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## Large Banks and Small Banks in an Era of Systemic Risk Regulation

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The financial crisis and its aftermath have revealed fundamental problems in both risk management by financial institutions and supervision by government regulators. These shortcomings arose in no small part from a failure by both the private and public sectors to adjust to far-reaching changes in financial markets over recent decades. There is a growing, though certainly not unanimous, view that supervision and regulation must be substantially more oriented toward containing systemic risk and addressing the associated problems posed by institutions considered too-big-to-fail. The public policy agenda will thus rightly be dominated for some time by proposals for legislative and administrative measures directed at systemic risk. In a moment I will offer some of my own views on the subject.

Even as we move into this era of systemic risk regulation, however, it is important to recognize that changes in the financial services industry have affected every bank in America, large and small. While smaller banks will not likely see the extensive supervisory changes that have been proposed for the largest financial institutions, they too must adapt their risk-management practices to new competitive and economic conditions. Only by doing so will they continue to play their distinctive role in providing credit to individuals and small businesses.

The changes in the financial services industry that preceded the crisis, the crisis itself, and the regulatory changes that will follow together carry important consequences for all banks. It seemed to me particularly appropriate to address the implications of these changes here in North Carolina, home to institutions that range from the very large to the very small.<sup>1</sup>

## Large Banks

If we have learned anything from the present crisis, it is that systemic risk was very much built into our financial system. This situation was the outcome of a decadeslong trend, during which traditional bank lending, trading, and other capital markets activities were increasingly integrated. The most visible manifestations of this trend were the explosive growth of securitization and the increasing involvement of banks and their affiliates in all parts of the securitization process. And, as we learned during the course of the crisis, the universe of institutions whose potential failure was regarded as having systemic consequences extended well beyond banks, or even bank holding companies, to include financial firms not subject to mandatory prudential regulation.

More generally, the emergence of the so-called shadow banking system changed important features of the traditional banking model, particularly at the largest institutions. These banks became increasingly dependent on the wholesale funding provided by securitization, commercial paper issuance, and other sources--funding that was often poorly matched to the maturity of the firm's assets.

The result was the rising vulnerability of these institutions to non-traditional sources of risk. The new market-based liquidity problems arose from sudden, sharp movements in asset prices that led to enormous market uncertainty concerning the values of those assets. As now liquidity-strained institutions made increasingly distressed asset sales, they placed further downward pressure on asset prices, leading to margin calls for leveraged actors and mark-to-market losses for all holders of the assets. Since multiple firms were relying on similar marketable assets as a ready source of liquidity, extreme price declines could ensue, engendering a negative feedback loop that, if unchecked,

would threaten the solvency of firms operating on the assumption of liquidity through asset sales or borrowings secured by such assets.

These and other changes in the competitive environment both prompted and advanced the relaxation over the past few decades of many of the restrictions on bank activities and affiliations that had been established in the 1930s. As a result of these changes, which had taken place both through administrative action and by statute, banks could operate nationally, had few practical restrictions on their ability to pay competitive deposit rates, could conduct a much broader range of activities within their own operations, and could affiliate with virtually any kind of financial firm. In response to now-permissible bank involvement in more activities and affiliation with broker-dealers and other financial firms, regulatory agencies imposed more detailed capital requirements and insisted on better risk management. But there was no overhaul of financial regulation to take account of the impact of trading and capital market activities on both traditional banking and systemic risk.

The financial crisis has focused the attention of policymakers on the need for just this kind of regulatory reorientation. I have recently set forth a fairly extensive explanation of the changes I believe should accompany this reorientation.<sup>2</sup> I will not repeat this whole agenda today. Instead, let me simply highlight a few of these items to illustrate concretely what an era of systemic risk regulation would look like.

First, within the Federal Reserve, we are adjusting our consolidated supervision practices to take greater account of the risks faced, and created, by affiliates principally involved in trading and other capital market activities. Recent supervisory practices had not moved quickly enough away from the traditional focus on bank holding company

regulation as a way to protect the insured depository institution subsidiaries, and toward more attention to such factors as the common exposures of different affiliates within the consolidated entity.

