

State of the World Economy, 2011-2012:

Whither or Wither?

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On November 18, 2010, the U.S.-Korea Institute at SAIS and the Korea Institute of Finance, sponsored by the Asian Studies Program at SAIS and the *JoongAng Ilbo*, hosted the one-day conference, "State of the World Economy, 2011-2012: Whither or Wither?" at the Paul H. Nitze School of Advanced International Studies (SAIS) in Washington, D.C.

This volume contains the speeches and papers that were presented that day and subsequently further refined by the authors to reflect discussions during the conference.



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*The State of the U.S. Economy**

John B. Taylor

Mary and Robert Raymond Professor of Economics, Stanford University and
George P. Shultz Senior Fellow in Economics at the Hoover Institution

It has been more than three years since the economic crisis first flared up in August 2007, and the U.S. economy is still operating far below its potential. Unemployment is high at 9.8% (November 2010). Economic growth is low at 2.5% (third quarter of 2010). Hopes for a strong economic recovery were high after the fall 2008 panic phase of the crisis, but these hopes were dashed as the recovery fizzled and economic growth fell sharply this year compared to last year.

In my view, the outlook for next few years will be subpar growth and high unemployment because of the drag of uncertainty about economic policy, including the risks and burden of the growing government debt. In these remarks I explain this view. I focus on the overall response of fiscal policy and monetary policy to the crisis. I draw on and summarize the results of a research project (listed in the appendix) in which I have been engaged at Stanford University during the past three years. The main purpose is to assess the future outlook and draw policy lessons for the future.

Fiscal Policy Responses

The federal fiscal policy response to the economic crisis mainly took the form of discretionary short-term stimulus packages. In my view these did not stimulate the economy much, if at all. Now, rather than leaving the economy in a stronger growth position, the interventions have weakened the economy and left it with the burdens of increased debt and higher government spending as well as concerns about future tax increases. While the cash-for-clunkers and the first-time home buyers programs moved purchases forward by a few months, they did not increase economic growth on a more permanent basis.

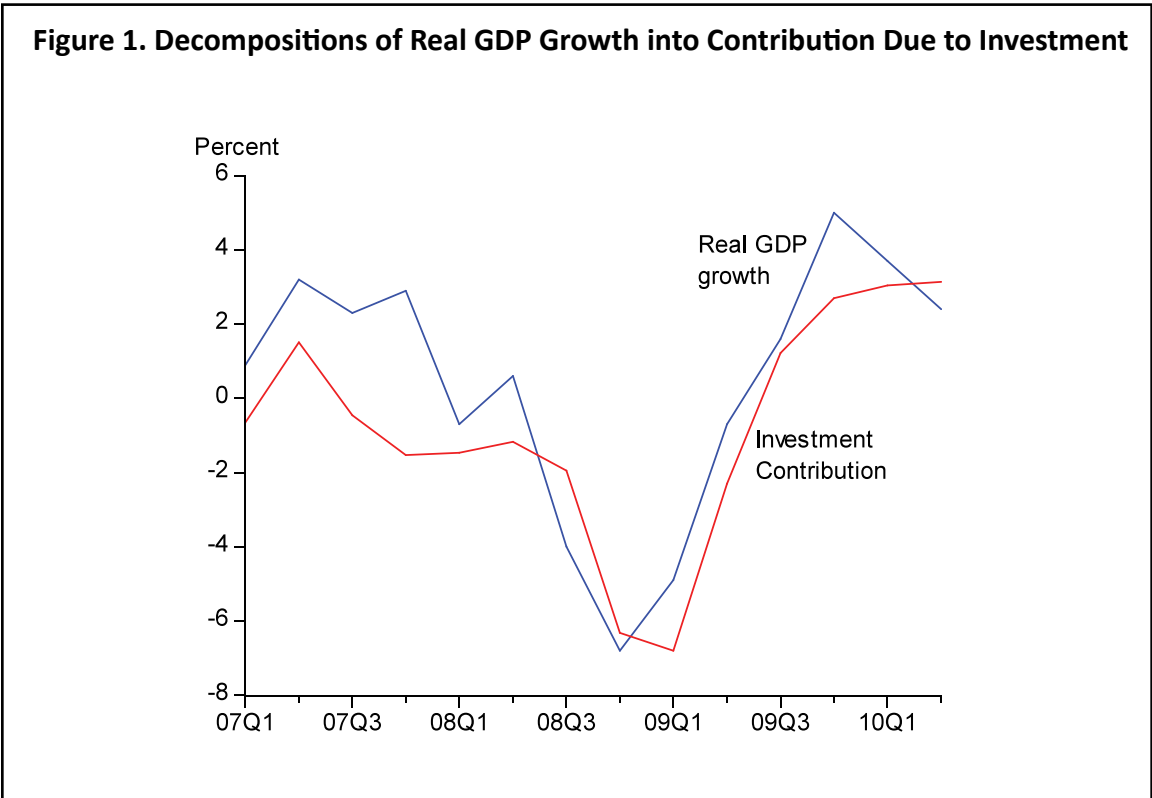
I base my conclusions on empirical research that examines the direct impacts of different components of the stimulus packages as well as on basic economic theory, including the theory incorporated in modern econometric models. First, consider the American Recovery and Reinvestment Act of 2009. One component of this stimulus package focused on temporarily increasing people's disposable income by sending checks, temporarily increasing tax credits, and correspondingly reducing withholding. The objective of this part of the package was to jump-start consumption demand and thereby jump-start the economy. Aggregate disposable personal income did jump at the start of the stimulus; however, aggregate personal consumption expenditures did not increase by much, if at all, around that time. If you examine data at the aggregate level, the stimulus package had no noticeable effect on consumption. The same was true of the fiscal policy response passed in February 2008, in which checks were also sent to people on a one-time basis. Disposable income rose, but there was no noticeable increase in

