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**The Limits of Prudential Supervision:
Economic Problems, Institutional
Failure and Competence**

by
Bernard Shull¹

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**THE LIMITS OF PRUDENTIAL SUPERVISION: ECONOMIC PROBLEMS,
INSTITUTIONAL FAILURE AND COMPETENCE**

Bernard Shull¹

I. INTRODUCTION

Bank supervision typically receives little if any attention when banks are operating without difficulty. But when banks fail in large numbers, or large banks fail, and the system itself is threatened, supervision becomes a focal point for criticism and reform (see, for example, Conference Report, 1989, Title I, IX; Pecchioli, 1987, pp. 11 ff.; and Comptroller General of the U.S., 1977).² On such occasions, institutional changes may take equal billing with the "improvement" of supervision. But as often as not, the only thing Congress can agree on is that supervision needs to be better. This usually translates into more supervisors operating with more authority,

The repeated augmentation of bank supervision may give the impression that it is a solution rather than a symptom of

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²Unless otherwise specified, commercial banks, savings associations, including S&L's and savings banks, credit unions, all providing transactions deposits and subject to more or less similar regulation and supervision, are referred to as "banks" throughout this paper. Holding companies that control these institutions, and are similarly regulated and supervised, are, in general, not distinguished.

recurring banking problems; and it is in the interest of supervisors to suggest that this is the case. Repeated disappointments about past performance never seem to undermine the promise that more and better supervisors, with more authority, will make things better in the future.

The historical record suggests that this is not true. There are, however, independent reasons for questioning whether, in and of itself, more supervisors with more restrictive authority will help very much. It is argued below that the promise of supervisory enhancement is an illusion traceable to the belief that recurring banking problems are caused by bad bankers, and that ignores the limitations of supervision in dealing with the problems that actually exist. These limitations include: (1) the existence of an intractable economic problem confronting depository institutions; (2) at least two distinct institutional failures, a fragmented regulatory system composed of multiple agencies and the growth of opportunism among banking organizations, that make it difficult to formulate and implement appropriate policies; and, finally, (3) the inability of the existing supervisory establishment to deal with these economic and structural issues.

The nature of supervision is discussed in the next section. The limitations are reviewed in Section III, and the inadequacy of the current supervisory establishment to deal with the problems it must deal with to be successful is considered in Section IV. Some proposals to remedy the existing difficulties

are presented in Section V. These include the consolidation of the "stand-alone" supervisory agencies with the monetary authority.

II. SUPERVISION AND BANKING PROBLEMS

Bank supervision in a rudimentary form accompanied the inception of chartered banking in the United States (Hammond, 1957, p. 187). The early bank charters granted banks exclusive privileges, particularly the right to issue notes payable on demand that would circulate as currency. Banks were also understood to be "private establishments employed as public agents" (Dunbar, 1904, p. 91). Among other things, they were employed to provide credit to the government. A symbiotic bank-government relationship implied government support of one kind or another (Shull, 1983). Government supervision was a logical outcome.

The substance of the bank-government relationship has changed over the past two hundred years, but special charters, effectively defining and limiting banks activities, still exist; and other firms are restricted in providing depository services. Banks are still perceived as serving public functions, such as participation in the payments mechanism, and are supported by what, in recent years, has been referred to as a "safety net" that includes deposit insurance and the Federal Reserve's discount mechanism.

A. Supervisory Objectives and Operations.

The objectives of supervision are sometimes specified in terms of protecting depositors, and/or protecting the insurance funds, and/or protecting the payments mechanism and/or protecting the money supply, and/or assuring that banks abide by laws that constrain the private use of their resources; e.g. the Community Reinvestment Act. In general, each of these objectives may be viewed as involving a public function which banks perform.

While it is often said that it is not the purpose of supervision to keep banks from failing, these functions cannot be served by failing or failed banks, particularly if problems are system-wide. It is understandable, then, that supervisors are not simply concerned with closing insolvent banks, but also aim at sustaining banks as viable institutions. This objective is reflected in activities that range from advice given to bankers on how to solve problems, to financial aid provided by the supervisory agencies (particularly the FDIC and the Federal Reserve), to advocacy by supervisory agencies for legal changes that are seen as supporting bank earnings; e.g., providing banks with the authority to underwrite securities and sell various types of insurance. Bank capital, as noted, is viewed as a protection against failure; and earnings are the basis for increased capital. The twin obligations of supporting banks and restraining them, the ultimate restraint being closure, implies a potential conflict of objectives that at best can confuse supervisors in responding to changing bank and market conditions.

The functioning of supervision has also changed over the past two hundred years, from the collection of sporadic reports to sophisticated techniques for monitoring, evaluation and enforcement. By the middle of the Twentieth Century, supervision had developed into an examination of the condition of banks on a given date, their policy procedures, and management competence, as well as a determination of compliance with applicable statutes and regulation. (Crosse, 1962, p. 109). At the Federal Reserve Bank of New York, for example, the principal concerns were that banks would have sufficient liquidity to meet their contractual obligations to provide funds, that they have sufficient capital to prevent the threat of insolvency in the face of potential losses, and that they have sufficient earnings to absorb losses and raise new capital when needed (Crosse, 1962, p. 158).

Currently, the principal work of the supervisory agencies include the establishment of regulations in accordance with law, and the evaluation of "safety and soundness" of the institutions supervised. When a bank's condition is deemed "weak" or "troubled;" i.e., approaching insolvency, they attempt to bring about improvements; and, if unsuccessful, are expected to close the bank promptly. The principal tool of the supervisory agencies is bank examinations.

In recent years, with the collapse of the S&L industry, the high rate of commercial bank failure, and the depletion of the the FDIC's deposit insurance funds, there have been some notable changes in supervisory technique. There has been movement toward

measuring the net worth of banks on a market, rather than a book, basis, toward adjusting capital requirements to risk, and incorporating interest-rate risk measures and interest-rate change scenarios into supervisory calculations (Haupt & Embersit, 1991). But a principal legislative remedy, as has typically been the case, has been more supervision and tougher constraints, including earlier intervention and closure of weak banks. This approach derives from the venerable idea that bank management is almost invariably responsible for bank failure.

B. Bank Management, Supervision and Bank Failure

Mismanagement as a cause of bank failure was a recurrent theme in the 19th and early 20th Centuries (Legislative History, 1855, pp. 58 ff.; House Committee on Banking & Currency, 1913, pp. 11, 31). (For an early example of the incipient "supervisory attitude," see Hammond, 1957, p. 201). It has emerged repeatedly in studies by supervisory agencies in a succession of banking problems and crises over the last 70 years. In 1926, Federal Reserve officials identified bad management as a principle cause of the high rate of bank failure (Friedman & Schwartz, 1963, pp. 269-70). In 1930, the Comptroller of the Currency reported roughly half the failures of national banks then in receivership could be attributed to incompetent management and dishonesty, while the other half could be attributed to local financial depression (Comptroller of the Currency, 1930, pp. 307-321). The economist Walter Spahr epitomized the "supervisory attitude" when he wrote that "it is probably not possible to separate

(the)...failures due to incompetent management from those due to local business depressions since it is the purpose and test of good bank management to avoid the effects of local financial depressions" (Spahr, 1932, p. 220). This appears to have been the view of the Federal Reserve which, in the early years of the Great Depression, again found bad management to be principally at fault for bank failures (Friedman & Schwartz, 1963, p.358-59).

In the mid-1970's, the reemergence of large bank failures evoked the traditional supervisory response. The Federal banking agencies again pointed to inept management and/or fraudulent practices as the principal cause (First Meeting on the Condition of the Banking System, 1977, pp. 1022-1025, 1077-1081, 1154-1167). In the early 1980's, the FDIC discounted the significance of regional economic problems and found mismanagement to be the most important cause of bank failures (FDIC, 1984, p. 13). In the late 1980's, the Comptroller indicated a "long held belief" that bank management and boards of directors bear ultimate responsibility for bank problems and that management-driven weakness were the underlying cause of most of the bank failures studied (Comptroller of the Currency, 1988, p. 1).

It is an small step from identifying management deficiencies as a principal cause of bank failure to finding that supervision needs to be improved. The currently active Federal agencies provide a living historical record of the continuing efforts to provide such improvement. The perceived deficiencies of state bank supervision was an important element in passage of the

National Banking Act in 1863 and the establishment of the Office of the Comptroller of the Currency (OCC) (Robertson, 1968, pp. 42-52). Reviewing a succession of banking crises in the latter half of the 19th Century under National Banking Act, the National Monetary Commission complained in 1912 that "(w)e have no power to enforce the adoption of uniform standards with regard to capital, reserves, examinations and the character and publicity of reports of all banks in different sections of the country" (National Monetary Commission, 1912, p. 9). An explicit purpose of the Federal Reserve Act of 1913 was "to establish more effective supervision of banking in the United States." It extended Federal supervision to state (member) banks.

