CHAPTER 1

Introduction

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The recent financial crisis was a mix of "unique" and much more conventional events. This short book offers our perspective on what happened and especially on the lessons to be learned in order to avoid a repetition of this large-scale meltdown of financial markets, industrial recession, and public deficits. Chapter 2 provides a diagnosis of what went wrong and discusses some key financial regulation reforms. Chapter 3 takes a more detailed look at the flaws in the prudential framework that was in place when the crisis erupted and at the required remedies, and chapter 4 focuses on the treatment of distressed banks, a key element of this prudential framework. This introduction takes a more general look at the rationale for and challenges of banking regulation.

Regulation in a Historical Perspective

What degree of regulation of the banking sector is appropriate has been a controversial question for almost a century. The Great Depression, with its wave of bank failures triggered by bank runs, led in the 1930s to heavy-handed regulation, combining deposit insurance, interest-rate regulations, barriers to entry, restrictions on activities (compulsory specialization), and constraints on bank size. Although the succeeding decades witnessed a return to stability, the banking system gradually became perceived as inefficient and poorly innovative. In order to encourage cost-cutting and innovation, and to induce banks to pass efficiency gains on to consumers, governments deregulated the banking industry and fostered competition from the 1970s on. This trend was also the result of pressure from commercial banks, which were facing competition from other less regulated financial institutions (e.g., money-market mutual funds and investment banks).

Although details vary from country to country, the removal of interest-rate controls promoted competition at first. In the turbulent macroeconomic environment of the 1970s and 1980s, though, this form of deregulation, together with an interest-rate maturity mismatch in a period of rising interest rates, resulted in the 1980s in a large-scale banking crisis in the United States (the savings and loan—S&L—crisis). This crisis led to a mix of further deregulation and reregulation. On the one hand, diversification of activities was allowed in order to reduce the specialization-induced fragility of the S&Ls. S&Ls had used short-term savings deposits to fund long-term, fixed-rate mortgages, and were thereby exposed to yield-curve risk. On the other hand, in order to limit the exposure of deposit insurance funds, the regulation of solvency ratios became more stringent and intervention rules in case of violation of these ratios were strengthened.

This emphasis on prudential regulation and the desire to harmonize country-specific capital adequacy requirements led to the international standard embodied in the Basel system of regulation. New international regulations, including the 1988 accords, were intended to ensure a level playing field in a world of increasing globalization of banking. Subsequent events made this attempt to establish a level playing field, however imperfect in practice, seem prescient since large international banks have now become common in the United States, Europe, and Asia.

This internationalization and the intensification of competition among various marketplaces (e.g., between Wall Street and the City of London) led to a weakening of regulatory standards, fed by pressure from large banks, themselves facing competition from more lightly regulated financial institutions. One can interpret the recent modification of the Basel capital adequacy rules (Basel II), which allow large banks to reduce effective capital ratios if they can show that their risks are "limited," as an outcome of lobbying by these banks. The assessment of risk under the new regulations comes from the banks themselves, through "internal models"—which represents a step toward self-regulation. The complexity of these internal models can make it very hard for supervisors to verify what is being computed and raises concern, despite the requirement that those models be authorized by regulatory authorities.

The trend toward weaker regulation also came from the inability of the system to cope with the pace of financial innovation, itself fed by a desire to lower the amount of capital required by the regulatory agencies. Indeed, the growth of the shadow banking system, of securitization, and of structured products (backed by credit ratings that had been inflated by the rating agencies) can be partly traced to this desire.

The gradual lowering of regulatory standards predated the recent crisis. To be sure, other developments such as "irrational exuberance," loose monetary policy, and global macroeconomic imbalances also contributed to the crisis. But underregulation or ineffective regulation is rightly blamed for playing a central role in the crisis. Not surprisingly, this has led to calls for a strengthening of regulations in a number of countries. It is worth pausing, however, to ask what the purpose and extent of regulation should be.

To Regulate or Not to Regulate?

Banking is one of a handful of industries (others include insurance, financial market making, and pension-fund investing) subject to prudential regulation on top of consumer protection. The focus of this book will be on the former, and more substantial and decisive, form of regulation. This is not to imply that insufficient consumer protection played no role in the recent crisis. Indeed, the crisis started with problems in subprime loans. Although these problems were small compared to the overall crisis that ensued, subprime lending was the release mechanism. Subprime loans are associated with weak consumer protection regulation of banking products in the United States. Therefore the creation of an agency specifically dedicated to strengthening borrower protection in the United States is a welcome development.

What is so unique about banks as to warrant industry-specific regulation? Banks fulfill a specific role in the economy through their involvement in the payment/deposit system as well as in lending to households and firms (for a survey of models of banking, see Freixas and Rochet 2008). Although these activities are essential to the economy, they are no more essential than, say, cars or pharmaceuticals, sectors in which consumer protection regulation exists but not prudential regulation.

