

FISCAL POLICY: A POTENT INSTRUMENT

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I INTRODUCTION

There has undoubtedly been a major shift within macroeconomic policy over the past two decades, from the pre-eminence of fiscal policy to that of monetary policy. The latter has gained considerably in importance as an instrument of macroeconomic policy, whereas the former is rarely mentioned in policy discussions anymore, except in the context of limiting its use. We argue in this short paper that fiscal policy remains a powerful instrument for regulating the level of aggregate demand. We discuss two broad aspects of fiscal policy: its status in the eyes of the ‘new consensus’ in macroeconomics, and its institutional aspects.

II FISCAL POLICY ACCORDING TO THE ‘NEW CONSENSUS’ IN MACROECONOMICS

The ‘new consensus’ in macroeconomics (NCM) that has come to dominate macroeconomic analysis has been summarized in a simple model with the following three equations (adapted from Meyer 2001; but see, also, McCallum, 2001, and Clarida, Galí and Gertler, 1999; it is also discussed in Arestis and Sawyer, 2002):

$$(1) \quad Y_t^g = a_0 + a_1 Y_{t-1}^g + a_2 E_t(Y_{t+1}^g) - a_3 [R_t - E_t(p_{t+1})] + s_1$$

$$(2) \quad p_t = b_1 Y_t^g + b_2 p_{t-1} + b_3 E_t(p_{t+1}) + s_2, \text{ (with } b_2 + b_3 = 1)$$

$$(3) \quad R_t = (1 - c_3)[RR^* + E_t(p_{t+1}) + c_1 Y_{t-1}^g + c_2 (p_{t-1} - p_T)] + c_3 R_{t-1}$$

Where Y^g is the output gap, R the nominal rate of interest, p the rate of inflation, p_T the inflation rate target, RR^* the ‘equilibrium’ real rate of interest (the rate of interest consistent with zero represents stochastic shocks, and E_t refers to expectations held at time t). Equation (1) is the aggregate demand equation with current output gap determined by past and expected future output gap and the real rate of interest. Equation (2) is a Phillips curve with inflation based on current output gap and past and future inflation. Equation (3) is a monetary policy operating rule where the nominal interest rate is based on expected inflation, output gap, deviation of inflation from target, and the ‘equilibrium’ real rate of interest. The lagged interest rate represents interest rate ‘smoothing’ undertaken by the monetary authorities (see, for example, McCallum, 2001).

From the perspective of this paper, equation (1) is of particular significance. There is no explicit mention of fiscal policy, though changes in the fiscal stance are reflected in a change in a_0 . There is no recognition within these equations of the potential stabilizing effects of fiscal policy. However, proponents of the approach to macroeconomic analysis embedded in this model have produced a number of arguments against the use of discretionary fiscal policy and long-term budget deficits. The most important arguments, and those more widely accepted by the proponents of the model, are those relating to

‘crowding out’ and the Ricardian Equivalence Theorem (RET). Further arguments against discretionary fiscal policy concern its so-called ‘institutional aspects’ (Hemming, Kell and Mahfouz, 2002): longer and more variable lags prevail between the announcement and impact of policies than was thought previously (the ‘model uncertainty’ argument—see *ibid.*, p. 8); there is the risk of pro-cyclical behavior in view of cumbersome parliamentary approval and implementation processes; increasing taxes or decreasing government expenditure during upswings may be politically unrealistic, and this may very well generate a deficit bias; spending decisions may be irreversible, which can lead to a public expenditure ratcheting effect; and lastly, there may be supply-side inefficiencies associated with tax-rate volatility.

In Arestis and Sawyer (2003) we argue that none of these concerns is valid, particularly when fiscal policy is viewed in terms of ‘functional finance’—when budget deficits are used to correct a deficiency in private aggregate demand. We concluded that fiscal policy can affect aggregate demand, and that the path of aggregate demand can itself influence the supply-side equilibrium. The size and distribution of the capital stock is a determinant of the productive capacity of the economy, and a larger capital stock would lead to a supply-side equilibrium involving a higher level of output and employment. The level of aggregate demand (including the change in economic activity and profitability) has an impact on investment expenditure, and thereby on the size of the capital stock (Arestis and Biefang-Frisancho Mariscal, 2000). The supply-side equilibrium may form an inflation barrier at any point in time, but it is not immutable or impervious to the level of aggregate demand.

The empirical investigation of fiscal policy effectiveness is generally undertaken in the context of econometric models that are elaborations of the NCM model. These models are much larger and involve many leads and lags which do not appear in the NCM model, as presented above. However they generally impose a supply-side equilibrium (say, the non-accelerating inflation rate of unemployment, or NAIRU), which is equivalent to the zero output gap for which inflation is constant. Under a policy regime that pushes the economy toward supply-side equilibrium (reflected in the determination of the rate of interest, equation (3)) there is little room for output to diverge substantially from supply-side equilibrium. Hence, it appears that any fiscal stimulus is soon dissipated; leading to the empirical conclusion that fiscal policy is ineffective. Indeed, it is surprising that any positive effect of fiscal policy can be observed under these circumstances.

