
FRBSF WEEKLY LETTER

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Banking and Commerce: The Japanese Case

With the February 5 release of the Treasury's proposal, banking reform will be a high priority on the nation's agenda. Of the many reforms, several shatter Glass-Steagall restrictions on banks' powers, and expand the scope of banking in order to bolster the competitiveness of U.S. banks in an increasingly global market.

One example is that nonfinancial firms, such as plastics manufacturers, would be permitted to own banks. But the reverse situation, permitting banks to own shares in plastics manufacturers, is not part of the proposal and was not even debated. The notion of allowing banks to hold shares in nonfinancial firms is not without precedent. The European community plans to adopt the model of "universal" banking in 1992, and in Japan, banks have traditionally held shares in firms they lend to.

This *Letter* examines the experience of postwar Japan to identify some of the potential benefits as well as costs of a system that allows banks simultaneously to lend to an industrial firm and hold its equity.

A little finance theory

To understand the costs and benefits of combining lending and shareholding requires a small dose of finance theory. The theory argues that a borrower knows more than a lender about his prospects or the actions he can take to affect his prospects. Because of this information asymmetry, the lender-borrower relationship is subject to *moral hazard*. More specifically, after obtaining funds from the lender, the borrower has an incentive to undertake investments of greater risk than originally stipulated in the contract. In other words, for the borrower, it's a version of "heads I win, tails you lose": If the gamble pays off, the borrower gets all of the "upside gain" while the lender just gets the fixed sum of interest; if the gamble goes sour, the lender and the borrower share the loss.

A lender anticipates such behavior when negotiating the terms of the loan in the first place and

demands an interest rate commensurate with the highest amount of risk the borrower can undertake. This preempts any possible loss through risk-shifting by the borrower, but ultimately at a cost to society. Suppose that bankruptcies are costly; that is, the transfer of ownership of the firm's assets from the shareholders to the creditors in the event of default imposes some deadweight loss. Deadweight losses include legal costs as well as indirect costs such as internal losses due to disruption in production when the firm encounters financial distress. Since the lender demands a higher interest rate in anticipation of moral hazard, it implies a higher probability of bankruptcy and hence higher expected bankruptcy costs. In a competitive market, these expected deadweight costs will be passed on to the borrower in the form of a higher interest rate.

In principle, lenders can check borrowers' propensity for risk-taking by monitoring them and exercising restrictive covenants. But monitoring itself is costly, and that cost is ultimately borne by the borrower. Indeed, modern finance theory ascribes the very *raison d'être* of banks to their superior capacity to screen and monitor borrowers economically. However, the fact remains that the moral hazard problem will impose a deadweight loss to the economy in the form of higher financing costs faced by firms. Moreover, the potential magnitude of such deadweight losses will be greater the higher the corporate sector's leverage, since the greater will then be the severity of the moral hazard problem.

The Japanese puzzle

According to the theory outlined above, the financing costs for the typical Japanese firm should have been very high in the 1950s and 1960s. Emerging from the ashes of World War II, Japanese firms typically had little accumulated profits to undertake investments; that is, their need to rely on outside financing was high. This was all the more so because growth during this period was concentrated in heavy and chemical industries. These industries were essentially being rebuilt, requiring investment in large increments,

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rather than being expanded, which requires only marginal increments that are more amenable to financing out of retained earnings. But judging from the performance of Japanese industries and the overall economy, the Japanese financial system appears to have been relatively unimpaired by the sort of information-related problems described above.

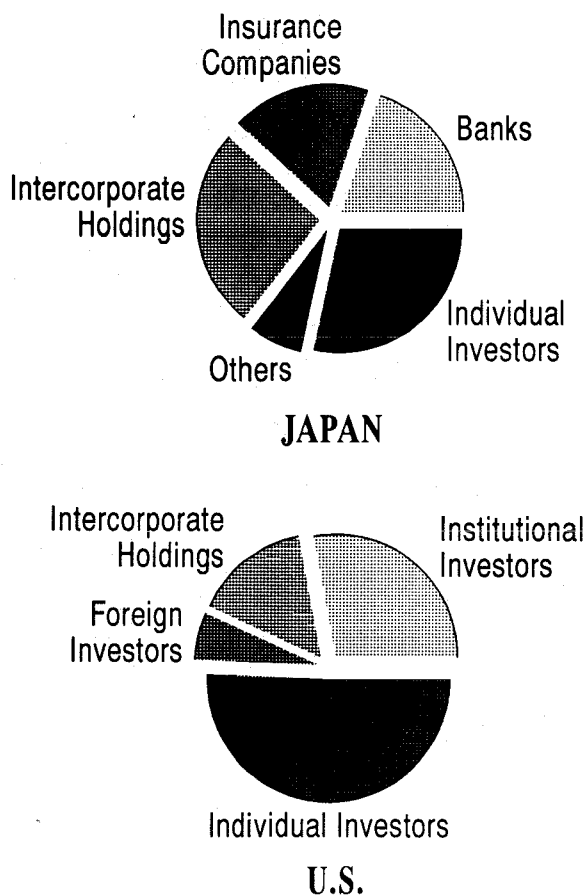
How were Japanese firms able to draw large and sustained flows of funds from the banks despite low collateral or net worth? Traditional explanations emphasized interest rate regulations. Interest rates on bank deposits were artificially suppressed to low levels so that industries, in turn, could borrow these funds at low rates. This explanation, however, has been seriously challenged by growing evidence that the legal and institutional attributes of the Japanese banking system were primarily responsible for attenuating the potentially high deadweight costs of an imperfect market.

