

*As long as some firms are considered too big to fail,
those firms will take outsized risks.*

Lessons from the Financial Crisis

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With the benefit of a year's hindsight, we can now look on the financial crisis and determine what was really the central problem, as well as identify what are the most important policy changes needed to avoid repeating the crisis. In my view, the usual suspects — “global imbalances” of saving or imports and exports, the Fed's low rates, a housing “bubble,” subprime mortgages, fancy derivatives — are not that important. Once we put all that aside, I think we can focus on the real problems and their solution.

The signature event of this financial crisis was the “run,” “panic,” “flight to quality,” or whatever you choose to call it, that started in late September of 2008 and receded over the winter. Short-term credit dried up, including the normally straightforward repurchase agreement, inter-bank lending, and commercial paper markets. If that panic had not occurred, it is likely that any economic contraction following the housing bust would have been no worse than the mild 2001 recession that followed the dot-com bust.

The reasons for the current recession are pretty straightforward: it is hard to get much done if you are scrambling for cash and the normal way of doing business just fell apart. Now that the short-term credit crunch is over, the recession seems likely to be followed by a quick recovery, at least if the government does not get in the way with too many counterproductive attempts to fix things.

PANIC

Why was there a financial panic? There were two obvious precipitating events: the failure of Lehman Brothers investment bank in the context of the Bear Stearns, Fannie Mae, Freddie Mac and AIG bailouts; and the chaotic days in Washington surrounding the passage of legislation establishing the Troubled

Asset Relief Program (TARP).

Why would Lehman's failure cause a panic? Why, after seeing Lehman go to bankruptcy court, would people stop lending to, say, Citigroup, and demand much higher prices for its credit default swaps (insurance against Citi failure)? Nothing technical in the Lehman bankruptcy caused a panic. The usual “systemic” bankruptcy stories did not happen: We did not see a secondary wave of creditors forced into bankruptcy by Lehman losses. Most of Lehman's operations were up and running in days under new owners. Lehman credit default swaps (CDSs) paid off. Sure, there was some mess — repos in the United Kingdom got stuck in bankruptcy court, some money market funds “broke the buck” and had to borrow from the Fed — but those issues are easy to fix and they do not explain why Lehman's failure would cause a widespread panic. What is more, Lehman's failure did not carry any news about asset values; it was obvious already that those assets were not worth much and illiquid anyway.

We are left with only one plausible explanation for why Lehman's failure could have had such wide-ranging effect: After the Bear Stearns bailout earlier in the year, markets came to the conclusion that investment banks and bank holding companies were “too big to fail” and would be bailed out. But when the government did not bail out Lehman, and in fact said it lacked the legal authority to do so, everyone reassessed that expectation. “Maybe the government will not, or cannot, bail out Citigroup?” Suddenly, it made perfect sense to run like mad.

Buttressing this story, let us ask how — by what mechanism — did Federal Reserve and Treasury equity injections and debt guarantees in October eventually stop the panic? An increasingly common interpretation is that, by stepping in, the government signaled its determination and legal ability to keep the large banks from failing. That too makes sense in a way that most other stories do not. But again, it means that the central financial problem revolves around the expectation that banks will be bailed out.

In sum, the government was stuck in an awful situation.

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Once everyone expects a bailout, government has to provide it or else chaos will result. Obviously, in this view there is nothing inherently “systemic” about the behavior of Lehman Brothers or other large banks. What is systemic is the expectation of a bailout. The policy question is simply how to escape this horrible moral-hazard trap.

The TARP mess did not help. Federal Reserve Chairman Ben Bernanke, Treasury Secretary Henry Paulson, and President Bush got on television and said, basically, “The financial system is about to collapse. We are in danger of an economic calamity worse than the Great Depression. We need \$700 billion, and we won’t tell you what we’re going to do with it. If you need a hint, we just made it illegal to short-sell bank stocks.”

