

# Systemic Risk and the Role of Government

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I appreciate the opportunity to speak to this conference on financial innovation and financial crises. I plan to address the question: what is the role of government in reducing systemic risk in the financial markets?

The ongoing financial crisis has given a new urgency to this question. Government officials are now proposing legislation to expand significantly the role of government in the financial sector and beyond. The heads of the United States Treasury Department, the Federal Reserve Board, the Federal Deposit Insurance Corporation (FDIC), and the Securities and Exchange Commission (SEC) have all proposed the creation of a “systemic risk regulator,” which could be a new stand-alone agency, or part of the Fed, or a new council of existing regulators. Such an agency could have the broad power to review, regulate, and prohibit the use of financial innovations—both instruments and institutions—of the kind discussed at this conference. And it could be granted new resolution powers over private firms.

Proposals for the future role of government in the financial markets depend critically on lessons learned about the role of government in the current financial crisis. Broadly speaking there are two views.

One view is that “the markets did it.” The crisis was due to forces emanating from the market economy which the government did not control, either because it did not have the power to do so, or because it chose not to. This view sees systemic risk as a market failure that can and must be dealt with by government actions and interventions; it naturally leads to proposals for increased government powers. Indeed, this view of the crisis is held by those government officials who are making such proposals.

The other view is that “the government did it.” The crisis was due more to forces emanating from government, and in the case of the United States, mainly the federal government. This is the view implied by my empirical research and that of others. According to this view federal government actions and interventions caused, prolonged, and worsened the

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<sup>1</sup> Professor of Economics, Senior Fellow at the Hoover Institution, Stanford University. This talk is based on my remarks at the Bipartisan Financial Regulatory Roundtable on “Systemic Risk” hosted by Congressmen Paul Kanjorski and Scott Garret on April 27, 2009 and has benefitted from the contributions by George Shultz, Allan Meltzer, Peter Fisher, Donald Kohn, James Hamilton, Myron Scholes, Darrell Duffie, Andrew Crockett, Michael Halloran, Richard Herring, and John Ciorciari to *The Road Ahead for the Fed*, edited by John Ciorciari and myself and forthcoming next month from Hoover Press, Stanford, California.

financial crisis. There is little evidence that these forces are abating, and indeed they may be getting worse. Hence, this view sees government as the more serious systemic risk in the financial system; it leads in a different direction—to proposals to limit the powers of government and the harm it can do.

### **Systemic Risk: Government versus the Market in the Financial Crisis**

To answer the question about the role of government and systemic risk, it is important therefore to examine carefully whether government or the market was the systemic factor in this crisis. By definition a systemic risk in the financial sector is a risk that impacts the entire financial system and real economy, through cascading, contagion, and chain-reaction effects. The triggering event for such a macro impact can come from the public sector—as when the central bank suddenly contracts liquidity, or from the financial markets—as when a large private firm fails, or externally—as when a natural disaster or terrorist attack shuts down the payments system.

Examples of systemic events prior to the current crisis were the default by the Russian government in 1998 which affected markets around the world leading the Federal Reserve to cut interest rates, and the 9/11 terrorist attacks which spread through the payments system in the United States by severely damaging financial firms intimately engaged in the system. It is important to emphasize that contagion or chain reactions are not automatic; they can be altered by changes in the rules of the game established by public policy. When Argentina defaulted on its debt in 2001, three years after the Russian default, there was no global contagion, even though the world economy was in worse shape, primarily because the rules of International Monetary Fund (IMF) support were better explained and anticipated.

What were the systemic events in the current crisis? Fortunately, there was no terrorist attack or natural disaster, so was it government forces or market forces?

Let us start by asking about the initial cause of the crisis. Debate is currently raging over this question and much has already been said on both sides. My finding, that it was government induced, is explained in my recent book.<sup>2</sup> An opposing argument has been put forth by Alan Greenspan<sup>3</sup> in the *Wall Street Journal*, which has since published a symposium on the subject. I argue that the primary initial cause was the excessive monetary ease by the Fed in which the federal funds rate was held very low in the 2002-2005 period, compared to what had worked well in the past two decades. Clearly such an action should be considered systemic in that the entire financial system and the macro economy are affected. My empirical work shows that

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<sup>2</sup> John B. Taylor *Getting Off Track: How Government Actions and Interventions Caused, Prolonged, and Worsened the Financial Crisis*, Hoover Press, Stanford, California, 2009

<sup>3</sup> Alan Greenspan, “The Fed Didn’t Cause the Housing Bubble” *Wall Street Journal*, March 11, 2009. The symposium was published on March 27, 2009

these low interest rates led to the acceleration of the housing boom and to the increased use of adjustable rate mortgages and other risk-increasing searches for yield. The boom then resulted in the bust, with delinquencies, foreclosures, and toxic assets on the balance sheet of financial institutions in the United States and other countries.