However, our brief review of the empirical evidence of fiscal policy effectiveness tells a rather different story (Arestis and Sawyer, 2003). It suggests that fiscal multipliers and other tests used to assess fiscal policy tend to provide favorable evidence for such policy. This is especially so in view of the argument put forward above that in most of the summaries of our results (Arestis and Sawyer, 2003), there is a long-run constraint built into the models used for empirical exercises. In their very definition such constraints (what we called NAIRU constraints) contain the long-run values of the fiscal multipliers.

We may conclude this section by suggesting that shifts in the level of aggregate demand can be readily offset by fiscal policy. Consequently, fiscal policy remains a powerful instrument for regulating the level of aggregate demand. Fiscal policy “can and should be called upon as a key part of the remedy” when the economy needs a boost to aggregate demand, and “when the economy’s resources are underutilized” (Fazzari, 1994-95, p. 247). Even when the economy’s resources are fully utilized, we maintain that fiscal

policy will have long and lasting effects on aggregate demand via its impact on the capital stock of the economy (Arestis and Biefang-Frisancho Mariscal, 2000).

III INSTITUTIONAL ASPECTS OF FISCAL POLICY

Fiscal policy appropriately applied does not lead to crowding out, and in that sense it will be effective (Arestis and Sawyer, 2003). However, an attempted fiscal expansion in a fully-employed economy will involve crowding out to some degree. The extent of the crowding out will depend on how greatly supply can respond to increase in demand. Even at full employment there can be some elasticity of supply (firms hold some excess capacity, there are 'encouraged' worker effects, etc.). This refers to discretionary fiscal policy: it could be said that the automatic stabilisers are operating all the time. But there may be other causes of ineffectiveness in fiscal policy, to which we now turn.

The first issue concerns 'model uncertainty.' The operation of fiscal policy requires forecasts of the future course of the economy, so uncertainty in forecasts makes fiscal policy decisions difficult. Uncertainty increases the likelihood that fiscal policy will turn out to have been inappropriate. However, Friedman (1959) clearly showed that model uncertainty and the resulting long and variable lags between policy announcement and effect are not peculiar to fiscal policy. Fiscal *and* monetary policy draw on the forecasts of macroeconomic models, so uncertainty in the models would apply with equal force to both policy types. Further, monetary policy (in the form of interest rate decisions) involves frequent decision making (monthly for the Bank of England, every six weeks for the Federal Reserve) and attempts at fine tuning. Fiscal policy, in contrast, typically involves infrequent decisions (often annually), and could be described as 'coarse tuning'¹. It could be argued that the 'fine tuning' nature of monetary policy means that it suffers more from problems of model uncertainty than does fiscal policy.

The second issue is the argument that fiscal policy is in practice pro-cyclical rather than counter-cyclical². It has long been argued that the various lags between decision-making and implementation, implementation and impact, may mean that fiscal policy which is intended to stimulate (or cool down) the economy during a downturn (boom) may come into effect when the economy has already started to recover (decline). The strength of this argument depends on the relationship between the length of the business cycle and the lags in fiscal policy. For example, a four year business cycle and a two year fiscal policy lag would indeed result in pro-cyclical fiscal policy.

The notion of the pro-cyclical nature of fiscal policy is justified by resort to arguments relating to the cumbersome parliamentary processes of designing, approving and implementing policy. In this context we need to distinguish between inside and outside lags. Inside lags refer to the time it takes policy makers to appreciate that fiscal policy action is necessary and to make the required decisions. Clearly, inside lags depend on the political process and the effectiveness of fiscal management. Outside lags refer to the time it takes for fiscal measures to affect aggregate demand (Blinder and Solow, 1974). Discretionary policy measures, particularly when they involve policy departures (*i.e.*, new forms of taxation and expenditure initiatives), are likely to be subject to long inside lags. Variations in tax rates and in social security benefits can potentially be made with relatively short inside lags³. But automatic stabilizers, by their nature, involve little in the way of inside lags. Outside lags are expected to be more variable than inside lags, such

variation depending on the fiscal measure utilized, the institutional set-up of the economy in question, and the period under investigation.

One difference between monetary policy and fiscal policy is that the former is much less subject to democratic decision-making than the latter. Changes in tax rates require Parliamentary or Congressional approval; changes in interest rates do not. But long and variable outside lags may be a feature of monetary policy as much as (or more than) fiscal policy. The inside lags in fiscal policy could be substantially reduced by the adoption of a ‘fiscal policy rule’ (Taylor, 2000) analogous to a ‘monetary policy rule’ (Taylor, 1993), so long as it is the right rule (*i.e.*, it emphasizes full employment); especially so if the rule relates to the fiscal stance, leaving the composition of taxation and public expenditure to be determined through the democratic process.