The massive bank failures of the early 1930's were attributed by many both to inadequate bankers and inadequate supervision. W.F. Gephart, of the First National Bank of St. Louis, reflected a common sentiment when he wrote in the American Economic Review in 1935:

"For many decades, the states and even the federal government have permitted banks to be organized with small capital...and by individuals with no banking or business experience to qualify them to conduct a banking business....Chief reliance has...been placed on bank examinations....In many cases, these examiners were less qualified for their jobs than the bankers were for theirs" (Gephart, 1935, p. 84).

The measures required to remedy the "constitutional weaknesses" of the system, as seen by the Senate Banking Committee in reporting the Glass Bill to the full Senate in May 1933 have a familiar ring:

"(a) Strengthen the capital of banks; (b) Provision for closer and stronger supervision; (c) More careful restriction of investments. (d) Requirements for the truthful valuation of assets. (e) Protection of depositors and limitation of their losses through a bank deposit insurance corporation" (Senate Banking Report, 1933, p.11).

The FDIC was established in the early 1930's not simply to provide deposit insurance, but to further extend an upgraded Federal supervision to state (insured) banks; and the Federal Home Loan Bank System (FHLBS) was established to provide Federal supervision for the reorganized savings and loan industry.

In more recent years, the National Credit Union Administration (NCUA) was established (1970) to provide Federal supervision for credit unions. And the Federal Financial Institution Examination Council (FFIEC) was organized in 1977 as a coordinating agency to improve the "improved" supervision provided by the other Federal agencies.

Comprehensive banking reform, typically including improved supervision, has typically evoked a transcendent, and in retrospect, unwarranted optimism. For example, the Comptroller of the Currency announced in 1914 that, with the new Federal Reserve Act, "financial and commercial crises, or 'panics,'...with their attendant misfortunes and prostrations, seem to be mathematically impossible" (Comptroller of the Currency, 1914, p. 10). Seventy-five years later, confronting the S&L disaster with yet another comprehensive reform, the Financial Institutions Reform, Recovery and Enforcement Act (FIRREA), the Secretary of the Treasury (Nicholas Brady) proclaimed "(t)wo watch words guided us as we

undertook to solve this problem--Never Again" (Brady, 1989, p.1).

C. Recent Banking Reform

Notwithstanding its general emphasis on liquidating insolvent S&L's and regulatory reorganization, a stated purpose of FIRREA was "(t)o promote..., a safe and stable system of affordable housing;" i.e., to sustain the public functioning of savings associations. It increased the required proportion of assets to be held by S&L's in loans and securities related to residential housing (qualified thrift lender test; Title III, Sec. 301); and it established two new subsidized housing programs (Title VIIIA, Sec. 721).

FIRREA provided for the liquidation of failed savings institutions through the Resolution Trust Corporation (RTC). It abolished the Federal Home Loan Bank Board and the Federal Savings & Loan Insurance Corporation (FSLIC), transferred supervisory authority over savings associations to a newly established Office of Thrift Supervision (OTS) in the Treasury and established a new Savings Association Insurance Fund (SAIF) to be administered by the FDIC. Despite its emphasis on "picking up the pieces" and reorganization of the S&L regulatory structure, FIRREA did not neglect the public functions of S&L's.

FIRREA also included major changes in supervision that affected not only savings associations but other depository institutions and bank holding companies. In general, it tightened constraints on Federal savings associations, extended Federal constraints to state-chartered associations, and imposed other

restrictions applicable to national and member banks. Specifically, among other things, it prohibited savings associations from the acquisition and retention of junk bonds, and limited their equity investments (Title II, Sec. 222). It raised their capital requirements to levels no less stringent than those applicable to national banks (Title III, Sec. 301) and imposed National Bank and Federal Reserve Act limits on lending to one borrower, lending to insiders and on interaffiliate transactions (Title III, Sec. 301). It prohibited certain activities to institutions not meeting capital requirements ("troubled institutions"); these prohibitions include accepting brokered deposits, offering above-market interest rates on deposits, lending to business development corporations, increasing assets, and, for state associations, exercising "expanded powers" permitted under state law. The FDIC was given "backup enforcement authority" over all savings associations, permitting it to intervene in situations representing a risk to the insurance funds.

In addition, FIRREA augmented the authority of all the Federal agencies to ferret out potential problems, impose timely restrictions and discipline recalcitrant bank officials (Title IX). For example, it expanded agency authority to appoint a conservator on the determination that a bank is unsafe or unsound, or that it has "willfully" violated an order issued against it. It expanded agency authority to remove bank officials, and to order restitution for violations of law or

regulation. The agencies were given veto power over new directors and senior executive officers of relatively new banks, banks experiencing recent change in control and those not meeting capital requirements. It provided for substantial civil money penalties, up to \$1 million per day, for violating written agreements or orders, or for filing false or misleading reports. It also beefed up criminal penalties and appropriated additional funds to the Department of Justice to undertake civil and criminal prosecutions. (For a discussion, see Siedman, 1990).

The new powers to discipline and penalize banks did not prevent high levels of commercial bank failure in 1990 and 1991, or the emerging insolvency of the Bank Insurance Fund (BIF). Comprehensive reform was again proposed by the Treasury in 1991 (Treasury Report), and an "Administration bill," based on the Report, was introduced in Congress. The bill provided for the recapitalization of the Bank Insurance Fund (BIF); it included measures to relax restrictions on interstate branching, lift restrictions on securities and insurance activities, and permit ownership of bank holding companies by commercial firms. It contained measures to further modify supervision.

The Act that was passed, the Federal Deposit Insurance Corporation Improvement Act of 1991 (FDICIA), did not adopt the Administration's proposals on branching, new activities or holding company ownership, measures expanding bank powers, aimed at increasing bank market value and, in general, extending deregulation. It did, however, reaffirm the public interest in

banks by recapitalizing the insurance funds and, among other "public function" measures, providing depository institutions with an incentive to offer "lifeline banking accounts" and to make loans in "distressed communities" (Title II, Secs. 231-34). It augmented supervision in a number of ways: by requiring Federal supervisors perform additional on-site bank examinations and through annual independent audits for larger institutions (Title I, Secs. 111-12); by giving supervisors authority to prescribe and enforce detailed managerial and operational standards for purposes of "safety and soundness" that seem to run the gamut from loan documentation to compensation for tellers; and by further extending Federal authority to state banks by imposing the limits on insurance underwriting and equity investments applicable to national banks (Title III, Sec. 303).

FDICIA coupled the reaffirmation of public interest in banks and the augmentation of supervision with the requirement that rules be substituted for discretion in evaluating bank condition and dealing with weak institutions. Past agency practice had supported large banks deemed "too big to fail." FDICIA restricted such policies by prohibiting the FDIC from extending insurance coverage to uninsured creditors after 1994 unless the President, the Secretary of the Treasury and the FDIC jointly determine that doing so involves a "least cost" resolution or that there is a systemic risk. In the latter case, the Congressional banking committees must be notified (Title I, Sec. 141). FDICIA further restricted the Federal Reserve from lending to "undercapitalized"

institutions unless the institution were certified "viable" by its Federal bank supervisory agency. If a "certified" institution to whom the Federal Reserve makes loans were subsequently to fail, with losses to the insurance fund, the Federal Reserve Board could incur a liability to the FDIC (Title I, Sec. 142).

FDICIA further limits supervisory discretion on a case-by-case basis through what has been termed "prompt corrective action," involving the imposition of escalating constraints on undercapitalized banks (Title I, Section 131). In an elaboration of the "troubled institution" category of FIRREA, five capitalization categories are established: "well-capitalized," "adequately capitalized," "undercapitalized," "significantly undercapitalized," and "critically-undercapitalized." A determination by the relevant federal supervisory agency that a bank is in one of the lower three categories automatically triggers the requirement that it submit an acceptable capital restoration plan. "Undercapitalized" banks failing to submit and implement an acceptable plan are subject to constraints on asset growth, non-traditional activities, transactions with affiliates, and deposit rates of interest, among others. Those "critically undercapitalized" are subject to additional constraints and, under the law, must be closed promptly.

Despite the establishment of "prompt corrective action," discretionary authority remains for the agencies in key areas. In defining the five categories, FDICIA specifies the use of both a

leverage and a risk-based capital requirement.³ It also specifies a minimum requirement for "critically undercapitalized" institutions; the agencies must impose a leverage requirement of tangible equity-to-total assets of not less than 2 percent, and not more than 65 percent of the minimum leverage requirement established (by the agencies) for "adequately capitalized" banks. But within these legislated limits, the federal supervisors have been given authority to develop the capital adequacy thresholds that activate supervisory constraints.⁴ Even the required closing of a "critically undercapitalized" bank, is subject to agency-determined exceptions; it need not be closed if the bank's federal supervisor and the FDIC jointly determine that it has an acceptable capital restoration plan and is viable.