In banking, by contrast, prudential regulation has been in place since the 1930s. One classical rationale for such regulation is the vulnerability of individual banks to depositor runs. When wholesale and uninsured retail depositors lose confidence in a bank, their natural reaction is to withdraw their money from the bank as fast as possible. Such bank runs stem from the banks' transformation activity. Banks create liquidity by borrowing short and lending long. By allowing depositors to withdraw their money whenever they feel like it, banks are exposed to self-fulfilling rational panics: as shown by Diamond and Dybvig (1983), when one expects other depositors to run and thereby force the bank into costly asset liquidation, one's dominant strategy becomes to run too. The regulator's monitoring of the institution's leverage (and now liquidity) positions is meant to reduce the frequency of such costly runs.

The recent crisis (as well as some previous episodes, such as the failure of the Long-Term Capital Management hedge fund) has shown that another, related rationale for subjecting the banking industry to prudential regulation could be that the failure of one bank can trigger the failure of other banks through interbank exposures or banking panics. Prudential regulation of banks—in the form of capital ratio requirements plus deposit insurance—is therefore warranted, especially for institutions that are large and interconnected and thus can generate domino effects. In contrast with nonfinancial firms, which are bound to benefit when a competitor goes under, banks can be hurt both as creditors of the failed bank and also as victims of panics that follow a neighbor's insolvency. Prudential regulation is therefore meant to protect the banking infrastructure, the financial system that allows the economy to function smoothly. This warrants that specific attention be paid to large banks.

Yet smaller and not necessarily interconnected banks, whose failure has no systemic consequences, are also subject to prudential regulation. The main reason for this is that their debtholders are small and lacking in monitoring expertise. Deposit insurance is typically introduced in order to reduce the risk that depositors will behave erratically, but it further reduces depositors' incentive to monitor banks.

This rationale for prudential regulation—the lack of expertise and the wastefulness associated with monitoring of balance sheets by retail depositors—explains why prudential regulation is also observed for other institutions with small, dispersed debtholders such as insurance companies and pension funds. Dewatripont and Tirole (1994) discuss in detail the specifics of these institutions and their differences from other financial and nonfinancial institutions that are much more lightly regulated. They formulate the *representation hypothesis*, according to which prudential regulation should aim at replicating the corporate governance of nonfinancial firms, that is, at acting as a representative of the debtholders of banks, insurance companies, and pension funds.

The financial industry has recently substantially increased the magnitude of its "wholesale" liabilities, that is, liabilities held not by small depositors but by other financial institutions. Does this mean that the case for regulation has been weakened? In fact not, because such liabilities, which are often short term and therefore subject to panics, create systemic problems of two sorts: (1) they imply risks for the institution's insured depositors (a case in point is Northern Rock; see the discussion in chapter 3), and (2) even if the institution does not have formally insured deposits (as in the case of investment banks or hedge funds), its failure could create domino effects because of its high degree of interconnectedness with other financial firms (as was the case, for example, with the investment bank Lehman Brothers). Consequently, the argument behind the representation hypothesis still holds: even if the debtholders of banks are neither small nor inexperienced, the fact that their deposits are short term means that when they expect trouble, running is the best strategy. The danger of a bank run for the banking system as a whole then typically prompts the authorities to support endangered institutions. The expectation of this "too big to fail" or "too interconnected to fail" syndrome does prevent panics but it also makes the bank's debtholders passive and creates the potential for excessive risk-taking, in turn implying the need for a debtholder representative to ensure discipline. The social cost of the Lehman Brothers bankruptcy has, if anything, reinforced this argument, since one can now safely expect big banking institutions to be rescued in case of financial distress.

The Challenges Facing Prudential Regulation

According to the representation hypothesis, regulation should mimic the role played by creditors in nonfinancial firms. Since debt gives its owners the right to take control of their borrowers' assets in bad times, regulators must take control of banks in bad times in order to limit the losses of depositors or of the deposit insurance fund. This, in turn, implies the necessity of (1) defining what "bad times" means, and (2) making sure that one can intervene in those circumstances. This is no easy task, even when trouble hits only a single institution; we discuss this case first, and then turn to the more complicated case of multi-institution hardship prompted by negative macroeconomic shocks.

For a single institution, bad times are defined as times at which its capital falls below the regulatory solvency ratio, as defined by the Basel I and II international agreements. Such definitions, although increasingly complex over time, nonetheless yield only rough approximations of a bank's riskiness; for example, they concentrate only on credit risk, and do not fully take into account portfolio risk. Moreover, even in "normal" times, it is a challenging task for the regulator to intervene early enough, given that there is always an "accounting lag" in the computation of solvency. Moreover, this challenge is exacerbated by the fact that, in contrast to nonfinancial firms, banks can take advantage of (explicit or implicit) deposit insurance and "hide" problems of insolvency by aggressively raising money through higher interest rates, a strategy that has been called "gambling for resurrection."

"Market discipline" can to some extent be relied on to help provide early warning signals of a bank's trouble. This can work, however, only if some of the bank's debt is not explicitly or implicitly insured by the state (otherwise its risk premium is zero) or if it is privately insured, so that its insurance premium would reflect market perceptions of its riskiness. Such market discipline can in fact precipitate a crisis by making it more expensive for a bank in trouble to remain insured, and it does not make public intervention in bad times less essential; put differently, market discipline can be only a complement to, not a substitute for, public intervention.

