Center for Financial Innovation and Stability

The Financial System after the Crisis: Policy Fallout

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- Some banks apparently are too big to fail. It's unlikely that any policy will eliminate too big to fail or the effects of some firms being too big to fail.
- Contingent convertible bonds are one likely way to reduce the bad effects of some banks being too big to fail.
- Macroprudential supervision may be able to reduce the bad effects of some banks being too big to fail, but there are many unanswered questions including, even a basic approach.

The effects of the financial crisis on government policies toward financial firms and markets will be both far reaching and long lasting. If it wasn't implicit before the crisis, policies put in place during the crisis made it obvious that some firms can be too big to fail. As part of dealing with the ill effects of too big to fail, macroprudential supervision of firms has been put forth as a remedy. While this remedy cannot possibly cure the problem, it has potential for alleviating some ill effects.

The Federal Reserve Bank of Atlanta's 2010 Financial Markets Conference, held in May, examined both too big to fail and macroprudential supervision. Mark Flannery's presentation put forward his views on what should be done about too big to fail. As he suggested even before the crisis, new securities called contingent convertible bonds might play a role. In a technical paper presented at the research portion of the conference, Boris Albul, Dwight M. Jafee, and Alexei Tchistyi analyzed these contingent convertible bonds. Charles Goodhart analyzed an issue that is broader in some ways: macroprudential supervision, which can be thought of as regulation to prevent another financial crisis.

What to do about too big to fail?

Mark Flannery's presentation asked what should be done to alleviate too big to fail. As outlined in the February 2010 *Notes from the Vault*, too big to fail is a policy of shielding creditors of institutions from losses when large institutions fail. Essentially, policymakers bail out a firm that is too big to fail because of a concern that the losses imposed on creditors will result in widespread financial distress and possibly a financial crisis. As my colleague Larry Wall emphasized in the April 2010 *Notes from the Vault*, too big to fail has no easy solutions. In extreme circumstances, policymakers are likely to prevent the failure of institutions that are too big to fail, and policy outside of crises cannot ignore that likelihood.

As Flannery put it at the conference, bailouts seem like a good idea at the time. They seem to be a good idea partly because policymakers think that bankruptcy is too slow and messy. Given the difficulties associated with building a resolution process that policymakers actually would use, Flannery suggests that the best course is to pursue policies that would avoid failure.²

¹ As detailed in the June 2010 issue of *Notes from the Vault*, the conference also examined structured finance and credit ratings agencies.

² Dave Altig (2010) discusses this aspect of Flannery's talk.

Flannery puts the regulations considered in a broad perspective. He generally is negative about suggested changes such as better supervision. While not discounting that better supervision may be helpful, he concludes that "[it] will not save us from future crises. The problem is just too hard" (Flannery 2010, 12). Here, it seems that he is overstating anyone's claims. Saying "better supervision" would prevent financial crises is similar to suggesting that better fire prevention would prevent fires. Better supervision could lower the likelihood and cost of financial crises, but there are two major difficulties. As do many others, Flannery takes it for granted that "better supervision" can be reasonably defined. That supposition is not so obvious, but even supposing that it can be defined, there is a remaining problem.

The problem then, as Flannery points out, is whether regulators actually will perform this better supervision. For example, it is obvious now that loan portfolios with large concentrations of loans to property developers created problems for banks and resulted in quite a few bank failures. But would

the financial crisis still have happened even if small banks had not made so many developer loans? Suppose that bank supervisors were aware that small banks were concentrating on such loans more than seemed prudent to the supervisors, as some banks assuredly were. Realistically, what could the supervisors do about it? It's important to note that these loans were quite profitable with very low default

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rates until housing and land prices started falling. Bank supervisors could make sure that banks followed the rules on limiting the concentration of their loans and not much else. It seems unrealistic to expect widespread enforcement actions to have been taken against banks for making what were safe, profitable loans at the time.

Flannery does suggest one route for better supervision. If supervision relies more on market information, some signals of problems will be perceived earlier. Even though market information is not available for small banks that have no liabilities traded on public markets, big banks that are too big to fail do have such information. So reliance on market information can help even if it's not sufficient by itself.

Flannery suggests primary reliance on higher capital standards. With higher capital, banks can withstand larger losses before failing. Interestingly, he suggests those standards should be risk-based capital standards. This suggestion is interesting because the big problems with large banks' portfolios have been with assets that the Basel Accord presumed to be low risk. Those assets are mortgages, government debt, and other assets with insurance by a highly rated third party. Mortgage-related assets were part of the financial crisis in the United States, and the crisis spread to Europe through those assets. AAA-rated government debt—including Greece's until recently—has been associated with more recent problems. The other set of assets included loans rated AAA because the loans were guaranteed by a AAA-rated entity—most spectacularly, AIG. It's debatable whether risk weighting is something to be continued or whether its time has passed. That consideration aside, higher capital definitely will help to mitigate some problems with banks.