It was recently noted that "...the regulators have opted for a narrow definition of 'undercapitalized' that sticks less than

³The "leverage" requirement refers to the ratio of tangible equity capital-to-total assets. Tangible capital excludes intangibles, principally "goodwill;" equity capital is the principal component of what has been termed "Tier 1" (or "core") capital and distinguished from "supplementary capital," including subordinated debt, loan loss allowances and preferred stock ("Tier 2"). The risk-based capital requirement currently derives from a weighing of the credit risk in specific types of assets on bank balance sheets and in off-balance sheet items, such as standby letters of credit. FDICIA, however, requires the Federal supervisory agencies to augment their risk-based capital computations by developing interest rate risk, "concentration" risk and "non-traditional activity" risk components (Title III, Sec. 305). Advanced notice of changes, subject to comment, was issued in July, 1992 (Federal Reserve Board, "Press Release," July 30 1992). Final regulations are to go into effect in mid-1993.

⁴The final rules, including the definitions developed by the federal supervisory agencies, were issued in September 1992 and went into effect on December 19, 1992.

5% of the industry with the unwanted label." Andrew Hove, Chairman of the FDIC, was reported to have acknowledged that "We could have set the capital levels a lot higher" (Rehm, American Banker, December 2, 1992).

The establishment of rules for dealing with weak banks can be seen as an effort to encourage higher levels of capital and provide a basis for further deregulation. Risk-adjusted deposit insurance premiums and risk-adjusted capital requirements (both required by FDICIA) are aimed at reducing incentives for excessive risk-taking emanating from government support through deposit insurance, forbearance, and "too-big-to-fail" policies. Closure rules run parallel by precluding, for the most part, bank operations with little or no capital (at least on a book basis). If risk-adjustment and closure rules can effectively neutralize undesirable incentives and, thereby, limit FDIC and tax-payer exposure, regulatory restrictions on bank activities should not be needed to curb excessive risk-taking. With Federal support for large banking organizations curtailed by restrictions on "too-big-to-fail," the growth of large organizations through interstate branching and merger should not derive from unfair advantages in capital markets or further expose the insurance funds.

Whether the specific rules established by FDICIA (or any set of rules) can be effective in protecting the insurance funds and taxpayers, without jeopardizing other public policy objectives, are questions that have yet to be fully examined. Any system of

rules raises the specter of a deus ex machina that unthinkingly closes (or keeps open) large numbers of banks on the basis of arbitrary calculations that can have little relationship to bank condition.

On close examination, however, FDICIA establishes "rules" over "authorities" in a illusory way. In fact, the legislation provides the authorities; that is, the federal supervisory agencies, with enormous discretion. They have been authorized to establish standards for bank management that extend into areas that had long been considered management prerogatives. They have been directed to visit and examine banks more often; and to implement legislative provisions requiring considerably more rule-making and regulation-writing. In the case of weak banks, they have been given the power to establish, for the most part, the "rules" for activity restrictions and closure which, presumably, may be changed if, in their discretion, it seems reasonable to do so. Even in restricting "too-big-to-fail" policies, Congress left the door open for discretion. (The supervisors may, nevertheless, find it advantageous in dealing with bank officials to emphasize that they now have less flexibility to go easy on undercapitalized banks).

In the venerable "rules vs. authority" debate on the conduct of monetary policy, the establishment of a "rule" for money growth was to be through legislation that would tie the hands of the central bank, eliminate "fine-tuning," and even permit its reorganization as a small agency, largely composed of

technicians. FDICIA, on the other hand, calls for more, not less agency activity and "fine-tuning." Larger, not smaller, agencies, are a result. In mid-1992, the Comptroller announced that to meet the more frequent bank examination requirements of the Act, he soon would hire 300 additional bank examiners, and another 300 in 1993 (Comptroller of the Currency, May 27, 1992). In fact, all the Federal agencies have substantially expanded their staffs over the past year and project further substantial increases in 1993 (Rehm, American Banker, December 2, 1992).

FIRREA and FDICIA reflect well-established trends and tendencies in banking legislation, including the expansion of supervisory authority to meet bank failure problems and the extension of Federal supervision to state banks. "Prompt corrective action" is also consistent with the historic tendency to expand supervision. The operational questions raised concern the capacity of supervisors to "co-manage" as opposed to monitor and "nurse" sick banks; and the capacity of a more constrained bank management to raise capital and sustain traditional lending functions. The strategic questions concern a seeming failure to recognize the inherent limitations of supervision.⁵

⁵While not discussed here, it is worth noting that limitations of the supervisory process would also support proposals to confine the Federal "safety net" to "minimal banks" in which safety is assured by asset restrictions. See Litan, 1987, Ch. 5 and Pierce, 1991, Ch.5.

III. LIMITATIONS

The reform of supervision in recent legislation reflects the failures of supervision over the last decade. It continues to focus on misguided, inept and dishonest bank management as the principal cause of bank failure. It does not address the inherent deficiencies in the supervisory process that have contributed to the historical record of repeated failure.

A. Monetary Policy and Exogenous Shock ⁶

It has long been understood that banks are vulnerable to macro-economic disruption. It is somewhat less widely recognized that banks may also be vulnerable to monetary policy designed to ameliorate disruptions. The Federal Reserve appears to have been cognizant of the latter from the early 1920's when it began to use open market operations as a tool of policy.

(1) Federal Reserve Policy. When the Federal Reserve was established, the discount window was much more actively used than it is currently. Discounts and advances as a proportion of Federal Reserve credit reached a peak of 82 percent in 1921; in 1929 they were still over 60 percent. During the 1920's, the proportion of member banks borrowing from the Reserve Banks was consistently around 60 percent (Shull, 1971, pp. 36-38).

The Federal Reserve's view of supervision reflected its position as a creditor, and also its understanding that the

⁶This section is adapted from Hanweck & Shull, 1992 which provides a review of the literature and empirical tests of hypotheses that monetary surprise and exogenous shock substantially affect the condition of banks.

credit it extended was intended, by Congress, to serve the "needs of trade;" i.e., to provide commercial banks with funds that would be extended to business in the form of short-term credit for current operations. The Reserve Banks, therefore, needed to "...be acquainted with the loan policies and credit extensions of their member banks...." (Federal Reserve Board, 1923, p. 35).

In the early 1920's, monetary policy was transformed from the provision of credit at the discount window, on the demand of banks having short-term commercial paper eligible for discount, to recurrent pressure on bank reserves implemented through open market operations. This transformation required new constraints on borrowing at the discount window. A set of non-price rationing rules, limiting use of the discount window to short-term borrowing for unanticipated outflows of funds, were developed; banks were encouraged to be "reluctant to borrow;" i.e., the Fed "turned to 'gadgets' and conventions...without any overt alteration of the law" (Keynes, 1930, pp. 239-40).⁷

The reformulation of monetary policy, of necessity involved a reevaluation of supervision. Like other bank supervisors, the Federal Reserve might focus on the integrity and competence of bank management, the adequacy of bank capital in light of past

⁷There is an irony in the Federal Reserve's encouraging banks to be reluctant to borrow that corroborates Keynes' perception of what the Federal Reserve was doing. An important aim of the Federal Reserve Act of 1913 had been to promote the secondary market for commercial paper and to overcome the reluctance of banks to borrow. In establishing the discount window, few restrictions, other than those required to define "commercial paper," were initially imposed by the Act and by the Federal Reserve (Hackley, 1973, Chs. 2,3).

experience, and the bank's current condition. But it would also have to consider whether banks had the capacity to meet predictable needs for funds without reliance on the window, and other unexpected needs for funds with only short-term reliance on the window. If not, do they have sufficient capital to absorb the losses they might incur as the result of monetary restraint.

The compelling need to supervise with these questions in mind could be traced to recognition of a potential bind in exerting monetary restraint. If many banks or important banks did not have the capacity to tolerate the pressure imposed, the Federal Reserve would have the choice of maintaining restraint and permitting banks to fail, or easing restraint and abandoning the objectives of the policy it had adopted; e.g., price stability.

The problem was addressed through a supervisory policy that served as a companion to its new discount policy. The lessened availability of discount credit to meet reserve drains, some at least imposed by monetary restraint, implied that banks would have to maintain higher levels of liquidity and/or capital to meet the new needs. The new supervisory policy was, in part, implemented through discount window surveillance where, with about 60 percent of member banks typically indebted, discount officials could influence bank behavior.⁸

⁸In the aftermath of the great depression, the discount window became far less important to banks as a source of reserves than in the 1920's. In the 1950's, the development of alternative sources of short-term funds, first through the federal funds market, and associated with the decline in bank holdings of government debt,

Elements of the Fed's distinctive supervisory policy over the past 40 years can be seen in its approach to capital adequacy. An "adjusted risk asset" approach was originally adopted by the Federal Reserve Bank of New York in 1952. In 1956 a liquidity test was added that required more capital from banks which were less liquid (Crosse, 1962, pp. 173 ff.). The Board amended its capital adequacy approach in 1972 to consider the experience of banks in the 1969-70 period of disintermediation (Vojta, 1973, p. 11; see Appendix 2 for the revised ABC form developed by Board). The Board's approach has sometimes been contrasted with that of the Comptroller of the Currency who deemphasized "ratio analysis" in favor of general guidelines "...appropriate for banks operating in normal conditions" (Vojta, 1973, p. 11).

