

## Focusing Bank Regulation<sup>1</sup>

Comments related to my short talk at the G7 Finance Meetings in Bari

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I have been spending some time in China. Big changes in China provide interesting reminders about basic economic principles that are harder to see in the US where changes are incremental and their impact can be hidden in the noise. China is a good reminder of what markets do well: introducing relatively modest levels of competition has given China a very large rate of growth. This is a useful reminder for the US that when we put in frictions and barriers to competition, as we have been doing consistently for many years, it will tend to slow growth. China is also a good reminder of what markets do badly: it seems the officials there decided that worrying about the environment is a luxury a developing country cannot afford, and absent regulation they have terrible pollution. This is a reminder that markets do poorly in handling externalities (external economies) such as pollution. If I sell you goods I manufacture, most of the people who are affected by my pollution are not party to the transaction (are external) and I do not have an incentive to treat them well. In the US, this is a reminder of the importance of the Environmental Protection Agency (EPA): recent news articles seem to focus on fanatics in the EPA attacking some ranchers for reasons that are hard to understand, but we need to keep in mind that around the time I was born, Lake Erie did not have any fish and the air was terrible in Pittsburgh, Akron, and many other places. Sometimes the political debate is posed in terms of “more regulation” versus “less regulation,” but we can see that we should think instead of regulating things that need to be regulated and making the market as free as possible for everything else.<sup>2</sup>

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<sup>1</sup>I am grateful for comments from Doug Diamond, Randy Kroszner, Pete Kyle, Jenn Schmich, Janet Yellen, and from participants in my short talk at the G7 meetings in Bari, Italy. I do not speak for any of them.

<sup>2</sup>Financial markets in China are interesting and complex and there are lessons to be learned there as well, but discussing them in detail would take me too far away from my main topic. Chinese financial markets have many of the problems we have in Western countries, for example, crony capitalism, high levels of debt, and a potentially unstable shadow banking sector, as well as some other interesting features, good and bad. It is a little hard to get a handle on what is happening there because of the opaqueness of the regulation.

Relatively unfettered financial markets are essential for growth, but we do need to have some regulation to prevent bank runs and consequent financial crises that can stall or even reverse growth. Having governmental deposit insurance removes the threat of bank runs (as in Diamond and Dybvig (1983)) and protects retail depositors, but gives poor incentives for risk-taking. Just as private debt includes covenants to remove incentives for firms to take on too much risk given that bondholders bear the downside risk, banks are subject to regulation to manage the amount of risk they take on given that the deposit insurance fund bears the downside risk. Without regulation of the risk, deposit insurance would be a very expensive free gift from government to the banks, and an invitation to take on too much risk because bank owners receive the upside but the government covers the downside.

The Basel Committee on Banking Supervision (Basel for short) is the main international body setting standards for bank regulation. The financial crisis revealed that Basel is not effective in making banks safe. If banks were regulated to be safe, problems in the real estate market in the US would not cause bank failures around the world. The growth of shadow banking before the crisis suggests banks are being constrained significantly from supplying the financial services we might like. Basel has also been unsuccessful in establishing a level playing field, because supplemental regulation is different in each country, more so after the crisis. Before the crisis, some countries left the regulation almost entirely to Basel capital adequacy rules, although they are not generally the countries whose banks came through the crisis in healthy condition. The basic problem with the Basel requirements is that they are easy to manipulate and do not give regulators the information they need to do a good job.<sup>3</sup> There are different ways of organizing bank regulation, and I want to talk about moving to an alternative system that can be used to focus bank regulation, and has the potential to make banking safer and also encourage growth by making banking less constrained overall.

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<sup>3</sup>Basel I is based on coarse accounting numbers that are easy to manipulate, while Basel II also has Value at Risk and other internal methods that seem even easier to manipulate. Basel III seems similar to Basel II but with stricter standards, moving towards more stability and less growth. I am definitely opposed to the feature of Basel II and III that allow banks to use their own models with a correction if we learn the models had problems, since when you learn about problems it is too late. Anecdotaly, the Basel rules are also costly to implement.

In my youth, bank regulation in the US was based primarily on bank examiners and Glass-Steagall.<sup>4</sup> Bank examiners looked at the banks books and loan documentation and talked to the loan officers and other employees to perform the task of assessing the safety and soundness of the bank and its practices. This is like the role of old-fashioned accountants of one hundred years ago, whose job was to create accounting statements that accurately represent the economics of the firm, rather the modern accountants, whose job is to produce accounting statements in compliance with Generally Accepted Accounting Principles (GAAP). Because of the site visits and access to documentation and employees, bank examiners had available much better information than the inputs to Basel standards.

