Japan's Experience with Deposit Insurance and Failing Banks: Implications for Financial Regulatory Design?

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This paper examines three decades of Japanese experience with deposit insurance and failing banks, and analyzes the implications of that experience for bank safety-net reform in other countries. To date, the literature and policy debate on deposit insurance have been heavily colored by U.S. banking history and focus almost exclusively on explicit deposit protection schemes. Analysis of Japan's safety-net experience suggests that (1) deposit insurance, for all its flaws, is superior to the real-world alternative-implicit government protection of depositors and discretionary regulatory intervention in bank distress; (2) a well-designed explicit deposit insurance system that includes a credible bank-closure policy is the starting point for the design of effective private alternatives to a government-run safety net; and (3) the trend toward greater institutionalization of the Japanese safety net—culminating in recent legislation to address the financial crisis—reflects increased political competition and greater emphasis on legal as opposed to reputational systems of economic ordering in that country.

Key words: Deposit insurance; Bank failure

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I. Introduction

It is axiomatic that one of the central roles of government is to establish the ground rules for economic activity. In this capacity as "institutional designer,"¹ few governments in the past decade have made policy choices more controversial and costly than those relating to deposit insurance and other components of the bank safety net.

As recent events in world financial markets have demonstrated, on this central issue of institutional design the stakes are high; the results may best be described as dismal. While governments have expended enormous resources to promote bank stability, systemic banking insolvencies in the last two decades have been commonplace.² Resolving these problems has been expensive, involving wealth transfers of spectacular dimensions. In many cases, it has cost between 20 percent and 50 percent of the affected country's GDP to bail out troubled banks.³ More importantly, perhaps, history has shown that poorly designed deposit protection and other safety-net mechanisms are worse than ineffective in the prevention of banking distress. An obvious illustration is the U.S. savings and loan crisis, in which the state-supplied incentive structure dramatically increased bank risk taking, at great eventual cost to taxpayers.

Although there is universal recognition that greater market discipline for banks is essential, there is little agreement about how the ground rules for banking should be changed to accomplish this objective. In the world of policy analysis, the moral hazard effects inherent in deposit insurance have led many commentators to conclude that it should be replaced by private alternatives. Others have argued in favor of implicit deposit protection, theorizing that "constructive ambiguity" about the government's response to banking distress will constrain excessive risk taking by private entrepreneurs. In the world of policy implementation, deposit insurance and other bank safety-net protections continue to be advocated, adopted, and expanded. There is no consensus on the safety net for the "architecture" of the international financial system.⁴

This paper examines Japan's experience with deposit insurance and failing banks, and analyzes the implications of that experience for safety-net reform in other countries. To date, the literature and policy debate have been heavily colored by U.S. banking history. This is not surprising, given that the United States pioneered modern-day deposit insurance and suffered an abject lesson in its flaws. It is unfortunate, however, because existing literature is short on analyses of real-world implicit and semiprivate deposit protection schemes, concepts underlying many reform proposals. Separately but not less importantly, while banks are widely viewed as delegated monitors in the Japanese system of corporate governance, the governance of Japanese banks has drawn very little scholarly attention. An abundant literature explores Japanese bank involvement in borrower distress without considering the

^{1.} See Aoki (1994).

^{2.} Caprio and Klingebiel (1996) list bank insolvency crises in almost 70 countries since the 1970s.

^{3.} See Caprio and Klingebiel (1996). The term "bank" will be used in the paper to denote any depository institution.

^{4.} On bank stability and financial architecture, see BIS (1998).

governance of failure within the Japanese banking sector itself. Analysis of Japan's safety-net experience provides the opportunity to redress these gaps in the literature.

Arguably, no other country has had as varied and turbulent an experience with bank safety nets as Japan. Deposit insurance was not established in Japan until 1971, almost 40 years after it was implemented in the United States. For the next two decades, however, financial regulators, working in tandem with the banking sector, continued to operate a highly successful implicit safety net that rendered the formal deposit protection system superfluous. In the past decade, however, changes in the economic, political, and regulatory environments following the collapse of the "bubble" economy caused the implicit safety net to fail spectacularly, leaving a gaping hole in Japan's bank regulatory infrastructure. Over the past several years, few policy issues in Japan have commanded more public attention and political acrimony than the redesign of the safety net. These efforts have recently culminated in the passage of legislation that commits enormous financial resources to redesign the governance of failure in Japanese banking.

I draw the following principal conclusions from the Japanese experience. First, for all its flaws, explicit government-administered deposit insurance is superior to the most likely real-world alternative-implicit government protection of banks. Given the apparent inevitability of some form of government safety net, transparent ex ante ground rules for governmental intervention in bank distress, which are most likely to be developed as part of an explicit deposit insurance system, are preferable to protections based on the non-institutionalized reputation and discretionary intervention of financial regulators. Second, the political economy of bank failure makes the development of effective private alternatives to government safety nets highly unlikely absent mechanisms to constrain government intervention in banking distress. Again as demonstrated by Japan, without a credible commitment to bank closure, ostensible delegations of monitoring of bank risk and loss guarantee functions from government to the private sector are likely to be both illusory and inconsistent with market discipline. Thus, a well-designed, explicit deposit insurance system that includes a credible bank-closure policy is the starting point for the design of effective private alternatives. In view of the preceding conclusions, I view the trend toward greater institutionalization of the Japanese safety net as a promising development reflecting significant changes in that country's political and legal structures. While these assertions may seem quite limited and unsurprising to readers unversed in bank regulatory literature, they in fact run counter to the predominant normative conclusions about deposit insurance.

A caveat at the outset: this paper is not an all-purpose defense of deposit insurance; nor will it show that criticisms of deposit insurance are completely misplaced, either with respect to the United States or Japan. On this point, theory and history speak for themselves. Rather, this paper has more modest goals: to clarify the real-world regulatory design alternative to deposit insurance, and to show that in this as in other areas of economic policymaking, institutions trump the *ad hoc* interventions of government agents charged with promoting the social good.

The paper is organized as follows: Chapter II sketches a simple framework for understanding design choices in the promotion of bank stability. This framework

provides a brief review of past theoretical and policy debates, guiding the discussion in the remainder of the paper. Chapter III analyzes three distinct phases in recent Japanese banking history relating to deposit insurance and the resolution of failing banks. Chapter IV draws principal lessons and policy implications from the Japanese experience, with consideration for the bearing it might have on safety-net initiatives in other countries. Chapter V is a brief conclusion.

II. Safety Nets and Regulatory Design

Governments care deeply about bank stability. Whether banks merit this attention is the subject of enormous debate; in general terms, however, government intervention in bank distress rests on three principal factors. First, banks are uniquely susceptible to runs and panics due to their financial structure and economic functions.⁵ Second, in virtually all countries, banks are the dominant providers of payment services, absorbing liquidity pressures and credit exposures on behalf of their customers. Widespread bank failure would thus lead to severe, economy-wide disruptions (Macey and Miller [1997]). Finally, in their activities as private economic agents, banks serve as the "transmission belt" for the conduct of the central bank's monetary policy. Consequently, as Rubin (1997) notes, "for ordinary businesses, insolvency is viewed as a quasi-Darwinian mechanism that improves the health of the corporate herd, but for banks it is viewed as a social disaster." More precisely, the potential for disaster is thought to lie in systemic risk—the threat that idiosyncratic bank distress will lead to the successive infection of other financial institutions, eventually engulfing the real economy.

To minimize this threat, many governments have introduced bank safety nets consisting principally of deposit insurance and the lender-of-last-resort facility. Deposit insurance systems, designed to dampen the threat of bank runs and panics, typically provide the ground rules for government intervention in failing bank situations by specifying the amount of insurance coverage, the measures available to the insuring agency to resolve insolvent banks, and the conditions for their implementation (Talley and Mas [1990]). Through last-resort lending, the central bank provides liquidity on preferential terms to institutions during periods of unusual economic stress.

