

Discussion of “Policies to Rebalance the Global Economy After the Financial Crisis”

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This paper analyzes the impact of alternative policy scenarios in the aftermath of the financial crisis. The policy challenges that are considered cover a broad range of issues—from securing a sound financial sector and sustaining public investments to supporting future productivity developments, avoiding protectionist policies that would decrease the degree of competition in goods and labor markets, improving current account imbalances through an appropriate adjustment of national savings and exchange rates, and preventing protracted excessive fiscal deficits. The impact of alternative policy choices on these issues is illustrated by simulations with the International Monetary Fund’s Global Integrated Monetary and Fiscal (GIMF) model. The exercise nicely illustrates the strength of such a structural model to analyze a wide variety of relevant policy questions. The outcomes of the simulations indicate that appropriate policy choices can result not only in favorable prospects for the pickup in global GDP growth but also in a more balanced growth path that alleviates the current account imbalances.

The main focus of the paper is on fiscal policy with a strong call for fiscal consolidation. If current public deficits translate into permanently higher public debt ratios, GIMF simulations predict an increase in global long-term real interest rates and increased risk premiums for specific countries, which would lead to a permanent crowding out of private capital accumulation and—in particular, in the case of the United States—to persistent current account imbalances and increasing foreign liabilities. With this message, the focus of the paper is clearly on the medium- and long-term implications of fiscal policy. In previous work published in spring 2009 in the middle of the crisis, the authors used the same model to argue for a global fiscal stimulus package in order to reduce the deflationary effects of the financial crisis (Freedman et al. 2009). That paper discusses in detail the conditions under which a fiscal expansion is most

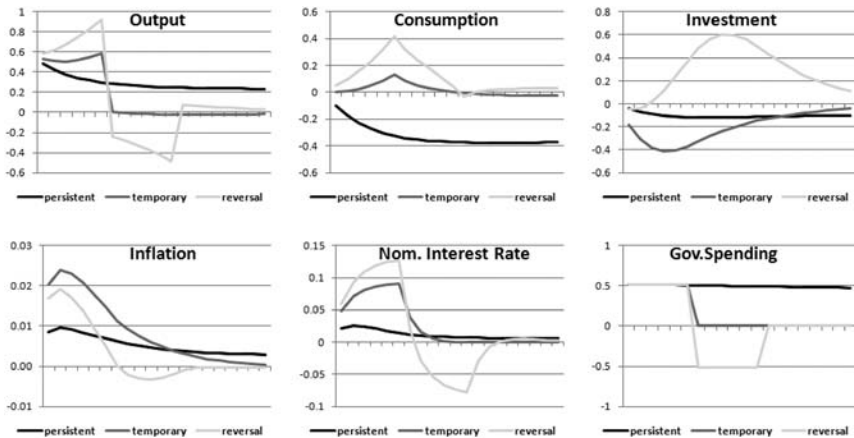
effective for the short-run stabilization of output. The fiscal stimulus program is most effective if there is an accommodating monetary policy, if the program is timely and temporal, if the program is globally implemented, and if effective fiscal instruments are used. It was argued that these conditions were fulfilled at the time when the global stimulus plan was designed and promoted.

These two policy recommendations illustrate clearly the apparent conflict between the short-run and the long-run implications of fiscal policy expansions. The GIMF model is very well suited to investigate this type of complex dynamics. Several model features are of special interest for this analysis: the standard New Keynesian sticky-price sticky-wage setup for the demand effects; liquidity-constrained and finite-horizon (OLG) households for the income and wealth effects; various fiscal instruments with their distorting effect on capital, labor, and consumption decisions; public consumption and investment expenditures; open-economy linkages, etc. These features, calibrated on various stylized facts, allow a consistent and very rich analysis of both the short-run expansionary demand effects and the long-run crowding-out effects of public debt on real interest rates, the capital stock, and the net foreign liabilities.

