

**COMMENTS ON SESSION 1
THE SHORT-TERM IMPACT OF FISCAL POLICY**

FISCAL POLICY AND ITS MACROECONOMIC EFFECTS – A DISCUSSION

*Adi Brender**

1 Introduction and framework

Caprioli and Momigliano's (C&M) paper: "The Macroeconomic Effects of Fiscal Policy Shocks during Good and Bad Times" examines the macroeconomic effects of fiscal policy changes using an extended VAR model. The paper provides a unique analysis and useful insights but there are avenues through which it could be improved.

The key background policy question of the paper is whether fiscal policy can and should be used to smooth the business cycle. To answer this question it is important to identify whether fiscal policy is effective and under what conditions, what are the potential "side effects" of using fiscal policy, and are there alternative measures (e.g., monetary policy) that can reach the same results more effectively or with less side effects. A related issue, particularly relevant in the current European economic setting, is to identify the optimal consolidation pace in various states of the economy.

Table 1

Main Characteristics of Caprioli and Momigliano's Model

Model Characteristic	Caprioli & Momigliano
Framework	VAR
Fiscal policy effect on growth	non-linear – binary
Fiscal policy effect on unemployment	not discussed
Monetary policy	Short-term interest rates included
Present/future tradeoff	No
Public debt	Debt excluded
Sample	Italian time series
Data	Quarterly
Constraints on policy	None
Fiscal measure	Central government consumption

Table 1 depicts the model's main characteristics. A contribution that stands out is the non-linearity of fiscal policy effects introduced by C&M and its interaction with monetary policy. On the down side a key caveat of the model for policy interpretation purposes is that it does not impose an intertemporal constraint on fiscal policy.

* Bank of Israel.

Table 2

Analytical Division of Data

	Status of the Economy	
Fiscal policy		
	Recession	Close to full Employment
Consolidation	+	
Expansion	+	

A useful way to characterize the policy issues and economic environment on which the paper focuses is presented in Table 2. C&M use data on fiscal measures in all the cells of the table, but focus their analysis on policy during recessions; that is the left side of the table. It could be useful if they, as well as other papers that analyze the macroeconomic effects of fiscal policy, provided a breakdown of the data points in the sample according to the classification in this table because theory suggests potential differences between the cells. Otherwise, it is not clear that there are sufficient observations in each cell to allow drawing policy conclusions about that policy environment.

2 Specific comments

The main point of C&M's paper is clear, analytically robust, and supported by the empirical analysis: the fiscal multiplier depends on the state of the economy. The analysis is conducted on Italian quarterly data over 30 years, and finds that fiscal shocks have a positive effect on private GDP for several quarters in recessions and no effect in expansions. They also show that part of this effect is due to interest rates that rise in response to fiscal expansions in growth periods but not in recessions.

An important condition for the sustainability of policies, however, is that the average impact of fiscal shocks on the economy would be close to zero. If the average is positive, policy-makers may be tempted to use fiscal policy to constantly inject stimulus into the economy. As mentioned repeatedly in the literature, without a non-linear effect of the debt to GDP ratio on the growth rate or welfare, there is no consistent optimal policy. Hence the debt to GDP ratio explodes. In the case of C&M, the technical result is that the effect of a fiscal shock on private GDP is positive and fades after a few quarters in recessions, and is insignificant in expansions. Accordingly, when one adds the impact of the fiscal stimulus itself on GDP, the effect is always positive and there is no "cost" to expanding the deficit. For a policy-maker this implies that whenever an "old" shock fades it is time to boost the economy with another stimulus, leading to an unsustainable policy. It would be worthwhile to introduce the appropriate constraints in the model, e.g., in the form of an effect on long-term growth, yields and risk premiums, to wrap the analytical framework of the model. Using a continuous non-linear model, rather than a binary "two states of the world" approach, may generate the required non-linearity. I should stress that this comment does not relate to the empirical results of the paper – which do not show such persistence of expansions – but to the analytical interpretation of the results.

A useful feature of this paper is the explicit introduction of short-term interest rates into the model. This allows to examine potential interactions between monetary and fiscal policies, and to experiment with alternative policy options that tradeoff between the two. One question in this context, however, is whether the interaction between fiscal policy and interest rates is still relevant for a single country in the Euro zone. The authors could provide some insights on this by allowing for different effects of this relationship in the pre-Euro and Euro periods. Another question that merits more attention is whether the response of short-term interest rates reflects only monetary policy, or also the sentiment of investors, consumers and financial markets – due to the different signaling value of fiscal shocks in the various environments represented by the cells of Table 2.

A more technical point, but conceptually important, is the choice of the indicator for the state of the economy. C&M use the average growth over several quarters as the indicator from which they derive the classification of the state of the economy to recession or expansion. Theory, however, is more focused on “stock” variables such as the output gap or capacity utilization. This feature seems to be important when one examines the estimation results which derive the state of the economy variable from capacity utilization; in that case there is no significant effect of fiscal shocks on private GDP in either state of the economy. The choice of which variable is used to characterize the state of the economy is particularly important in periods like the current one where a big drop in GDP almost 4 years ago had been followed by growth, but not one that was sufficient to fully close the output gap.

Finally, a useful extension of the analysis would be to examine whether the magnitude of the effects of positive and negative fiscal shocks is similar during recession periods. In the current period, where strong incentives exist for both fiscal consolidation and stimulus, such an analysis may provide important insights to policy-makers.

3 Conclusion and potential extensions

The C&M paper offers useful insights on the macroeconomic effects of fiscal policy. Specifically, incorporating the role of monetary policy response to fiscal shocks offers a potential avenue for evaluating trade-offs between alternative policy instruments. Combining these with some form of a welfare function that guides policy makers and introducing an explicit cost to fiscal expansions would facilitate a broader picture of these tradeoffs and of the considerations in designing fiscal policy.

Of particular importance in setting such future frameworks would be to internalize some insights from our accumulated experience with fiscal policy. Specifically, it seems quite clear that in the absence of crises or external incentives political leaders almost never find a “good time to cut”. Hence, monetary policy may be a preferable instrument for counter-cyclical purposes to the extent possible, or until the “liquidity trap” is approached. Such an analysis may also highlight some of the costs of large monetary unions, such as the Euro zone, where country-specific monetary policy is not available. Adding the required features for such an analysis to a fiscal framework would make models more relevant for genuine policy analysis. The paper discussed here is a useful contribution in this direction and such extensions may make it an even greater one.