As is now universally recognized, however, safety-net initiatives produce their own problems. Deposit insurance is a put option for bank shareholders⁶; last-resort

^{5.} Banks specialize in asset transformation, turning short-term, liquid assets (deposits) into longer-term, less-marketable assets (loans). Since banks maintain reserves against only a fraction of their liabilities, mass depositor withdrawals can lead to liquidity crises and insolvency even for otherwise sound institutions. The presence of information asymmetries heightens this risk. As Mishkin (1996) explores in detail, since bank loans contain borrower-specific information that may be inaccessible to depositors, runs can occur at both good and bad banks. Disorderly withdrawals at one bank can create uncertainty about the health of the entire financial system, leading to a contagion effect. Diamond and Dybvig (1983), for example, have shown that bank panics can be self-fulfilling.

^{6.} E.g., Merton (1977) and Scott (1989). A bank shareholder's residual claimant status includes not only the right to retain all profits from the use of depositor's funds, but also a valuable option to "put" the bank to its creditors

lending creates a precedent in which distressed banks become eligible for low-cost liquidity support. Thus, while government safety nets are designed to promote bank stability, they simultaneously provide incentives to *increase* bank risk, making bank failure mores likely.⁷ This necessitates a panoply of additional regulatory structures, including bank examinations, capital requirements, and portfolio restrictions, to limit excessive risk taking. Deposit insurance is thus often viewed as the starting point for understanding bank regulation generally (Bhattacharya and Thakor [1993]).

The banking literature also examines how the existence of a governmentadministered safety-net produces agency conflicts that exacerbate the risk-shifting effects just discussed. For example, the safety net can be manipulated to serve political interests. Macey (1989) argues that regulatory capture leads to loose bankclosure policies that favor bank shareholders.⁸ Even in the absence of political influence, both Kane (1989) and Boot and Thakor (1993) show that regulatory selfinterest will lead to bank-closure policies more lax than the social optimum. They analyze the career and reputational interests of those in charge of the deposit insurance fund, showing that the incentive structure promotes obfuscation and delay in connection with banking problems.⁹ Whether motivated by politics or selfinterest, therefore, the literature demonstrates that the agency conflict created by formal safety nets leads to regulatory forbearance.

This much is familiar and widely accepted. Not surprisingly, therefore, some conclude from the weight of the historical and theoretical evidence that "[t]he ultimate reform of deposit insurance may be its elimination."¹⁰ Block (1992), for example, suggests replacing deposit insurance with a private insurance scheme. Similarly, White (1995) argues that private alternatives are superior to deposit insurance for developing and transition economies, due to the incentive problems and regulatory demands the latter entails. Calomiris (1990) and Petri and Ely (1998), respectively, have suggested that government guarantees be supplemented or replaced by networks of guarantees worked out among financial institutions. The guarantors would serve

⁽government regulators and ultimately taxpayers) in the event that management's gambles do not pay off (e.g., Scott [1989]). Perversely, the value of the option increases as the riskiness of bank assets increases and bank capital decreases. Worse yet, since deposit insurance premiums are not adjusted for risk in any country other than the United States (a recent development), banks with lower-quality assets and more risk-loving managers can free ride off the insurance fund contributions of stronger, more risk-averse banks. Much of the ensuing discussion will focus on deposit insurance, the most central and controversial component of the bank safety net.

^{7.} Deposit insurance eliminates the incentive for an important class of fixed claimants—depositors—to monitor bank managers, shielding banks from the application of basic corporate finance principles (e.g., Macey and Miller [1988]). Simultaneously, deposit insurance distorts the investment decisions of the bank's shareholders and managers, who are motivated to adopt high-risk investment strategies.

^{8.} In this view, the primary beneficiaries of deposit insurance and other components of bank regulation are the shareholders of the regulated banks themselves, who enjoy policies that actually subsidize their risk-taking activities. Macey asserts that capture provides a particularly robust explanation for agency behavior in bank regulation due to the complexity of the issues involved, which invite both the participation of organized groups and deference to legislative committees, while rendering outside monitoring of the resulting legislation difficult.

^{9.} Kane (1989) argues that officials are initially slow to appreciate problems in the banking sector that jeopardize the insurance fund because they lack adequate information to recognize private-sector innovations that shift risk onto the fund—"honorable but slow regulatory adaptation." This is followed by dishonest denial of banking-sector distress, in order to conceal problems that could jeopardize the reputation and career advancement of the regulators. Similarly, Boot and Thakor (1993) hypothesize that regulators temporize in the face of bank distress because intervention to close a bank may cause the market to downgrade its assessment of the regulator, since closure signals the existence of inadequate capital and the regulator's failure to enforce a less risky asset choice.

^{10.} See Bhattacharya and Thakor (1993).

as delegated monitors of the firms whose risks are to be covered. Alternatively, many commentators have advocated maintaining deposit insurance, but only with respect to a tightly controlled class of "narrow" banks holding full reserves against deposits in the form of highly liquid securities (e.g., Miller [1998]). In exchange for retraction of safety-net protections, all other financial institutions would be free to operate without significant regulatory intervention.

So familiar is the stylized account of deposit insurance—heavily colored though it is by the history and politics of U.S. banking¹¹—that less formal government interventions to protect failing banks (in fact, the most common response to the problem of bank instability) have received scant attention in the literature. As Talley and Mas (1990) have noted, "[w]ithout explicitly recognizing the fact, th[e] vast literature [on deposit insurance] has employed an analytical framework that compares a deposit insurance system against a system where the government extends no protection to depositors."

This sense of the policy design alternatives, however, is confirmed neither by theoretical insight nor empirical observation. There are two closely related theoretical explanations for the existence of bank regulation to control risk, even in the absence of explicit deposit insurance. First, flaws in depositor discipline resulting from information asymmetries provide a rationale for government regulation to reduce bank risk taking (Mishkin [1996]).¹² Second, the economic functions of banks render these institutions particularly susceptible to behavioral biases that cloud the accurate estimation and disclosure of risk.¹³ These problems explain the existence of substantial regulations to control bank risk even in economies without deposit insurance systems.¹⁴

^{11.} In the stylized account, deposit insurance was introduced in the United States in the wake of the Great Depression. Like many economic policies, its implementation owes more to politics than to economic theory. When many small banks faced collapse in 1933, they pressed Congress for federal deposit insurance. The alternative, industry consolidation and an end to unit banking requirements which increased bank risk, was a political nonstarter. For a time, the arrangement worked: bank runs were eliminated, banks failed but without creating systemic problems, and deposit insurance was viewed as one of the most successful of the New Deal programs (e.g., Clark [1976]). That assessment changed dramatically in light of the savings and loan and banking crises of the 1980s, in which weak institutions shifted risks onto the federal deposit insurance funds, and regulators created accounting gimmicks and other measures that concealed the depths of the problems and delayed their resolution, at great cost to taxpayers.

^{12.} Macey and Garrett (1988) provide theoretical and empirical support for depositor discipline as a device to constrain bank risk. However, as the authors themselves recognize, the evidence suggests that depositor discipline is an effective *supplement* to regulatory constraints on bank risk.

^{13.} The first is the "commitment bias." A fundamental precept of individual psychology is that once a person has committed to a particular course of action, there is a strong motivation to resist data suggesting the existence of a superior option. Subsequent beliefs will be conformed to support the chosen path. Hence the tendency to "throw good money after bad." This bias poses substantial risks for the banking industry, where the quality of assets consisting principally of promises to pay sums of money in the future (loans) must be continually reevaluated and loan officers must decide whether further credit should be extended to troubled borrowers.

Second, organizations, like individuals, are susceptible to an "optimism bias." That is, all firms seek to prevent runs on their resources by adopting optimistic public faces. This bias is likely to distort public disclosures made by firms. Banks, which are particularly susceptible to runs due to their financial structure, may be even more likely than commercial firms to systematically downplay the riskiness of their assets. The discussion of behavioral biases is drawn from Langevoort (1997).

^{14.} Of course, these same theoretical insights explain why all bank risk regulation will be flawed, even in the absence of deposit insurance. The regulators' key task—monitoring the quality of bank assets—will be hampered by the same information asymmetries and behavioral biases that afflict bankers. Information problems make it difficult for regulators to assess bank risk. The commitment bias reinforces considerable political and personal incentives

Empirical observation also discredits the view that a world without deposit insurance is a world of market discipline for banks. A survey by Kyei (1995) shows that virtually all governments without explicit deposit protection systems nonetheless provide *implicit* deposit protection. In fact, implicit safety nets are more prevalent than the explicit variety.¹⁵ In an implicit deposit protection scheme, government intervention is discretionary and *ad hoc* (Talley and Mas [1990]). Depositors receive assurances, not from the existence of a formal insurance fund, but from the government's intention to safeguard the stability of the financial system. These assurances might be implied from the government's past conduct or stated intentions (Kyei [1995]). Government adherence to a bank-failure policy has been advocated in the literature (e.g., Tussing [1967]), but rarely implemented.¹⁶ Thus, in reality, as one commentator puts it, "[b]ank losses are quasi-fiscal deficits, even in highly private, market-based economies" (Sheng [1996]).