In my comments, I would like to illustrate that this difference in impact between temporal and persistent fiscal expansions is also present in a standard New Keynesian DSGE model like Smets and Wouters (2007) (henceforth, SW). Furthermore, the short-run expansionary effects crucially depend on the monetary policy accommodation of the fiscal shock. These two considerations are important arguments in planning for the exit from the current expansionary monetary and fiscal policy stance.

Figure 1 illustrates the impulse response of a public spending shock in SW under different assumptions about the persistence of the shock. Three alternatives are considered: a quasi-permanent increase in public spending, a temporary six-quarter increase in spending, and a temporary six-quarter increase that is followed by a subsequent drop in public spending. This last scenario can be interpreted as a policy that executes the planned expenditures faster without changing total expenditures, and it resembles the reversal mechanism in public expenditures that is also stressed in the paper by Corsetti, Meier, and Müller (2010). Note that in this model, households have infinite horizons and taxes are lump sum,

Figure 1. Impulse Response of a Persistent, Temporary, and Reversed Public Spending Shock in SW



so that the financing of the public deficit is irrelevant for the outcomes.

A quasi-permanent expansion of public expenditures raises output and employment, but the fiscal multiplier, measured as the increase in output relative to the increase in public expenditures, is clearly below one. The negative wealth effect from higher taxes and the higher real interest rate induce a crowding-out effect on private consumption and investment. The impulse response of a temporary increase in public expenditure is quite different: the output multiplier is around one in this case. With sticky prices and wages, a positive demand shock lowers temporarily the markup in goods and labor markets, which induces a positive supply effect. This effect dominates now the small negative wealth effect from a temporal tax increase, and private consumption starts to rise. Investment still decreases because of its higher sensitivity to the real interest rate. The picture changes even more in the case of a temporal expansion of public expenditures that is purely a front-loading of planned expenditures. Here the positive supply effect from lower markups is clearly dominating, with positive crowding-in effects on both consumption and investment.

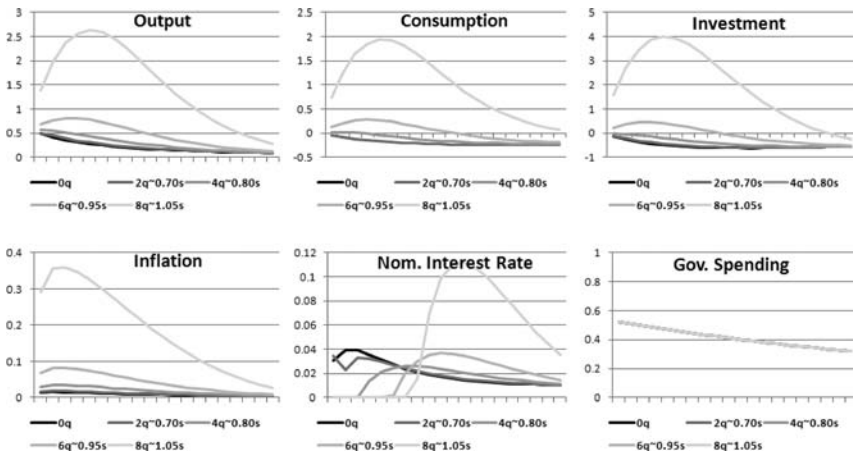
This exercise illustrates that the persistence of a public expenditures shock is crucial for the fiscal multiplier even in a simple DSGE

model. This confirms the main argument advanced in the paper about the potential negative crowding-out effects of sustained fiscal deficits. Allowing temporal shocks, which were introduced to support the economy during the crisis, to transform into permanently higher expenditure levels is not an efficient option. This raises the question about the correct timing for turning back the fiscal stimulus measures. This question is especially relevant in the present situation where the multiplier of the fiscal measures can be expected to be high.