The alternative view is that international market forces beyond the power of the Fed were at work; Alan Greenspan argues that increased saving from abroad brought down world interest rates and thereby mortgage rates. But this argument must deal with the fact that the global saving rate was historically low, and that over 30 percent of housing was financed with adjustable rate mortgages at the time. A variant on “the market did it” theme is the argument now made by some top U.S. government officials that the problem was the U.S. current account deficit through which a low U.S. saving rate sucked in financing from abroad and drove down interest rates. However, this argument must deal with the fact the low interest rate policy of the Fed helped keep the U.S. saving rate down.

The questions about the role of government in the crisis go well beyond the initial impetus of monetary policy. The gigantic government sponsored enterprises, Fannie and Freddie, fueled the flames of the housing boom and encouraged risk taking—chain reaction style—as they supported the mortgage-backed securities market. Moreover these agencies were asked by government to purchase securities backed by higher risk mortgages. Here I have no disagreement with Alan Greenspan and others who tried to rein in these agencies at the time.

The systemic role of government reemerges after the crisis flared up in the summer of 2007. In my view, the increased turbulence in the money markets was misdiagnosed by policy makers as a liquidity problem rather than a counterparty risk problem. Hence, liquidity was pumped into the system and interest rates were slashed too rapidly which caused the dollar to depreciate and oil prices to skyrocket, a severe hit to the economy, especially the automobile sector.

Understanding the events surrounding the Lehman bankruptcy is particularly important for assessing the source of systemic risks. Many in government now argue that the cause of the panic in the fall of 2008 was the failure of the government to intervene and prevent the bankruptcy of Lehman. This view gives a rationale for continued extensive government intervention—starting the very next day with AIG—and to proposals for a more expansive resolution process, whether in the hands of a new systemic risk regulator or the FDIC. However, in my view the problem was not the failure to bail out Lehman Brothers but rather the failure of the government to articulate a clear predictable strategy for lending and intervening into a financial sector. This strategy could have been put forth in the weeks after the Bear Stearns rescue, but was not. Instead market participants were led to guess what the government would do in other similar situations. The best evidence for the lack of a strategy was the confusing roll out of the TARP plan, which, according to event studies of spreads in the interbank market, was a more likely reason for the panic than the failure to intervene with Lehman.

With the passage of time, evidence is accumulating that confusing and unpredictable government interventions made things worse, though we are still very close to the crisis and the issues are complex. There was noticeable movement of interest rate spreads in the interbank

market and the bank debt market around the time of the seizure by the FDIC of Washington Mutual and its sale to JP Morgan Chase. This was followed quickly by a sharp drop in the price of Wachovia's bank debt, its aborted FDIC-driven acquisition by Citigroup, and its eventual acquisition by Wells Fargo. The acquisition of Merrill Lynch by Bank of America is also coming under scrutiny. Some argue that the reason banks have been holding off and demanding a higher price for their toxic assets than the market is offering is the expectation that federal funds will be forthcoming to assist private purchases. If so, this may be an explanation for the freezing up of some markets and the long delay in the recovery of the credit markets.

Of course, throughout this period there were market problems of various sorts. Mortgages were originated without sufficient documentation or with overly optimistic underwriting assumptions, and then sold off in complex derivative securities which credit rating agencies rated too highly, certainly in retrospect. Individuals and institutions took highly risky positions either through a lack of diversification or excessive leverage ratios.

But mistakes occur in all markets and they do not normally become systemic. In each of these cases there was a tendency for government actions to convert non-systemic risks into systemic risks. The low interest rates led to rapidly rising housing prices with very low delinquency and foreclosure rates, which likely confused both underwriters and the rating agencies. The failure to regulate adequately entities that were supposed to be, and thought to be, regulated certainly encouraged the excesses. Risky conduits connected to regulated banks were allowed by regulators. The SEC was to regulate broker-dealers, but its skill base was in investor protection rather than prudential regulation. Similarly, the Office of Thrift Supervision (OTS) was not up to the job of regulating the complex financial products division of AIG. These regulatory gaps and overlapping responsibilities added to the problem and they need to be addressed in regulatory reform.