In general terms, the policy problem confronting the Federal Reserve, and distinguishing its supervisory efforts from that of other supervisory agencies, can be briefly described as follows: (1) the condition of banks will be affected by unexpectedly intense monetary restraint and/or other exogenous shocks; (2) the degree of restraint that can be imposed by monetary policy may be affected by worsened conditions of banks developing out of the surprise or shocks; and (3) if policy is eased because the condition of banks worsens, the inflation rate will rise; but if pressure is sustained, the bank failure rate will rise.

made supervision through the window less effective. These developments did not, however, change the need for a supervisory policy coordinated with monetary management.

(2) Surprise and Shock. It seems likely that bank managements are now well aware of the problems created by alterations in Federal Reserve policy, and have adjusted their operations accordingly, at least within the limits of their experience. Nevertheless, unanticipated changes, whether emanating from sudden and drastic shifts in monetary policy (monetary surprise) or from exogenous shocks to bank-sensitive sectors and markets, may still produce an escalation of pressure to which banks are unable to adjust quickly.

The onset of a shock may be due to the inability of one or more large banks to replace volatile liabilities (e.g., Continental Illinois, 1984; Bank of New England, 1990), with many other banks excessively exposed. A similar shock may be generated by severe monetary restraint to control inflation that abruptly elevates market rates of interest and pushes banks into insolvency (e.g., 1979-82). The imposition of severe monetary restraint in the early 1980's, and the rise in bank failure rates during the last decade has indicated just how vulnerable banks can be.

"Shocks," such as defaults by major classes of borrowers, become increasingly likely during long periods of prosperity without crises (Minsky, 1957, pp. 181-187; Minsky, 1971, pp. 114-117; Guttentag & Herring, 1986, pp. 1-5; 1988, p. 607). During such periods, which may appear to be characterized by successful monetary policy, the banking system is likely to become increasingly "fragile," with institutions "excessively

exposed" to insolvency (Minsky, 1971; Guttentag & Herring, 1986).⁹ And ultimately, monetary policy will be constrained by the fragility of the system.

Shocks have been defined as low probability hazards carrying high potential costs (Guttentag & Herring, 1986, pp. 2, 32-33). It has been observed that "the continuing potential for credit crunches has usually been underestimated...." And at the same time, it is not possible to know before the event when or how hard it is going to hit (Kaufman, 1991). Bank management, then, will have no basis on which to calculate probabilities; the events, in Davidson's terms, do not emerge from an ergodic process (Davidson, 1988, pp. 332-33; see also, Davidson, 1991). Even in the case where management took an "outside observers" view and attached a "prudent" probability to such possibilities, competition could drive the institution from the market. In these circumstances, rational expectation and efficient market axioms do not apply.¹⁰

⁹Hyman Minsky recognized such institutional changes early. "If during a long prosperity, monetary policy is used to restrain inflation, a number of...velocity-increasing and liquidity-decreasing money-market innovations will take place...these compounded changes will result in an inherently unstable money market so that a slight reversal of prosperity can trigger a financial crisis (Minsky, 1957, p. 184). Examples of excessive exposure from the 1960's to the 1980's are readily available (Minsky, 1986, pp. 51 ff; Guttentag & Herring, 1986, pp. 16 ff.).

¹⁰This is not to suggest that policy will have no effect if changes are anticipated. There is evidence that the Federal Reserve's relief of seasonal pressure on banks in the 1920's, by definition an anticipated pressure, had a significant effect in reducing the frequency and severity of the banking crises that had plagued the economy in the late 19th and early 20th Centuries (Miron, 1986).

The development of bank vulnerability has also been viewed as a "perceptual problem." There is evidence in the psychological literature to suggest that when a probability reaches some critically low level, it is treated as if it were zero (Guttentag & Herring, 1986, pp. 3,4).

During a long period of expansion, then, managements' assessments of the probability of "shocks" tends to be biased downward. As a result, bankers will take greater risks than an objective assessment, if such were possible, would warrant. In the late 1960's, Minsky referred to this phenomena as "the economics of euphoria," and, more recently, Guttentag and Herring have labeled it "disaster myopia" (Minsky, 1971, p. 100-103; Guttentag & Herring, 1986, pp. 3-4). When vision is cleared by events, many banks are likely to be threatened with insolvency. There is evidence that with less capital, excessive risk-taking will be further encouraged and that the rate of insolvency is likely to rise (Barth, Bartholomew & Labich, 1990; Golbe & Shull, 1990).

(3) Policy Implications. The problem outlined above implies that bank supervisors need to be aware of developing fragility; and, in particular, to the growing vulnerability of banks to both monetary surprise and other shocks during periods of expansion. It is necessary that they separate themselves from what may seem the "reasonable" risk evaluations of bank management in developing supervisory policy. The monetary authority needs a capacity to establish minimum standards for bank condition,

through supervision, in accordance with the effects of likely, and sometimes abrupt, changes in monetary policy. It also needs a continuous stream of current information on the condition of banks in order to ascertain the likely effects of its policies.

In contrast, traditional supervision has not focussed on identifying vulnerable or fragile banks and leaning against their fragility (Minsky, 1975; Guttentag & Herring, 1988, p. 602). There are reasons why bank supervisors might have difficulty doing so. First, they too may believe it rational to ignore potential hazards of low probability. Supervisors and bankers live in the same emotional climate. Second, supervisory efforts to strengthen weak banks and sustain healthy ones focus on earnings from which most new bank capital has come. Restraining weak, much less seemingly healthy, banks in a vigorously growing economy, and in the face of unrestrained competitors, conflicts with traditional supervisory aims to support bank earnings and not to interfere with successful bank management. There is some evidence that supervisory myopia has been a problem (Guttentag & Herring, 1986, p. 33; Petersen, 1977, pp. 27-28).

Political difficulties are also created for a supervisory agency that is sensitive to growing system fragility during long periods of prosperity. An agency that "leans against" the developing institutional, operational and perceptual changes that impair the system and, in particular, what it views as myopic risk-taking, places itself in the way of banks and others, that literally do not see the reasons for supervisory foot-dragging.

The Federal Reserve has found itself in this position from time-to-time and has been subjected to severe criticism. It has been accused, for example of deferring desirable "innovative" regulatory action to avoid controversy that could generate political opposition to its "independence" (C. Golumbe as quoted in Horvitz, 1983, p. 259); and of using its regulatory authority in a way that "offends one's sense of fair play and equal regulatory treatment under the law" (Petersen, 1977, p. 36). Bank associations have sought to eliminate the Federal Reserve entirely from a supervisory role. (See, for example, Federal Reserve Board, 1984, p. 551).¹¹

In fact, in a boom characterized by "euphoria" and "disaster myopia," the strength of the criticism may be a measure of a supervisory agency's value as a supervisor. Despite strong opposition by banking associations and others, recent government studies, with the Treasury Report being the latest, have reserved a supervisory role for the Federal Reserve. In 1984, the Task Group headed by then Vice President Bush concluded "...that the FRB should maintain...supervisory and regulatory authority to

¹¹Such efforts have been supported by some who suggest that monetary policy can be executed without financial regulation. But such analyses view the Federal Reserve's supervisory needs as emerging from an unnecessary role as a creditor at the discount window (Goodfriend and King, 1988), or from informational requirements that can be satisfied by other agencies (Benston, 1983). In fact, as discussed above, the Federal Reserve's distinctive supervisory role emerged from its use of open market operations and countercyclical policy, not from discount window lending. Further, the information obtained in the course of supervision is needed not only inform monetary policy, but also as the basis for regulatory revision.

back up its responsibilities as the central bank (Blueprint for Reform, p. 48). The conclusion is not unreasonable; but, as discussed below, it is inadequate.

Recent legislation and supervisory reform has, as noted, taken some steps toward dealing with bank vulnerability, as opposed simply to existing weakness. Risk-adjusted capital standards, as they have developed, are, however, seriously deficient. They apply relatively arbitrary weights to individual assets independently of their contribution to risk in each bank's portfolios. They apply to book capital which may differ significantly from capital based on market values, and they do not confront the problem of myopia in any systematic way. Risk-adjusted deposit insurance premiums and interest-rate risk evaluations are at a very early stage and have yet to be tested.

While it is not possible to anticipate a particular surprise or shock, more can be done in preparation. It is possible to create accounting systems that reveal bank exposure to non-specific events of varying impact that would also inform supervisors and give them some leverage in confronting bank managements (Minsky, 1971, pp. 124-29; Minsky, 1975; Guttentag & Herring, 1988). It should also be possible to develop more complex models, with regional as well as national banking sectors, and to simulate economic and financial shocks.

