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The Future of Financial Intermediation and Regulation: An Overview

Stephen G. Cecchetti

On March 11, Stephen G. Cecchetti, Executive Vice President and Director of Research at the Federal Reserve Bank of New York, delivered the following remarks at the symposium A New Equilibrium in the Credit Business: The Future of Financial Systems—Regulation in the Twenty-First Century, *sponsored by the Oliver Wyman Institute and the Institut für Kreditwesen, Universität Münster.*

In thinking about the future of financial intermediation and regulation in today's global economy, it is important to be clear about the fundamental role financial intermediaries will play, the services they will provide, and the forms the intermediaries are likely to take. Only then can we consider why and how regulation should be applied and what form this regulation may best take.

Our knowledge of the history of banking may not be very useful in clarifying these issues. Although the original job of banks was to transform short-maturity liabilities into long-maturity assets, this job may no longer be needed. Rather, I would argue, we should think about the future role of banks and of financial intermediation with one basic principle in mind: There will always have to be some mechanism for channeling the savings of households into the investments of firms. From the perspective of financial markets, businesses need capital and will supply assets to the market to get this capital. Households are the ultimate holders of these assets—either directly or through various types of investment pools—and so provide the ultimate demand. The financial intermediary moves resources between these two groups—businesses and households. This is the fundamental role of a financial intermediary. But, we may reasonably ask, beyond this basic function, what services will a financial intermediary provide and how will it be organized in the next century?

The Fundamental Services Provided by Financial Intermediaries

Financial intermediaries of the future will, I believe, provide a host of services that are essential to the functioning of a modern economy. One such service is access to the payments system. This service may be thought of as trade execution.[1] Although Internet companies may eventually become the payments system providers of the future, we will still need institutions to execute the transfer of assets between individuals.

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A second service financial intermediaries will continue to provide is access to liquidity. There are two basic classes of liquidity services: one is the standard form of a demandable deposit, and the other is a standby line of credit. In either case, there is going to be a call for a service that supplies liquidity on demand.

A third service financial intermediaries will have to offer—a service related to a traditional banking function—is to package and sell risk, or to repackage and resell risk. This service could be provided through a number of different institutional arrangements.[2] For example, risk could be intermediated by means of reinsurance, where small entities with concentrated risks purchase insurance from larger, better diversified entities. It could also be intermediated through entities that function like investment banks by means of sales to mutual funds, insurance companies, and asset managers.

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Risk can also be pooled and securitized, as it is in the residential mortgage market in the United States. My impression is that some combination of all these channels is possible, but for the purposes of my argument, the distinction is not important.

A fourth service financial intermediaries will be called upon to offer is information. The provision of information will include the certification of the quality of assets together with credit review and possible follow-up. What I have in mind here is something like the creation of brand-name versus generic assets. Individuals may be willing to pay more for something that carries the seal of approval of a particular brand-name firm. This service may also include the provision of more traditional financial and planning advice.

Finally, financial intermediaries will remain a conduit for government guarantees. This service will be provided both explicitly and implicitly. Some financial intermediaries will continue to have access to the central bank, which will operate as a lender of last resort, and this access will have value. At the same time, financial intermediaries will be able to offer deposit insurance—an explicit guarantee—or government bailouts—an implicit guarantee.

Why have I not listed the provision of credit as a fundamental financial service? Because, in my view, technology will turn this service into a brokered activity.

The Future Form of Financial Intermediaries

Given my views of the services that financial intermediaries will be called upon to provide in the future, what might these intermediaries look like? I see two possibilities: 1) a financial products supermarket and 2) what I will call an *all-in bank*.

The financial products supermarket will be akin to a brokerage firm that need not have a balance sheet of its own. It will serve retail customers, manage portfolios for individuals, and provide various services for corporate customers. Like a broker, the financial products supermarket will be a retail firm that handles asset allocation together with payments and settlement services. The assets themselves will be traded in secondary markets. Because there is never any mismatch between its assets and its liabilities, the financial products supermarket will not incur any risks from its balance sheet (unless it trades on its own account) and therefore will have no need for capital.[3]

In addition to retail firms, there will be wholesale firms that package risk and pass it through to pension funds and asset managers. The retail customers, in turn, will purchase shares in those funds and thereby have a stake in the funds' activities. For the financial products supermarkets to become dominant, financial markets will have to evolve to the point where nearly all risk is fully securitized.

In the *all-in banks*, funding and risk taking will take place in the same institution. On the institution's own balance sheet, liabilities with one risk structure are transformed into assets with another risk structure. As a result, the risk remains in the institution in the same way that it does in the traditional maturity-transforming bank.