The impulse response of a fiscal shock depends indeed strongly on the monetary policy reaction to the shock. In the current situation where monetary policy is restricted by a lower bound on nominal interest rates, fiscal expansions are automatically accommodated by monetary policy as long as the policy rate remains at its lower bound. This type of monetary accommodation can increase the output multiplier significantly—in particular, if the zero lower bound is expected to apply for a long time. The mechanism is simple: positive aggregate demand shocks reverse at least partially the low or negative inflation trend, and under a constant nominal rate, this implies a proportional decline in the real rate. So in a deflationary context and a zero lower bound (ZLB) on monetary policy, fiscal expansions will be supported by a strong real interest rate channel. It is obvious that the strength of this mechanism depends crucially on the expected duration of the ZLB policy.

To give some empirical indication of the magnitude of this argument in the 2009 context, we simulate the SW model under different hypotheses about the size of the negative demand shocks that are identified in the model as the main drivers for the current recession. Based on data up to 2009:Q1, the SW model identifies the risk-premium shock, a shock to the rate at which households and firms have access to the financial market, and the investment-specific demand shock as the two main sources for the current crisis. Simulating the model over the next five years starting from 2009:Q1, and ignoring all other shocks and the changes in public expenditures, the model predicts a sharp decline in economic activity, an inflation rate that falls below zero, and a monetary interest rate that would be constrained by the zero lower bound over the next seven quarters. The duration of the ZLB depends, of course, crucially on the size of the shocks that we simulate. If the shocks are less than 70 percent

Figure 2. Impulse Response of a Public Spending Shock under the ZLB Constraint



of the estimated magnitude, the economy would have avoided the ZLB, whereas with shocks that rise to 105 percent of the estimated level, the ZLB binds for eight quarters. Next, we add to these baseline scenarios a one-standard-error shock to public expenditure in order to evaluate the fiscal multiplier conditional on the underlying scenario about the strength of the recession and the stance of the monetary policy. Note that in all these simulations, the ZLB is effectively imposed on the projection during these periods where the standard policy reaction function generates a negative interest rate.

The results of this exercise are summarized in figure 2. If the ZLB is considered as non-binding or binding only for two quarters in the baseline scenario (corresponding with shocks that are limited to 70 percent of the estimated value), the public stimulus is sufficiently strong to raise output and inflation to a domain where the standard monetary policy rule is active with a nominal interest rate above zero. In these simulations, monetary policy escapes from the ZLB and responds to the fiscal shock in line with its historical policy rule—that is, by raising the real interest rate and crowding out private expenditure. The fiscal multiplier in these cases is of the same magnitude as in normal times and depending on the expected persistence of the fiscal shock as discussed before. If the baseline scenario is built on a more negative realization of the shocks and

the ZLB binds for more than four quarters, the expenditure shocks become more and more effective to raise output. The fiscal multiplier increases very quickly with the duration of the ZLB and becomes of the order of three if the ZLB is expected to bind for eight quarters.

Clearly, real activity can be very sensitive to expenditure shocks in situations where the ZLB is expected to apply over an extended period. In these circumstances, the timing of fiscal exit plans should be selected carefully. Reversing expenditure plans before monetary policy is escaping from the ZLB can have substantial negative real effects which might prolong the recession substantially. Continuing expenditure plans beyond the monetary policy exit will add a large burden on public debt and future taxes that might be costly in terms of medium- and long-run growth. The timing of the fiscal and monetary policy exit is a difficult choice, and simulations of this transition period with models like the GIMF model could provide useful advice.

References

- Corsetti, G., A. Meier, and G. J. Müller. 2010. "Cross-Border Spillovers from Fiscal Stimulus." *International Journal of Central Banking* 6 (1).
- Freedman, C. M., M. Kumhof, D. Laxton, and J. Lee. 2009. "The Case for Global Fiscal Stimulus." IMF Staff Position Note No. 09/03.
- Smets, F., and R. Wouters. 2007. "Shocks and Frictions in US Business Cycles: A Bayesian DSGE Approach." *American Economic Review* 97 (3): 586–606.