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Commentary

1. Introduction

Participants at this conference debated the merits of market discipline in contributing to a solution to banks' tendency to take too much risk, the so-called moral hazard problem of deposit insurance. With government safety nets protecting creditors, banks probably do not bear the full costs associated with their risk taking, either in ex-ante pricing of deposits and other sources of funds or in ex-post monitoring. In fact, the policy rationale usually given for safety nets is to remove the main mechanism for ex-post monitoring: the bank run.

Simon H. Kwan's contribution broadens this policy debate by reminding us that market discipline necessarily comes with public ownership of bank securities. By separating ownership from control, public ownership of bank equity potentially worsens managerial agency problems. His evidence suggests that public ownership makes some banks *less cost efficient and less profitable*, but *safer* than they would be under private ownership. Thus, in thinking about the best ownership of banks, we ought to consider a trade-off between the market discipline benefits of public equity ownership and the potential agency costs.

2. Market Discipline from Public Equity

As described in the proposal to revise the Basel Accord, market discipline involves "developing a set of disclosure requirements that will allow market participants to assess key information about a bank's risk profile and level of capitalization" (Bank for International Settlements 2003).[1] Much of the discussion of market discipline has focused on whether banks should be required to issue publicly traded subordinated debt, and whether changes in debt prices will directly influence a bank's behavior.[2] But even without direct influence, the information impounded in securities prices can provide regulators with a signal about bank health that goes beyond what can be learned from examinations. Perhaps more important, because the market information is available for all to see, these public signals may mitigate the problem of regulatory forbearance (see, for example, Kane [1989]).

Under most conditions, variations in stock prices generate more information about investor beliefs than variations in the prices of debt securities.[3] Equityholders receive a residual claim, making stock prices vary more with changes in information about a bank's future prospects than prices of fixed-income debt securities. Moreover, equity securities trade more frequently in more liquid secondary markets than do debt securities. Thus, changes in stock prices can act as the best early-warning signal from the securities markets.

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3. Agency Problems in Banking

Agency problems occur when managers make decisions that place their own welfare above the welfare of outside shareholders. Manifestations of the problem can take many forms, including consumption of perks (such as corporate jets), overinvestment (in the form of empire building), and excessive pay. Three control mechanisms—corporate governance, capital structure, and the corporate takeover market—usually constrain managerial discretion. Governance includes direct monitoring by corporate boards and large shareholders, and the tying of managerial pay to performance with stock-based and option-based compensation and cash bonuses linked to accounting returns. A levered capital structure helps by imposing a hard constraint on managers. Only the regular payment of interest prevents financial distress and a loss of control. According to Jensen (1986), debt reduces "free cash flow," thereby limiting the ability of managers to consume perks or waste corporate resources with bad investments. When all else fails, hostile takeovers can sometimes act as a last resort to force out bad managers.

These control mechanisms may not work very well in banking. Regulation and deposit insurance not only create moral hazard problems, they also blunt the standard market mechanisms that work to rein in managerial agency problems. While governance mechanisms, at least in principle, ought to function as well in banking as in other industries, the other two mechanisms almost certainly do not.[4] For example, debt does *not* impose a hard constraint on banks. With insurance, depositors have no incentive to withdraw funds or otherwise trigger financial distress. As long as regulators will allow it, a bank can simply raise new deposits to finance its business, however bad. Billet, Garfinkel, and O'Neal (1998) show that as banks get into trouble, they tend to rely increasingly on insured deposits as a funding source. The corporate takeover market in banking has also been hampered by regulations. For example, only a bank or financial holding company in the United States can acquire another bank. The list of potential acquirers was restricted even further by state laws prohibiting interstate banking until the 1980s. Because these control mechanisms are weak, it seems theoretically plausible that agency problems would be worse in banking than elsewhere.

We also know from empirical research that managerial agency problems have led to misallocation of bank credit (Peek and Rosengren 2002); bank inefficiency (for example, Shranz [1993] and Jayaratne and Strahan [1998]); and, in dire circumstances, such as those experienced during the savings and loan crisis, managerial looting, both of shareholders and taxpayers (Kroszner and Strahan 1996; Akerlof and Romer 1993). Moreover, the frequency of hostile takeovers—deals designed to get rid of bad managers—has been conspicuous by its absence in the banking industry (Prowse 1995).