These speeches should be remembered as a case study in how to start a financial crisis, not how to relieve one. In the Washington context they may have made sense, and I understand and sympathize with the awful position that Bernanke and Paulson were in. I suspect that they wanted legal authority to bail out the likes of Lehman and they needed to scare Congress into giving them the money, even as stubborn right-wing fiscal conservatives like Barney Frank were saying impolite things like, “No one in a democracy, unelected, should have \$700 billion to spend as he sees fit.” Alas, the speeches scared everyone outside the Beltway too.

We do not need to argue whether the Lehman failure or the TARP mess was the central cause of the panic. They both contributed. And they both point to the central problem: the panic was induced by the moral hazard that comes from 30 years of “too big to fail” policies and actions. The middle of a crisis is a terrible time to grow a spine.

WHY FAILURES AND BAILOUTS?

Let us go back one step further. Why did Lehman fail — along with Fannie Mae, Freddie Mac, AIG, Wamu, and very nearly Citigroup and Bank of America? Here is where I part company on the usual worries about bubbles, imbalances, silly mortgages, and so on.

The underlying decline in wealth from the housing bust was not that large. Comparable wealth disappeared in the dot-com stock market bust, with no financial crisis and only a mild recession. Yes, fortunes were

lost and a generation of web designers had to find new jobs, but we did not have a financial panic and 10 percent unemployment. Why not? Well, you may be unhappy if your stocks lose half their value, but there is not a lot you can do about it, and no way for your losses to spark a panic in short-term debt markets.

For this reason, in 2007 most commentators and the Fed (who, remember, is going to be regulating all this the next time around) were saying that the problems in housing finance were “contained.” Most estimates put subprime losses around \$400 billion. The stock market absorbs losses like that in days. But it turned out that housing risks are spread very differently from stock market risks.

The difference is that mortgages were held in very fragile financial structures. An extreme example: many mortgages were pooled into securities, and the securities were held in special purpose vehicles (SPVs), funded by rolling over short-term commercial paper with an off-the-books credit guarantee from a large bank. Less extreme: when Bear Stearns failed, it was holding a large portfolio of mortgage-backed securities (MBSs) funded at 30-to-1 leverage by overnight debt. In both cases, when the mortgages lose value, the debt-holders refuse to renew their loans and the whole thing blows up. In contrast, when your (and my) pension account loses value, we cannot run for the exits and try to make someone else hold the losses.

These structures attempt to take risky assets — mortgages — and turn them into risk-free assets in the form of short-term debt. But we all know you cannot do that; you can slice and dice risk, but you cannot get rid of it.

Here is what this financial structure does instead: First, it turns a “smooth” risk, like equities, which are repriced routinely, into “earthquake” risk that either pays a steady stream or fails catastrophically and unpredictably.

Second, it turns a “non-systemic” risk into a very “systemic” one. For the fundamental investors to lose any money, we need to see a default or a bankruptcy, which is always expensive and chaotic. The losses can drag down brokerage, derivatives, market-making, and other “systemic” businesses having nothing to do with simply sitting on credit risk. There was even talk that the ATM



machines might go dark. And it turns a perfectly good security — an MBS — into one that is prone to “runs” when investors refuse to renew overnight lending.

Third, it hides risk and avoids regulations, which may be much of its design. An institution that issues short-term debt to hold mortgages is what we used to call a “bank.” Why call it an SPV? Because the regulations assessed lower capital requirements on SPVs. This structure allows investors who really do want higher risks and higher yields, but are constrained by regulations that specify types (commercial paper) and ratings of individual securities they must hold rather than focusing on portfolio risk. Thus the regulatory system ends up encouraging artificial obscurity and fragility.

It is often claimed that “free, deregulated markets failed,” bringing about the housing collapse and financial crisis. In fact, the free, relatively deregulated equities market absorbed massive losses this time, as last time, with relatively little turmoil. It was the regulated, supervised part of the market that failed.

Nothing in this fragility is specific to mortgages or MBSs. If we tried to hold equity or corporate debt in highly leveraged entities funded by short-term debt, we would have the same problems. Actually, we did, back in the 1930s. Thus, the challenge for policy and Wall Street, going forward, is to devise a financial system in which risks are held in less fragile ways. Much-maligned MBSs are perfect for this effort, by the way. If held by, say, pension investors in a long-only mutual fund that trades at net asset value, they provide high yields and allow transparent and non-systemic losses.