Glass-Steagall separated commercial banking from investment banking. Some of the origins of Glass-Steagall were a little silly, and particular it is said that the populist politician Huey Long of Louisiana hated J. P. Morgan and loved the idea of breaking up his empire. More seriously, part of the purpose of Glass-Steagall was to help to protect the deposit insurance fund from all manners of risk-taking. A commercial bank taking retail deposits could have the benefits of deposit insurance in exchange for limiting business to a short list of activities the examiners have a reasonable shot at evaluating well. This is important because whenever there is financial innovation, practitioners are three steps ahead of the regulators because regulators only learn about innovations after development and implementation, at which point they must use reverse-engineering and economic analysis to try to evaluate the implications. I would like for us to have a regulatory policy that has this feature of Glass-Steagall that depository institutions that enjoy the benefits of deposit insurance in exchange for being restricted to a short list of activities the regulators have a fighting chance to understand well enough to regulate effectively. Regulation of money market funds is an example of the sort of arrangement I am talking about.<sup>5</sup> Money market mutual funds offer retail deposits and can only undertake a very narrow set of activities, mostly investing in short liquid assets that are quite safe. I do not have a strong opinion

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<sup>4</sup>To be fair, although this is my focus, the world was much more complicated. Regulation Q and deposit insurance were also important, as was the separate regulation of S&Ls, commercial banks, and credit unions and the different Federal and state regulators.

<sup>5</sup>Money market funds also show that this sort of arrangement is not a guarantee there will not be problems if the regulations are not structured optimally, perhaps in response to lobbying.

about what should be the short list of activities for the optimal regulation, but I offer some ideas about this later.

In the crisis, Lehmann was allowed to fail but AIG was not. Presumably this was because if AIG had failed, a lot of banks that had purchased loan insurance in the form of CDS's from AIG would have failed, too. AIG was poised to fail because AIG had not hedged these short CDS positions.<sup>6</sup> Under a modern Glass-Steagall restriction, banks would not be allowed to buy CDS's. Insurance companies are banks too, with retail customers and similar types of damage done if the assets funding future insurance payments lose their value. If we had a modern Glass-Steagall restriction on insurance companies, they might be restricted to traditional businesses (property-casualty and life/health), and in my view they have no business writing CDS's. A modern version of Glass-Steagall would likely have prevented the need to bail out AIG, without having to have specific foreknowledge of the form of the problems, since AIG would not have been allowed to trade CDS's and banks would not have been allowed to buy them.

There is a lot of discussion these days about linkages and systemic risk, the risk that some sort of chain-reaction will cause many firms to fail. We can say that AIG was not allowed to fail because it was systemically important but Lehmann was allowed to fail because it was less systemically important. We need to draw the line between firms (financial and non-financial) that are so important that they cannot be allowed to fail (and must be regulated to avoid too-big-to-fail bailouts) and firms that might do damage but can be allowed to fail (as a natural part of the evolution of the market, similar to a forest fire that cleans out the deadwood to leave room for the new shoots). Regulation is now based in part on identification of systemically-important financial institutions that are the important ones singled out for special regulation. As we saw in the AIG-Lehmann comparison, the particularly toxic systemic risk is the risk that hits the banks with insured retail deposits. The beauty of a modern Glass-Steagall restriction is that instead of trying to figure out all the complex connections in financial networks, we shut down the connections that are particularly toxic. If AIG had not have been permitted to trade

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<sup>6</sup>I am not sure why neglecting to mention these huge unhedged liabilities was not a violation of the requirement of Sarbanes-Oxley that the CEO and CFO of a firm need to sign for the economic accuracy of the accounting statement under threat of felony conviction. If the rule does not apply here, does it ever apply?

CDS's, and banks had not have been permitted to buy them, then there would have been no linkages between AIG and the banks, and AIG would not have been systemically important.