Kwan's paper adds to this body of evidence. He documents that banks with publicly traded stock (where control is separated from ownership) are less efficient and less profitable, but safer, than private banks of similar size (where control and ownership are presumed to be closely tied because managers own all or most of the bank's equity). Specifically, banks with public equity have lower returns on assets due mainly to their higher noninterest costs, compared with banks that remain private. These differences are driven by the smaller banks. For large banks, Kwan finds increases in costs that are not statistically significant overall, and that are not even consistent in sign over time. His results highlight the following trade-off: public equity may increase market discipline by generating public information about bank profitability and solvency, but it may also *increase* costs—at least for small banks—by separating ownership from control.

For the same reason that it raises costs, public ownership may also help offset banks' tendency to take too much risk. Shareholders tend to hold a well-diversified portfolio, so they need not worry much about firm-specific risk. Managers hold a large and poorly diversified stake in their bank, however, both because they have made firm-specific investments in human capital and because a large fraction of their financial wealth is tied up in the bank's stock. This portfolio, while improving the typical manager's incentive to increase profits and share prices, probably makes the manager more risk averse than shareholders would like. Kwan provides some support for this notion. He finds that the small public banks hold more capital per dollar of assets than do private banks. But he does not find that asset risk depends on the ownership of banks, although I would have liked to see more work on this dimension. Kwan studies volatility of earnings (based on each bank's time-series standard deviation of return on assets) and loan delinquency rates. These measures reflect, in large part, ex-post performance. I also would have liked to see additional analysis of measures of insolvency risk—such as a "Z-score" estimate of the probability of insolvency or simple balance sheet ratios (for instance, the ratio of loans to assets, the ratio of business loans to assets, the ratio of liquid assets to total assets)—to test further whether managers of publicly held banks choose safer operating policies than do managers of private banks ex ante, as theory suggests.

4. Who Should Own Banks?

Public ownership enhances market discipline and increases access to liquid securities markets, potentially lowering the cost

of equity. Thus, issuing public equity offers two advantages—more market information for regulators and a lower cost of capital for banks—against which to weigh greater agency costs. Large banks obviously need more capital in dollar terms than do small banks. Moral hazard problems are also worsened for large banks by the perception that systemic consequences make them too-big-to-fail. Moreover, Kwan offers little evidence that large public banks have higher costs than do large private banks. So, the benefits of public equity seem easily to outweigh agency costs, thus dictating that large banks should be publicly held. Small banks, however, should probably remain private. The efficiency losses that come with public ownership of small banks that Kwan documents are large—noninterest costs are about 20 percent higher at the small public banks compared with at the small private banks. These agency costs, plus the high fixed costs of issuing public securities, probably outweigh any "market disciplining" benefits for small banks.

Despite what appear to be large agency costs at the small banks, equilibrium seems consistent with "optimal" ownership of banks. *All* of the largest U.S. banks are publicly owned and *all* of the smallest banks are privately owned. Kwan focuses only on the marginal banks—those smaller than the largest privately held bank and larger than the smallest publicly held bank. Among these, he finds important effects of ownership on capital structure and cost efficiency *only* among the small banks, and fewer than 10 percent of these small banks are publicly owned. (In the two smallest size classes, 496 out of 5,536 firm-year observations—about 25 banks—are public.)

Much of the debate on market discipline has been over whether banks ought to issue subordinated debt. Variations in bank stock prices, however, promise to give regulators more information than do variations in subordinated debt prices, at least as long as bank failure is not imminent. Kwan's study points to agency problems as a cost against which these benefits of market discipline should be weighed. If policymakers want to enhance market discipline by increasing public ownership of smaller banks, more thought should be given to ways to lower the agency costs that come with separation of ownership from control. A relaxation of constraints on the bank takeover market would represent a move in this direction.

Endnotes

1. The two other requirements aimed at reducing the moral hazard problems are improved supervision and more accurate risk-based capital adequacy standards.

2. Bliss and Flannery (2001) argue that banks do not respond directly to changes in the value of their outstanding subordinated debt or equity. For evidence that changes in market prices can help inform regulators, however, see Flannery (1998).

3. When distress becomes imminent, equity values can reflect the option value associated with government protection of the bank. In these times, stock prices only reflect upside potential, whereas downside risk is borne by the deposit insurer. Variations in the price of traded debt securities therefore may sometimes be more helpful to regulators than variations in equity prices.

4. Bank supervisors have recently placed greater emphasis on such internal controls as bank boards of directors, internal audit functions, and other governance mechanisms in preventing losses from fraud or mismanagement of the bank.

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