The few commentators who have analyzed implicit safety nets have each suggested that they might generate less moral hazard than the explicit variety. Mishkin (1996) reasons that in an implicit system the government has the flexibility to respond only to systemic crises, rather than being formally bound to protect all banks. Depositors thus have an incentive to withdraw funds from banks facing idiosyncratic shocks, providing discipline against excessive risk taking. In apparent adherence to similar logic, the European Central Bank has concluded that rules on the operation of the safety net should remain opaque, so that the financial sector is kept guessing about the authorities' reaction to a banking crisis (*Financial Times* [1998]). Demirgues-Kunt and Detragiache (1997) advocate an implicit deposit insurance scheme for banking systems with insufficient prudential regulatory capacities.

The discussion now turns to Japan, which offers the opportunity to examine the theoretical and policy debate by exploring a social experiment in implicit and semiprivate alternatives to deposit insurance.

III. Deposit Insurance and the Governance of Bank Distress in Japan

For purposes of analysis, the Japanese experience can be divided into three slightly overlapping phases: (1) the period from 1971–92, in which a formal safety net was established but eschewed in favor of an intricate set of informal regulatory practices

to prop up distressed banks. The optimism bias, which applies to regulatory agencies as well as firms, could lead to downplaying bank problems in order to maintain a public image of competence, stability, and control with respect to matters under their jurisdiction. The bureaucratic structure in which all bank risk monitoring takes place only accentuates these problematic tendencies (see Langevoort [1997]).

^{15.} A 1995 survey showed that 55 countries maintained implicit deposit protection arrangements while 47 countries maintained explicit protections (Kyei [1995]).

^{16.} New Zealand is currently the only country in the world in which the government explicitly refuses to protect the depositors of failing banks (Kyei [1995]). Argentina experimented with a credible commitment to bank failure, but reinstituted a formal deposit protection system almost immediately in the face of a serious financial and political crisis (Miller [1996]). A government pursuing this option must do more than simply forgo the establishment of a deposit insurance regime; constitutional or statutory measures prohibiting state involvement in troubled banks must be put in place to make the commitment to bank failure credible.

designed to promote bank stability; (2) the period from 1992–97, in which the informal safety net was stretched to the breaking point and beyond, leading to a series of deviations from traditional patterns of regulatory intervention in banking distress; and (3) the late 1990s, in which a new, explicit safety net has been under construction in tandem with other institutional and political realignments.

A. Deposit Insurance and the Implicit Safety Net

Japan's deposit insurance system was established in 1971, ostensibly to protect bank depositors and maintain the stability of the financial system in the face of increased competition resulting from financial liberalization. The system is administered by the Deposit Insurance Corporation (DIC), a special corporation established under the Deposit Insurance Law with capital contributed by the Ministry of Finance (MOF), the Bank of Japan (BOJ), and private financial institutions.¹⁷ Suzuki (1987) notes several distinctive characteristics of Japanese deposit insurance. First, membership is compulsory for virtually all depository institutions. Second, the DIC's original mandate was limited to collecting insurance premiums and paying off insured depositors of failed institutions. Thus, unlike the U.S. Federal Deposit Insurance Corporation (FDIC), the DIC was not envisioned as playing an active role in the resolution of distressed financial institutions. Third, private financial institutions are represented in the management of the DIC.

Three other components of the explicit regime for failing banks in Japan should also be noted. First, as lender of last resort, the BOJ is empowered to provide loans to liquidity-troubled financial institutions.¹⁸ Second, under Article 26 of the Banking Law,¹⁹ the operations of a bank can be suspended by the regulatory authorities, although no formal guidelines for the exercise of this authority existed until recently. Third, prior to 1998, Japanese law did not provide for separate insolvency procedures for banks; thus, unlike the situation in the United States, the formal insolvency mechanisms applied to both banks and commercial firms.²⁰

For most of the postwar period, however, this explicit regime played virtually no role in the governance of bank failure in Japan. This is particularly true with respect to deposit insurance, which is apparent from a review of the DIC's resources and institutional design during the first two decades of its existence.²¹ From its inception, the DIC was poorly funded, understaffed, and largely subsumed within

^{17.} Deposit Insurance Law, Law No. 34 of 1971. The statutory payoff limit has been increased several times and is currently ¥10 million (approximately US\$91,000, at an exchange rate of ¥110/US\$1) per depositor. In addition, deposits at agricultural cooperatives are protected under a separate statute. Deposits in a postal savings system are also covered by an explicit guarantee.

^{18.} This authority was initially provided in Article 25 of the original Bank of Japan Law. Under current law, the BOJ is legally empowered to provide secured or unsecured loans to financial institutions (Bank of Japan Law, Law No. 67 of 1942, as amended, articles 33 and 37). In response to a request by the Minister of Finance, the BOJ may also provide loans and conduct other business when it is deemed essential for the maintenance of order in the financial system (Bank of Japan Law, article 38).

^{19.} Law No. 59 of 1981, as amended.

^{20.} In the United States, banks are specifically exempted from the Bankruptcy Code (11 U.S.C. § 109, 1994).

^{21.} For a contrary view, see Hall (1998), who argues that "[d]eposit insurance has played an important part in stabilizing the Japanese banking and financial sectors since its inception in 1971." The lender-of-last-resort function has been utilized in several cases in the past, beginning with loans to a large securities firm in 1965.

the operations of the BOJ.²² Although there were Japanese bank failures in the 1970s and 1980s, the deposit insurance fund was not utilized until 1992, when the DIC provided financial assistance to facilitate a rescue merger for a small failed bank (see DIC [1998]; Federation of Bankers Associations of Japan [1994]). The deposit insurance fund has never been used to pay off depositors of a failed institution.

Focusing solely on the formal safety net, however, masks an intricate and historically successful informal process of managing the failure of financial institutions in Japan. As one Japanese commentator notes, "the most important safety-net system in our country has not been the deposit insurance system, but the public's confidence in the MOF and the BOJ's ability to avoid a major instability in the financial system" (Ueda [1996]). While both journalistic and scholarly accounts have come to refer to the Japanese regulatory approach to bank failure as the "convoy policy," it is helpful to break this policy down into several interrelated but distinct components. The financial regulators were able to avoid systemic problems by playing the leading role in the formation and enforcement of the following well-developed set of informal norms governing bank distress:²³

- (1) Survival of the weakest: Interest rates and other regulations were set to permit the survival of the weakest member of the banking industry, whose numbers were kept manageable by high barriers to entry. In addition to enhancing the durability of the industry as a whole, the survival of the weakest norm supported pricing arrangements that allowed the weakest member to stay in business, while allowing more efficient producers to earn super-competitive profits. These economic rents were used to compensate for the monitoring and rescue operations undertaken by the stronger firms.
- (2) No exit (no failure): Almost a corollary of the principle of survival of the weakest was that of no exit—no member of the banking industry was allowed to exit (fail), other than through merger with a stronger member. This enhanced stability both by preventing the failure of weaker members and by increasing public confidence in supervisory capabilities.
- (3) Responsibility and equitable subordination: When the danger of financial failure grew, the parent or principal source of funding for the failing entity was expected to take responsibility by extending financial assistance and by subordinating its claims to those of other creditors, even if not legally required to do so. This norm encouraged monitoring by stronger firms, by imposing both monetary and reputational costs on stronger players who allowed smaller institutions to fall into difficulty.
- (4) Implicit government insurance: The preceding norms led naturally to a norm of implicit insurance provided by the government. If strong members were expected to assist weaker members and if no member of the industry were

^{22.} While the percentage of bank deposits covered by insurance is similar in Japan and the United States, the ratio of insurance fund reserves to covered deposits in Japan since the inception of the deposit protection system has consistently been far lower than the corresponding U.S. figure. For example, in 1995, the ratio was 0.07 for Japan and 1.30 for the United States (DIC [1998]; FDIC [1996]). For the first two decades of its existence, DIC staff numbered fewer than 10. Because its staff was so small, office space and technical support were provided to the DIC by the BOJ (see Yoshitomi [1996]; Federation of Bankers Associations of Japan [1994]).

