Systemic Risk and the Role of the Federal Reserve

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Summary of Recommendations:

- **Give the Federal Reserve lead responsibility for monitoring the stability of the financial system.** The Fed should consult with other regulators and report to Congress at regular intervals on emerging risks, regulatory gaps, perverse incentives, and market forces that threaten to destabilize the system. It should recommend remedies, both statutory and administrative.

- **Give the Federal Reserve a means of controlling excessive leverage throughout the financial system.** The Fed would then have another tool, in addition to monetary policy, for controlling major asset price bubbles whose bursting could destabilize the financial system and cripple the real economy.

- **Discourage growth of large financial institutions:** (1) by increasing capital requirement steeply as institutions grow; (2) by creating authority to expedite the resolution of failing financial institutions (paid for by fees that rise with size).

- **Do not designate systemically important institutions (institutions deemed too big to fail) or give them their own regulator.** This will create a new class of GSE-like protected institutions.

- **Do not give major new regulatory responsibility to the Federal Reserve.** Allow the Fed to focus on monetary policy, the payments system, and its role as lender of last resort. Protect the Fed's independence, especially with respect to monetary policy-making.

- **Consolidate prudential regulation of financial institutions—**to increase efficiency and eliminate regulatory arbitrage. This could be done in stages. Stage one would consolidate bank regulation in a single independent agency, which would also have responsibility for regulating Financial Holding Companies (including those that do not own banks). This independent agency could report to a Board or Council of agencies, but should not be part of the Treasury or the Federal Reserve. Stage two might eventually pull other functional regulators under the same agency.

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Why Worry about Systemic Risk?

The current financial crisis is a clear example of systemic failure. It illustrates—once again—the vulnerability of market capitalism to spectacular boom and bust cycles that can devastate the real economy. After decades of complacency about the ability of markets to correct themselves and the resiliency of the economy to financial and other shocks, we have experienced another spectacle of irrational herd behavior producing rapid increases in asset values, lax lending standards and over-borrowing, excessive risk taking, and out-sized profits in the financial sector. The boom was followed by a dramatic crash that spread rapidly through world financial markets, causing plummeting asset values, rapid deleveraging, risk aversion, and huge losses. The crash dried up normal credit flows, destroyed confidence, and triggered a deep recession from which the economies of the world will recover slowly, painfully, and expensively.

Only a few observers of the financial sector predicted this crisis and hardly any anticipated its devastating consequences. Lack of understanding of the complex interconnectedness of the financial system worldwide masked the dangers inherent in the boom and exacerbated the subsequent crash. Reducing systemic risk requires identifying the flaws in the system and its regulation and repairing those flaws in ways that will reduce the chances of another such catastrophe.

When the financial system fails on a massive scale the losers are not just the wealthy investors and executives of financial firms who took excessive risks. They are average people here and around the world whose jobs, livelihoods, and life savings are destroyed and whose futures are ruined by the effect of financial collapse on the real economy. We owe it to them to identify and correct the weaknesses in the financial system that contributed to the crisis, so that we can avoid future serious recessions originating in the financial sector.

The repair has to avoid the danger of fighting the last war, since the next crisis might have different specific origins. It also has to balance the costs against the potential benefits. Regulation always comes with costs. There is a danger that regulation designed to reduce systemic risk will impair the efficiency of the financial system in allocating capital to productive uses and channeling credit to those who can use

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it best. Nevertheless, the costs of the current crisis are so huge that it will be well worth some efficiency loss to reduce the chances of another debacle as bad as this.

Approaches to Reducing Systemic Risk

The crisis was a financial "perfect storm," in which multiple causes reinforced each other. Different explanations of why the system failed—each with some validity—point to at least three different approaches to reducing systemic risk in the future.