In my view, the long-term trend certainly is toward financial supermarkets. Both advances in technology and the growing sophistication of investors argue for the demise of traditional banks. Indeed, firms such as Charles Schwab are already building financial supermarkets. But there could surely be large entities, such as Citigroup, that combine all aspects of commercial banking, investment banking, brokerage, and insurance. I must confess that I do not see an easy way for insurance to overcome the mismatch between the risk characteristics of assets and liabilities, as a need will likely remain for some sort of reserve to pay claims that have asynchronous timing with the premiums. Still, the ability to essentially securitize insurance liability through syndication could spread, if it has not already done so.

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Why and How Do We Regulate?

In thinking about government involvement in the financial system of the future, the first question we need to address is: Why do we regulate financial intermediaries? I believe that there are three basic justifications. These have to do with: 1) consumer protection, 2) systemic risk, and 3) the moral hazard arising from government guarantees. Let me examine each of these in turn.

The first basic justification for regulation is to protect consumers. The potential for consumers to be exploited exists because financial services are often most efficiently provided by large firms. Why large firms? The reason is that many financial services give rise to externalities. On the one hand, there are standard economies of scale: large fixed costs are initially incurred in setting up a system to provide a service, but subsequently the production of an additional unit of the service is very low or zero. On the other hand, there are also what are now termed *network externalities*: the overall value that arises from an individual's participation in a particular network is greater than the individual's private value because an additional party in the network raises everyone else's utility. Many of the products provided by financial intermediaries share these characteristics. Payments and settlement services are a clear example: they display both scale economies and network externalities. The role of a regulator is to ensure that the large players do not abuse the market power that they have gained from their ability to supply services at lower cost and therefore with greater benefit to consumers.

Regulators need to ensure that the incentives of each financial intermediary are consistent with the goal of safeguarding the interests of those who hold that intermediary's liabilities.

Another reason consumer protection is needed has to do with disclosure requirements. When regulators require financial intermediaries to provide reliable and complete information in transparent and accessible form, consumers are given the ability to protect themselves. The job of the regulator is to ensure that such disclosure occurs. The idea is that delegating the monitoring of the financial intermediary to the consumers is efficient. Experience suggests, however, that leaving the monitoring of financial intermediaries to consumers is not enough, because even with well-constructed disclosure requirements, consumers do not seem to be very good at monitoring financial institutions. As a result, there is very little support for leaving the monitoring role to consumers alone.

In short, the need to protect consumers gives rise to prudential regulation whose main focus is on the failure of the individual firm. That is, regulators need to ensure that the incentives of each financial intermediary are consistent with the goal of safeguarding the interests of those who hold that intermediary's liabilities.

The second basic justification for regulation is to reduce systemic risk. In this capacity, the regulator really functions as the risk manager for the financial system as a whole. Most important, regulators must focus on the interconnections between firms within the financial system. Because the problems of individual firms become systemic insofar as those problems influence other firms, one can create a coherent argument in favor of the prudential supervision of only those intermediaries active in wholesale markets. It is not clear, however, that regulating only the wholesale market will be cost effective in every instance. But if there is such an externality as a systemic crisis from the failure of a wholesale clearinghouse, as there may well be, then prudential oversight may be the best means of dealing with it.

The final justification for regulation is to provide for government guarantees and to address the moral hazards that arise from those guarantees. Government guarantees serve to enhance consumer protection and reduce systemic risk. The desirability of government guarantees stems from the conviction that people should not always be forced to face the consequences of actions that are not under their control, especially when those consequences can be catastrophic for them. For this reason, the government guarantees pension funds and provides both explicit and implicit guarantees to the holders of liabilities issued by certain financial intermediaries. Once these guarantees—such as deposit insurance—are in place, regulation is needed to minimize the distortions created by the elimination of market discipline. Monitoring the behavior of insured institutions is necessary to make certain that the government guarantees do not lead to irresponsible behavior on the part of the managers of those institutions. For example, deposit insurance removes the oversight interest of liability holders in a financial intermediary, giving managers of that

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intermediary the ability (and incentive) to take more risk than they otherwise would be allowed to take.

What Form Will Regulation Take?

The justification for regulation is unlikely to change even as the structure of financial intermediation changes.[4] The need to protect consumers and reduce systemic risk will not go away as financial firms evolve. Ideally, regulators would like to develop a set of principles to influence incentives regardless of the ultimate structure of financial firms, but in practice the knowledge to do so is lacking. What is likely and desirable in lieu of such an ideal set of principles?