Since the occupation era, Japan has had its own version of the Glass-Steagall Act, but with a notable difference. Throughout most of the postwar period, until 1987, Japanese banks were allowed to hold up to 10 percent of the outstanding shares in any single company. In effect, however, Japanese banks could hold more than 10 percent through cross-holding effects; that is, if the bank holds 10 percent in firm A and 10 percent in firm B, and firm A holds some shares, say 30 percent in firm B, then the bank effectively holds 13 percent of firm B (10 percent plus 10 percent of 30 percent). The effects of these intercorporate shareholdings have not been closely monitored. In this legal setting, the typical corporate financing arrangement in Japan featured the bank as the principal lender as well as major shareholder of industrial enterprises.

The chart illustrates the differences in corporate ownership structure between Japan and the U.S. In Japan, financial institutions have held close to 40 percent of corporate shares and constitute the largest shareholders. Out of this 40 percent, commercial and trust banks together account for about 20 percent; insurance companies hold roughly another 20 percent. In the U.S., where financial institutions cannot own shares, individual investors have been the largest group of shareholders, holding roughly one-half of the total corporate shares outstanding. Intercorporate shareholding is much more extensive in Japan,

claiming over 25 percent of the total compared to 15 percent in the U.S. Because of these cross-shareholdings, the effective holding of corporate equity by Japanese banks are likely to be much larger than the reported figure.

Corporate Shareholders



... Both a lender and a shareholder be ...

If lenders are also shareholders, then finance theory argues that the costs of financing should be lower. A lender who holds equity is less likely than a pure lender to force a firm into bankruptcy when it encounters temporary financial problems. If the firm goes bankrupt, the value of its share held by the bank will go to zero, so the bank will have a greater incentive to behave as a "committed investor." Therefore, if a bank holds a firm's shares, the probability of bankruptcy is reduced and so is the expected cost of bankruptcy. This lower cost is passed on to the firm in the form of more favorable financing terms.

Likewise, if a major lender is also a significant shareholder, the cost of bankruptcy when it is declared actually is lower. When shareholders and creditors of a bankrupt firm are largely the

same entities, the firm's assets need not change hands. This avoids much of the cost of protracted legal battles among the various claimants to the firm. Again, the saving from this lower expected cost is passed on to the firm.

The evidence seems to be consistent with these predictions. Large Japanese firms appear to avoid bankruptcies in predicaments that elsewhere would have placed them under receivership. When bankruptcies actually are declared, reorganizations are often swift and less disruptive than is usually the case in the U.S. In many cases, insolvency prompts the lead shareholder bank to orchestrate a rescue effort. The main bank would not only inject new loans into the firm, but, by guaranteeing existing debt claims by other creditors in the consortium, also would ensure their rollover. The most celebrated case is that of Sumitomo Bank's rescue of Mazda Motors in the early 1970s, turning the company around from the verge of bankruptcy to one of the industry's most profitable firms.

Finally, allowing banks to hold equity would reduce the bias in the lending or monitoring pattern typically associated with banks that cannot own shares. The conventional bank that cannot hold shares tends to be more concerned about the probability of bankruptcy than about the best or even the likeliest prospects of the firm. This "conservative" penchant is natural for a non-shareholding bank because it cannot share in the "upside return" of the firm; the best it can do is to recoup principal plus interest while the worst it can do is to lose the entire amount of investment. The scope of Japanese banks to share in the firm's upside return may explain their greater willingness to take calculated risks promising high payoffs.

Why not U.S. banks?

The arguments in favor of a financial system that allows equity participation by banks must be tempered by at least two sets of considerations, one economic and the other political. The first relates to the issue of risk and the second to the concentration of economic power.

Equity is in general riskier than ordinary bank loans. Allowing banks to own equity shares, therefore, raises the problem that banks will assume undue levels of risk with depositors' funds. Under a system where banks' downside loss is protected by deposit insurance, banks'

access to a risky security such as corporate equity may intensify the moral hazard of the banks themselves, a problem that has become all too familiar in the wake of the S&L crisis in the U.S. Therefore, systematic checks on the amount of risk banks may undertake need to be carefully considered. In the case of postwar Japan, the government took an active role in monitoring the banks. The task was feasible because of the small number of banks in the system—which takes us to the next consideration.

The efficiency gains from allowing banks to hold industrial securities may come at the cost of increased concentration of resources and power in the banking system. How much concentration to accept is, in the final analysis, a political decision. In Japan, the limit of bank equity holding was reduced from 10 percent to 5 percent, effective in 1987. The change reflected a policy shift in Japan in favor of decreased economic concentration. Given that the U.S. is traditionally much more wary of concentration of power than Japan is, the increased concentration likely to emerge if banks are given commerce powers will no doubt be met with greater resistance here.

Conclusion

Banking reform will likely remain at the fore of public debate in the coming months and years. Appraisal and comparison of foreign systems of bank regulation provide valuable insights into policy choices currently facing the U.S., despite differences in economic, social, and political context. In this regard, the experience of postwar Japan suggests the possible advantages, as well as the attendant costs, of giving banks the ability to lend to and hold equity shares in the same corporation. It bears noting that the Japanese system is neither unique, nor is its apparent success in supporting a vigorous economy an isolated event. As suggested in an earlier issue of this *Letter* (June 1, 1990), other major industrialized economies, such as France, Germany, and Italy, have allowed their banks similar latitude. With the European community's plan to adopt the universal banking model in 1992, the issue of expanded securities powers for U.S. banks will undoubtedly warrant public consideration and scrutiny.

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