- **The system failed because no one was in charge of spotting the risks that could bring it down.** This explanation suggests creating a Systemic Risk Monitor with broad responsibility for the whole financial system, charged with spotting perverse incentives, regulatory gaps and market pressures that might destabilize the system and taking steps to fix them. The Obama Administration (U.S. Treasury 2009) would give this responsibility to a Financial Services Oversight Council, chaired by the Treasury, but with its own staff. I believe the Federal Reserve, which already monitors the economy and the health of the banking sector is best suited to this task. The Fed, coordinating with a Council, should have explicit responsibility for spotting risks to system stability and reporting its findings and making recommendations to Congress and the public.

- **The system failed because expansive monetary policy fueled a housing price bubble and an explosion of risky investment in asset backed securities.**
  While low interest rates contributed to the recent bubble, tight monetary policy in the early part of the decade would have weakened the recovery, which might have made the cure worse than the disease. Monetary policy should be directed at containing inflation and maximizing employment in the whole economy. It is an ineffective tool for controlling asset price bubbles and should be supplemented by the power to change leverage ratios when an asset price bubble threatens the stability of the financial sector. Giving the Fed control of leverage throughout the

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system would enhance the effectiveness of monetary policy. The tool should be exercised in consultation with a Financial Services Oversight Council.

- **Expensive bailouts were necessary to prevent a meltdown, because the failure of large inter-connected financial firms would have created cascading failures.**
  Preventing a repetition of expensive bailouts suggests policies to restrain the growth of large interconnected financial firms—such as capital requirements that rise steeply with growth and interconnectedness—and expedited resolution authority for large financial firms (including non-banks) to lessen the impact of their failure on the rest of the system. The Obama Administration recommends making the Federal Reserve the consolidated prudential regulator of all systemically important financial institutions (Tier One Financial Holding Companies). This seems to me a double mistake. Identifying a list of specific institutions as too big to fail would create a new group of GSE-like institutions with implied claims on the federal taxpayer. Making the Fed the consolidated prudential regulator of big interconnected institutions would weaken its focus on monetary policy and the overall stability of the financial system and could threaten its independence.

The points are elaborated below.

The Case for a Systemic Risk Monitor

One reason that regulators failed to head off the recent crisis was the sources of risk had escalated, but no one was explicitly charged with spotting risks that could lead to system failure. In recent decades anti-regulatory ideology kept the United States from modernizing the financial regulatory system during a period of rapid change and intense financial innovation. In this period capital markets burgeoned and became far more important sources of credit than the more heavily regulated banking system. Highly leveraged private funds supplied large amounts of capital without having to expose their activities. Increasingly complex derivatives were traded in huge volumes mostly over the counter, not on regulated exchanges. Complexity and lack of transparency led to under-pricing of risk. The explosion of

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securitization weakened market discipline and created profit opportunities for inventing and marketing securities backed by assets of dubious quality that neither buyers nor sellers understood.

A fragmented regulatory structure retained from a previous era had both serious gaps and overlapping jurisdictions, which invited regulated institutions to choose the weakest regulator, but none of the multiple regulators was charged with monitoring the system as a whole. Many of the financial institutions whose lax lending standards created the bad mortgages that back today's toxic assets were either unregulated mortgage brokers or had chosen to be regulated by the weak Office of Thrift Supervision. With no one in charge of spotting gaps and weak links in the regulatory structure, the crisis caught authorities by surprise and forced them to improvise expensive interventions that had not been thought through in advance.

Moreover, perverse incentives had crept into the system with change and innovation. Lax lending standards in the mortgage sector should have been a danger sign—the Fed should have spotted the threat and failed to do so. More important, regulators should have focused attention on what was driving lenders to push dubious mortgages on people unlikely to repay. Perverse incentives were inherent in the originate-to-distribute model which left the originator with no incentive to examine the credit worthiness of the borrower. The problem was magnified as mortgage-backed securities were re-securitized into more complex instruments and sold again and again. (The Administration proposes fixing that system design flaw by requiring loan originators and securitizers to retain five percent of the risk of default. This seems to me too low, especially in a market boom, but it is a move in the right direction.)