^{23.} The textual discussion is based on Milhaupt and Miller (1997).

allowed to fail, some entity had to backstop the strong members. Thus, an implicit grant of government insurance was inherent in the operation of the other norms. Put differently, the responsibility norm extended even to the government.

For many years, these norms instilled confidence in the financial industry and its regulators. In effect, a partnership was created between the public and private sectors to enhance financial stability and protect depositors. Until the beginning of this decade, these norms *were* Japan's safety net, and the institution of deposit insurance did not matter.²⁴

Under this approach, the MOF arranged for stronger banks to absorb insolvent institutions through what amounted to informal, administratively orchestrated purchase and assumption (P&A) transactions (Yoshitomi [1996]). Strong banks, acting under the MOF's guidance and encouragement, purchased the assets and assumed the liabilities of failing institutions. At times, the MOF officials were dispatched to the boards of troubled banks. This was said to signal the government's commitment not to allow the bank to fail, while preparing the way for a rescue merger (Horiuchi [1998]). In addition, at times the BOJ provided loans to distressed banks in order to prevent systemic crises.

Disclosure practices among industry participants complemented this norm- and reputation-based approach to bank failure. With MOF support, troubled financial institutions traditionally minimized disclosures of nonperforming assets, often while liquidating portfolio assets in order to show a profit. These measures helped to maintain an aura of financial soundness while mergers and other financial assistance were arranged behind the scenes (Choy [1995b]).²⁵ These practices were so highly ingrained that the reporting of an annual loss by a major Japanese bank in 1995—the first in postwar history—was said to signal a significant shift in official and market disclosure philosophy (Choy [1995a]). The concentration of borrower-specific and other risk-related information in the hands of main banks and MOF regulators largely disabled the market mechanism as a viable tool of risk monitoring and constraint.

It is important to note that the beneficiaries of this implicit safety net were not simply depositors, but the banking sector itself. Bank stability is important everywhere; it is, however, crucial in Japan, where a relatively small number of very large banks have played key roles in postwar corporate finance and governance.²⁶ The "no failure" norm, therefore, was not only based on political considerations but also drew at least qualified support from economic theory: a given Japanese bank was the sole repository of considerable borrower-specific information that could not be

^{24.} Thus, characterizing Japan as having an explicit deposit insurance system (Kyei [1995]) is accurate, but somewhat misleading.

^{25.} To illustrate, in two recent cases, the severity of a firm's financial problems were not publicly disclosed prior to bankruptcy. For example, for the fiscal year ended March 1997, Hokkaido Takushoku Bank reported capital of ¥298 billion; six months later, inspections after the bank's collapse revealed negative equity of ¥240 billion. Off-balance-sheet losses amounting to more than half of Yamaichi Securities' capital were not revealed by MOF or BOJ inspections prior to its collapse in late 1997.

^{26.} It is interesting to note that Japanese banking law explicitly ties the regulation of bank soundness to the public character of the banking business. See Banking Law, Law No. 59 of 1981, article 1. Commentators critical of bank regulation in the United States dispute the quasi-public nature of banking, where the law contains no such concession to the public interest.

transferred costlessly to other lenders. Bank failure would thus jeopardize assets far more wide-ranging than shareholders' equity.²⁷ Deposit protection was a natural corollary to this regime, but the centrality of banks to the economy provided an independent and perhaps overriding justification for the "no failure" policy. This conclusion draws support from pre-deposit insurance Japanese banking history, in which policymakers did not hesitate to impose losses on depositors when necessary to strengthen the banking industry.²⁸

The prevailing regulatory environment supported the implicit safety net in several ways. For example, portfolio restrictions limited the ability of banks to hold risky assets and to generate volatile off-balance-sheet revenues. More importantly, the anti-competitive effects of a heavily segmented industry with high entry barriers endowed banks with substantial economic rents, increasing the value of a bank charter. As Keeley (1990) has shown, high charter values help to constrain excessive risk taking that could lead to bank failure. Simultaneously, the MOF's branch licensing authority provided the incentives needed to encourage rescues of troubled banks.²⁹

Finally and very significantly, the institutional structure for failing bank resolutions discouraged resort to the explicit deposit protection scheme. As previously noted, the Deposit Insurance Law did not initially contemplate a role for the DIC in bank failures beyond deposit payoffs. In 1986, the law was amended to permit the DIC to provide financial assistance in connection with mergers of troubled banks; however, the amount of assistance was limited to the hypothetical cost of paying off depositors.³⁰ Since the cost of resolving the troubled institutions exceeded this limit, mergers took place outside the formal deposit protection system. Moreover, under the Deposit Insurance Law, resort to the bankruptcy process results in deposit payoffs,³¹ a disfavored approach to bank distress even in the United States. Thus, the legal framework provided an unpalatable menu of formal options for MOF officials.

The implicit safety net functioned well in a favorable economic environment and gained credibility from the stable political and bureaucratic structures in Japan. The long dominance of the Liberal Democratic Party (LDP) eliminated the threat that other political parties would renege on the implicit government insurance norm, or otherwise alter the uncodified safety net to favor different interest groups. Finally, the MOF's long-standing reputation as a highly competent and uncorrupt regulator gave it the moral authority to act as coordinator and enforcer of the informal arrangements.

^{27.} Of course, economic theory also predicts substantial moral hazard effects in a banking system that does not permit failure. The crucial regulatory task is thus properly calibrating protection and market discipline.

^{28.} Large depositors were subjected to losses during a banking crisis in 1927; many depositors suffered losses from bank failures in the immediate postwar period. Both episodes led to bank consolidation in Japan.

^{29.} Authorization for new branches was highly coveted by industry participants, since branch growth constituted the principal form of competition among city banks under a regulated interest rate regime. Indeed, one of the stated rationales for the establishment of an explicit deposit insurance system in the early 1970s was the desire to enhance competition by eliminating the practice of granting this type of regulatory favor to rescuing banks (Financial System Research Council [1969]).

^{30.} Deposit Insurance Law, article 64.

^{31.} Deposit Insurance Law, article 49(2).

B. Breakdown of the Implicit Safety Net

Developments in the 1990s, however, seriously undermined these pillars of the implicit safety net. Regulators found it increasingly difficult to persuade financial institutions to provide assistance to failing firms of all types in the post-"bubble" environment. Even large banks faced serious nonperforming-loan problems, low returns on equity, and weak capital bases, making them unwilling to play the role of white knight. Moreover, the explosive growth of shareholder derivative litigation in Japan following a 1993 amendment to the Commercial Code raised the specter of personal liability for bank managers who used shareholder funds to rescue troubled institutions. Simultaneously, a series of policy missteps and scandals during the "bubble" and its aftermath seriously eroded the credibility of the financial regulators that was so crucial to the operation of the informal safety net. As the stability of entire classes of financial institutions was imperiled by economic developments, it became increasingly clear that more systematic approaches to the problem of financial instability were necessary. In the first half of the 1990s, resolution techniques became more highly institutionalized, involving the use of specialized public entities to recover nonperforming loans. A tortuous progression over time toward more rule- and market-based resolution methods was evident, but a coherent, formal approach to troubled banks would not emerge until the implicit regime had been thoroughly undermined.

1. DIC-assisted mergers

As financial liberalization progressed, the Deposit Insurance Law was amended in anticipation of a more important role for the DIC in the resolution of distressed banks. A 1986 amendment strengthened the DIC's financial condition and provided the authority for the DIC to extend financial assistance for the promotion of mergers of insolvent depository institutions with stronger banks.³² Beginning in 1992, a series of DIC-assisted mergers was carried out among troubled credit cooperatives, *shinkin* (nonprofit cooperative) banks, and regional banks. Since that time, the DIC has extended financial assistance in more than 20 cases. By 1995, however, these operations had rendered the deposit insurance fund insolvent (see Cargill, Hutchison, and Ito [1997]).