First and foremost, I would argue, is the need to promote market discipline. This effort is likely to include a greater role for private sector monitoring than has thus far existed. We know, for example, that there is information in the publicly available ratings provided by private ratings services that is independent of supervisory ratings. These public ratings complement supervisory ratings and should be used as such. More broadly, however, the goal of regulation is to improve the information available to the market. Information moves market prices, and so enhanced disclosure creates discipline.

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To the extent that it is possible to do so, regulators should also increase their emphasis on incentives. Such an effort is part of the move away from the traditional evaluation of loan quality and has to do with regulatory and supervisory evaluation of the risk management process itself. Instead of monitoring balance sheet composition alone, regulators examine a financial firm's internal controls: its accounting and auditing systems, reserving practices, back-office control procedures, and the like.

Finally, going forward, regulators will need to rely more on the financial firm's own internal assessments of risk.[5] Supervisors will review and evaluate the firm's internal risk assessments and strategies to make certain that these are adequate. This kind of supervisory review supplements the current method of capital regulation: it incorporates a certification of the adequacy of the firm's internal control systems instead of relying more exclusively on an independent and potentially misleading calculation based on one day's balance sheet position.

This last point raises a larger issue with respect to supervision: What are the relative merits of allowing financial firms to monitor themselves versus maintaining centralized government regulation? I strongly believe that there are some economies of scale and scope as well as the opportunity to "learn by doing" in the monitoring function. This does not necessarily mean that government regulation is the answer, since private self-regulated organizations, such as the New York Stock Exchange, can also take advantage of these potential efficiencies. But I do think that some sort of centralized monitoring of financial firms is likely to be more efficient in the long run than delegating this task to the firms themselves and that it will be difficult to remove the government entirely from this function.

Some sort of centralized monitoring of financial firms is likely to be more efficient in the long run than delegating this task to the firms themselves.

At the same time, although I believe it is important to continue to think about ways to reduce government guarantees and any negative influence they may have on firm behavior, I am convinced that most guarantees are likely to remain—either explicitly or implicitly—for the foreseeable future. Such guarantees will have to exist both to protect consumers and to address concerns about systemic risk. For example, it is inconceivable to me that the government would allow a large pension fund to fail; the impact this failure would have on individuals is simply too great. Therefore, there is now and will always be some form of pension fund guarantee. Moreover, systemic concerns will remain because it is impossible to liquidate large mutual funds and pension funds in a timely manner without seriously impairing

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the functioning of secondary asset markets. Simply because a fund holds securities that trade does not mean that there is sufficient liquidity to fully liquidate them.

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Given these realities, the government will continue to impose prudential standards on financial intermediaries to limit its potential losses.

Another issue bearing on the future form of financial regulation is the eroding importance of international borders and the burden this erosion places on regulators in their attempts to contain systemic risk and protect consumers within their jurisdictions. In this respect, I believe that we have no choice but to continue to encourage international coordination. One means of achieving such coordination is to work toward the widespread adoption of the Core Principles of the Basle Committee on Banking Supervision. In my view, there are also strong natural forces toward regulatory harmonization stemming from a growing international consensus that lax financial supervision leads to market fragility and potential crisis. Moreover, the ability of regulators to coordinate policies may be getting easier as the number of major players declines. The recent creation of the European Central Bank, including the move to harmonize regulation and supervision within the euro area, is the latest example. In this environment, countries that fail to implement best practices in their regulatory oversight regimes will see their financial firms and economies placed at a significant disadvantage. Here we must count on the market to impose discipline.

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Conclusion

The key challenges facing financial supervisors today are to identify the shape financial intermediation will take in the coming decades and to determine how best to organize regulation in the future. Should regulation be totally governmental or implemented by a private self-regulatory organization with a contract from the government? What legal and enforcement powers should supervisors have? Is it better to have many small regulators in competition with each other or one large regulator for the entire financial system? The answers to these questions are not yet clear, but I am convinced that we should be thinking hard about how we might answer them if we want to ensure the smooth functioning of our financial system in the next century.

Notes

1. Historically, trade execution has been the primary role of banks and it continues to provide a significant percentage of bank revenues. See McAndrews and Roberds (1999) and Radecki (1999).

2. See Drzik and Kuritzkes (1997).

3. See Kuritzkes (1998) for an example of this.

4. For a summary of views about the likely direction for regulation, see Federal Reserve Bank of New York (1998).

5. See McDonough (1998) for one view of the likely direction supervison will take.

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