A search for perverse incentives should have raised other questions about why securitization of loans—long thought to be a benign way of diffusing risk—became a monster that brought the world financial system to its knees. Was it partly because the immediate fees earned by creating and selling more and more complex collateralized debt instruments were so tempting that this market would have exploded even if the originators retained a significant portion of the risk? If so, we need to change the reward

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structure for this activity so that fees are paid over a long enough period to reflect actual experience with the securities being created.

Other examples of perverse incentives that contributed to the violence of the perfect financial storm include Structured Investment Vehicles (SIV's) that hid risks off balance sheets and had to be either jettisoned or brought back on balance sheet at great cost; incentives of rating agencies to produce excessively high ratings; and compensation structures of corporate executives that incented focus on short-term earnings at the expense of longer run profitability of the company.

The case for creating a Systemic Risk Monitor is that gaps in regulation and perverse incentives cannot be permanently corrected. Whatever new rules are adopted will become obsolete as financial innovation progresses and market participants find ways around the rules in the pursuit of profit. The Systemic Risk Monitor should be constantly searching for gaps, weak links and perverse incentives serious enough to threaten the system. It should make its views public and work with other regulators and Congress to mitigate the problem.

The Treasury makes the case for a regulator with a broad mandate to collect information from all financial institutions and "identify emerging risks." It proposes putting that responsibility in a Financial Services Oversight Council, chaired by the Treasury, with its own permanent expert staff. The Council seems likely to be cumbersome. Interagency councils are usually rife with turf battles and rarely get much done. It would be better to give the Fed clear responsibility for spotting emerging risks and trying to head them off before it has to pump trillions into the system to avert disaster. The Fed should make a periodic report to the Congress on the stability of the financial system and possible threats to it. The Fed should consult regularly with the Treasury and other regulators (perhaps in a Financial Services Oversight Council), but should have the lead responsibility. Spotting emerging risks would fit naturally with the Fed's efforts to monitor the state of the economy and the health of the financial sector in order to set and implement monetary policy and function as lender of last resort. Having explicit responsibility for monitoring systemic risk—and more information on which to base judgments would enhance its effectiveness as a central bank.

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Monetary Policy, Leverage, and Asset bubbles

John Taylor (Taylor 2009) and some other economists have argued that lax monetary policy caused the housing bubble that led to the financial crisis. While tighter monetary policy might well have been appropriate in 2002-4, there were counter arguments that persuaded the FOMC at the time to leave rates low. The recovery from the recession of 2001 was slow and apparently fragile. General inflation did not pose a serious threat. Raising rates in 2002-3 would have been regarded as a bizarre attempt to abort the economy's still slow recovery. At the time there was little understanding of the extent to which the highly leveraged financial superstructure was building on the collective delusion that U.S. housing prices could not fall. Even with hindsight, controlling leverage (along with stricter regulation of mortgage lending standards) would have been a more effective response to the housing bubble than raising interest rates. But regulators lacked the tools to control excessive leverage across the financial system.

The housing bubble followed the tech stock bubble of the 1990's, in which the Fed also took criticism for not raising rates to slow the booming equity markets. The FOMC at the time (of which I was a member), was seriously concerned about the surge in equity prices. But it would have had to raise rates dramatically to slow the market's upward momentum—a move that conditions in the general economy did not justify. Productivity growth was increasing, inflation was benign and responding to the Asian financial crisis argued for lowering rates, not raising them. In fact, we lowered rates in the fall of 1998 despite considerable concern about bubble-behavior in the equity markets.

Central banks have multiple objectives and often do not perceive that curbing asset price enthusiasm warrants monetary policy that may also increase unemployment or have other negative consequences. Having an additional tool to influence leverage (in place of or in coordination with interest rate changes) would increase their effectiveness in controlling asset bubbles.