The risk evaluation approach currently underway in the supervisory agencies are limited by the absence of an explicit model of the relationship between the banking firm, financial

markets, real markets and monetary policy. It is noteworthy that even the Federal Reserve's elaborate MPS model does not include an explicit banking sector. In the formal analysis and forecasting framework of the Board of Governors, the interactions between monetary policy and bank condition are ignored.

B. The Fragmented Regulatory System

The continued existence of multiple regulatory agencies have precluded uniformity, made planning nearly impossible and diminished accountability. The system has repeatedly been perceived as deficient. Unification of Federal bank supervision was proposed in Congress as early as 1919, again in the 1930's, and on numerous occasions subsequently (Robertson, 1966, p. 686).¹² Among other things, the system involves overlap and duplication that is excessively costly and imposes differential costs on competing depository institutions (Blueprint for Reform, 1984, p. 29, note 16; Huston, 1985; Hackley, 1969). By the end of the 1970's there was both anecdotal and empirical support for many of its short-comings (Shull 1992; Hackley, 1969; Robertson, 1966). Case studies have indicated conflicts among different regulators with overlapping authority (Shull, 1980; Huston, 1985).¹³

¹²For reviews of past proposals see U.S. Treasury Department, 1991, pp. IX-6 to IX-8 (Treasury Report); Blueprint for Reform: Report of the Task Group on Regulation of Financial Services, 1984, pp. 32-33 (Bush Report); and Horvitz, 1982, pp. 44-45.

¹³A recent review of the arguments on both sides of the issue is provided in Shull, 1992.

In the late 1970's, the Federal Financial Institution Examination Council (FFIEC), composed of the heads of the five principal Federal banking agencies and a small staff, was established to establish uniform standards and to coordinate the work of the five Federal agencies. There has yet to be a full evaluation of the FFIEC.¹⁴ But without authority to impose negotiated recommendations, this organization cannot be viewed as a reasonable substitute for consolidation.

Events of the last decade have further exacerbated the problems. Differentially permissive Federal and state regulation of S&Ls provides a morbid illustration of destructive regulatory competition and differential cost problems. With excessively lax S&L regulation in the early 1980's some commercial banks opted to become S&L's (Isaac, 1984, pp. 1667-68). Forbearance for insolvent thrifts, in one form or another, and the relatively high rates they were willing to pay for deposits, injured not only solvent thrifts but also commercial banks (Brumbaugh, 1988, pp. 70 ff.).

With an intensification of competition, differential regulatory costs, of necessity, assume an increasing importance. A higher probability of bank failure, makes confusion generated by overlaps less acceptable. Timely supervisory policies to assist bank adaptation to rapidly changing financial markets, unburdened by agency conflicts, becomes increasingly important

¹⁴A GAO study in 1984 was critical of its performance (Comptroller General of the U.S., 1984). For a history of the FFIEC from an insider's point of view, see Lawrence, 1992.

and difficult to achieve. Global banking and international regulatory agency deliberations; e.g., to establish uniform capital standards, place new demands on agency coordination.

The principal arguments in favor of a continuation of the fragmented system has been that it promotes regulatory innovation, in particular, deregulation, and that it affords a check against excessive concentration of regulatory power (Scott, 1977). Events have made these arguments less important in recent years. The value of agency competition was higher when there were more anticompetitive regulations to erode. With interest rate restrictions on deposits eliminated, branch banking and activity restrictions in process of elimination, the benefits of further erosion are, for the time at least, dubious. Moreover, it is now clear that the check afforded by multiple agencies are just one of several types, including litigation and Congressional oversight, that constrain each regulatory agency. For example, the transfer of authority from the Federal Home Loan Bank Board, an independent agency with exclusive jurisdiction over S&L's, to the OTS in the Treasury Department was justified on the basis of evidence that the Board had been excessively "checked" by industry and Congressional pressure, and needed to be "insulated" (Greenspan, 1989, p. 6).

The system that now exists tends, itself, to undermine the efficacy of supervision. First, it has induced competing institutions to seek out the most attractive regulatory regime, permitted escape from supervisory restraints imposed on

individual institutions and, thereby, eroded constraints in general (Burns, 1974; Shull, 1980). In addition, it has made it difficult, if not impossible, to achieve certain policy objectives that require cooperation. As noted by George Bush's 1984 Task Group, the banking agencies have difficulties in "shared responsibilities" and "...problems of interagency coordination may... (undermine) confidence in the financial system" (Blueprint for Reform, 1984, p. 31).

Examples of one agency's policy being frustrated by other agencies are readily available. In the 1960's, the Comptroller of the Currency adopted a distinctive chartering, acquisition and new powers policy; it was frustrated, in part, by agency conflict. In the 1970's, the Federal Reserve Board adopted a policy aimed at restoring competition in local market areas by restricting market-extension acquisitions; it was frustrated, in part, by other agencies also having merger and acquisition authority, but with different views on competition (Shull, 1975, p. 110). Beginning in 1980, nonbanking firms found it possible to establish "nonbank banks" by exploiting a "loophole" in the Bank Holding Company Act that the Comptroller, but not the Federal Reserve, was willing to accommodate. It required roughly 7 years of Congressional deliberations before further nonbank bank acquisitions were prohibited by the Competitive Equality Banking Act of 1987. Thus, major changes in banking structure have also resulted from divided authority and agency conflict.

The fragmented system may, moreover, result in some important issues not being addressed at all. The deficiencies of the "too-big-to-fail" policies of the Federal Reserve and FDIC are now reasonably clear. But because of divided merger and acquisition authority, no one agency has been in a position to prevent new banks from becoming "too-big-to-fail." In fact, no agency has ever proposed to incorporate this consideration into its merger and acquisition standards. As noted, a proper focus on the macro problems confronting banks suggests the need to develop analyses that increases supervisory awareness of institutional vulnerabilities. Of the agencies, only the Federal Reserve appears to be clearly aware of the problem (Federal Reserve Board, 1984). But none have dealt with it effectively.

As a practical matter, we should expect the agencies to focus on what can be accomplished and generally disregard what is beyond their capacity. In the absence of unification, capacity is limited and important issues fall through the cracks.

At the practical level, the effects of agency differences can spill over from one group of banks to another. A recent staff report of the House Banking Committee contended that national banks had imposed a disproportionate drain on the Federal deposit insurance fund because of supervisory deficiencies of the Comptroller of the Currency (Staff Report, 1991).¹⁵ Other banks

¹⁵The House Banking Committee's Staff Report is highly critical of OCC supervision. The Comptroller of the Currency disputed the findings of the Staff Report, but simultaneously announced the expected hiring of 300 new examiners over the next two years (Clarke, 1991).

would be affected even if their condition and their supervisors were superior.

Under the dual banking system, banks have been able to choose the most attractive (least costly) supervisory domain. Even if there were no overlaps, with each supervisory agency confined to a separate depository institutions, a competition among supervisors to attract banks would exist. Arthur Burns believed that such competition promoted laxity; i.e., a relaxation of supervisory restrictions to attract "constituents" (Burns, 1975).

The fragmented system, moreover, attacks its own effectiveness and legitimacy. Agency competition, if not agency differences alone, imply that supervision is arbitrary; and supervisors can, therefore, be viewed as capricious in insisting on any particular set of rules. Evading supervision and regulation takes on the character of an activity for which the social consequences are trivial.

Some of the problems of the fragmented system may be attenuated by the growing uniformity of Federal regulation, limitation on supervisory discretion, and the extension of the new rules to state banks. But to the extent this development is effective, it leaves the existing agencies as artifacts. And it does not integrate supervision and monetary policy.

C. Insider Abuse and Criminal Misconduct: Opportunism

In recent years, there has been a substantial increase in insider abuse and criminal misconduct in banking.¹⁶ The growth is evidenced in Congressional reports, written orders by regulatory authorities, criminal referrals, civil suits, and the expansion of bank examination staffs and costs (Fraud in America's Insured Depository Institutions, 1991; Seidman, 1990; Federal Response to Criminal Misconduct, 1984). Over the last decade, the number of criminal referrals to the Justice Department by the supervisory agencies have risen dramatically. In 1986, the Justice Department notified all U.S. attorneys that fraud in the banking industry was a national priority. The number of failed financial institutions with ongoing FBI investigations have increased each year since 1986 (Effectiveness of Law Enforcement Against Financial Crime, 1990, pp. 397-98, 444). The legislative response has been to establish more extensive supervision and harsher penalties.

Widespread insider abuse and criminal misconduct constitutes a substantial burden on supervision. Like any form of appraisal, supervision is simpler when those being appraised recognize the legitimacy of the evaluation, believe it is of benefit to them, view themselves as participants with common interests, and

¹⁶The term "insider abuse" refers to a wide range of "misconduct" by officers, directors and other insiders of depository institutions for purposes of personal enrichment, without regard to the safety and soundness of the institution, and in violation of civil banking laws or regulations and/or criminal banking laws. "Criminal misconduct" ("fraud") refers to criminal acts committed by "insiders" for the same purpose. (Federal Response to Criminal Misconduct, 1984, p. 2).

generally govern their institutions with an attitude of "stewardship."¹⁷ It is more difficult when those being appraised are intent on distortion and obfuscation. There has, from time-to-time, been a sense of stewardship among bankers that has been encouraged by supervisors.¹⁸ The upsurge in misconduct can be viewed as an institutional failure.