Contingent capital

Flannery suggests that contingent capital could play a substantial role in providing more capital without introducing as many problems as higher actual capital. Contingent capital is equity capital that becomes available to the bank after some triggering event. Under Flannery's approach, banks would be required to issue securities called contingent capital bonds, which, if the triggering event occurs, transform from bonds into equity capital. For example, suppose that the trigger is a low ratio of the market value of equity to assets. If this ratio falls below a predetermined limit, contingent capital bonds become equity capital, and the holders of contingent capital bonds become part-owners of the firm. This transformation of bonds into equity provides equity capital if the firm gets into trouble but allows the firm to hold less capital if it does not get into trouble.

The triggering event is important for evaluating contingent convertible bonds. Conversion of these bonds into equity dilutes existing shareholders' ownership and can transfer control of the bank if the conversion is big enough. In addition, the conversion value compared to the market price can

seriously affect the bank and financial markets. An obvious conversion value would be the current market price on conversion. A conversion at the current market price, though, can seriously affect debt and equity prices when a triggering event might be imminent. The market price might just move inevitably to the trigger price when the mar-

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ket price of equity gets close enough to the trigger price. Another possible conversion value would be a high conversion value relative to the market price at the time of conversion. This high conversion value, though, can give holders of contingent convertible bonds an incentive to manipulate the price to induce a conversion. A low conversion value relative to the market price of equity, though, can give equity capital holders an incentive to manipulate the price to induce a conversion.

Albul, Jafee, and Tchistyi's paper examines the effects of various conversion values of contingent convertible bonds into equity.

An initial question, though, about contingent convertible bonds might be why firms don't already issue them. One possible reason in the United States is the tax treatment of the interest payments. Interest on bonds is deducted from firms' taxable income. Dividends to owners of equity are paid with after-tax income. It is quite possible that the interest payments on contingent convertible bonds would not be deductible because contingent convertible bonds are partly bonds and partly equity.

In addition, as Albul, Jafee, and Tchistyi show, the holders of existing equity will not want to issue such securities to replace other debt because the owners of the firm are better off with government funds from bailouts. Hence, too-big-to-fail firms will not issue such bonds unless required to do so.

Albul, Jafee, and Tchistyi also show that there exists a range of conversion values that do not create an incentive for either holders of the equity or the debt to manipulate the equity's market price to trigger a conversion. Their analysis does not resolve all the questions, but it provides some answers to important questions about contingent capital bonds.

³ Flannery proposed this role in 2005, well before the financial crisis of 2008.

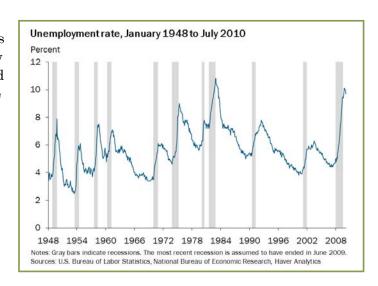
Macroprudential regulation

Charles Goodhart's paper considered the role of macroprudential supervision. He examined various policies and even the organization of macroprudential regulation.

What is macroprudential regulation? Much current regulation of banks, or financial firms more generally, often is called prudential regulation: regulation that is supposed to ensure that the regulated firms are operating in a prudent way. To many observers, the financial crisis suggested that regulation of more global aspects of the financial system would be desirable. While the goal might be clear—avoid financial crises—the means are not so obvious. What would macroprudential regulation actually do?

Goodhart divided responses along what he regarded as European and American solutions to the goal of reducing the effects of some institutions being too big to fail. His versions of European solutions primarily rely on more regulation; American solutions rely more on market mechanisms.⁴ Contingent convertible bonds are an obvious example of a market mechanism.

What are some nonmarket mechanisms? Requiring higher capital ratios is an obvious example of a nonmarket regulation. The low capital ratios held by financial firms seemed appropriate before the crisis, partly because of the economy's relative stability. The figure shows the unemployment rate in the United States. Until the financial crisis, the economic situation had been relatively benign. Recessions were less frequent and less severe. Indeed, macroeconomists call the period from the early 1980s up to 2008 the Great Moderation. Arguably, everyone knows one thing now—the Great Moderation is over—and higher capital ratios seem



quite desirable. As Flannery suggests as well, higher capital ratios seem important.

Another nonmarket mechanism is requiring higher liquidity ratios. This solution is less obvious. The original rationale for current required reserve ratios was to ensure that banks have some liquid assets in the event of a bank run. The problem with this rationale is that required reserves are required, a point widely recognized today. These reserves are not available to be paid to depositors in a run precisely because the bank is required to hold them. Liquidity ratios have the same problem: If a bank is required to hold liquid assets, those assets are no longer liquid. Possibly the requirements could be imposed in a way that, in the event of difficulties, the liquid assets are, in effect, no longer required to be held. But that approach could also cause problems because then the bank's difficulties could be seen by all as the bank's liquidity ratios fall. Finding out that an institution is having liquidity difficulties is likely to create its own problems. And besides, as Wilhelm Buiter (2008) has pointed out, the central bank is supposed to be the provider of liquidity in difficulties. If the central bank does its job, what is the payoff from having individual institutions hold more liquid assets?

⁴ It's interesting that former Fed Chairman Alan Greenspan's (2010) proposal for much higher capital ratios makes him a European according to this division.

Conclusion

It would not be expected that one conference would resolve all the issues that arose during the financial crisis, but it is fair to say that there was much to be learned from the presentations. And unfortunately, from the viewpoint of resolving the policy issues raised by the financial crisis, there still is much to be learned.

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