Prompt intervention in an individual insolvency is not straightforward, but it is even harder in the case of generalized insolvency resulting from a macroeconomic shock. Indeed, multiple factors make taking control of banks during a banking crisis much more complicated. First, banks can expect some sympathy from politicians when they argue that the responsibility is not theirs but instead that of poor macroeconomic conditions. Second, politicians may quickly be faced with a drained deposit insurance fund and be very reluctant to request money from taxpayers to cover the cost of intervention. Third, competent staff from regulatory authorities are likely to be overwhelmed by the sudden magnitude of the task of overseeing multiple interconnected distressed financial firms at once.

In such cases, the temptation to manage the accounts of banks so as to pretend that they are not really insolvent is strong. Such forbearance has been practiced in various crises (e.g., the S&L crisis of the 1980s) but it is dangerous: insolvent banks do misbehave (gambling for resurrection was rampant among S&Ls, for example) and experience shows that the cost to the taxpayer, though delayed, is magnified in the end by such cover-ups. History tells us that, when a crisis hits, honest and speedy cleanups of bank balance sheets are highly desirable: real money is required; accounting tricks won't do. A striking example is provided by the contrast between the Scandinavian and Japanese crises of the 1990s: Japan's procrastination led to years of sluggish GDP growth while Scandinavia "bit the bullet" and came back to satisfactory growth much more quickly.

Building an Adaptive Regulatory System in a Global World

One problem with regulation in recent years is that it has faced accelerating financial innovation. Of course, financial innovation is driven not just by the desire to serve customers better: it can be the result of pure regulatory arbitrage rather than an attempt to increase social surplus (think of structured products with originators keeping senior tranches in order to minimize capital requirements and providing huge off-balance-sheet, and therefore low-capital-requirement, liquidity support to the conduits). More generally, one can expect regulatory arbitrage by the industry (as in the case of rating agencies offering consulting services to boost the ratings of hard-to-understand structured products).

As a consequence, when drafting regulation, legislators should explicitly start from the assumption that these factors will be at play, and they should be willing to adapt the system without delay to these developments. This has, unfortunately, not been the case: regulation is too often designed to "fight the previous crisis" rather than the next one, and is typically one step behind market developments. The trend toward global banking has exacerbated regulation's lag behind market developments.

Indeed, as stressed earlier, recent years have witnessed two significant trends: bigger financial institutions on the domestic scene (with many domestic mergers) and accelerating globalization (partly due to cross-border mergers). On the one hand, these trends have significantly increased the domestic lobbying power of financial institutions, thereby giving more prominence to a laissez-faire approach. On the other hand, globalization in a world of hard-to-coordinate international regulatory policies has increased the lag between private-sector developments and regulatory responses. Taken together, these factors led to Basel II regulatory rules that were less demanding than their predecessors in terms of capital and that even started delegating bits of the actual implementation of supervision to private-sector actors, namely rating agencies or even the (big) banks themselves.

Keeping a Balance

The previous trend toward decreasing capital requirements and increasing delegation of oversight to banks and credit-rating agencies clearly requires a correction, namely a strengthening of regulation. In the recent crisis, the pendulum can be expected to swing in this direction. In such complex industries, however, there are many challenges on the road to efficient regulation.

The first challenge is the need to avoid overreaction: regulation should mimic for banks the corporate governance of nonfinancial firms, not "punish" banks just in order to place blame for the crisis. Although financial institutions that are not yet regulated should be regulated if the regulated sector has large exposures to them (for example, if they are systemically important owing to their large volume of over-the-counter trades with the regulated sector), and although capital ratios should be raised in comparison to precrisis levels, it is much less clear that one should, for example, become prescriptive in terms of business models in banking: the crisis has hit some small as well as some large banks, some private as well as some state-owned banks, and some specialized as well as some universal banks.

The second challenge is the need for politicians to avoid the temptation to be especially harsh in their treatment of banks that have received a bailout—for example, by limiting their ability to pay managers in comparison to their competitors. This can be counterproductive because it means putting them at a competitive disadvantage toward those banks that have not been bailed out, at least *directly* (but that may nonetheless have been *indirect* beneficiaries of bailouts, as creditors of bailed-out banks). By contrast, it does make sense to promote compensation schemes that incentivize bank managers to take a long-term perspective.

Finally, a danger of the recent crisis is that cross-border banking might collapse. This problem, which would be less dire for some large countries such as the United States, is of first-order importance for European countries and some emerging markets. It is linked to the fact that bailout money originates from national treasuries—which are responsible to national electorates—and not from an internationally coordinated insurance fund. Therefore, it is not a surprise that bailed-out banks have in many cases been ordered to favor domestic lending. This trend can mean the end of the European Union's Single Market in banking, which is bad news for the Single Market in general, and therefore for economic growth and efficiency.

The challenges, thus, are numerous. The three essays in this volume discuss a number of principles to deal with these challenges, addressing the microeconomic incentives of financial institutions, the impact of macroeconomic shocks, and the role of political constraints.