

Government Actions and Interventions

More harm than good?

BY JOHN B. TAYLOR

IN THE SUMMER OF 2007 at the annual Jackson Hole international conference for central bankers and financial officials I provided evidence that excessively low interest rates set by the United States Federal Reserve in 2003-2005 was a primary cause of the housing boom and subsequent housing bust which eventually led to the financial crisis. The article by Carmen Reinhart in this issue delves deeper into this argument. Here I review evidence that other government actions taken in 2007 and 2008 unfortunately prolonged and worsened the crisis.

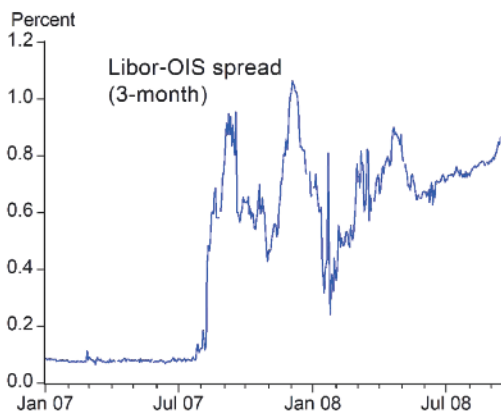
Prolonging the crisis

THE FINANCIAL CRISIS became acute on August 9 and 10, 2007 when money market interest rates rose dramatically. Figure 1 illustrates this, using the spread between the three-month Libor and the three-month Overnight Index Swap (OIS). The OIS is a measure of what the markets expect the federal funds rate to be compared to the three month Libor over the three-month period. Subtracting OIS from Libor effectively controls for expectations effects which are a factor in all term loans, including the three-month Libor. The difference between Libor and OIS is thus due to factors other than interest rate expectations, such as risk and liquidity effects.



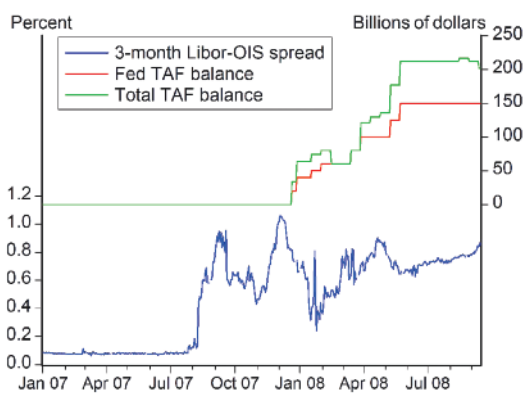
Community activists demonstrate at the Federal Bankruptcy Courthouse in Santa Barbara, California.

FIGURE 1: THE LIBOR–OIS SPREAD DURING THE FIRST YEAR OF THE CRISIS



Source: “A Black Swan in the Money Market,” (with John C. Williams), *American Economic Journal: Macroeconomics*, Vol. 1, No. 1, January 2009, pp. 58-83.

FIGURE 3: THE TERM AUCTION FACILITY HAD LITTLE IMPACT ON THE SPREAD



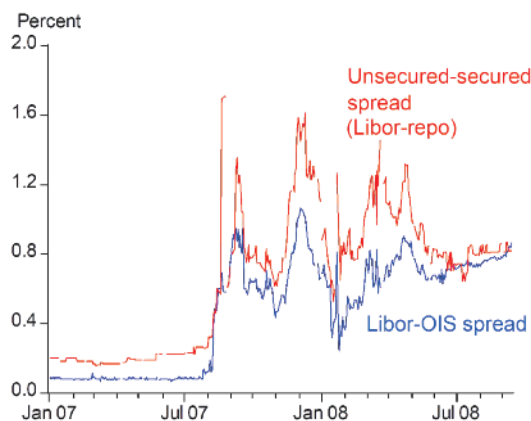
Source: “A Black Swan in the Money Market,” (with John C. Williams), *American Economic Journal: Macroeconomics*, Vol. 1, No. 1, January 2009, pp. 58-83.

Looking at the lower left of Figure 1 you see that on August 9th and 10th of 2007 this spread jumped to unusually high levels. Bringing this spread down was a major objective of monetary policy from the start of the crisis.

Diagnosing the problem: Liquidity or counterparty risk?

DIAGNOSING THE REASON for the increased spreads was essential to determining the appropriate policy response. If it was a liquidity problem then providing more liquidity by making discount window borrowing easier or opening new windows or facilities would be appropriate. But if the issue was counterparty risk then a direct focus on the quality and transparency of the bank’s balance sheets would be appropriate.

FIGURE 2: COUNTERPARTY RISK EXPLAINED MOST OF THE VARIATION



Source: Author’s calculations based on research [3] in the references.

To assess the issue empirically, one can look at the difference between interest rates on unsecured and secured interbank loans of the same maturity. Examples of secured loans are government-backed Repos between banks. By subtracting the interest rate on Repos from Libor, you get a measure of risk.

