal provisions could actually undermine the Basle "level playing field" principle. For example, some Japanese banks are considering expanding into the U.S. securities business.¹⁵² However, the new law may require some foreign banks to set up well-capitalized holding companies here,¹⁵³ at considerable expense, rather than opening subsidiaries and branches directly under their parent companies. Thus, the back door to resolving the struggle over expanded bank powers may be the desire to increase regulation of foreign banking institutions operating on U.S. soil.

V. CONCLUSION

The need for improved bank regulation in this country to address credit risk and to improve the competitiveness of American institutions is clear.¹⁵⁴ Because capital ratios provide regulators with a "hard" standard against which to judge bank performance, it has been attractive to design schemes of regulatory intervention around changes in banks' capital positions. The question is whether the current U.S. scheme for early intervention based upon the capital positions of banks is the right medicine. Appropriating the mechanics of the Basle standard to address national bank regulation issues will probably succeed in raising capital levels of institutions in this country, despite the theoretical shortcomings of the risk asset ratio scheme, but accomplish little more. Capital-based regulation will probably not alleviate current banking problems and has not been successful in reconciling the relationship between banking and non-banking financial businesses.

150. See MODERNIZING THE FINANCIAL SYSTEM, *supra* note 9, at 32.

151. See *id.* at x-xii.

152. *Japan Banks Keen to Enter U.S. Securities Field*, *supra* note 93.

153. Comprehensive Reform Act, Pub. L. No. 102-242 §§ 214, 215 (1991).

154. Regardless of the immediate future of banking reform, the U.S. banking system will be decidedly more atomistic than any other for some time to come, encompassing thousands of institutions that have divergent interests. The consequence is that one internationally important monetary policy continues to experience the severe constraints of the structure of its domestic banking system. Hundreds and thousands of independent financial decisionmakers make it impossible for monetary authorities to communicate with them except through the incentives and penalties of the price mechanism (setting interest rates). Monetary authorities cannot exercise clubby moral suasion, and this constraint can generate conflict between international requirements for monetary policy and those imposed by moral hazard at home (keeping troubled banks afloat), leading to fragility of the financial structure. Cf. Franco Modigliani's comments on A.M. Wojnilower, *The Central Role of Credit Crunches in Recent Financial History*, 2 BROOKINGS PAPERS ON ECONOMIC ACTIVITY 334 (1980) ("[P]ast credit crunches led to deregulation which, on the whole, made the system even more difficult to control, thus requiring further crunches that led to more deregulation and so on."). An atomistic banking system is bound to contain a relatively high proportion of regionally and sectionally exposed institutions, which, in turn, leads to political pressures constraining a monetary policy that must accommodate international realities.