Moreover, excess leverage can magnify the upswing in any market and turn the downswing into a rout. One aspect of the recent financial extravaganza that made it truly lethal was the over-leveraged superstructure of complex derivatives erected on the shaky foundation of America's housing prices. By

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itself, the housing boom and bust would have created distress in the residential construction, real estate, and mortgage lending sectors, as well as consumer durables and other housing related markets, but probably would not have tanked the economy. What did us in was the credit crunch that followed the collapse of the highly leveraged financial superstructure that pumped money into the housing sector and became a bloated monster.

One approach to controlling serious asset price bubbles fueled by leverage would be to give the Fed the responsibility for creating a Bubble Threat Warning System that would trigger changes in permissible leverage ratios across financial institutions.[2] The warnings would be public like hurricane or terrorist threat warnings. When the threat was high—as demonstrated by rapid price increases in an important class of assets without an underlying economic justification--the Fed would raise the threat level from, say, Three to Four or Yellow to Orange. Investors and financial institutions would be required to put in more of their own money or sell assets to meet the requirements. As the threat moderated, the Fed would reduce the warning level.[3]

The Fed already has the power to set margin requirements—the percentage of his own money that an investor is required to put up to buy a stock if he is borrowing the rest from his broker. Policy makers in the 1930s, seeking to avoid repetition of the stock price bubble that preceded the 1929 crash, perceived that much of the stock market bubble of the late 1920s had been financed with money borrowed on margin from broker dealers and that the Fed needed a tool distinct from monetary policy to control such borrowing in the future.

During the stock market bubble of the late 1990s, when I was at the Fed, we talked briefly about raising the margin requirement, but realized that the financial system had changed dramatically since the 1920s. Stock market investors in the 1990s had many sources of funds other than

[2] For a discussion of systemic risk metrics see, for example, Lo, Andrew W., *Hedge Funds, Systemic Risk, and the Financial Crisis of 2007-2008*: Written Testimony for the House Oversight Committee Hearing on Hedge Funds, November 13, 2008.
[3] For a discussion of policy tools related to controlling excess leverage see, for example, Committee on the Global Financial System, No 34, *The role of valuation and leverage in procyclicality*, April 2009.

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borrowing on margin. While raising the margin requirements would have been primarily symbolic, I believe with hindsight that we should have done it to show that we were worried about the bubble. In any case, the 1930's legislators were correct: monetary policy is often a poor instrument for counteracting asset price bubbles; the Fed needs an additional tool.

In the wake of the current crisis, financial system reformers have approached the leverage control problem in pieces, which is appropriate since financial institutions play diverse roles. However the Federal Reserve could be given the power to tie the system together so that various kinds of leverage ratios move in the same direction simultaneously as the threat changes. The tying together would not be easy. It would have to be very carefully crafted and would be unpopular with the financial institutions involved.

With respect to large commercial banks and other systemically important financial institutions, for example, there is an emerging consensus that higher capital ratios would have helped them weather the recent crisis, that capital requirements should be higher for larger, more interconnected institutions than for smaller, less interconnected ones, and that these requirements should rise as the systemic threat level (often associated with asset price bubbles) goes up.

With respect to hedge funds and other private investment funds, there is also an emerging consensus that they should be more transparent and that financial derivatives should be traded on regulated exchanges or at least cleared on clearinghouses. But such funds might also be subject to leverage limitations that would move with the perceived threat level and could disappear if the threat were low.

One could also tie asset securitization into this system. The percent of risk that the originator or securitizer was required to retain could vary with the perceived threat of an asset price bubble. This percentage could be low most of the time, but rise automatically if the Fed deemed the threat of a pervasive asset price bubble was high. One might even apply the system to rating agencies. In addition to requiring rating agencies to be more transparent about their methods and assumptions, they might be subjected to extra scrutiny or requirements when the bubble threat level was high.