2. Failed credit cooperatives and the Tokyo Kyodo Bank

In 1995, the Tokyo Kyodo Bank was established to hold the assets of two failed credit cooperatives. Funds for this bank were contributed by commercial banks, the DIC, the BOJ, and the Tokyo metropolitan government, which regulated the failed cooperatives. The possibility of further insolvencies among credit cooperatives led to the reorganization of the bank in September 1996 into the Resolution and Collection Bank (RCB) as a subsidiary of the DIC. This institution was loosely modeled after the U.S. Resolution Trust Corporation, serving to liquidate the business and assets of failed credit cooperatives. Liabilities of the RCB were guaranteed and losses compensated by the DIC, which is empowered to act as conservator of failed cooperatives.

^{32.} Deposit Insurance Law, article 64. The amendment raised insurance premiums and increased the DIC's line of credit from the BOJ.

3. The jusen problem and the Housing Loan Administration

An elaborate resolution scheme was employed in response to the "*jusen* problem," one of the most contentious and highly politicized episodes in modern Japanese financial history. The *jusen* problem merits fairly detailed exposition, as it illustrates problems inherent in the implicit safety net and helped to catalyze the movement toward more law- and market-based resolution techniques.³³

In the early 1970s, seven home mortgage lending (jusen) companies were established as nonbank subsidiaries of major financial institutions. The money they lent was borrowed from three groups of financial institutions: their parent entities (known as the "founding banks"), politically powerful agricultural credit cooperatives, and other lenders. The jusen problem can be traced to several convergent factors, including lax oversight, financial liberalization, and the "bubble" economy. From their inception, the jusen companies were not carefully monitored by government authorities, managers, or shareholders. In part at least, monitoring was diluted by the presence of large numbers of MOF alumni on the boards of the jusen companies, and less than arm's length relationships between the *jusen* and the major financial institutions which had established them as nonbank subsidiaries. Financial liberalization in the late 1970s and 1980s seriously eroded the jusen companies' market niche: as banks lost corporate borrowers to the capital markets, they increased lending to individuals. In response, the jusen companies turned aggressively to real estate lending. This move coincided with the speculative excesses of the "bubble" era, and the flow of a torrent of cash into the jusen companies from the agricultural cooperatives. Agricultural cooperative lending was spurred in part by the exemption of the *jusen* companies from MOF administrative guidance that imposed limitations on real estate lending in the banking sector.

MOF inspections of the *jusen* companies in 1991—the first ever—revealed that almost 40 percent of their loans were nonperforming. Under MOF guidance, 10-year restructuring plans were undertaken for each of the *jusen* companies. Concessionary interest rates and longer repayment schedules were negotiated on loans to the *jusen* companies, on the assumption that improved land values would eliminate the problem. Consistent with the implicit norms outlined above, the founding banks took the biggest loss on their loans (by eliminating all interest), and the MOF circulated an ambiguous memo suggesting that the founding banks and perhaps even the MOF itself would guarantee repayment of the principal of all loans made by the agricultural cooperatives, which were generally perceived to be the weakest institutions involved, other than the *jusen* companies themselves.

Rather than dealing effectively with the problem, however, this forbearance led to a huge increase in the percentage of nonperforming assets held by the *jusen* companies. Land values did not improve as anticipated, additional loans extended by the agricultural cooperatives turned bad, and by 1995 all of the *jusen* companies were insolvent. Collectively, almost 75 percent of the *jusen* assets were nonperforming, and the *jusen* problem had reached crisis proportions. Adding to the urgency of the situation was the appearance of the "Japan premium" in the Eurodollar

^{33.} For an in-depth analysis of the *jusen* problem, see Milhaupt and Miller (1997).

market (Figure 1). In part, the premium reflected the unusual systemic risk that regulators would undermine the strength of major Japanese banks by requiring them to bear more than their *pro rata* share of *jusen* losses, a reflection of the "responsibility" norm in the parlance of this paper.

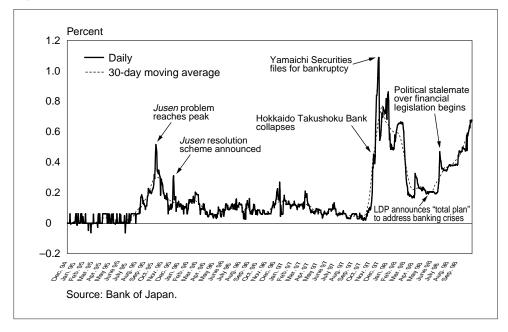


Figure 1 "Japan Premium" (Tibor – Libor)

Following months of extraordinarily contentious and politically charged negotiations among the major lenders to the *jusen* companies, their regulators,³⁴ and political leaders, a plan to allocate the losses was enacted by the Diet. The resolution scheme called for the *jusen* companies to be liquidated, with their assets split into two groups. Completely unrecoverable assets were written off immediately, generating "first stage losses" of ¥6.4 trillion (US\$58 billion). These losses were shared among the three groups of lenders to the *jusen* companies in the following manner: founding banks wrote off the entire amount of their loans to the *jusen* companies (¥3.5 trillion), other institutional lenders wrote off about half of their loans (¥1.7 trillion), and the agricultural cooperatives "contributed" ¥530 billion, only about 10 percent of their loans, despite their status as the largest lenders to the *jusen* companies. The agricultural cooperative funds were cast as a "contribution" to lend credence to the claim that these institutions were the innocent victims of founding bank improprieties and mismanagement, bore no responsibility for the collapse of the *jusen* companies, and thus were entitled to full recovery of their loans.

The agricultural cooperatives' minimal share of the losses left a ¥680 billion (US\$6.2 billion) shortfall in the coverage of first stage losses, which could only be

^{34.} The founding banks are regulated by the MOF; the agricultural cooperatives are regulated principally by the Ministry of Agriculture, Forestry and Fisheries. Resolution of the *jusen* problem was complicated by this division of regulatory responsibility, and by the political power of the agricultural cooperatives.

filled by injecting public funds into the resolution scheme.³⁵ While the amount is relatively small, the use of public funds in a resolution framework perceived as nontransparent, politically motivated, and without legal basis created a firestorm of political controversy.

The remaining ¥6.6 trillion (US\$60 billion) of *jusen* assets was transferred to the Housing Loan Administration Corp. (HLAC), which was established as a subsidiary of the DIC to recover these assets over a 15-year period. "Secondary losses" resulting from uncollectible loans will be covered from special DIC accounts "voluntarily" established by the *jusen* founding banks and other lenders at MOF insistence and, if necessary, from public funds.

It is fair to question why the failure of the *jusen* companies was the subject of such massive regulatory attention. These were not depository institutions, and a variety of corporate insolvency laws were available to govern their orderly exit from the market. In reality, however, the *jusen* resolution *was* a depositor protection scheme, albeit an indirect and heavily negotiated, semiprivate one. If the agricultural cooperatives had been forced to bear their *pro rata* share of the *jusen* losses, many of them would have been rendered insolvent. Thus, the depositors of the agricultural cooperatives—most of whom are farmers with long-standing loyalties to the LDP—were protected at the expense of founding bank shareholders and Japanese taxpayers. In the end, the traditional norms governing financial institution distress could be applied only in modified form due to the enormity of the losses involved and the rapidly changing financial and legal environments in which both the public and private sectors were operating.

4. Failures of major financial institutions

The complete demise of the implicit safety net might accurately be dated to 1997. Autumn of that year witnessed the collapse of Japan's 10th-largest bank and its fourth-largest securities firm, as well as the failure of a major life insurance company and a second-tier securities house. Significantly, major shareholders and firms affiliated with these failing institutions refused to come to their aid. Moreover, stronger, unaffiliated institutions resisted the MOF's attempts to broker rescue mergers. This episode represents a watershed in regulatory approaches to failing banks in Japan, indicating that the ground rules for the operation of the safety net were open to complete revision. Although MOF officials scrambled to reassert the "no failure" norm through public statements that no other major banks would be allowed to fail, credibility in the financial structure fell to an all-time low.