### **What Are the Big Systemic Risks Going Forward?**

Regardless of how the government versus the market debate is settled regarding the crisis so far, I think there is an even stronger case that the federal government is the bigger systemic risk going forward.

Consider first the enormous deficits and growing debt of the federal government. According to the Congressional Budget Office, the federal debt was 41 percent of GDP at the end of 2008 and it is projected to grow to 82 percent of GDP by 2019. CBO calculations also indicate that, with the average government borrowing rate rising above the growth rate of GDP in the future, the debt to GDP ratio will continue to rise on an unsustainable explosive path. The deficit in 2019 is expected to be \$1.2 trillion about the same as the most recent Administration budget for 2010; hence the gap between spending and tax revenues does not decline. What is the purpose of running trillion plus dollar deficits as far as the eye can see? There is certainly no stimulus effect from such deficits, and they put a very heavy burden on the not so distant future. This is a systemic risk because it will affect the entire financial system and the real economy.

To understand the size of the risk, consider what it would take to balance the budget in 2019? Income tax revenues are expected to be about \$2 trillion, so with a deficit of \$1.2 trillion, a 60 percent tax increase across the board would be required. Clearly this will not and should not happen. So how else can debt service payments be brought down as a share of GDP? Inflation will do it. But how much inflation? To bring the debt to GDP ratio down to the level at the end of 2008, it will take a doubling of the price level. That one hundred percent increase will make nominal GDP twice as high and thus cut the debt to GDP ratio in half, back to about 40 from around 80 percent. A hundred percent increase in the price level means about 10 percent inflation for 10 years. And it is unlikely that it will be smooth. More likely it will be like the 1970s with boom followed by bust with increasingly high inflation after each bust. This is not a forecast, because policy can change; rather it is an indication of the systemic risk that the government is now creating.

A second systemic risk is the Fed's balance sheet. Reserve balances at the Fed have increased 100 fold since last September, from \$8 billion to around \$800 billion, and with current plans to expand asset purchases it could rise to over \$3,000 billion by the end of this year. While Federal Reserve officials say that they will be able to sell the newly acquired assets at a sufficient rate to prevent these reserves from igniting inflation, they or their successors may face political difficulty in doing so. That raises doubts and therefore risks. The risk is systemic because of the economy-wide harm such an outcome would cause.

An example illustrates the risks in the current situation. According to a widely cited article<sup>4</sup> appearing in the *Financial Times* two weeks ago, the Fed's Taylor rule calculations show that the interest rate should be -5 percent. The article was based on a leaked report from the Fed. I have not seen the report and I do not know how the calculations were made, but they imply that the Fed may think it has plenty of time before positive interest rates and a reduction in reserve balances are required.

But the calculations are way off. The Taylor rule specifically says that the interest rate should be one and a half times the inflation rate plus a half times the GDP gap plus one. Whether you average a broad based GDP inflation index over the past year, as I originally suggested, or whether you use core inflation rates, the inflation rate is not less than 1 percent at this time; it is closer to 2 percent, but let's suppose the Fed takes it as 1 percent. The GDP gap seems to be around minus 4 percent. Now, if we put those numbers into the rule, we get  $1\frac{1}{2}$  times 1, plus  $\frac{1}{2}$  times -4, plus 1, which equals .5 percent not -5 percent. The Fed's calculation reported in the *Financial Times* has both the sign and the decimal point wrong. In contrast my calculation implies that we may not have as much time before the Fed has to remove excess reserves and raise the rate. We don't know what will happen in the future, but there is a risk here and it is a systemic risk.

A third systemic risk may be most important, but it is quite complex and I can only touch on it in these remarks. In my view the increasing number of interventions by the federal government into the operations of private business firms represents a systemic risk. The interventions are also becoming more intrusive and seemingly capricious whether they are about

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<sup>4</sup> Krishna Guha, "Fed Study Puts Ideal Interest Rate At -5%," *Financial Times*, April 27 2009

employee compensation, the priority of debt holders, or the CEO. Many of these actions reverse previous government decisions, and they involve ex post changes in contracts or unusual interpretations of the law. We risk losing the most important ingredient to the success of our economy since America's founding—the rule of law, which will certainly be systemic.