Figure 2 shows the high correlation between the unsecured-secured spread and the Libor-OIS spread. There seemed to be little role for liquidity. These results suggest, therefore, that the market turmoil in the interbank market was not a liquidity problem of the kind that could be alleviated simply by central bank liquidity tools. Rather it was inherently a counterparty risk issue.

But this was not the diagnosis that drove economic policy during this period. Rather the early interventions focused on liquidity. As evidence I provide three examples of interventions that prolonged the crisis either because they did not address the problem or because they had unintended consequences.

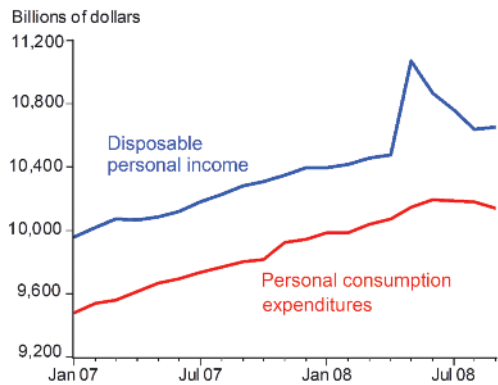
Term Auction Facility

TO MAKE IT EASIER FOR BANKS to borrow from the Fed, the Term Auction Facility (TAF) was introduced in December 2007. Similar facilities were set up at other central banks. The main aim of the TAF was to reduce the spreads in the money markets and thereby increase the flow of credit and lower interest rates. Figure 3 shows the amount of funds taken up (on the right scale) along with Libor and OIS spread (on the left scale). Clearly, the TAF did not make much difference.

Temporary cash infusions through the 2008 Fiscal Stimulus

ANOTHER EARLY POLICY RESPONSE was the Economic Stimulus Act of 2008 passed in February, which sent cash totaling over \$100 billion to individuals and families in the

FIGURE 4: THE REBATES INCREASED INCOME, BUT NOT CONSUMPTION. (MONTHLY DATA, SEASONALLY ADJUSTED, ANNUAL RATES).



Source: Author's calculations based on research [4] in the references.

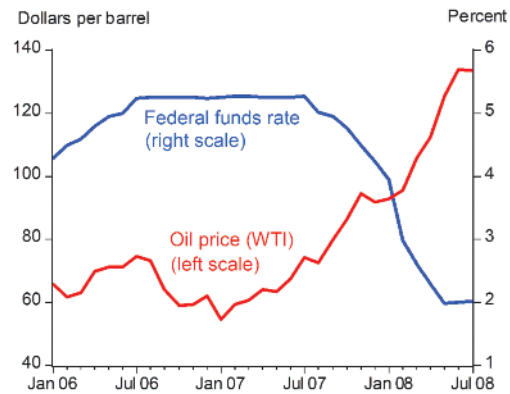
United States so they would have more to spend and thus jump-start consumption and the economy. Most of the checks were sent in May, June, and July. However, people spent little if anything of the temporary rebate, and consumption was not jump-started. The evidence is in Figure 4. The top line shows how personal disposable income jumped at the time of the rebate. The lower line shows that personal consumption expenditures did not increase.

The initial sharp cuts in interest rates through April 2008

A THIRD POLICY RESPONSE was the sharp reduction in the federal funds rate. The federal funds rate target went from 5.25 percent when the crisis began, to 2 percent in April 2008. The so-called Taylor rule also called for a reduction in the interest rate during this early period, but not as sharp as the federal funds rate. The most noticeable effects of the cut in the federal funds rate, were the sharp depreciation of the dollar and the large rise in oil prices. During the first year of the financial crisis oil prices doubled from about \$70 per barrel in August 2007 to over \$140 in July 2008, before plummeting back down as expectations of world economic growth declined sharply. Figure 5 shows the close correlation between the federal funds rate and the price of oil during this period using monthly average data. The chart ends before the global slump in demand became evident and oil prices fell back.

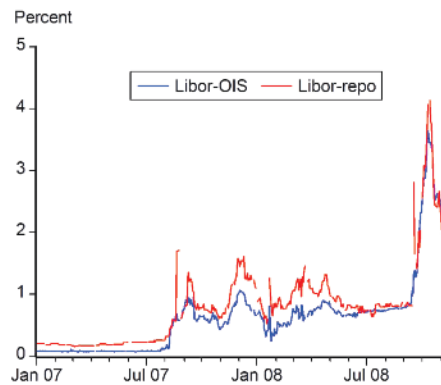
Clearly this bout of high oil prices hit the economy hard as gasoline prices skyrocketed and automobile sales plummeted in the spring and summer of 2008. When it became clear in the fall of 2008 that the world economy was turning down sharply, oil prices then returned to the \$60-\$70 range. But by this time the damage caused by the high oil prices had been done.