Consider two alternatives: Mortgage could be held by a big (perhaps global) bank, the risk would then be pooled with all sorts of other stuff like internal hedge funds, and monitoring would be done (if at all) by an international pool of equity-holders and senior debt-holders, plus a new super-regulator that is trying to understand this huge, obscure entity. Or mortgages could be held by the ultimate investors, who need only monitor the quality of those mortgages, who are set up to bear losses, and who do not need any regulation or supervision. The latter structure avoids the “agency costs of equity.” Yes, MBSs can be a very good idea.

POLICY

Given my diagnosis of the central problem, it should be no surprise that I think much of the thrust of current policy-making is misguided.

First, a lot of policy seems aimed at stopping anyone from ever again losing money in financial dealings. Policymakers want new “consumer protections,” extensive supervision and regulation of financial institutions, the Fed to start diagnosing and pricking “bubbles,” and governments and the International Monetary Fund to address all sorts of vague “imbalances,” like how much countries save, invest, import, or export.

This approach is hopeless. We cannot pin the stability of the financial system on the idea that nobody should ever lose money. Doing this would strangle the economy and crush financial innovation. It would also require an impossible level of wisdom on the part of regulators. Keep in mind that

they did not see any of this coming, any more than the rest of us. They’re only human.

Increased “supervision” — the basic model that large global financial institutions will be allowed to do pretty much what they want, with a too-big-to-fail guarantee, but the Fed will impose risk management from above to keep them out of trouble — seems pretty optimistic. Banks want to be as global, interconnected, “systemic,” opaque, and chaotic in bankruptcy as possible, to make sure they get bailed out. They want to evade the next round of tighter regulation as much as the last round, and devices like the SPVs they used last time seem like child’s play in retrospect.

Second, there is a huge initiative of mostly pointless regulation that would move derivatives and CDSs onto exchanges, regulate hedge funds, force loan originators to hold back some credit risk, and so forth. Each idea here has a downside and unintended consequence. For example, you cannot clear the fancy CDSs that got AIG into trouble because they are too idiosyncratic. Moving those securities to exchanges also would eliminate cross-netting between CDSs and interest rate swap contracts. And if every mortgage broker has to hold and manage credit risk, you have just created a thousand new “systemic” institutions. The “problems” these proposals try to address really had little to do with the crash. These policy-making efforts distract us from the main, hard problems.

Third, we are headed for a “resolution authority” in place of bankruptcy. This will be run by administration officials, not judges. They will have immense power and few legal constraints. I suspect this move will end up institutionalizing too-big-to-fail policies.

What should we do instead? First of all, the central problem is how to escape the bailout expectations trap. To do this, we have to finally define what “systemic” means. And then, we must define clearly what is *not* systemic, and thus should and will be left to fail next time — we really mean it! This limit must be written in law or in regulation. We cannot rely on the good intentions of powerful administrators; Odysseus knew he had to tie himself to the mast. The only way to limit expectations of a bailout is for the government to give up the legal authority to do it. Lehman is actually a great example: it went to bankruptcy because the government could not save it. We need more of that. If everybody had known that ahead of time, rather than have it emerge from the usual weekend conclave in Washington, there likely would have been no panic because Lehman’s failure would not have signaled anything about the government’s commitments to Citigroup.

To give government officials the power to bail out firms at their discretion, especially if those officials are elected or political appointees, is practically to guarantee a bailout. In a crisis, everything looks systemic. In the last crisis, GM was bailed out on the notion that unemployed auto workers and idled suppliers were “systemic.” CIT was bailed out on the notion that its lending to small businesses would not be taken up by competitors or the surviving company in Chapter 11, and thus was “systemic.” And insurance companies were bailed out on the idea that guaranteed return annuity contracts to retirees were “systemic.” Of course, none of this makes any sense. But if you

are a public official with a failing company in front of you asking for a lifeline, you face a hopeless choice: If you bail it out needlessly, all you have done is add a few hundred billion to the mountain of national debt, and maybe you can claim some “stimulus” benefit as a result. But if you let it fail, you will be on the hook for anything bad that happens. At a minimum, as Chrysler’s bondholders found out to their dismay, a politically appointed receiver can make arbitrary decisions.