Events of the past several years, therefore, exposed a legal and policy vacuum of considerable dimensions. For decades, while operating under a comprehensive, implicit safety net, there was little need for a highly developed institutional structure to govern deposit protection and bank closure. Post-"bubble" economic, political, and regulatory conditions rendered the "no failure" norm inoperable, yet no coherent substitute was in place to address the serious problems facing Japanese banks. As reflected in the "Japan premium" (Figure 1), a massive loss of confidence in the country's financial institutions and supervisory structures ensued.

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^{35.} MOF officials attempted to pressure the founding banks to cover the additional shortfall, but bank managers refused on the ground that such action would expose them to personal liability to shareholders.

C. Institutionalizing the Safety Net

Policymakers struggled against political and bureaucratic inertia to fill the vacuum. By late 1998, these efforts had culminated in an explicit framework governing bank risk regulation, failed bank resolutions, and bank recapitalizations. While it is too early to fully evaluate the effectiveness of this program, its broad outlines can be sketched, revealing a movement toward greater institutionalization of the bank safety net.

The first set of reforms was inspired by the jusen problem. The moral hazard for managers and investors produced by the "no failure" norm, and the unusual systemic risk produced by the responsibility norm, heightened awareness of the need for both more market-oriented and more formal regulatory processes to deal with troubled banks. In 1996, legislation was enacted to decrease regulatory discretion in dealing with ailing financial firms and to increase market discipline on financial intermediaries. These reform measures included two major changes relating to the treatment of failing financial institutions. First, a system of prompt corrective action based on objective criteria was instituted to deal with financial institutions in failing health.³⁶ Similar to U.S. legislation enacted in the wake of the savings and loan crisis,³⁷ this law was designed to prevent politically palatable but economically costly regulatory forbearance. Under the law, banks are required to engage in periodic self-assessments of capital, subject to external audit. When a bank's capital ratio deteriorates beyond certain benchmarks, a newly established Financial Supervisory Agency (FSA)³⁸ is required to undertake increasingly stringent measures to minimize the risk to the deposit insurance fund. Depending on how severely capital is impaired, a bank may be required to raise capital, sell assets, or even to cease operations. A second bill enacted in 1996 conferred upon regulators the authority to initiate corporate reorganization or bankruptcy procedures with respect to financial institutions to deal with insolvencies in a more formal and timely manner.³⁹

These measures, in a major departure from past Japanese financial practices, contemplate that regulators will allow and even force insolvent banks to exit the market. In order to prepare for this eventuality, other bills raised deposit insurance premiums⁴⁰ and established the HLAC and the RCB, the two previously mentioned public collection agencies, for the recovery of assets of failed institutions.⁴¹ In view of the seriousness of the financial situation and the inadequacy of past disclosure practices, however, the government guaranteed all deposits (including those above the statutory payoff limit of ¥10 million) through fiscal 2000. Finally, a temporary exception to the payoff cost limit for financial assistance was made to the Deposit Insurance Law. Through fiscal 2000, financial assistance for mergers of weak

^{36.} Banking Law, article 26; Banking Law Enforcement Order No. 10 of March 21, 1982, as amended, articles 21-2, 21-3. The prompt corrective action regime took effect in April 1998.

^{37.} Federal Deposit Insurance Corporation Improvement Act § 131 (codified as 12 U.S.C. § 18310(a)(2)).

^{38.} The FSA assumed supervisory responsibilities over the banking, securities, and insurance industries from the MOF on June 22, 1998.

^{39.} Bill to Implement Special Procedures for Reorganizing Financial Institutions, Law No. 95 of 1996.

^{40.} Bill to Amend the Deposit Insurance Law, Law No. 96 of 1996. Insurance premiums were quadrupled from 1.2 basis points to 4.8 basis points, and a special premium of 3.6 basis points was assessed for five years.

^{41.} The HLAC was established under the Special Measures Law to Promote the Resolution of the Assets and Liabilities of the *Jusen* Companies, Law No. 93 of 1996. The RCB was established under the Bill to Amend the Deposit Insurance Law, Law No. 96 of 1996.

institutions may exceed the payoff cost limit when the commissioner of the FSA determines in consultation with the BOJ that a merger is necessary to maintain the stability of the financial system.⁴²

The financial condition and organizational structure of the DIC were further strengthened by amendments to the Deposit Insurance Law in early 1998. The DIC now is expected to play a much more central role in the resolution of failing financial institutions than in the past. The amendments bolstered the DIC's financial condition with a ± 17 trillion appropriation to be used for depositor protection. The DIC's capacity to collect nonperforming loans was enhanced with the creation of a committee to investigate civil and criminal liability in connection with bank failures and the reformation of the RCB into a general-purpose "bad bank" to take over nonperforming assets in connection with the failure of any financial institution. In addition to enhanced financial and formal resources, the DIC's staff was increased to almost 300.

Finally and perhaps most significantly, two packages of legislation were enacted in late 1998 that significantly redesign the governance of bank failure in Japan. Key aspects of this legislation were heavily influenced by opposition party demands in arduous political bargaining taking place over the course of more than two months.⁴³ The legislation contemplates a massive injection of public money through the DIC infrastructure to be used for the protection of depositors, the resolution of failed banks, and the recapitalization of solvent but undercapitalized banks (Figure 2).

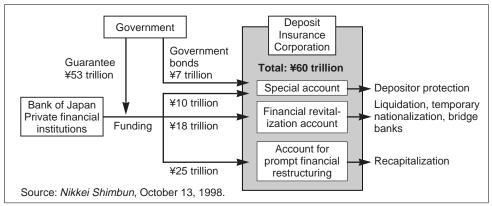


Figure 2 Public Funds for Financial System Stabilization

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- 42. Deposit Insurance Law, Supplementary Provisions, article 16. Note the similarity to the "too-big-to-fail" treatment under U.S. banking law. Normally, the FDIC is required to select the resolution technique that imposes the least cost on the federal deposit insurance fund. Application of the "least-cost resolution test" can be waived if the FDIC, Federal Reserve Board, and Treasury Secretary (in consultation with the President) determine that complying with the test would pose systemic risk (12 U.S.C. § 1823(c)(4)(G)).
- 43. In July 1998, the LDP lost its majority in the Upper House of the Diet. Since approval of both houses of the Diet is necessary for bills to become law, the LDP was forced to negotiate with several key opposition parties in order to obtain passage of the banking legislation.

Major areas of disagreement between the LDP and the opposition included the circumstances under which public money should be injected into financial institutions that have not formally failed, the amount of balancesheet information to be disclosed to the public, particularly for institutions accepting public funds, the specific receivership mechanisms to be created to deal with failed banks, and the structure of bank regulatory oversight. As to each of these issues, it is fair to characterize the opposition proposals as reflecting a greater concern for market discipline than the initial LDP bills.

Through fiscal 2000, insolvent banks will be subjected to an entirely new, formal resolution process.⁴⁴ Reflecting the demands of the opposition parties, article 1 of the law sets out the principle that insolvent financial institutions are to be liquidated. It goes on, however, to provide that various mechanisms to handle bank failures are to be established to support the credit system and protect depositors. A formally independent Financial Revitalization Commission was established under the Prime Minister's Office to administer the system. This commission will identify insolvent banks based on FSA examinations and select an appropriate resolution method specified in the law. Insolvent banks must either be (1) operated by a public administrator as a bridge bank to assume the business until a private successor institution emerges; or (2) temporarily nationalized by placement under special public management. Where the commission determines that systemic risk is posed by a bank's failure, insolvent or nearly insolvent institutions will be temporarily nationalized through the DIC's compulsory acquisition of their shares, at a price determined by the commission. Public management of the bank will terminate when the bank has been rehabilitated, a private successor emerges, or its shares are reprivatized. Under both resolution mechanisms, nonperforming loans will be transferred to a new Resolution and Collection Organization (see below), and sound borrowers of the failed bank will continue to receive funding to prevent a chain reaction of bankruptcies in the real economy.

In addition, the legislation attempts to create a more effective legal framework for the recovery of nonperforming loans. A Resolution and Collection Organization (RCO) was created through the merger of the HLAC and the RCB. Modeled after the U.S. Resolution Trust Corporation, the RCO has the authority to purchase nonperforming loans from both failed and solvent banks. In addition, various procedural improvements were made to streamline the debt collection, auction, and asset liquidation processes.