Second, we must strengthen existing regulations and supervisory guidance, particularly in areas in which bank involvement in trading and markets is most significant. The centrality of liquidity problems to the crisis requires considerable attention to adequate liquidity risk-management practices, particularly at firms substantially reliant on wholesale funding. While the most serious liquidity problems occurred outside traditional commercial bank lending and borrowing activities, the crisis revealed significant fragilities in financial institutions' extensive use of short-term repurchase agreements and reverse repurchase agreements to finance large portions of dealer inventory and trading positions. On the other side of the balance sheet, capital requirements for assets in the trading book were revealed by the crisis to be seriously deficient, based as they were on only a 10-day trading horizon. Along with our colleagues in the other regulatory agencies and, indeed, with our international colleagues in the Basel Committee on Banking Supervision, we are working on proposals to address these problems.

Third, we are augmenting our supervisory approach for bank holding companies to include a more explicitly systemic perspective. "Horizontal reviews" of risks, risk management, and other practices that are conducted across multiple financial firms and grounded in a uniform set of supervisory stress parameters can help identify both common trends and firm-specific weaknesses. We will incorporate into more routine

supervisory practice some lessons learned from our recently completed Supervisory Capital Assessment Program of the nation's 19 largest bank holding companies.

Fourth, it is important to solve through legislation the so-called boundary problem in financial regulation. Last year there was a series of runs on nondepository financial institutions that raised systemic concerns. Institutions that may be considered too-big-to-fail, or at least too-interconnected-to-fail, must be subject to regulatory requirements and consolidated supervision.

Of course, these are not the only steps I would recommend, either within the Federal Reserve or for the financial regulatory structure more generally. They should, however, give you an idea of the kinds of changes that will be necessary as we shift to a focus on systemic risk regulation.

## **Small Banks**

Let me turn now to the situation of smaller banks--here in North Carolina and around the nation. The financial crisis did not originate in smaller banks, but they have hardly escaped the fallout from the crisis itself, and from the serious recession that has followed. On average, commercial banks with less than \$1 billion in assets reported a modest net profit during the first quarter of 2009, recovering from an average loss position in the fourth quarter of 2008. But this average figure hides the fact that nearly one in five of these banks lost money in the first quarter. As of March 31, nonperforming assets were twice the level of one year ago, and when measured against total loans and the category of Other Real Estate Owned, stood at an historic peak. Furthermore, capital ratios, although still strong for these banks as a group, have fallen since early 2008.

At the same time, the importance of traditional financial intermediation services, and hence of the smaller banks that typically specialize in providing those services, tends to increase during times of financial stress. Indeed, the crisis has highlighted the important continuing role of community banks. This seems an opportune moment both to review the virtues of community banking and to identify some of the difficulties faced by community bankers during this recession and beyond.

The dramatic changes in the U.S. financial services industry that I described earlier have also produced a new competitive environment for community banks.

Consolidation has reduced the number of banking institutions (that is, commercial banks and thrifts) in the United States by nearly 50 percent since 1989. The number of community banks has declined by a similar percentage, leaving the share of all banking institutions that are community banks virtually unchanged.<sup>3</sup>

Even as the number of banking institutions has been declining, the number of banking offices (branches plus headquarters) has been growing. Not surprisingly, big banks have been the drivers of the increase in banking offices. Since 1989, the number of community bank offices has declined by about 14 percent. The number of offices per community bank did increase from 2.4 to 3.9, but even this 60% growth must be understood in the context of the changes in larger banks. In this same 20-year period, the number of big bank offices increased by about 42 percent, and the number of offices per big bank more than tripled, from just under 17 to nearly 55. The net effect was a decline of more than 25 percent in the share of banking offices operated by community banks. The shares of deposits, banking assets, and small business loans held by community banks have declined substantially as well.