There has been no definitive study of the causes for an increase in misconduct in banking. But some plausible ones may be suggested within a "contractual" framework.

Bank regulation may be viewed as a "contract." The government-bank relationship is permeated by mutuality. Depository institutions receive the "privilege" of offering liabilities payable on demand that serve as "money" and also government support of various types. The government obtains a stable supply of banking services for itself and for other politically influential groups. The underlying basis for the exchange has historically involved both a shift in risk from

¹⁷Stewardship has been defined as a involving a trust relationship in which the word of a party can be taken as its bond (Williamson, 1975, p. 26); it suggests some degree of self-denial, at least in the short-run, and obedience to rules.

¹⁸ An explicit example of an older supervisory attitude urging bankers to abide by the rules and to exercise self-restraint can be found in a 19th Century circular letter sent by Comptroller Hugh McCulloch to each national bank. "Every banker... (should) feel that the reputation of the system... depends on the manner in which his particular institution is conducted.... Never be tempted by the prospect of large returns to do anything but what be properly done.... 'Splendid financiering' is not legitimate banking, and 'splendid financiers' in banking are generally humbug or rascals" (as quoted in Kane, 1922, pp. 29-30).

banks to the government (taxpayers), and government efforts to control its exposure.

This continuing exchange suggests the existence of a contract that can be characterized as: (1) long-term, (2) incomplete, and (3) with important implicit elements (Goldberg, 1976, pp. 427-29; Williamson 1985, Ch. 2). The long-term nature of the banking contract is reflected in charters of indefinite duration; it is incomplete in the sense that neither law nor regulation can spell out precisely how banks and regulators will behave in all possible circumstances. The implicit elements include informal "understandings" about behavior, and particularly, but not exclusively, in the face of unspecified contingencies (such as exogenous shock) that affect the net benefits of both parties. The relationship that supports such cooperation can be traced to the first chartered banks in the U.S. that were organized on the Bank of England (17th Century) model. As noted above, they were considered "private establishments employed as public agents."

Long-term contracts with implicit elements invariably create concerns among parties about each other's good faith performance. In banking, the complexity of the transactions and the potential for false reporting creates a particular problem. Hiding information, distorting and lying, to say nothing of stealing, cheating and embezzling, needs to be controlled by a proper structuring of incentives and/or in other ways. This type of behavior, has been referred to as "profit seeking with guile,"

and termed "opportunism." It has been contrasted with simple profit maximization, within the established rules, and with stewardship (Williamson, 1985, pp. 47-49; and 1975, p. 26).¹⁹

Concerns about deceit and guile are reflected in vague bank regulatory requirements such as "meeting fiduciary duties" and "protecting safety and soundness." Such terms are not subject, ex ante, to precise definition; and even ex post are frequently difficult to evaluate. They support, however, a necessary understanding that bankers will curb opportunistic behavior; and they do give regulatory agencies a legal basis for proceeding against banks that are perceived in violation. Experience suggests that the government and supervisory agencies are also expected to act in good faith in adjusting laws and regulations to changing circumstances that create unexpected difficulties for banks, and to honor its informal pledges of ad hoc support.

The increase in misconduct that has developed has paralleled the deterioration of the old regulatory arrangement that had been established in the 1930's. The changes over the period of "deregulation" placed enormous pressures on banks, as reflected in the S&L debacle, the high rate of commercial bank failure and the low levels of profits in recent years.

The good faith of the government may be questioned, as it was in the early 1980's when the Federal Reserve's anti-inflation

¹⁹For any one individual, these types of behavior need not be taken as mutually exclusive over time; nor need one, the other or some blend be uniform across an entire industry.

policy produced interest rate levels and volatility that, for S&L's, created a "financial holocaust" (Gray, 1984, p. 1598).²⁰ Risk-taking incentives emanating from Federal deposit insurance and other elements of the safety net have existed since their inception. But with a reduction in charter values resulting from an intensification of competition, a counterweight appears to have been removed (Keeley, 1990). In these circumstances, stewardship may simply be untenable.

The transition to opportunism can be viewed as including increased incentives and lowered costs. In the market environment that existed in the 1980's, the potential gains from misreporting, distortion, violating restrictions, etc., appear to have been enormous compared to the potential gains from abiding by the rules. Opportunistic activities, of course, involve risks, and are sometimes equated to risk-taking within the "rules." But the identification is not complete, either conceptually or with regard to the effect on the institutions involved.²¹

Conventional risk-taking is associated with higher expected profits for the institution and might or might not be associated with an increased probability of insolvency. Misconduct would always be associated with lower expected (true) profits for the

²⁰Brumbaugh states: "In October 1979, the Federal Reserve made a decision with ruinous results for the thrift industry. The Federal Reserve changed from a policy of stabilizing interest rates to...slowing money growth rates to combat inflation. This lead to ...an unprecedented increase in thrifts' costs...with almost no corresponding increase in revenues....(Brumbaugh, 1988, p.15).

²¹For a discussion of the conceptual differences, see Williamson, 1985, pp. 64-67.

institution and an increased probability of insolvency. For example, "lending" excessive amounts to associates on the basis of inflated collateral values would have the effect of producing bad loans, likely to be hidden on financial statements, and, thereby reduce expected profits and capital. The institution's risk may also be increased indirectly by reducing asset diversification, without any increased profit expectation.

A principal difference between risk-taking within and outside the rules, then, relates to the expected future of the institution. The conventional risk-taker knows that there is a chance that the institution will fail; but also that there is a chance it will succeed and prosper. The abusive risk-taker knows that, in the long-run, the institution has no chance at all.²²

While restraints on opportunistic behavior may have weakened with the disorganization of the old regulatory arrangements, other factors appear simultaneously to have made opportunism "safer;" i.e., the expected cost of discovery lower. First, the demand on supervisory resources has been increasing as the result of increased numbers of problem banks, bank failures, and mergers (Comptroller General of the U.S., 1984, p. 74). In addition, much of the deregulation that has occurred in recent years has been

²²Regulatory forbearance encourages conventional risk-taking by permitting bank managers to operate with little or no capital. But this does not directly encourage opportunistic risk-taking; penalties for misconduct do not increase as capital is reduced. If forbearance encourages misconduct, it does so by keeping open institutions run by opportunistic managers. Opportunism may also extend to political activity that delays closure of insolvent institutions and would, therefore, tend to promote risk-taking of both types.

conditional. From a supervisory point of view "just say no" is less demanding than "yes on condition." The latter requires far more careful monitoring. Despite growth in resources, supervision may, at any point in time, be insufficient. Finally, while the capacity for misreporting and distortion has always been great in banking, growth in the complexity of markets, instruments and banking institutions has probably make it easier to escape detection.

Opportunism among bankers tends to compromise supervision. Supervisors become torn between their obligations to support bank profitability and to prevent dubious practices which, ex ante, are not obviously abusive, and which seem to contribute to profitability. In periods of prosperity, they may be reluctant to substitute their judgement for that of bank management, and reluctant to restrict the banks they supervise when their competitors, supervised by others, are not restricted. In times of bank distress, difficulties arise for the same underlying reason. Moreover, when supervisors are confronted with banks at or near insolvency, they become understandably anxious to find buyers who will inject new capital. The S&L experience of the 1980's suggests that standards for evaluating the character of new owners can suffer in the anxiety to find investors.

Recent legislation, like FIRREA and FDICIA, have attempted to make the expected cost of discovery much greater. They may also be steps in the process of establishing a new regulatory contract. But the process is not yet complete. It remains to be

seen just what effect more supervision and harsher penalties have in and of themselves.

IV. COMPETENCE

Given the problems of supervision and its track record, it is reasonable to ask whether supervisors are sufficiently competent. This question needs to be considered on two levels. First, are supervisors competent to do what they have traditionally been assigned to do; i.e., to appraise the condition of banks at a point in time, identify weak institutions and institute corrections as needed. Second, even if they are, can they prevent system-wide periodic deterioration in safety and soundness of the banks they supervise.

There is evidence to suggest that supervisors have been reasonably successful in identifying weak institutions, but less successful in correcting their problems (For some earlier evidence on this point, see Comptroller General of the U.S., 1977, Ch. 4). Oversight by Congressional banking committees has resulted in severe criticism from time-to-time; e.g., in the cases of the Continental Bank insolvency, failure of the United American Bank (and other banks controlled by Jake Butcher), and more recently in the case of the Bank of New England. However, criticism has typically been directed toward sluggishness in supervisory reaction after weaknesses have been uncovered.