personal consumption expenditures. It is important to emphasize that this is what well-known economic principles—in particular the permanent income theory and the life cycle theory of consumption—would predict from such temporary payments. In other words, the small impact of the policy response is exactly what one would have expected based on economic reasoning.

Next, consider the government purchases part of the stimulus package of 2009, also designed to stimulate economic growth. An examination of what actually happened indicates that such purchases had little to do with the recovery in economic activity, and they have not prevented the recent slowdown. Data from the Bureau of Economic Analysis provide the evidence: changes in government purchases did not correlate with the changes in economic growth from recession to recovery. On the contrary, most of the recovery last year has been due to investment—including inventory investment—and has little to do with the discretionary stimulus package.

Figures 1 and 2 illustrate the story in simple graphical terms. Figure 1 shows the growth rate of real GDP and the percentage contribution to that growth from private investment, including inventory investment. Note that real GDP growth declined in the recession, then began to increase in the recovery, and now has slowed down again. Note also that the changes in investment are closely correlated with these ups and down in the economy.

Figure 2 shows the contribution of both non-defense federal government purchases and state-local government purchases of goods and service to the growth rate of GDP. Contributions from defense spending are not shown because they were not part of the stimulus package.

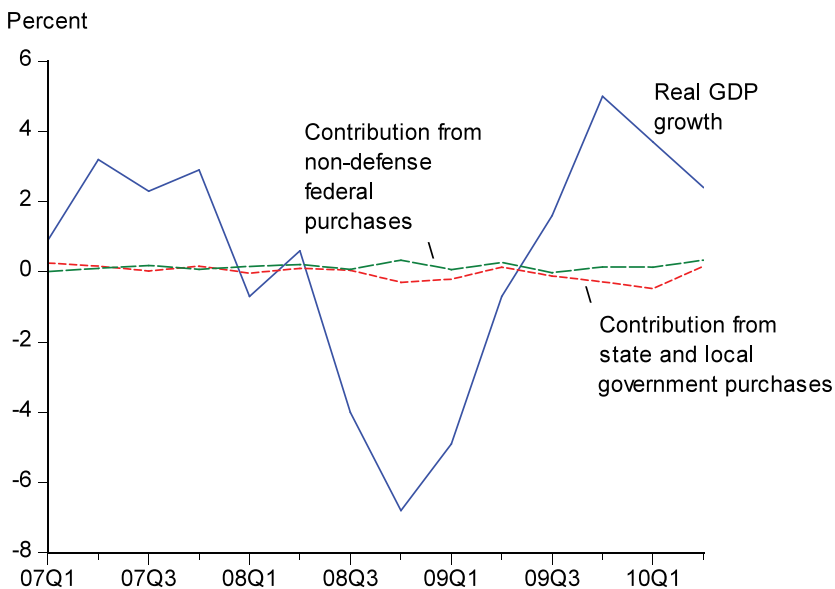


Note that these government purchases have little to do with the ups and downs of GDP during this period. If the increase in government spending in the stimulus package actually increased real GDP growth and created jobs, one would likely have seen a more noticeable effect in the decompositions. The impact of government purchases is particularly small in comparison with investment. Changes in consumption and net exports (not shown here) are also more significant than the changes in government purchases, but the main story is investment.

How can the contributions of the change in government purchases be so small given that the stimulus was \$862 billion? One reason is that the part of the package explicitly devoted to federal purchases of goods and services was quite small. In fact, of the \$862 billion package, the amount of government purchases at the federal level was \$7.9 billion in 2009 and \$10.5 billion in the first half of 2010 according to the Bureau of Economic Analysis. Focusing on infrastructure spending (gross investment) at the federal level, the amount was even smaller: \$0.9 billion in 2009 and \$1.5 billion in the first two quarters of 2010. Thus, of the total \$862 billion, only 0.3% has been on federal infrastructure projects, as illustrated by the small slice of the bars in figure 3.

A larger amount of government purchases might have been expected at the state and local level, and indeed grants by the federal government to the states were a large part of the stimulus package of 2009. However, uncertain timing by which state governments spend federal grant money, as well as the fungible nature of grant funds, makes it difficult to translate grants into purchases. In fact, both government gross investment (infrastructure) and government consumption purchases at the state and local level have declined since the economic crisis began. Moreover, according to aggregate statistics they show little positive association with the

Figure 2. Contribution due to Government Purchases



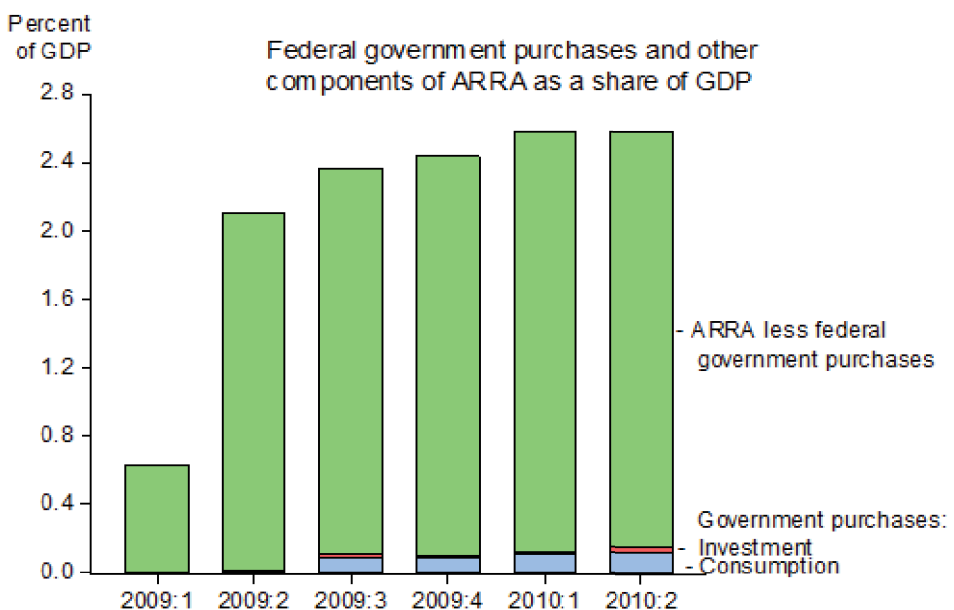
federal grants to state and local government once one controls for the state of the economy and other sources of receipts. In any case, there is little evidence that on balance the stimulus packages increased government purchases at the state and local level.