FIGURE 5: THE SHARP CUT IN INTEREST RATES WAS ACCOMPANIED BY A RAPID INCREASE IN OIL PRICES THROUGH THE FIRST YEAR OF THE CRISIS. (LAST OBSERVATION IS JULY 2008)



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

FIGURE 6: EVIDENCE OF THE CRISIS WORSENING DRAMATICALLY FOURTEEN MONTHS AFTER IT BEGAN



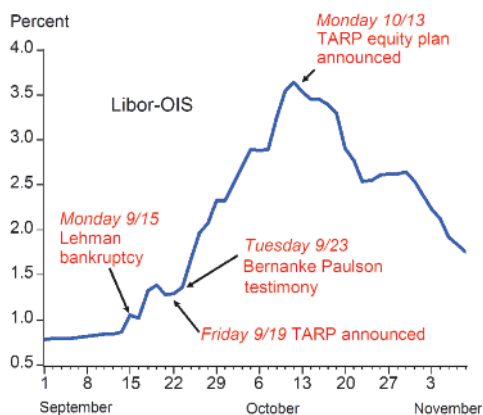
Source: *Getting Off Track: How Government Actions and Interventions Caused, Prolonged, and Worsened the Financial Crisis*, Hoover Institution Press, Stanford, 2009.

The crisis worsens in the panic of the fall of 2008

FIGURE 6 SHOWS how dramatically the financial crisis worsened in October 2008. Many commentators have argued that the reason for the worsening of the crisis was the U.S. government's decision not to intervene to prevent the Lehman Brothers bankruptcy on the weekend of September 13 and 14. The timing of events suggests that the answer is more complicated than this and, in my view, lies elsewhere.

Figure 7 focuses on a few key events from September 1 through mid-October. Since then conditions have improved as the graph illustrates. But the question here is what led to the worsened conditions. You can see that the spread moved a bit on September 15th, which is the Monday after the weekend

FIGURE 7: EVENT STUDY OF THE DRAMATIC WORSENING OF THE CRISIS



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

decision not to intervene in Lehman Brothers. It then dropped back down a little on September 16 around the time of the AIG intervention. While the spread did rise during the week following the Lehman Brothers decision, it was not far out of line with the events of the previous year.

On Friday of that week the Treasury announced that it would propose a large rescue package. The package was put together over the weekend and on Tuesday September 23, Federal Reserve Board Chairman Ben Bernanke and Treasury Secretary Henry Paulson testified in Congress that the package would be \$700 billion. They provided a two and a half page draft of the legislation, specifying little oversight and few restrictions on its use. They were questioned intensely and the public reaction was quite negative, judging by the large volume of critical mail received by many members of the United States Congress. As shown in Figure 7 it was following this testimony that one really begins to see the crises deepening.

The main message in Figure 7 is that it is questionable to identify the decisions of the weekend of September 13 and 14 as having increased the severity of the crisis. Not until more than a week later did conditions deteriorate. Moreover, it is plausible that events around September 23 actually drove the market, including the realization by the public that the intervention plan had not been fully thought through and

that conditions were much worse than many had been led to believe. At a minimum, the rollout of the TARP revealed a great deal of uncertainty about what the government would do to aid financial institutions, and under what circumstances, and thereby added to business and investment decisions at that time. Such uncertainty would have driven up risk spreads in the interbank market and elsewhere.

This lack of predictability about Treasury-Fed intervention policy and recognition of the harm it could do to markets likely increased in the fall of 2008 when the underlying uncertainty was revealed for all to see. What was the rationale for intervening with Bear Stearns, and then not with Lehman, and then again with AIG? What would guide the operations of the TARP?

Worries about the lack of clarity were raised in many quarters. At a conference held at Stanford in July to address the new interventions, I argued that the U.S. Treasury and the Fed urgently needed to develop a new framework for exceptional access to government support for financial institutions. The more policy makers could articulate the rationale and the procedures the better.

Conclusion

IN THIS ARTICLE I have provided empirical evidence that government actions and interventions prolonged and worsened the financial crisis. They prolonged it by misdiagnosing the problems in the bank credit markets and thereby responding inappropriately by focusing on liquidity rather than risk. They made it worse by providing support for certain financial institutions and their creditors but not others in an ad hoc way without a clear and understandable framework. While other factors were certainly at play, these government actions should be first on the list of reasons for what went wrong.

What are the implications of this analysis? Most important is that government fiscal and monetary policy interventions, however well-intentioned, can make things worse if they are based on faulty diagnosis of the problem and do not follow clear predictable principles. Establishing a set of principles to follow will help prevent such misguided actions and interventions.

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This essay is drawn from John B. Taylor, *Getting Off Track: How Government Actions Caused, Prolonged, and Worsened the Financial Crisis*, Hoover Press, Stanford, California, 2009.



Artist Laura Gilbert's "The Bailout Bill." Gilbert created an edition of 5000 copies to give away.