Hard questions remain on what are the optimal activities to be funded by deposits and insurance liabilities. Part of the issue is whether liquidity creation by banks is important for the economy. If not, having narrow banks that hold liquid riskless assets may be good enough, but imposing this is a gamble and could create chaos if there are not enough liquid riskless assets available. Outside of narrow banking, this determination of what banks are allowed to do should be made with an eye towards what is useful and not too difficult for regulators to evaluate. This rules out proprietary trading and probably most derivatives positions, but not the hedging of interest rate risk. Similarly, we would probably allow insurance companies to continue to offer GICs since they are useful and hedging them is a sort of asset-liability management that is not so different technically from hedging life insurance products. We would probably also allow insurance companies to continue to offer index-linked annuities, since they are useful to consumers, although valuing and hedging these instruments has presented some challenges to insurers and their regulators. I would like for depository institutions to be able to choose from a continuum of structures ranging from a narrow bank to a money market fund to a broader bank.<sup>7</sup>

Funding of mortgage lending presents a special challenge, and we can see many examples of it going wrong in the S&L crisis, the 2008 financial crisis, the failure of LTCM, and Orange County. This suggests to me that maybe mortgages should be financed by equity in a private firm. Perhaps depository institutions should be allowed to originate mortgages, but holdings should be limited to a modest pipeline, but as we have seen time and again, there can be incentive problems when originators do not hold the mortgages. For this reason, depository institutions should not be allowed to issue subprime mortgages. On the other side, insurance companies with retail customers probably should not be allowed to hold mortgage products. It might seem sensible to allow insurance companies to hold senior tranches with good credit

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<sup>7</sup>This sounds like a market test, since (for example) maybe we would have only narrow banks if that is efficient, but this is only a good test if the regulation is effective and efficient.

ratings, but I would argue against this given what we have learned about how little those credit ratings can mean.

To summarize, I would like to see a “modern version of Glass-Steagall” that restricts the lines of business for banks and insurance companies that deal with retail customers. In exchange for the implicit and explicit governmental guarantees, they must restrict their activities to a short list that regulators can easily manage. This rule will break the most toxic systemic linkages and make it possible to reduce regulation of other institutions without destroying stability. This approach would focus regulation where it is most important, for the protection of the deposit insurance fund and insurance company customers. This system would give better protection of financial institution safety where it is critical, and would encourage growth by giving more freedom for non-depository institutions.

Additional comments on other issues

1. Decimalization (trading in pennies instead of eighths) has made markets much more competitive. Trading in eighths was a kind of cartel enforcement for the institutions: if you want to undercut my price, you have to do it by an eighth, so my price can be way too high and competition will not fix it. There is a proposal to go backwards on this and trade in nickels instead of pennies, presumably backed by a big lobbying effort. This change would benefit the market makers and hurt investors (especially retail but also wholesale), and make the market overall less efficient.
2. Legislation has made repos and some other financial contracts exempt from bankruptcy law (sometimes referred to as superpriority). These exemptions are obviously convenient for counterparties, but they are overall destabilizing and tend to undermine existing priority structures and the good parts of bankruptcy law. In the lead-up to the crisis, these exemptions were part of the reason for the huge growth of the repo market.
3. Contingent convertible bonds (CoCos) are an interesting idea for easing the burden on regulators in a crisis. In a crisis, regulators often have insufficient capacity to close down institutions they are required by law

to close, and this creates perverse incentives (for example, encouraging distortions in the accounting rules during the S&L Crisis). Having a pre-packaged bankruptcy (possibly implemented by CoCos or other contingent capital) eases the burden (and possibly a lot of the loss) for the government by moving it into the private sector. However, we have to be careful how these are designed. If the conversion of the CoCo is based on market price of the banks stock, having CoCos might invite a speculative run on the stock. Even if the bank is fundamentally sound, speculators shorting the stock might profit if they can push the price down enough to trigger conversion. So, we have to be careful how these instruments are designed to avoid destabilization.

Conversion based on book values may have the same problems. The extent to which book values depend on market prices is complicated, due in part because the complexity of hedge accounting rules (see Dybvig, Liang, and Marshall (2013)). Markets often have good valuations, but prices cannot be relied upon in times of great liquidity problems. To the extent that book values are not affected much by market prices, they probably do not have current information we need for an effective CoCo. See Kyle (2017) for an interesting discussion of CoCo's and other forms of contingent collateral.

4. Insurance companies have benefited from extensive favorable regulation, largely through the fiction that hedging using insurance is intrinsically different from other financial hedging. There were huge efficiency gains in banking from eliminating barriers to competition from interstate banking restrictions, and the same should come from eliminating interstate restrictions in insurance. Maybe the first step would be the establishment of nationally chartered insurance companies that would be exempt from state-by-state restrictions.
5. Existing models of financial networks seem pretty primitive and not yet close to practice. There is also a big issue of having accurate data as inputs to these models, especially for new products.
6. I am skeptical of the usefulness of current stress tests: scenarios are arbitrary and distributional assumptions are hard to validate.

## References

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