One could posit other counterfactuals in which state and local government spending might have declined by a larger amount without the stimulus, but more research is needed to determine what would have happened in the counterfactual of “no discretionary stimulus.” In the meantime, these data, at the very least, suggest that the recovery and the slowdown have been due to changes in investment, not government purchases.

Another approach to evaluate the impact of the response of policy is to use econometric model simulations. However, in most attempts to evaluate policy using models, the results are built into the models, and were built in well before the stimulus package was enacted. Frequently the same economic models that said, a year and half ago, that the impact would be large are now used to show that the impact is in fact large. In other words, these assessments are not based on the actual experience with the stimulus.

For example, economists John Cogan, Volker Wieland, Tobias Cwik, and I raised questions about the robustness of estimates of the impact of the stimulus package soon after they were released by the administration (in a white paper by Christina Romer and Jared Bernstein) in January 2009. Their estimates were based on models that were much different from more modern models that take account of expectations of the future, including increases in debt and future taxes. We found the economic impacts to be much smaller using the more forward-

Figure 3. Federal Government Purchases and Other Components of ARRA as a Share of GDP



looking models than with the older Keynesian models. Since then, many technical papers have been written on this subject, and in my view the consensus is that the impacts of the stimulus package are much smaller than originally reported by the administration.

Another example is the recent working paper by economists Alan Blinder and Mark Zandi on the impact of federal stimulus policies. In this case, the policies are run through a model and the paper reports what the model says would happen. It does not look at what actually happened, and it does not look at other models. I explained the defects with this type of exercise in testimony at a July 1, 2010, House Budget Committee hearing. I showed that the results are entirely dependent on the model: old Keynesian models show large effects and more modern models show smaller effects.

Other evidence from models comes from an International Monetary Fund study that reports estimates of government spending impacts that are much smaller than those previously reported by the administration. The IMF uses a very large complex model called the Global Integrated Monetary and Fiscal (GIMF) Model. It shows that a 1% increase in government purchases (as a share of GDP) increases GDP by a maximum of 0.7% and then fades out rapidly. This means that government spending crowds out other components of GDP (investment, consumption, net exports) immediately and by a large amount. The IMF estimate is much less than the impact reported in the Romer and Bernstein paper.

Monetary Policy Responses

In evaluating the monetary policy response to the crisis, I think it is useful to divide the crisis into three periods: 1) the period from the flare-up of the crisis in August 2007 to the panic in late September 2008; 2) the period of the panic from late September through October 2008; and 3) the period after the panic.

The three periods are illustrated in figure 4, which shows a frequently used measure of financial stress in the interbank market: the interest rate spread between the three-month interbank lending rate (Libor) and the expected federal funds rate over the same three-month period (OIS). Note that the beginning of the economic crisis is quite evident in August 2007 and that the panic begins in late September 2008 and reaches its peak in October 2008.