These declines can be explained by a number of factors, including legal developments, technological advances, and changes in the business strategies of larger banks and non-bank financial service providers. For example, deregulation has allowed banks to expand their geographic reach, facilitating the formation of a number of large, geographically diversified banking organizations. These large banking organizations can now be found in many local markets, competing for business with the community banks that call those markets home. Here in North Carolina, the number of large banks with a branch presence in the state has more than doubled over the past twenty years, from 18 to 39.

At the same time, technological advances have made information about households and small businesses more readily available, allowing some (typically large) institutions to substitute credit scoring for more costly traditional techniques in the underwriting of some types of consumer and small business loans. This development has allowed larger banks to compete more effectively with community banks in providing these types of loans.

Another salient change in the competitive environment is that non-bank financial service providers have become increasingly important participants in the financial services sector, capturing a large and growing share of the retail financial services business. For example, while the number of credit unions has declined by 42 percent since 1989, credit union deposits have more than quadrupled, and credit unions have increased their share of national deposits from 4.7 percent to 8.5 percent. In addition, some credit unions have shifted from the traditional membership based on a common interest to membership that encompasses anyone who lives or works within one or more

local banking markets. In the last few years, some credit unions have also moved beyond their traditional focus on consumer services to provide services to small businesses, increasing the extent to which they compete with community banks.

These changes have posed significant challenges for community banks. Even so, many community banks have thrived, in large part because their local presence and personal interactions give them an advantage in meeting the financial needs of many households, small businesses, and agricultural firms. Their business model is based on an important economic explanation of the role of financial intermediaries—to develop and apply expertise that allows a lender to make better judgments about the creditworthiness of potential borrowers than could be made by a potential lender with less information about the borrowers.

A small, but growing, body of research suggests that the financial services provided by large banks are less-than-perfect substitutes for those provided by community banks. Consistent with this view, one study finds that the increase in competition from large, geographically diversified banking organizations has not affected the profitability of community banks in urban areas. There is some evidence of a profitability effect in rural areas, but it is actually more likely to be positive than negative. Thus, for most community bankers, the increased presence in their local markets of large, geographically diversified banking organizations appears not to adversely affect profitability. This circumstance may be due to the fact that a branch manager at a large depository institution typically does not have the same local connections and relationships as a community bank president.

Furthermore, although survey data indicate that small businesses have increased their reliance on large banks and non-bank financial service providers in recent years, the data show that these same firms have not reduced the average number of financial services they obtain from community banks. Rather, small businesses are, on average, using more financial services and types of services than they have in the past, and are obtaining these services from a greater number and wider variety of financial institutions, often including community banks.<sup>6</sup>

To remain successful, any business must adapt to a changing competitive environment. The adaptation of community banks over the past two decades is evidenced by the substantial changes in their balance sheets, on both the asset and liability sides. On the asset side, both the average ratio of total loans to total assets and the average share of lending comprised by commercial real estate loans have increased markedly. On the liability side, reliance on deposits of individuals, partnerships, and corporations has declined somewhat, and there has been a dramatic increase in the share of community banks that hold brokered deposits. In addition, community banks have become more reliant on non-interest sources of revenue.

These changes in business strategy, which undoubtedly helped to maintain community bank profitability over much of the past two decades, may in the current financial environment exacerbate the risks faced by community banks. In this difficult operating environment, Federal Reserve examiners are encouraging community banks to focus on maintaining sound loan quality and strong credit administration practices. In addition, they are working with community banks to ensure that they maintain appropriate capital planning, credit administration, and liquidity management policies.

For example, earlier this year, the Federal Reserve issued supervisory guidance (SR letter 09-4) that reemphasized the importance of capital planning and prudent dividend policies for bank holding companies (BHCs) and their bank subsidiaries. This guidance--which was directed at all BHCs, both large and small--reminded them to ensure that they remain sources of strength to their bank subsidiaries and to curtail dividends when their financial condition is under stress.