A second package of legislation passed in late 1998 provides a framework for the recapitalization of distressed banks.⁴⁵ The legislation replaced a ¥13 trillion recapitalization fund that was eliminated at the insistence of opposition parties.⁴⁶ The law provides for the RCO to purchase the common stock, preferred stock, or subordinated bonds issued by, and to extend subordinated loans to, banks whose capital is below various prescribed levels. The capital will be supplied upon application by a bank, provided that various conditions are met.⁴⁷ These conditions, also largely the product of opposition party demands, are designed to reduce moral hazard stemming from the use of public funds to prop up weak institutions. Together, the

^{44.} Law on Emergency Measures to Revitalize the Functions of the Financial System, Law No. 132 of 1998.

^{45.} Law on Emergency Measures to Promptly Restore the Functions of the Financial System, Law No. 143 of 1998.

^{46.} The initial fund, established in early 1998, failed to improve bank health. Bank managers were reluctant to accept capital from the fund out of fear that their institutions would be perceived as weak by the market. Ultimately, 21 banks received virtually equal and insignificant amounts of new capital (see DIC [1998]).

^{47.} Critically undercapitalized banks with a capital adequacy ratio between 0–2 percent are eligible to receive capital only if they agree to drastic management and structural reforms, provided that their continued operation is deemed indispensable to the regional economy. Banks with a capital adequacy ratio in excess of 8 percent are eligible to receive capital only if they agree to acquire a failing bank or it is deemed necessary to prevent a credit contraction. Banks with capital of between 8 percent and 4 percent are required to undertake various restructuring efforts that could include resignations of top management and reductions in shareholder capital.

two sets of legislation contemplate the use of ¥60 trillion (US\$550 billion), or approximately 12 percent of Japan's GDP, to protect depositors and restore the health of the banking sector.⁴⁸

A key remaining question is what will happen after March 31, 2001, when in accordance with its terms the 1998 legislation ceases to be effective, and the payoff cost limit is reimposed on extensions of public financial assistance to support mergers of weak institutions. If no new mechanisms for the resolution of failing banks are enacted to replace this legislation, the bank safety net will revert largely to the state that existed before the Japanese financial crisis became apparent. With the notable addition of the prompt corrective action regime, the only legal mechanisms available to regulators to deal with weak and insolvent banks will be the bankruptcy regime, which requires deposit payoffs, and financial assistance for mergers limited to the deposit payoff amount. Given the reluctance of regulators to use deposit payoffs, this institutional setup would place all of the stress from bank closures on the prophylactic mechanisms contemplated by the prompt corrective action regime. If this regime buckles under the stress,⁴⁹ there is a real danger that Japan will slip back into a pattern of nontransparent, administratively orchestrated bank resolutions. It is essential, therefore, that a permanent safety net with specific mechanisms for the closure of failed banks be erected prior to the year 2001.

IV. Lessons and Policy Implications

Japan's financial problems in the 1990s find obvious parallels in the bank and savings and loans crises experienced by the United States in the previous decade. For a time, banks in both systems managed to function well under quite distinct, politically contrived safety nets with deep roots in regulatory self-preservation. Eventually, however, both systems succumbed to an identical economic logic rooted in moral hazard. Yet casual observers who simply chalk up the Japanese experience as another dismal lesson in the problems of deposit insurance⁵⁰ miss a more nuanced evaluation with potential implications for safety-net initiatives in other countries.

The unique historical and political circumstances of deposit insurance in the United States have caused many analysts to focus rather narrowly on that institution as the principal source of problems in the regulation of bank risk. It is instructive to note, however, that the explicit deposit insurance system played virtually no role in the creation of Japan's banking crisis. The serious moral hazard effects which contributed to the *jusen* debacle and the high-risk lending practices of Japanese banks in the "bubble" period were created not by deposit insurance, but by the implicit norms that governed the resolution of financial distress in Japan for many decades.

^{48.} It is anticipated that a portion of these funds will be returned to the treasury upon the re-privatization of nationalized banks and bridge banks, and through receipt of dividend income.

^{49.} Japan does not have a strong tradition of aggressive law enforcement by independent regulatory agencies. Therefore, some skepticism about the viability of the prompt corrective action regime is in order, particularly since this approach to bank failure is basically untested even in the United States, from which it was imported.

^{50.} E.g., Walsh (1997).

Regulatory forbearance occurred, not principally to protect a deposit insurance fund, but because half-measures in the face of bank problems are the inevitable political and behavioral response of government agents pursuing an open-ended mandate to promote financial stability. Deposit insurance as an institution simply did not matter in Japan until the early 1990s, by which time the land mines that exploded into the financial crisis had already been laid.

Recognition of this fact provides a slightly different perspective on the U.S. banking crises as well. Arguably, the most serious problems in the United States were caused, not by the explicit portions of the safety net, but by the development of the "too-big-to-fail" norm and the FDIC's selection of resolution techniques for failed banks that protected virtually all uninsured depositors.⁵¹ These policies were not firmly grounded in law, but rather were the result of discretionary expansions of the safety net into an implicit realm. Absent formal constraints on regulatory action, safety nets tend to metastasize.

The importance of the implicit portions of Japan's safety net suggests that the debate over bank regulatory design would benefit from a careful comparison of the real-world alternatives to a government-administered deposit insurance program, and a recognition that some form of government intervention in the plight of failing banks is virtually inevitable. In some cases, this inevitability may stem from the political pressures of depositors, who of course double as voters (see Miller [1996]). In other cases, it is a function of the distinctive role that banks play in the political economy, operating as transmission belts for industrial policy and corporate governance. Whether banks are "special" from a purely economic perspective is open to debate; but there is little question that banks in virtually every country are unique in the degree to which they combine public and private economic functions, maintain intimate linkages to political actors, and are perceived as crucial connective tissue for the real economy.

Perhaps some day technological and economic changes will fully erode this unique status, political patterns will adjust accordingly, and the governmental safety net will be pulled out from under banks. In fact, however, the trend is in the opposite direction, as regulators extend the safety net to other financial intermediaries whose failure is deemed to pose systemic risk.⁵² Thus, there is reason to expect that governments will continue to intervene in banking crises even in the absence of a formal deposit insurance system. This point is confirmed by the widespread use of implicit deposit protection systems around the world and by bank bailouts in countries that have far less extensive formal deposit protection systems than the United States (Mishkin [1995]). A key policy question, therefore, is how these protections should be provided.

Japan's experience suggests several reasons why a well-designed, explicit safety net is the superior institutional choice. First, although implicit arrangements were successful in Japan for many years, the Japanese approach may not serve as a good

^{51.} In the United States between 1979 and 1989, 99.7 percent of all deposit liabilities at failed commercial banks were protected (Feldman and Rolnick [1998]).

^{52.} Witness the informal rescue of the hedge fund Long-Term Capital Management with the support of the Federal Reserve Bank of New York.

model for other countries. As an initial matter, characterizing the implicit safety net as a success requires qualification, insofar as it was essentially untested until the 1990s, when it proved incapable of responding to crisis. Moreover, even accepting the desirable qualities of this system, replicating Japan's traditional approach to bank failure in other countries may prove difficult.⁵³ Implicit deposit protection schemes appear to function most effectively in environments that are out of step with current trends in international financial markets. Competition must be limited and entry barriers must be high to channel a stream of rents to the banking sector. Regulators must maintain a near monopoly on information serving as the basis for prudential policy. Similarly, disclosure of problems in the industry must be limited in order to protect regulatory reputation and avoid stresses on an underdeveloped institutional framework. Competition-distorting incentives may be needed to encourage informal resolutions of bank distress. The regulators must themselves maintain a high reputation for expertise and propriety, while enjoying broad policymaking autonomy. While this delicate balance was maintained in Japan through several decades of high economic growth, the collapse of the implicit safety net over the course of the 1990s is a cautionary tale for policymakers elsewhere who would replicate the Japanese approach to bank regulation.54

Second, Japan's experience indicates that implicit safety nets not only suffer from the moral hazard and forbearance flaws found in explicit systems, they also generate additional problems. The lack of a formal institutional structure for failed bank resolutions compounded the country's financial problems, as a legal and policy vacuum of significant dimensions opened where the traditional bank governance model once stood. The resulting uncertainty and nontransparency of the implicit regime, which led to the emergence of the "Japan premium," exacerbated bank liquidity problems by making interbank lending more expensive for *all* Japanese banks, regardless of strength (see Peek and Rosengren [1998]).⁵⁵ The informal safety net may also have contributed to the poor profitability of the Japanese banking sector, a leading factor in the banking crisis (see OECD [1997]). Excess capacity,

^{53.} The experience of the United Kingdom is also instructive, and offers some interesting parallels to postwar Japanese banking history. Regulators in the United Kingdom also operated a successful informal and discretionary safety net, thanks largely to the credibility of the Bank of England and intimate ties to the private financial sector. For many decades, the Bank of England was able to coordinate rescue efforts by banks and other financial institutions in the absence of statutory underpinning. In the early 1990s, the private sector began refusing to take on risk in connection with these rescues, and the Bank of England was forced to assume responsibility. There are significant legal issues involved in the Bank's rescue efforts and use of public funds for such purposes, because no such authority is provided by the Bank of England Act or the Banking Act of 1987. The author is grateful to Shinsaku Iwahara for calling attention to the U.K. experience.