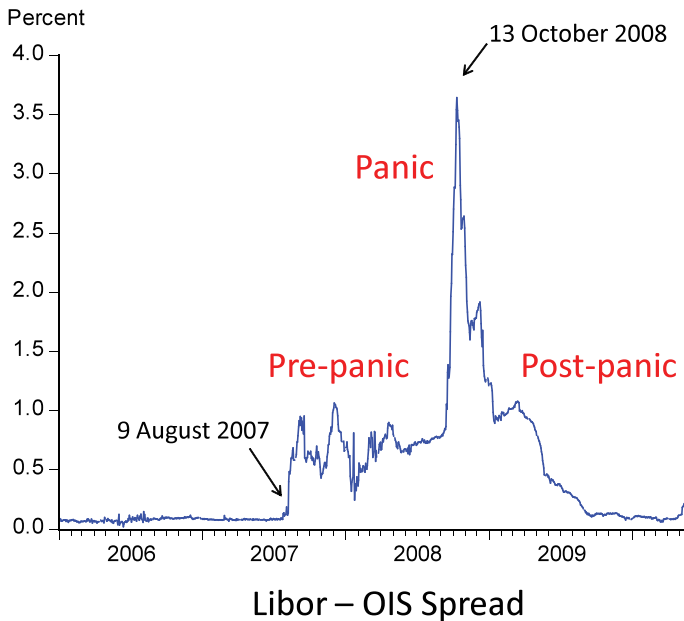
The main monetary policy responses to the crisis were a cut in the federal funds rate and the use of the Fed's balance sheet to finance massive and extraordinary lending and securities purchase programs. The Federal Reserve cut the federal funds rate by two percentage points during the panic, and this helped to counteract the rising interest rate spreads and thereby alleviated some of the negative impacts of the panic. In my view, however, the cuts in early 2008 were at times too sharp and erratic and may have caused a depreciation of the dollar and thereby rising oil prices, which had negative effects on the economy.

By far the most unusual response of monetary policy to the economic crisis, however, was the massive extraordinary measures in which the Federal Reserve used its balance sheet. I assess their impacts during the three phases mentioned above.

My assessment of the extraordinary monetary measures that were taken in the year before

Figure 4. Three Phases of the Crisis

Three Phases of the Crisis: Pre-Panic, Panic, Post-Panic



the panic is that they did not work and that some were harmful. The Term Auction Facility (TAF) did little to reduce tension in the interbank markets during this early period, as I reported in research at that time, and it drew attention away from counterparty risks in the banking system. The extraordinary bailout measures, which began with Bear Stearns, were the most harmful in my view. The Bear Stearns actions led many to believe that the Fed's balance sheet would again be available in the case that another similar institution failed. But the Fed closed its balance sheet in the case of Lehman Brothers, and then reopened it again in the case of AIG. It was then closed off again for such bailouts, and the TARP was proposed. Event studies show that the rollout of the TARP coincided with the severe panic. For example, figure 5, which blows up the panic section of figure 4, shows that the Libor-OIS spread rose dramatically after TARP was announced. Initially, there was considerable confusion about how the TARP would work, and the Libor-OIS spread did not stop rising until the Treasury clarified that TARP would be used for equity injections. So I have to disagree with those who view all the extraordinary interventions as having worked.

The panic period is the most complex to analyze because the Fed's main measures during this period—those designed to deal with problems in the money market mutual fund and the commercial paper markets—were intertwined with the FDIC bank debt guarantees and the clarification that the TARP would be used for equity injections, which was a major reason for the halt in the panic. In any case, a detailed examination of micro data shows that the Fed's asset-backed commercial paper money market mutual fund liquidity facility (AMLF) was effective. And I have argued that the Federal Reserve should also be given credit for rebuilding confidence by quickly starting up these complex programs from scratch in a turbulent period and for working

closely with central banks abroad in setting up swap lines.

The main policy responses during the post-panic period were the large-scale asset purchase programs. Much of the work evaluating these programs has been based on “announcement effects,” which I think can be quite misleading. It is therefore necessary to look at the programs themselves—at the amount purchased and the timing—not just the announcement effects. Consider the impact of the Fed’s mortgage-backed securities (MBS) purchase program, which at \$1.25 trillion is the largest single extraordinary program. My research on that program shows that it had a rather small and uncertain effect on mortgage rates once one controls for prepayment risk and default risk. If so, such a program is not an effective monetary instrument. The initial announcement of the MBS program on November 25, 2008, had a noticeable effect on mortgage spreads, but the effects soon disappeared. The March 18, 2008, announcement effect of the extension of the program actually raised interest rate spreads, but it too was soon reversed.

