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Financial Modernization and Banking Theories

Financial innovation has greatly changed the business of banking. Instead of just accepting deposits and making loans the old-fashioned way, banks nowadays are increasingly active in lending without putting loans on their balance sheets, through either securitization of their asset portfolio or outright loan sales. Banks also are shifting from interest-based revenues towards fee-based activities, including lines of credit and many types of credit guarantees. The 1999 Gramm-Leach-Bliley Financial Modernization Act further legalizes the integration among commercial banks, securities firms, and insurance companies under the financial holding company (FHC) organizational structure, allowing banks to diversify into other nonbank activities. So far (as of 12/7/01), 591 financial organizations have elected to become FHCs, though only a few firms are active in the full spectrum of financial services.

While it is difficult to predict how the financial services sector in general, and the banking industry in particular, will evolve over time, financial regulators and policymakers are keenly interested in the course of financial modernization. As we look to the future of the financial services industry, it may be useful to revisit the roots of banking. Banking theories provide us with insights into why banks exist in the economy. If these theories are correct, banks exist because they perform certain special functions that no other financial services firms can replicate. Thus, no matter what course financial modernization takes in the future, we can count on certain defining characteristics in banking to be preserved. This *Economic Letter* looks at financial modernization through the lens of existing banking theories. First, I review some well-known banking theories in the finance literature. Then, I discuss the implications of these theories for financial innovation and financial integration.

What's different about banks?

Economists have been asking the question "what's different about banks" for ages. In his famous article, Corrigan (1982) argued that banks are special because: (1) they provide transaction services and administer the nation's payments system; (2) they provide backup liquidity to the economy; and (3) they are transmitters of monetary policy. Due to their special function in the economy, the government set up a safety net to protect the banking system, in the forms of deposit insurance and access to the Fed's discount window borrowing. Based on this argument, what makes banks special spans both the asset side and the liability side of the bank's balance sheet: banks make loans in the course of providing liquidity, and they accept demand deposits in providing transaction services. Since only commercial banks have the unrestricted power to make commercial loans and accept demand deposits, it is their banking power that defines banks' specialness. Thus, banks are special not because of the government safety net, but, rather, the safety net is in place because banks perform special functions in the economy.

One can go deeper into the specialness of banks and ask a more fundamental question: Why do banks make loans and provide deposit services? For decades, banking researchers have studied the question of why banks exist and have made considerable progress in developing banking theories to explain banks' central role in the economy. Although many of us may take the existence of banks for granted, in a "perfect" world, where savers can channel their surplus funds to borrowers without friction, financial intermediaries like banks are not needed. As a corollary, banks' existence must be motivated by certain economic frictions, so that banks, as financial intermediaries, can provide some "value added" from transferring funds from savers to borrowers and providing liquidity.

An important value added provided by banks, according to several theories, is dealing with the information problems in lending and the incentive problems caused by the moral hazard behavior of borrowers. Because a lender must evaluate a borrower's creditworthiness, banks' investments in information technology allow them to achieve scale economies in information production, making them more efficient information producers than individual investors. Delegating the loan monitoring function to banks avoids the redundancy of monitoring by numerous individual depositors. Banks are credible monitors because their returns are more predictable due to the diversification effect of making a large number of loans (Diamond 1984). With credibility, banks can gather deposits at relatively low cost.

While information production represents a key function performed by banks, banks by no means have

monopoly access to information production technology. Other nonbank lenders, such as finance companies, also engage in information production and loan monitoring. Moreover, nonbank lenders could enjoy certain advantages over banks because they are not subject to banking regulations. However, empirical evidence suggests that there is something "special" about bank loans. Specifically, research has found that bank loan approvals represent positive economic signals that can lift the borrowing firms' stock prices, while loan approval by nonbank lenders does not have the same economic effect (for example, see James 1987).

Since loan making by itself does not seem to make banks special, banking theorists also have focused on the role of liquidity provision in conjunction with loan making to explain the unique economic function performed by banks. Calomiris and Kahn (1991), Flannery (1994), and Diamond and Rajan (2001) showed that the fragile capital structure in banks and, hence, their vulnerability to deposit runs serve important economic functions. Deposit runs represent a powerful disciplining device that limits banks' incentives for risk-taking and misallocation of resources. This provides some degree of quality assurance in banks' loan portfolios. Because nonbank lenders that cannot issue demand deposits do not have the "benefits" of a fragile capital structure, they are less credible in their loan portfolio quality commitment. This may explain why a loan approval by nonbank lenders does not carry the same "good news" weight as does a loan approval by banks.