There is reason to believe that, as a general matter, supervisors, with some notable exceptions, would be competent to

detect trouble as it develops. Those that head the principal agencies are well educated in business and, some in law. They have had successful careers as bankers, in bank examinations or the legal departments of the regulatory agencies. Their staffs have similar backgrounds, for the most part with less experience. Training at the regulatory agencies appears to have become reasonably sophisticated in the areas of financial markets and financial analysis.

Failure to effectively implement remedies is evidenced by a long list of floundering institutions that have ultimately failed. Over the past decade, troubled banks have imposed enormous costs on the insurance funds. Supervision has been condemned for yielding to political and industry pressure. Supervisors have been modeled as subordinating the public interest to their own career interests. It has been Congressional distrust of supervision, based on recent experience, that has resulted in constraints on supervisory discretion and the establishment of tripwires requiring intervention.

Whether or not the curtailment of supervisory discretion and the substitution of rules will improve supervisory performance remains to be seen. If the only aim of supervision was protection of the insurance funds, the new rules, or some variant, might serve well. But traditional supervision is also designed to conserve banks as going concerns and it is not clear that the current approach will facilitate this aim.

Supervisory competence can be questioned at another level. Even if supervisors are competent in identifying weak institutions, and the new rules for intervention are successful in protecting the deposit insurance funds, problems will remain. Supervisors are not competent, at present, to resist the pressures toward increasing fragility during periods of expansion. The institutional failures of the current system would strain the most competent agency in developing and implementing appropriate policies. The new rules could, moreover, impose draconian measures in a financial crisis.

Supervisors have not dealt effectively with these problems in the past, and there is nothing in the recent legislation that suggests they will come to grips with them in the future. It is reasonable to infer that they cannot.

V. POLICY

The problems faced by supervision are interrelated and reinforcing. These include an economic problem involving monetary surprises and exogenous shocks. The fragmentation of regulatory system makes the development and implementation of reasonable policies almost impossible. An increase in opportunistic behavior has made effective supervision considerably more difficult. The supervisory establishment does not appear capable of dealing with the economic and institutional problems that tend to undermine its best efforts.

Given the proper circumstances, it might be possible to deal with the economic problem. But it is far more difficult to do so when authority is divided and opportunism drains substantial resources. Any solution to the difficulties has to begin with unification of the regulatory structure. It is not possible to develop and implement appropriate policies with numerous quasi-independent supervisory agencies for competitive depository institutions. It is certainly more difficult to "lean against fragility" when other supervisory agencies are not. This implies that there is a need to work toward coordination and unification of policies. It is necessary, moreover, to integrate supervision more fully with monetary policy. As discussed, the impact of monetary policy on the condition of banks is such that it makes no sense to view supervision and central banking as separate functions. Monetary policy as it has been conducted and is likely to be implemented in the future, requires the authority to evaluate and influence the condition of commercial banks. Consolidation within the Federal Reserve, or within a new agency that incorporates the monetary authority, is needed.

A second step is a fuller integration of supervision with economic analysis that goes beyond early warning to potential vulnerabilities. Efforts toward this end seem to be underway. Integration would facilitate these efforts and produce the kinds of information that arm supervisors to "lean against fragility."

A third step is to raise the level of qualification and expectation for the top supervisory officials. With expanded

goals, supervision should command leadership of the first rank, no less qualified in economic and financial market analysis than Federal Reserve Board chairmen. Notwithstanding the qualities that some high level supervisors bring to the job, they have been insufficient to deal with the problems supervision must deal with if it is to be successful. The integration of central banking and supervision would help produce this result.

To the extent possible, it is necessary to reestablish a reasonable regulatory contract. It would be of considerable help if stewardship behavior could be promoted. What can be done, however, in a relatively deregulated, competitive and rapidly changing banking system is unclear.

IV. CONCLUSIONS

Supervision has repeatedly failed in preventing recurrent episodes of systemic deterioration in bank safety and soundness. The solution, repeatedly endorsed by Congress, with the support of supervisors, has been to augment supervision and improve the quality of bank management. Because periods of systemic fragility typically occur after long intervals of seeming successful bank operations, each episode appears to occur independently of the ones that preceded it.

We are now in a period of supervisory augmentation that is focusing on what happened during the last decade. This focus is, at best, distorted because it does not consider why "improved supervision" has repeatedly failed.

As in most cases of repeated failure, there exist systemic problems that produce inherent limitations. For supervision, the problems include monetary surprises and exogenous shocks, the effects of which seems only dimly appreciated. The fragmentation of regulatory system undermines the development of reasonable policies. And, in recent years, an upsurge in opportunistic behavior has confused supervisory efforts and drained resources. Supervisors appear competent to uncover weak banks, but not to deal with their inherent limitations.

To correct the difficulties, it would first be necessary to unify the regulatory agencies and integrate them with monetary policy, either in the Federal Reserve or in a new institution that included monetary policy authority. Such a consolidation would almost invariably produce a research initiative to develop a better understanding of the interrelationship between macro-economic policy, economic and financial markets and the condition of banks. This elevation of supervision, as a component, of banking policy, implies an upgrading of top officials whose background and experience should be, at a minimum, on par with what is currently expected of Federal Reserve Board chairmen. And this implies a better chance of dealing successfully with the enormous difficulties that supervision confronts.

REFERENCES

- Barth, James, Philip Bartholomew, and Carol Labich, "Moral Hazard and the Thrift Crisis: An Empirical Analysis," Consumer Finance Law, Quarterly Report, winter 1990, pp. 22-34.
- Benston, George, Federal Regulation of Banking: Analysis and Policy Recommendations," Journal of Bank Research, Winter, 1983.
- Berle, A.A. and Means, G.C., The Modern Corporation and Private Property, The Macmillan Co., New York, 1940.
- Brady, Nicholas, "Statement," Treasury News, February 6, 1989
- Brumbaugh, R. Dan, Thrifths Under Siege, Ballinger Publishing Co. Cambridge, Mass., 1988.
- Bryant, Ralph C., "Eurocurrency Banking: Alarmist Concerns and Genuine Issues, The Brookings Institution, 1984.
- Blueprint for Reform: Report of the Task Group on Regulation of Financial Services, July, 1984.
- Brumbaugh, R. Dan, Thrifths Under Siege, Ballinger Publishing Co., Cambridge, Mass., 1988.
- Burns, Arthur, "Maintaining the Soundness of Our Banking System," Address to the Convention of the American Bankers Association, Honolulu, Hawaii, October 21, 1975.
- Clarke, Robert L., Comptroller of the Currency, "Letter" to Henry B. Gonzales, Chairman, Committee on Banking, Finance and Urban Affairs, U.S. House of Representatives, September 22, 1991.

- Comptroller General of the United States, Federal Supervision of State and National Banks, January 1977.
- Comptroller General of the United States, Federal Financial Institutions Examination Council Has Made Limited Progress Toward Accomplishing Its Mission, GAO, February 3, 1984.
- Comptroller of the Currency, Annual Report, 1914
- Comptroller of the Currency, Annual Report, 1930
- Comptroller of the Currency, Bank Failure: An Evaluation of the Factors Contributing to the Failure of National Banks, June, 1988.
- Comptroller of the Currency, "News Release," No. 92-42, May 27, 1992.
- Conference Report to Accompany Financial Institutions Reform, Recovery and Enforcement Act of 1989, Report 101-209, U.S. House of Representatives, 101st Cong., 1st Sess., August 1, 1989.
- Crosse, Howard D., Management Policies for Commercial Banks, Prentice Hall, Inc., Englewood Cliffs, N.J., 1962
- Davidson, Paul, "A Technical Definition of Uncertainty and the Long-run Non-neutrality of Money," Cambridge Journal of Economics, Vol. 12, 1988, pp. 329-337.
- Davidson, Paul, "Is Probability theory Relevant for Uncertainty? A Post-Keynsian Perspective," The Journal of Economic Perspectives, Winter 1991, pp. 129-43.

Dunbar, Charles Francis, "Some Precedents Followed by Alexander Hamilton," in Economic Essays, The Macmillan Co., New York, 1904.

Federal Response to Criminal Misconduct and Insider Abuse in the Nation's Financial Institutions, Committee on Government Operations, U.S. House of Representatives, 98th Cong., 2d Sess., October, 4, 1984 (Cited as Federal Response to Criminal Misconduct Report, 1984).

FDIC, Deposit Insurance in a Changing Environment, April 15, 1983.

FDIC, Annual Report, 1984.

Federal Reserve Board, Annual Report, 1923.

Federal Reserve Board, "Press Release" (Risk-Based Capital Standards), July 30, 1992.

Federal Reserve Board, "The Federal Reserve Position on Restructuring of Financial Responsibilities," Federal Reserve Bulletin, July 1984, pp. 547-557.

First Meeting on the Condition of the Banking System, Hearings before the Committee on Banking, Housing & Urban Affairs, U.S. Senate, March 10-11, 1977.