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Systemically important institutions

Another explanation of why the crisis was so severe focuses on the perception—illustrated by Bear, Lehman, AIG and the fears of further instability that led up to the TARP—that many financial institutions had grown so big and interconnected that the failure of one of them could send other institutions and markets into a downward spiral. Under the fragmented regulatory structure the financial behemoths were not subject to strong consolidated regulation that might have required them to reduce their risk. The Fed was the consolidated regulator of bank holding companies, but it had limited powers and no authority over non-bank holding companies. Moreover, regulators of non-depository institutions did not have powers to resolve them quickly when such institutions got into trouble without resort to the possibly lengthy and disruptive bankruptcy process.

In this crisis, the perception, whether justified or not, that the failure of major financial institutions would lead to a cascading catastrophe that would devastate the real economy led to huge bailouts at taxpayer expense. There is strong consensus that this outcome must not be repeated. One approach is to discourage growth of very large institutions by making it expensive. Capital requirement could rise steeply with size and perhaps interconnectedness. Moreover, regulators could be empowered to resolve failing financial institutions in an orderly way at minimum cost to taxpayers. The costs could be paid by the institutions themselves with fee graduated according to size. Small institutions that posed no systemic risk would pay low fees, while large ones, whose resolution could be costly to the taxpayer, would pay a lot more. This graduation would further discourage growth.

There is a clearly a need for strong consolidated regulation of financial institutions—especially big, interconnected ones—to ensure that they are managing their risks prudently and prevent them from taking risks that endanger the whole the financial system, but there are better and worse ways of organizing this responsibility. The Obama Administration has proposed that there should be a consolidated prudential regulator of large interconnected financial institutions (Tier One Financial Holding Companies) and that this responsibility be given to the Federal Reserve. I think this is the wrong way to go.

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There are at least three reasons for questioning the wisdom of identifying a specific list of such institutions and giving them their own consolidated regulator and set of regulations. First, as the current crisis has amply illustrated, it is very difficult to identify in advance institutions that pose systemic risk. The regulatory system that failed us was based on the premise that commercial banks and thrift institutions that took deposits and made loans should be subject to prudential regulation because their deposits are insured by the federal government and they can borrow from the Federal Reserve if they get into trouble. But in this crisis, not only did regulation fail to prevent excessive risk-taking by depository institutions, especially thrifts, and their holding companies, but systemic threats came from other quarters. Bear Stearns and Lehman Brothers had no insured deposits and no claim on the resources of the Federal Reserve. Yet when they made stupid decisions and were on the edge of failure the authorities realized they were just as much a threat to the system as commercial banks and thrifts. So was the insurance giant, AIG, and, in an earlier decade, the large hedge fund, LTCM. In sum, it is hard to identify a systemically important institution until it is on the point of bringing the system down and then it may be too late.

Second, if we visibly cordon off the systemically important institutions and set stricter rules for them than for other financial institutions, we could drive risky behavior outside the strictly regulated cordon. The next systemic crisis will then likely come from outside the ring, as it came this time from outside the cordon of commercial banks.

Third, identifying systemically important institutions and giving them their own consolidated regulator tends to institutionalize 'Too Big to Fail' and create a new set of GSE-like institutions. There is a risk that the consolidated regulator will see its job as not allowing any of its charges to go down the tubes and be prepared to put taxpayer money at risk to prevent such failures. Hence, although I favor higher capital requirements and stricter regulations for large interconnected institutions, I would favor a continuum rather than a defined list of institutions with its own special regulator.

There is a strong case for reducing the number of regulators, for greater efficiency and consistency and to reduce the potential for regulatory arbitrage. It would make sense to create a new agency with two

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responsibilities. First, it would be the consolidated prudential regulator of financial holding companies, including bank holding companies, now regulated by the Fed, and other financial holding companies that do not own banks. The new agency would have a broader authority than the one the Administration proposes giving to the Fed, since it would not be limited to Tier One institutions. Second, the new agency would be the regulator of all banks under federal jurisdiction. It would take over the bank regulatory responsibilities of the Office of the Controller of the Currency (OCC), the Office of Thrift Supervision (OTS), the Federal Reserve, and work out a close relationship with the FDIC. At a later stage the new agency might subsume the responsibilities of the remaining functional regulators, including regulation of broker dealers and nationally chartered insurance companies. If these later moves took place the agency would be similar to the Financial Services Administration (FSA), but structured to function more decisively than the FSA did in the recent crisis.