Whether one believes that these unorthodox monetary programs worked or not, there are reasons to believe that their consequences going forward are negative. First, they raise questions about central bank independence. The programs are not monetary policy as conventionally defined, but rather fiscal policy or credit allocation policy, because they try to help some firms or sectors and not others and are financed through money creation rather than taxes or public borrowing. Unlike monetary policy, there is no established rationale that such policies should be run by an independent agency of government. By taking these extraordinary measures, the Fed has risked losing its independence over monetary policy.

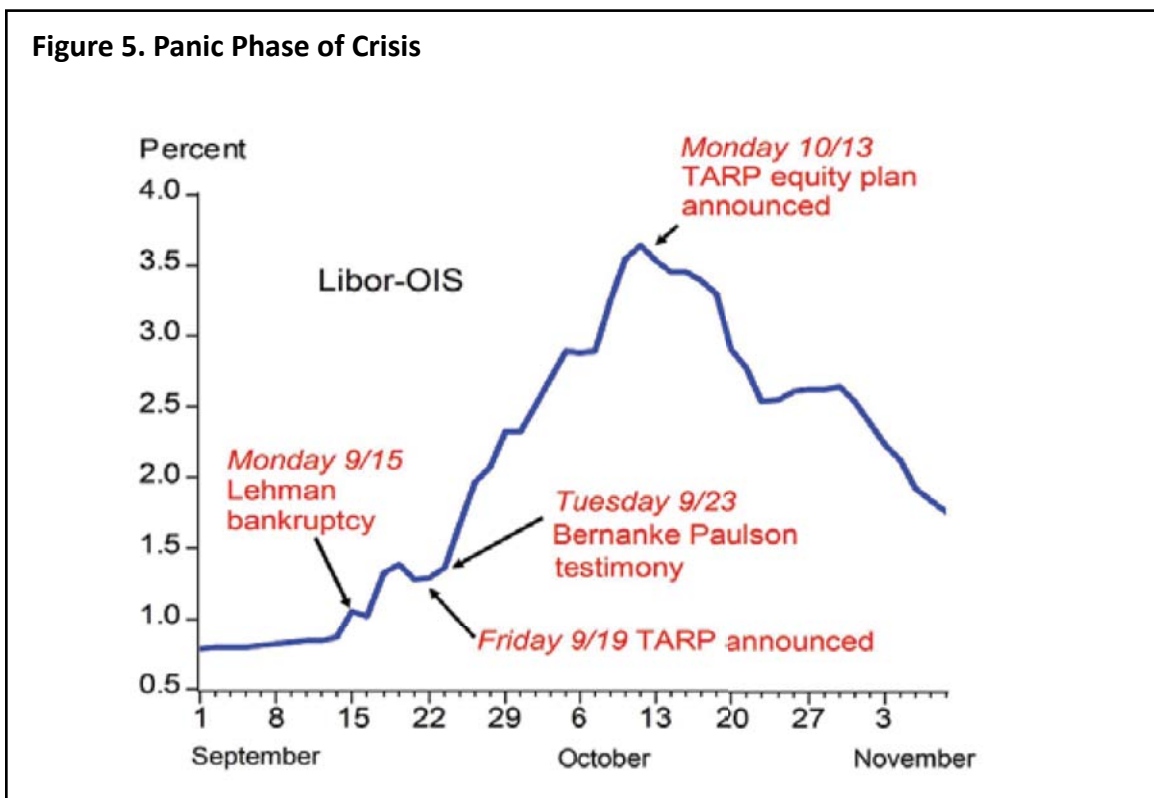
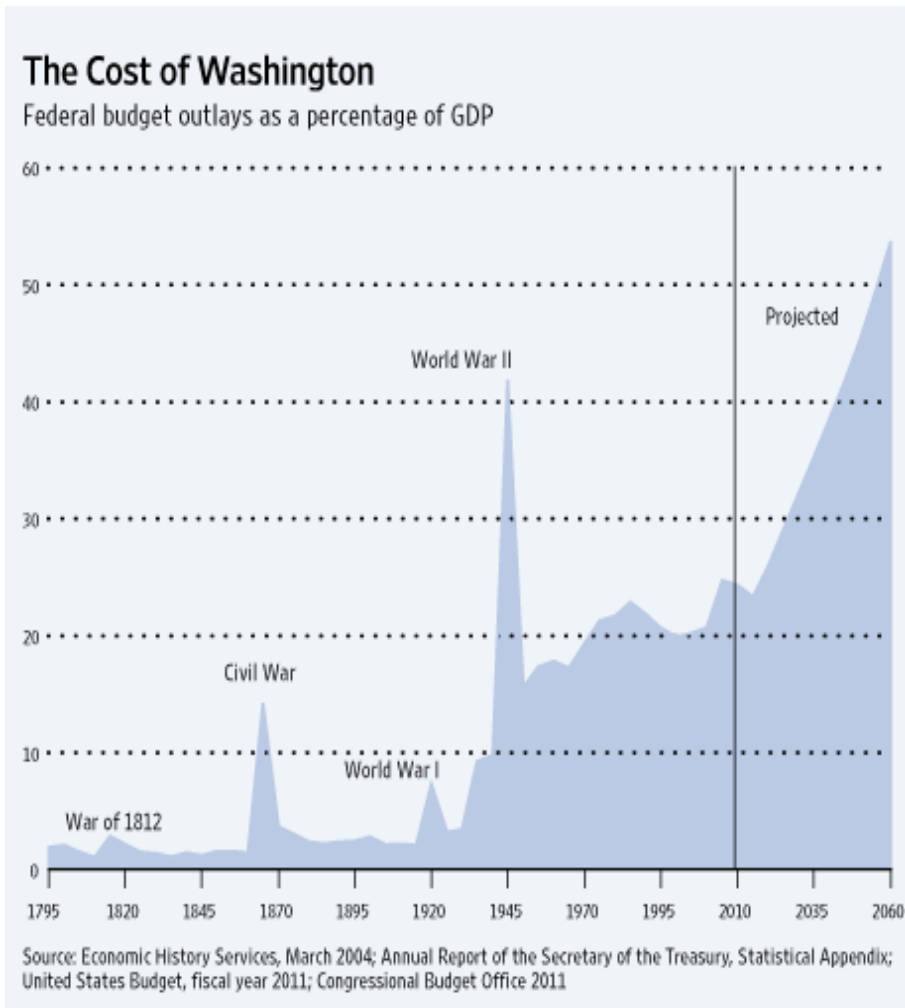