Friedman, Milton & Schwartz, Anna J., A Monetary History of the United States, Princeton University Press, 1963

Effectiveness of Law Enforcement Against Financial Crime, Field Hearing before the Committee on Banking, Finance and Urban Affairs, U.S. House of Representatives, Part 2, April 12, 1990.

- Gephart, W.F., "Our Commercial Banking System," American Economic Review: Supplement, March, 1935.
- Golbe, Devra and Shull, Bernard, "Risk Taking by Thrift Institutions," Contemporary Policy Issues, forthcoming.
- Goldberg, Victor, P., "Regulation and Administered Contracts," The Bell Journal of Economics, Autumn, 1976, pp. 426-448.
- Goodfriend, M. and King, R.G., " , " Economic Review, Federal Reserve Bank of Richmond, May/June, 1988, pp. 3-32.
- Gray, Edwin J., "Testimony," before the Committee on Banking, Finance and Urban Affairs, U.S. House of Representatives, April 11, 1984.
- Greenspan, Alan, "Testimony" before the Committee on Banking, Housing and Urban Affairs, U.S. Senate, February 23, 1989.
- Guttentag, Jack, "Reflections on Bank Regulatory Structure and Large Bank Failures," Proceedings of a Conference on Bank Structure and Competition, Federal Reserve Bank of Chicago, 1975, pp. 136-149.
- Guttentag, Jack and Herring, Richard, Disaster Myopia in International Banking, Essays in International Finance, No. 164, International Finance Section, Princeton University, September, 1986.
- Guttentag, Jack and Herring, Richard, "Prudential Supervision to Manage Systemic Vulnerability," Proceeding of a Conference on Bank Structure and Competition, Federal Reserve Bank of Chicago, 1987, pp. 602-33.

Guttentag & Herring, "Prudential Supervision to Manage Systemic Vulnerability," Proceedings of a Conference on Bank Structure & Competition, Federal Reserve Bank of Chicago, May 1988, pp. 602-33.

Hackley, Howard, "Our Discriminating Banking System," 55 Virginia Law Review, 1421 (1969)

Hackley, Howard, Lending Functions of the Federal Reserve Banks: A History, Board of Governors of the Federal Reserve System, May 1973.

Hammond, Bray, Banks and Politics in America, Princeton University Press, Princeton N.J., 1957.

Hanweck, Gerald & Shull, Bernard, "Monetary Policy and the Condition of Banks," unpublished paper, 1991.

Harvard Law Review, March 1920, pp. 718-721

Horvitz, Paul M., "Reorganization of the Financial Regulatory Agencies," Journal of Bank Research, Winter, 1983.

Horvitz, Paul M., "Consolidation of the Regulatory Agency Structure: Has the Time for It Come," Economic Review, Federal Reserve Bank of Atlanta, December, 1982.

House Banking Report, Changes in the Banking & Currency System of the United States, Committee on Banking and Currency, U.S. House of Representatives, 63rd Cong., 1st Sess., Report No. 69, Sept. 9, 1913.

Houpt, James V. & Embersit, James A., "A Method for Evaluating Interest Rate Risk in U.S. Commercial Banks," Federal Reserve Bulletin, August, 1991, pp. 625-637.

- Hurst, J. Willard, A Legal History of Money, 1774-1970,
University of Nebraska Press, Lincoln, 1973.
- Huston, Thomas H., "Dual Standards in Soundness and Safety
Regulation," Proceedings of a Conference on Bank Structure
and Competition, Federal Reserve Bank of Chicago, 1985, pp.
542-51.
- Isaac, William, Chairman, FDIC, How the Financial System Can Best
Be Shaped to Meet the Needs of the American People, Hearings
before the Committee on Banking, Finance and Urban Affairs,
98th Cong., 2d Sess., April, May, June, 1984.
- Kane, Thomas P. The Romance and Tragedy of Banking, The Bankers
Publishing Co., New York, 1932
- Keeley, Michael C., "Deposit Insurance, Risk and Market Power in
Banking," American Economic Review, December 1990, pp. 1183-
1200
- Kaufman, Henry, "Credit Crunches: The Deregulators Were Wrong,"
Wall Street Journal, October 9, 1991.
- Keynes, J.M., A Treatise on Money, Vol. II, Macmillan & Co.,
London 1960 (1930).
- Lawrence, Robert, Origin and Development of the Examination
Council, Federal Financial Institutions Examination Council,
February, 1992.
- Legislative History of Banking in the State of New York, Wm. C.
Bryant & Co., New York, 1855.
- Litan, Robert, E. What Should Banks Do?, The Brookings
Institution, Washington D.C., 1987.

- Mauskopf, Eileen, "Structure and Uses of the MPS Quarterly Econometric Model of the U.S.," Federal Reserve Bulletin, Feb. 1987, pp. 93-109.
- Mauskopf, Eileen, "The Transmission Channels of Monetary Policy: How Have They Changed," Federal Reserve Bulletin, Dec., 1990, pp. 985-1008.
- Minsky, Hyman P., "Central Banking and Money Market Changes," Quarterly Journal of Economics, Vol. LXXI, No. 2, May 1957.
- Minsky, Hyman P., "Financial Instability Revisited," Reappraisal of the Federal Reserve Discount Mechanism, Vol. 3, Federal Reserve Board, 1971, pp. 95-136.
- Minsky, Hyman P., "Suggestions for a Cash Flow-Oriented Bank Examination," Proceedings of a Conference on Bank Structure and Competition, Federal Reserve Bank of Chicago, 1975, pp. 150-184.
- Minsky, Hyman P., Stabilizing and Unstable Economy, Yale University Press, New Haven, 1986.
- Pecchioli, R.M., Prudential Supervision in Banking, OECD, Paris, 1987.
- Peterson, Manfred O., "Conflicts between Monetary Policy and Bank Supervision," Issues in Bank Regulation, Autumn, 1977.
- Pierce, James L., The Future of Banking, Yale University Press, New Haven, 1991.
- Posner, R.A., "Theories of Economic Regulation," The Bell Journal of Economics and Management Science, Vol. 5, No. 2, Autumn, 1974, pp. 335-58.

Rehm, Barbara A., "Regulators Loosen FDICIA's Handcuffs,"
American Banker, December 2, 1992.

Report of the National Monetary Commission, U.S. Senate, 62d
Cong., 2d Sess., January 9, 1912

Robertson, J.L., "Federal Regulation of Banking: A Plea for
Unification," Law and Contemporary Problems, Vol.31. No. 4,
Autumn, 1966, pp. 673-95.

Robertson. Ross, M., The Comptroller and Bank Supervision, Office
of the Comptroller of the Currency, Washington D.C., 1968.

Scott, Kenneth E., "The Dual Banking System: A Model of
Competition in Regulation," Stanford Law Review, Vol. 30,
No. 1, November, 1977, pp. 1-49.

Scott, Kenneth E., "The Dual Banking System: A Model of
Competition in Regulation," Issues in Financial Regulation,
F.R. Edwards, ed., McGraw Hill Book Co., New York, 1979.

Senate Banking Report, Operation of the National and Federal
Reserve Banking Systems, U.S. Senate, 73rd Cong., 1st Sess.,
Rept. No. 77, May 15, 1933.

Shull, Bernard, "Report on Research Undertaken in Connection with
a System Study," Reappraisal of the Federal Reserve Discount
Mechanism, Vol. I, Board of Governors of the Federal Reserve
System, August, 1971, pp. 27-75.

Shull, Bernard, "Statement," Federal Bank Commission Act,
Hearings before the Committee on Banking, Housing & Urban
Affairs, U.S. Senate, 94th Cong., 1st Sess., October 31,
1975.

Shull, Bernard, "The Separation of Banking and Commerce: Origin, Development and Implications for Antitrust," The Antitrust Bulletin, Vol. 28, No.1, Spring, 1983, pp. 255-279.

Shull, Bernard, "How Should Bank Regulatory Agencies Be Organized," Contemporary Policy Studies, forthcoming.

Seidman, L. William, "Testimony on the Prosecution of Financial Crimes," Subcommittee on Criminal Justice, Committee on the Judiciary, U.S. House of Representatives, July 11, 1990

Staff Report, Analysis of Bank Deposit Insurance Fund Losses, Committee on Banking, Finance & Urban Affairs, U.S. House of Representatives, 102 Cong., 1st Sess., Sept. 9, 1991.

Spahr, Walter E., "Bank Failures in the United States," American Economic Review: Supplement, March, 1932.

U.S. Department of the Treasury, Modernizing the Financial System, February, 1991 (cited as Treasury Report, 1991).

Vojta, George, Bank Capital Adequacy, First National City Bank, New York, N.Y., 1973.

Williamson, Oliver E., Markets and Hierarchies: Analysis and Antitrust Implications, The Free Press, New York, 1975.

Williamson, Oliver E., The Economic Institutions of Capitalism, The Free Press, New York, 1985.