A key part of any effective capital planning process is an evaluation of the risk posed by concentrations in specific portfolios of loans or other assets, and of the buffers necessary to offset potential losses on these holdings. In late 2006, the banking agencies issued guidance addressing concentrations in commercial real estate lending. This guidance set forth supervisory expectations for the management of risks stemming from these and other concentrations, including consideration of the effects of stressed market conditions on a bank's assets and capital. In the time since this guidance was issued, examiners report that many community banks have conducted rigorous and effective stress tests. But examiners have also visited many institutions that have only recently begun the essential step of ensuring that their management information systems are sufficiently detailed to support a robust analysis of bank concentration, and identifying where more work on stress testing is needed.

Funds management has also been an area that has received a renewed supervisory focus at banks of all sizes. As depositors and other funds providers have become more sensitive to bank risk, many banks have reinforced their contingency funding plans and developed sophisticated systems to more closely track their sources and uses of funds.

These steps are particularly important for banks facing weaker asset quality.

## Conclusion

The differences in the business models of systemically important financial firms and community banks are obvious. Yet the financial crisis and ensuing recession have revealed deficiencies in risk management in institutions of both types. Changes in competitive environments require banks to respond with changes in their business strategies. But the financial crisis has also revealed the importance of banks adopting risk-management strategies appropriate to these strategic changes, and of bank regulatory agencies adapting their supervisory models to both these kinds of changes in financial institutions.

The characteristics of the financial services industry have changed enormously in the last 30 years. Along with the nature of the regulatory regime that will be effective, the key aim of prudential regulation remains what it has always been--to encourage the efficient allocation of capital to productive uses while protecting the system from the defects and excesses that are inherent in financial markets. As we recover from the crisis and the recession, we will likely be entering a new era in which systemic risk regulation assumes much greater importance for supervisors. But the role of bank management, and of risk management at banks, will also remain what it has always been--to allow these institutions to play an effective intermediating role in a safe and sound fashion.

<sup>&</sup>lt;sup>1</sup> The views presented here are my own and not necessarily those of other members of the Board of Governors or the Federal Open Market Committee.

<sup>&</sup>lt;sup>2</sup> Daniel K. Tarullo (2009), "Financial Regulation in the Wake of the Crisis," speech delivered at the Peterson Institute for International Economics, Washington, D.C., June 8.

<sup>&</sup>lt;sup>3</sup> Statistics in this paragraph and the next are based on a definition of the term "community bank" that includes independent commercial banks and thrifts with assets less than \$1 billion and banks and thrifts that are subsidiaries of holding companies with total banking assets less than \$1 billion, all in 2008 dollars. The term "big bank" is defined to include all other commercial banks and thrifts.

<sup>&</sup>lt;sup>4</sup> See, for example, Robert Adams, Kenneth Brevoort, and Elizabeth K. Kiser, (2007). "Who Competes with Whom? The Case of Depository Institutions," *Journal of Industrial Economics* 55, pp. 141-67; Andrew Cohen and Michael J. Mazzeo, (2007). "Market Structure and Competition among Retail

Depository Institutions," *Review of Economics and Statistics* 89, pp. 60-74; and Timothy Hannan and Robin Prager, (2004). "The Competitive Implications of Multimarket Bank Branching," *Journal of Banking and Finance* 28, pp. 1889-1911.

<sup>&</sup>lt;sup>5</sup> See Timothy Hannan and Robin A. Prager, (2009). "The Profitability of Small Single-Market Banks in an Era of Multi-Market Banking," *Journal of Banking and Finance* 33, pp. 263-71 See Robin Prager and John D. Wolken, (2008). "The Evolving Relationship between Community Banks

<sup>&</sup>lt;sup>6</sup> See Robin Prager and John D. Wolken, (2008). "The Evolving Relationship between Community Banks and Small Businesses: Evidence from the Surveys of Small Business Finances," Federal Reserve Board Finance and Economics Discussion Series 2008-60.