### **Does Government have a Role in Reducing Systemic risk?**

This review of the past and the present indicates that the answer to this question is a clear “Yes.” But it is not the role implied in recent proposals to establish a systemic stability regulator or a new powerful resolution authority. At the present time government actions and intervention have far more potential for causing systemic risk than does the market.

#### ***First Rein in Government-Induced Systemic Risk***

Reining in this risk should be the highest priority, higher than creating a new systemic risk regulator. The emphasis should be on proposals to stop the systemically risky budget deficits projected as far as the eye can see, to exit from the extraordinary monetary policy actions, and to end the bailout mentality that is taking the federal government further and further into the operations of businesses and threatens the rule of law.

New legislation could then focus on preventing the monetary actions of the kind that led us into this crisis—perhaps a requirement that the Fed focus on the instruments of monetary policy and be accountable and transparent about it. As Peter Fisher<sup>5</sup> argues, first state the objective of the monetary policy instruments—including each of the new instruments and facilities; second say how they will be evaluated to determine whether the policy is meeting the objective; third report the results of evaluation.

More generally, government should set clear rules of the game, stop changing them during the game, and enforce them. The rules do not have to be perfect, but the rule of law is essential. To exit from the bailout mentality it will be necessary to let some firms fail. One way to wean the system from bailout presumptions would be for the government to try to stop chain reactions by helping the innocent bystander rather by rescuing the one who gambled and lost. This is a principle that was used to end the bailout mentality of the IMF in 2003 and it helped stop the bout of emerging market crises that began in the 1990s. It could be applied here.

#### ***Should There Be a Systemic Risk Regulator?***

Once this is done, efforts to reform the regulatory system are in order. What are reasonable objectives and tasks for systemic risk regulation? Based on recent experience, closing present and future regulatory gaps and de-conflicting overlapping and ambiguous responsibilities would help reduce systemic risk, especially as new instruments and institutions

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<sup>5</sup> Peter Fisher, “The Market View: Incentives Matter,” in *The Road Ahead for the Fed*, John D. Ciorciari and John B. Taylor (Eds) , Hoover Press, Stanford California, 2009

evolve. In addition, systemic risk might be reduced if disaggregated information were aggregated and passed back to the private sector as Myron Scholes suggests.<sup>6</sup> Examining new instruments, looking for new risks and gaps, and making recommendations for changes in regulations by using the ideas from conferences like this one would also help.

But none of these tasks and objectives requires a new systemic risk regulator. Indeed, such a new entity—or even proposals for such an entity—might serve as an excuse for existing regulatory agencies to pass off responsibilities for past and future regulatory failures. And if it were given its own regulatory powers they would be very difficult to limit, especially if the regulator could define what was systemic and what was not. The experience during the panic last fall is not reassuring that such an agency could resolve private institutions without causing more systemic risks than it was trying to reduce.

I suggest that the tasks I mention here be done within the existing President’s Working Group on Financial Markets suitably expanded with the existing regulatory agencies and with funding to support sufficient staff at the Treasury to take on the tasks. Locating a systemic risk regulator at the Fed is not a good idea because it would interfere with its essential monetary policy objectives as explained clearly by Andrew Crockett.<sup>7</sup>

But we should not expect too much. It is clear that a systemic risk regulator would not have prevented the current crisis. It would not have prevented the very low interest rates or the other government actions I have described in this talk. Nor would it be a force to reduce the major existing systemic risks, including the exploding federal debt, the Fed’s balance sheet, and the current bailout mentality.

## **Conclusion**

In these remarks I have offered the view that the federal government is the biggest source of systemic risk in the financial markets. I have given plenty of examples from the ongoing financial crisis, and I have pointed out several current government-induced systemic risks. Of course, systemic risks can also come from private markets and from external events, but formulating policy proposals and drafting legislation without considering these government risks is a mistake. At the least a balanced assessment should take them into account, and that has been my objective here.

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<sup>6</sup> Myron Scholes, “Market-Based Mechanisms to Reduce Systemic Risk” in *The Road Ahead for the Fed*, John D. Ciorciari and John B. Taylor (Eds.), Hoover Press, Stanford, California, 2009

<sup>7</sup> Crockett, Andrew (2009), “Should the Federal Reserve Be a Systemic Stability Regulator?” in *The Road Ahead for the Fed*, John D. Ciorciari and John B. Taylor (Eds.), Hoover Press, Stanford, California.