However the regulatory boxes are arranged, it seems to me a mistake to give the Federal Reserve responsibility for consolidated prudential regulation of Tier One Financial Holding Companies, as proposed by the Obama Administration. The skills needed by an effective central bank are quite different from those needed to be an effective financial institution regulator. Moreover, the regulatory responsibility would likely grow with time, distract the Fed from its central banking functions, and invite political interference that would eventually threaten the independence of monetary policy.

Especially in recent decades, the Federal Reserve has been a successful and widely respected central bank. It has been led by a series of strong macro economists—Paul Volcker, Alan Greenspan, Ben Bernanke—who have been skillful at reading the ups and downs of the economy and steering a monetary policy course that contained inflation and fostered sustainable economic growth. It has played its role as banker to the banks and lender of last resort—including aggressive action with little used tools in the crisis of 2008-9. It has kept the payments system functioning even in crises such as 9/11, and worked effectively with other central banks to coordinate responses to credit crunches, especially the current one. Populist resentment of the Fed has faded as understanding of the importance of having an independent institution to contain inflation has grown. Although respect for the Fed's monetary policy has grown in recent years, its regulatory role has diminished. As regulator of Bank Holding Companies, it

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did not distinguish itself in the run up to the current crisis (nor did other regulators). It missed the threat posed by the deterioration of mortgage lending standards and the growth of complex derivatives.

If the Fed were to take on the role of consolidated prudential regulator of Tier One Financial Holding Companies, it would need strong, committed leadership with regulatory skills—lawyers, not economists. This is not a job for which you would look to a Volcker, Greenspan or Bernanke. Moreover, the regulatory responsibility would likely grow as it became clear that the number and type of systemically important institutions was increasing. My fear is that a bifurcated Fed would be less effective and less respected in monetary policy. Moreover, the concentration of that much power in an institution would rightly make the Congress nervous unless it exercised more oversight and accountability. The Congress would understandably seek to appropriate the Fed's budget and require more reporting and accounting. This is not necessarily bad, but it could result in more Congressional interference with monetary policy, which could threaten the Fed's effectiveness and credibility in containing inflation. We need the Federal Reserve to be a strong, independent central bank, which sets monetary policy in the interest of sustainable economic growth, acts as lender of last resort, and works with other central banks to stabilize the world economy. Giving the Fed the official responsibility of Systemic Risk Monitor (as described above) would make it a more effective central bank. However, adding on major new responsibilities to be the a consolidated regulator of Tier One Financial Holding Companies would require a different set of skills, would distract the Fed's attention from its central banking role, and ultimately threaten the independence of monetary policy.

Conclusion

I believe that we need an agency with specific responsibility for spotting regulatory gaps, perverse incentives, and building market pressures that could pose serious threats to the stability of the financial system. I favor giving the Federal Reserve clear responsibility for monitoring systemic risk, reporting

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periodically to Congress and coordinating with a Financial Services Oversight Council. I also favor giving the Fed new powers to control leverage across the system—again in coordination with the Council. I think it would be a mistake to create a special regulator for Tier One Financial Holding Companies, and I would certainly not give that responsibility to the Fed, lest it become a less effective and less independent central bank.

References

Taylor, John B, *Getting Off Track: How Government Actions and Interventions Caused, Prolonged, and Worsened the Financial Crisis,* Hoover Institution Press, 2009.

U.S. Department of the Treasury, June, 2009. *Financial Regulatory Reform A New Foundation: Rebuilding Financial Supervision and Regulation*. http://www.financialstability.gov/docs/regs/FinalReport_web.pdf

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