The third issue is the idea that fiscal policy may entail a ‘deficit bias.’ This may be due to a number of factors. Increasing taxes or decreasing government expenditure during upswings may be politically unrealistic. Alesina and Perotti (1995) refer to a number of institutional factors to explain the possibility of a deficit bias. Voters and policymakers may be unaware of the government’s intertemporal budget constraint⁴, and as a result favor budget deficits. They may wish to shift the fiscal burden to future generations, or to limit the maneuvering room of future governments strategically in terms of fiscal policy. Political conflicts may delay fiscal consolidation in terms of sharing the burden of adjustment amongst various social groups, thereby producing a deficit bias. Spending decisions may be subjected to irreversibility, which can lead to a public expenditure ratcheting effect. The presence of a deficit bias does not necessarily make fiscal policy any less effective, though it may constrain governments to engage in further deficit spending in the face of a recession.

It has been argued that large and persistent deficits may be a reflection of this deficit bias. However, those deficits must be measured against the goals of the policy. The persistence of unemployment in market economies suggests a general lack of aggregate demand, and hence a requirement for fiscal stimulus. Any tendency for savings to outrun investment also requires a budget deficit to mop up the excess net private savings. We can then distinguish those budget deficits which are required to sustain demand and to mop up excess savings to ensure desirable levels of economic activity—these we will call necessary deficits. In contrast, unnecessary budget deficits stimulate economic activity too much (in relation to some criteria such as full employment). This distinction clearly implies that a bias in favor of necessary deficits is consistent with the argument advanced in this paper, whereas any bias towards unnecessary deficits are not.

The fourth issue arises from the alleged possibility of supply-side inefficiencies associated with tax-rate volatility. This issue is directly related to the way in which changes in taxes affect the supply of labor, and changes in capital taxes affect saving and investment. These considerations are expected to have a significant impact on internationally mobile labor and capital. However, ultimately the issue depends heavily on the empirical evidence adduced as to the impact of tax changes on the supply of labor and capital, and thereby on growth. However, the limited evidence that exists has not yet led to clear-cut conclusions (see, for example, Blundell and MaCurdy, 1999; Hemming, Kell and Mahfouz, 2002).

Moreover, active monetary policy involves interest rate volatility (as compared with a passive monetary policy, which changed interest rates infrequently, which would have supply-side inefficiencies. If fiscal policy is successful, then demand volatility will be reduced, and demand volatility will generate supply-side inefficiencies in that the level of supply would be continually changing not to mention the inefficiency of excess capacity.

A final ‘institutional’ issue is the level of economic development. Most of the literature on the effectiveness of fiscal policy has focused on developed countries. Agénor et al (1999) argue that because the developing world is more likely to be influenced by supply shocks, fiscal policy as a tool of demand management will be used far less frequently in developing than in developed countries. A supply shock is often taken to mean a cost change (*e.g.*, in oil prices), yet such a change does have a demand dimension (*e.g.*, in the case of a change in oil imports). Clearly, a supply shock cannot affect the level of economic activity unless it causes demand to change as well. Within the AS-AD model, an adverse shift in the AS curve can be offset by a shift in AD—albeit at the expense of a higher price level (leaving aside the question of how the supply side would be identified). In the case of developing countries, it may be that the collection of taxation is more difficult, but there would also seem to be less reason to run fiscal deficits. If developing countries are characterized by low savings and high demand for investment, then $S - I$ would be negative, and hence $G - T$ would also be negative—the classic argument that governments in developing countries run surpluses in order to generate savings, something the private sector is unwilling or unable to undertake.

Even so, the availability and cost of domestic and external finance is a major constraint on fiscal policy. It follows that access to financing should determine to a large extent the size of the fiscal deficit. An increase in the fiscal deficit beyond a level that can only be financed on unacceptable terms may be associated with severe crowding out effects. Relaxing these constraints, therefore, enables fiscal policy to have significant stimulative effects (Lane et al, 1999). The relatively high marginal propensity to consume that exists in these countries can also intensify the impact of fiscal policy significantly. This analysis suggests that the deficit bias discussed above may be relatively higher in developing countries. In fact, Hemming et al (2002, p. 12) provide a list of the causes of high deficit bias in developing countries. Poor tax administration and expenditure management on the part of government are probably the most important causes of ‘unnecessary’ deficit bias on the list.

IV CONCLUDING REMARKS

Fiscal policy is often discussed in a framework in which there is no issue of aggregate demand failure and in which the economy adjusts in a stable fashion toward a supply-side equilibrium. However, once it is recognized that there are failures of aggregate demand which can have lasting effects on the supply side of the economy (*e.g.* through effects on investment and thereby on productive capacity), fiscal policy can be seen to have an important role to play.

END NOTES

- 1 This refers to discretionary fiscal policy: it could be said that the automatic stabilizers are operating all the time.
- 2 The operation of the ‘automatic stabilizers’ provides a counter-cyclical component to fiscal policy. The pro-cyclical argument applies particularly to discretionary changes in fiscal policy.
- 3 This may not be the case in all Parliamentary systems. In the UK, for example, the decision to change the duty on alcohol, tobacco, petrol, etc., is made quickly and implemented within hours (often 6 p.m. on budget day). It is subject only to retrospective approval by Parliament.
- 4 In Arestis and Sawyer (2003b), we argue that whether the intertemporal budget constraint applies in reality depends on whether the rate of interest is higher or lower than the rate of growth.

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