Figure 6. Federal Budget Outlays as a Percentage of GDP



A second negative consequence of the programs is that unwinding them involves considerable risks. In order to unwind the programs in the current situation, for example, the Fed must reduce the size of its MBS portfolio and reduce reserve balances. But there is uncertainty about how much impact the purchases have had on mortgage interest rates, and thus there is uncertainty about how much mortgage interest rates will rise as the MBSs are sold. There is also uncertainty and disagreement about why banks are holding so many excess reserves now. If the current level of reserves represents the amount banks desire to hold, then reducing reserves could cause a further reduction in bank lending.

A third negative consequence is the risk of future inflation. If the Fed finds it politically difficult to reduce the size of the balance sheet as the economy recovers and as public debt increases, then inflationary pressures will undoubtedly increase.

Conclusion

In conclusion, I find that on balance the federal policy responses to the crisis have not been effective. Three years after the crisis began, the recovery is weak and unemployment is high. A direct examination of the fiscal stimulus packages shows that they had little effect and have left a harmful legacy of higher debt. The impact of the extraordinary monetary actions has been mixed: while some actions were helpful during the panic stage of the crisis, others brought the panic on in the first place and have had little or no impact since the panic. The monetary actions have also left a legacy of a large monetary overhang that must eventually be unwound.