^{54.} Theoretically, it is possible to conceive of an implicit deposit protection scheme that does not give rise to moral hazard, lead to nontransparency problems, or require anti-competitive industry practices. Such a system, presumably operating in tandem with a private insurance regime, would involve wise and politically unbiased decisions by regulators to selectively intervene only in systemic banking problems, with such intervention triggering substantial penalties for shareholders and managers of affected institutions. To date, however, no government has managed to meet this ideal.

^{55.} Peek and Rosengren point out that until November 1997, both Sanwa Bank (with a Moody's Investors Service bank financial strength rating of C+) and Sakura Bank (with a rating of D+) paid virtually identical and insignificant spreads over that paid by Bank of Tokyo–Mitsubishi (with a rating of C+). This suggests that the "Japan premium" reflected systemic risk from Japan's traditional approach to bank distress, in which strong banks were pressured to assist weaker banks. Only after the failure of Hokkaido Takushoku Bank in November 1997 did the international money markets begin to draw distinctions among Japanese banks.

which is holding down bank revenues, was built up in a regulatory system that essentially prohibited any bank from exiting the market.⁵⁶ Perhaps most importantly, developing a framework to resolve bank distress and allocate the resulting burdens is an enormously complex and politically charged undertaking. As the recent political economy of Japanese banking demonstrates, that undertaking is all the more difficult where a viable legal framework for bank closure does not exist and the financial system is already in crisis.

The lack of credible bank-closure policies in Japan rendered the semiprivate nature of many resolution schemes illusory. If the ground rules for bank closure remain obscure and the government retains significant control rights over the disposition of bank assets, there is little reason to believe that market-regarding private alternatives will be developed by economic agents. This suggests that proposals to privatize deposit insurance, create narrow banks, or develop private guarantee or delegated monitoring arrangements are doomed to fail in the absence of credible commitments to bank closure, which can only be provided by the government. Critical examination and imaginative thinking to increase market discipline on banks should be directed not only at circumscribing the scope of deposit insurance, but also toward the creation of more incentive-compatible bank-closure mechanisms.

Japan also confirms the experience of the United States and numerous other countries that, in the absence of an appropriate institutional structure, financial liberalization can be extremely destabilizing. Regulatory structures emphasizing informal bank risk monitoring were maintained even as those risks began to multiply exponentially in a more competitive and innovative environment. Increased competition from the capital markets diminished the rents that had been channeled to the banking sector, eliminating the high charter values that once constrained excessive risk taking. Private institutions capable of disseminating information on risk, such as credit rating agencies and a functional accounting profession, must be developed. Ironically, the more competitive and transparent financial environment accompanying deregulation also contributed to the rapidly declining credibility and stature of the MOF, which came to symbolize the flaws in the traditional regulatory approach. The MOF's recent history demonstrates that, like banks, even the most highly esteemed organizations can experience survival-jeopardizing runs on their reputations. The point is not that financial liberalization should be avoided, but that it must be preceded by reform of regulatory and supervisory structures to accommodate new risks.

Finally, implicit safety nets seem particularly susceptible to the time-consistency problem identified by Kydland and Prescott (1977). *Ad hoc* regulatory solutions to each bank insolvency may be "optimal" under then-prevailing circumstances, yet still lead to suboptimal outcomes over the long term. This result follows because rational private agents will adjust their behavior in anticipation of future discretionary governmental interventions; those adjustments will eventually undermine the policy

^{56.} Several analysts have concluded that inefficiency and high costs are not the cause of the low profitability of Japanese banks. Thus, raising profitability entails raising revenues, which can only be accomplished by allowing banks to enter new business areas or by reducing the supply of financial services to increase spreads (see OECD [1997]; Atkinson et al. [1997]).

goals of the regulators. This phenomenon is clearly illustrated in the behavior of the agricultural cooperatives during the *jusen* episode. Early in its attempts to work out the *jusen* companies' financial problems, the MOF adopted *ad hoc* strategies that disproportionately protected the investments of the agricultural cooperatives, arguably the institutions least capable of absorbing losses. The cooperatives responded rationally by *increasing* their loans to the faltering *jusen* companies, thereby expanding the scope of the problem and necessitating a more painful resolution a few years later. Thus, the Japanese experience provides solid support for the conclusions reached by Boot and Thakor (1993) and Calomiris (1990) that the sound operation of the safety net requires rules rather than discretion.

In contrast to the flaws of implicit safety nets, a well-designed, explicit deposit insurance system has several benefits. First, an industry-supplied pool of funds is created to deal with bank insolvencies; a well-capitalized fund enhances the credibility of the commitment to bank closure. Second, the fund provides an objective focal point for measuring agency performance (Swire [1992]). The existence of a fund may also provide incentives to resolve financial distress more quickly. Finally, deposit insurance can signal a commitment by the government to cap its exposure to the amount of the guarantee, avoiding more sweeping intervention to protect depositors (Macey and Miller [1995]).

As structured for the first two decades of its existence, Japan's deposit insurance system did not generate any of these benefits because it was overwhelmed by informal approaches to bank failure. Recently, political competition has been an important force toward the creation of a more formal institutional structure to govern bank distress. Indeed, the 1998 legislation to resolve bank insolvencies was significantly shaped by opposition parties, who rejected the original bills drafted by the MOF at the direction of the LDP. In this sense, the movement to create an explicit deposit protection scheme parallels the movement to increase the independence of the BOJ (see Lohmann [1997]). In both cases, a non-institutionalized reputational system hinging on the MOF's policy dominance gave way to greater institutionalization as political competition increased and politicians began to assert control over the policymaking process.

Finally, the inquiry into deposit insurance reform in Japan suggests a research agenda for corporate governance scholars. The many models revolving around a bank-centered system of corporate governance in Japan are surely incomplete, and possibly deeply flawed, without a much better understanding of the ways in which Japanese *banks* are themselves monitored and disciplined.⁵⁷

V. Conclusion

The problems engendered by government underwriting of bank risk are well known. Much prior analysis of deposit insurance, however, has been colored by a false sense of the policy alternatives. Bank losses are quasi-fiscal deficits around the world; bank

^{57.} See Horiuchi (1998) and Hanazaki and Horiuchi (1998) for analyses of the Japanese safety net and bank governance.

distress invites extensive government intervention everywhere. Put this way, deposit insurance looks more promising than the real-world alternative—a safety net operated at the discretion of political agents. In the Japanese banking crisis, most of the problems stemmed from the implicit portions of the safety net extended through the discretion of those charged with promoting bank stability. On reflection, the same is true of the U.S. banking problems of the previous decade.

Well-designed deposit insurance *systems*, the crucial component of which is a bank-closure policy made credible by legal constraints on regulatory autonomy, may be the starting point for the development of effective private mechanisms to control bank risk and promote bank stability. Perhaps before safety nets can be privatized, they must be institutionalized. Japan's experience with failing banks suggests that it is time to reevaluate the promise of deposit insurance as an institution. It also suggests that it is time to examine the mechanisms by which Japanese banks are monitored and disciplined, a black box at the center of the literature on comparative corporate governance. Japan's Experience with Deposit Insurance and Failing Banks: Implications for Financial Regulatory Design?

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