Barney Frank said wisely that markets “will never believe us” until we put one of the big financial companies to death. He is right in the current system. But clearly denying the legal

protected in bankruptcy, and separated as much as possible from risk taking.

Again, I think risk limits are much more likely to work if they operate by clear and simple rules. The philosophy of Glass-Steagall had some merit, though of course the vast majority of the actual legislation would make no sense today. No, you cannot have internal hedge funds or proprietary trading if you engage in certain activities. Institutions that offer “systemic” contracts must be as simple, small, and focused as possible.

We are instead hoping that the Fed’s risk managers can stay

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power to save such a company is the surest way to communicate that commitment.

Of course, getting rid of regulations that cause problems in the first place would help. For example, we want banks to hold more equity and less debt, but we persist in giving a tax advantage for debt.

Now, there are some things that are truly systemic. In my view, there really aren’t any genuinely systemic institutions, but there are systemically dangerous contracts. There aren’t as many of these as everyone seems to think, but there are some.

Bank deposits are a good and familiar example. If banks fund mortgages with bank deposits, that is a problem. Deposits promise face value and they are redeemed in first-come first-serve order. Thus, each depositor has a strong incentive to run and get his money at the first rumor of trouble. If we allow bank deposits (it is not obvious we have to allow this contract, or so much of it), they must be first in bankruptcy in order to stop a run, and there must be some backstop so that, even if all assets run out, the depositors get paid. The Federal Deposit Insurance Company guarantee achieves that. Derivatives have similar potential dangers, and their priority under the master agreement achieves a similar run-stopping effect.

Having given special treatment and a government guarantee, however, you need a limit on risk to protect taxpayers and some substitute for the now-missing discipline of depositors looking at the soundness of their bank. If a bank can arbitrarily issue guaranteed deposits to fund the internal hedge funds or proprietary trading, we are obviously in deep trouble.

We did learn, or re-learn, in the crisis that short-term debt (including collateralized or repurchase agreements), brokerage accounts, and some other financial products are susceptible to similar runs. We always knew that some market-making activity such as keeping the ATM machines from going dark cannot stop even in bankruptcy. In terms of the big picture, the same ideas apply: these need to be restricted, pro-

one step ahead of large integrated global firms, making decisions such as that “the tail risk on that prop desk in Hong King is too big.” In the detailed negotiation and capture of regulator and regulated, this seems much less likely to work. (In this context, the otherwise ridiculous limits on executive pay are having a wonderful unintended effect: the risky parts of large investment banks are leaving quickly to start up little boutiques, which can clearly fail.)

Admitting even this level of regulation is sometimes characterized as being anti-free market, but that is not correct. Bank deposits, subject to runs, pose an externality. We all understand that markets can fail when there are externalities. If we need to allow bank deposits, we need a guarantee or priority in bankruptcy, which leads to moral hazard and puts taxpayer at risk. Some regulation and a forced separation of these “systemic” contracts from arbitrary risk-taking are necessary. But this is a very minimal level of regulation compared to the too-big-to-fail guarantee and extensive discretionary supervision and regulation now being applied to the entire financial system.

This is not a small issue. It is important to get it right, and to do so quickly. This was not an isolated event. We are in an ever-increasing cycle of risk-taking and too-big-to-fail bailouts, going back decades. Now we know that bank holding companies, insurance companies, and investment banks are too big to fail in the government’s eyes and their activities are not going to be fundamentally restricted in size and scope. This crisis strained the fiscal limits of the United States to make good on bailout expectations. The next one will be bigger. Where will it come from? State and local government defaults? Defined benefit pension funds? Commercial real estate? A new “Asian bubble?” Default by Greece, Italy, or Ireland? Who knows?

We do know this: when the government no longer has the fiscal resources to bail out its financial institutions, the crisis will be much, much worse. Iceland can happen in the United States if we do not get this right. R