Is there another policy response that would have worked better or would work better in the future? In a testimony entitled, “The State of the Economy and Principles for Fiscal Stimulus,” which I gave before the U.S. Senate Budget Committee in November 2008, I recommended a different type of fiscal policy response to the crisis. The response was based on certain established economic principles, which I summarized by saying that policy should be *predictable, permanent, and pervasive*, affecting incentives throughout the economy. I argued “that there are many good fiscal packages that are consistent with these three principles. One would consist of the following”: 1) committing to keep income tax rates where they are, effectively making current income tax rates permanent; 2) making the worker’s tax credit, which President Obama had proposed, permanent rather than temporary; 3) enacting a responsible government spending plan that met reasonable long-term objectives, put the U.S. economy on a credible path to budget balance, and would be expedited to the degree possible without causing waste and inefficiency; and 4) recognizing that the “automatic stabilizers” will help stabilize the economy, and therefore counting them as part of the overall fiscal package even though they do not require legislation.

This is not the kind of economic policy that has been followed. Rather than being predictable, the policy response has created uncertainty about the debt, growing federal spending, future tax-rate increases, new regulations, and the exit from the unorthodox monetary policy. Rather than permanent, it has been temporary and thereby has not created a lasting economic recovery. And rather than being pervasive, it has targeted certain sectors or groups such as automobiles, first-time home buyers, and large financial firms, while avoiding others. It is not surprising, therefore, that the policy response has left us with high unemployment and low growth. Given these facts, the best that one can say about the policy response is that things could have been even worse, a claim that I disagree with and see no evidence to support.

The good news is that we can get back to a stronger economic growth and a faster reduction in unemployment by following an economic policy based on these fundamental economic principles. As argued in a *Wall Street Journal* article “Principles for Economic Revival,” published in September 2010 by George Shultz, Michael Boskin, John Cogan, Allan Meltzer, and myself, the policy experiences over the past two or three years, which I have reviewed in this paper, make the case for following such principles stronger than ever.

The outlook for 2011–12 depends very much on whether or not the United States makes these changes. This is illustrated in figure 6, which shows federal spending as a share of GDP; the chart appeared in the *Wall Street Journal* article by Shultz et al.

One of the most important needed policy changes is to bring down spending to the ratio

to GDP that existed before the recent sharp increase in spending. If we make these changes—as well as other changes to fiscal and monetary policy described here—in a responsible and credible way, I believe that the U.S. economy can have a good recovery with above-par economic growth in the next few years. If we do not make the changes, then uncertainty will continue and the recovery will be slow.

* These remarks were derived directly from testimony at the U.S. Senate Budget Committee on September 22, 2010. I have written and testified earlier about the role of federal policy in causing the crisis, including the role of monetary policy in keeping interest rates too low for too long leading up to the crisis, the role of Fannie Mae and Freddie Mac in encouraging the origination of risky mortgages, and the role of regulatory policy in failing to administer effectively financial regulations on the books.

Appendix: Empirical Research Project on the Economic Crisis

The above remarks draw from an empirical research project on economic policy and the financial crisis at Stanford University and the Hoover Institution. The research began in the summer of 2007. The findings of this research have been reported in books, published research papers, and reports, which are listed for the record below. I have summarized the results in congressional testimony and in newspaper articles, which are also listed below. In order to download any of these items, go to www.JohnBTaylor.com.

Books

Getting Off Track: How Government Actions and Interventions Caused, Prolonged, and Worsened the Financial Crisis. Stanford, Calif.: Hoover Institution Press, 2009. Translated into Italian, Spanish, Polish, and Japanese.

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U.S.-Korea Institute at SAIS

1717 Massachusetts Avenue NW
6th Floor
Washington, D.C. 20036
www.uskoreainstitute.org

Korea Institute of Finance

KFB Building, 5th – 8th Floors
4-1, 1-ga, Myong-dong, Chung-gu
Seoul, South Korea 100-021
www.kif.re.kr