Implications for financial modernization

If the roots of banking are in loan making and liquidity provision, how will financial innovations and financial integration shape banking's future? Regarding financial innovations, the most noticeable trend in the loan making process is the movement towards securitization and fee-based activities. Securitization means packaging bank loans into securities for resale, which permits banks to move those loans off their balance sheets. According to theory, good securitization candidates are less information-intensive assets, such as mortgages and credit card receivables, but not the more information-intensive assets, which include most business loans. Thus, this self-selection of loans for securitization leaves the bank's balance sheet with a high concentration of information-intensive loans. This may make the bank less flexible in dealing with liquidity shocks. Because the fragile capital structure calls for banks to invest in relatively low-risk assets that can be liquidated to meet depositors' withdrawal demand, this implies that there is a limit to how extensively securitized assets can be shifted outside of the banking system.

The same is true for fee-based activities, where banks do not make loans but provide credit lines, credit enhancements, or credit guarantees. Banks can provide these fee-based services because of their credibility, which stems from their commitment to low-risk assets as dictated by their fragile capital structure. Although banks can leverage their reputation capital, they can do so only up to a limit. To stay credible, banks need a core of low-risk assets on their books that are funded by demand deposits, and the scale of these core activities must be proportional to the overall organization.

Regarding financial integration, the driver seems to be linking activities in which banks can share expertise and operating systems, as well as the potential for providing one-stop-shopping for financial services to individual customers. Consider first securities underwriting. Both securities underwriting and loan making involve pricing financial assets. In loan making, a bank underwrites a loan and then funds it by putting it on its book. In securities underwriting, a bank underwrites a security but quickly turns around and resells it to the public. Securities underwriting involves information production, an expertise that banks already have in making loans. Further, information produced during credit underwriting is potentially reusable for securities underwriting. Thus, banks already have the know-how and infrastructure to engage in securities activities and would seem likely to realize a degree of scope economies by engaging in these activities.

On the other hand, securities firms that diversify into commercial banking also must engage in deposit-taking and payments service activities, which are integral to banking but have very little overlap with their existing dealing and underwriting activities. Except for securities brokerage firms, which already have established retail networks that can be readily used for gathering deposits, the required investment in retail deposit taking can be quite substantial. This may be one factor explaining why, so far, we observe relatively more financial integration originating from the banking side, especially those with a strong retail franchise, than from the securities side.

Next consider insurance. Its commonality with banking appears to be limited, because the two businesses are fundamentally different. Still, both share expertise in credit management and loan monitoring, whether it is a bank's loan portfolio or an insurance company's investment portfolio. In addition, both insurance products and banking services are retail activities targeted towards individual consumers. Thus, the ability to engage in cross-marketing seems to be an important force behind the integration of insurance and banking. For both securities and insurance activities, the direction of integration is complicated by the government safety net and the regulation and supervision under which banks operate due to their

special role in the economy. Banks, which already bear the cost of banking regulation and supervision, may not face appreciably more regulatory burden as the result of becoming an FHC and diversifying into nonbank activities. In contrast, nonbanks entering commercial banking must subject the entire organization to umbrella supervision by a banking regulator. The regulatory burden of being an FHC may deter nonbanks from integrating with banks. This also may explain why a number of nonbank financial institutions have decided to enter banking through the so-called nonbank-bank or thrift options, rather than through integrating with a full-fledged commercial bank.

Conclusion

An objective way of looking into the future of the financial services industry is to appeal to banking theories. As the intermediary channeling funds from savers to borrowers, banks engage in information production when making loans and commit themselves not to take excessive risks by having a fragile capital structure consisting of demand deposits. Thus, regardless of how financial modernization progresses, these core activities that define banks are expected to be preserved, suggesting that there may be a limit to the transformation of banks' balance sheets through financial innovations. Furthermore, to the extent that certain characteristics are unique to banks, such as gathering demand deposits in the course of providing payments services, banks may have some comparative advantage in financial integration over securities firms or insurance companies. This may be further accentuated by the disparity in supervision and regulation between banking organizations and nonbank financial firms.

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