PANOECONOMICUS, 2011, 2, pp. 143-156
Received: 12 April 2011.

UDC 330.101.54
DOI: 10.2298/PAN1102143A
Original scientific paper

Philip Arestis

Cambridge Centre for Economic and Public Policy, University of Cambridge, UK

University of the Basque Country, Spain

✉ pa267@cam.ac.uk

Paper by invitation

Fiscal Policy Is Still an Effective Instrument of Macroeconomic Policy

Summary: Recent developments in macroeconomics and macroeconomic policy, what has come to be known as "New Consensus in Macroeconomics", downgrades the role of fiscal policy and upgrades that of monetary policy. This contribution aims to consider this particular contention by focusing on fiscal policy. We consider fiscal policy within the current "new consensus" theoretical framework, which views fiscal policy as ineffective, and argue that it deserves a great deal more attention paid to it than it has been recently. We review and appraise recent and not so recent theoretical and empirical developments on the fiscal policy front. The possibility of fiscal and monetary policy coordination is proposed and discussed to conclude that it deserves a great deal more attention and careful consideration than it has been given to in the past. Our overall conclusion is that discretionary application of fiscal and monetary policy in a coordinated and focused manner as a tool of macroeconomic policy deserves serious attention paid to it than hitherto.

Key words: Fiscal policy, New consensus macroeconomics, Coordination of monetary and fiscal policy.

JEL: E62, H30.

1. Introduction

This contribution suggests that fiscal policy, as a tool of macroeconomic policy, deserves a great deal more attention paid to it than it has been recently. This contribution is, therefore, in full agreement with the IMF Managing Director when he asks the question, "What about fiscal policy?", and the answer he provides, namely that "Under the old paradigm, fiscal policy was definitely the *neglected child* of the policy family. Its role was limited to automatic stabilizers – letting budget deficits move up and down with the cycle – and discretionary policy was regarded with deep suspicion. But fiscal policy had a *Sleeping Beauty* moment during the crisis – with monetary policy running out of steam, and with the financial system on its knees, the forgotten tool arrived to prop up aggregate demand and save the world from an economic freefall. We need to rethink fiscal policy" (Dominique Strauss-Kahn 2011, p. 3). This is precisely what is attempted in this contribution. But we go further, nonetheless, and argue that coordination of fiscal and monetary policies is both possible and desirable.

We examine in this paper the role of fiscal policy as a macroeconomic instrument of stabilization policy. This policy has been downgraded in recent economic policy discussions (see, for example Philip Arestis 2007), although the empirical evidence on the effectiveness of fiscal policy is not always supportive of this view (see, for example, Arestis 2008). We would, thus, suggest that although problems would always prevail on the policy arena, fiscal policy does not deserve to be so downgraded as in recent policy contributions. The complexity of the theoretical arguments and the difficulty of arriving at clear-cut empirical results notwithstanding, the analysis in this contribution suggests that fiscal policy can be an effective instrument of regulating the level of aggregate demand. This is particularly so when fiscal policy is properly co-ordinated with monetary policy. It would appear to be the case that co-ordination of fiscal and monetary policies appears to gain a great deal of support.

While net government spending adds an equal quantity of net financial assets to the combined non-government sectors by identity, the impact of fiscal policy on aggregate demand and economic activity depends heavily on the theoretical model and its assumptions about the real world where the policy is implemented. In the old macroeconomic models with sluggish prices, fiscal policy has positive demand implications. Expansionary fiscal policy adds to aggregate spending, and allows demand-constrained firms to sell more output, thereby increasing income and employment. The inflexibility of prices due to mark-up pricing makes output demand determined. Prices adjust gradually and they follow cost-push increases in wages as captured in some versions of the Phillips-curve type of specifications. The fiscal policy multiplier is positive, although its size can be affected by a number of factors, of which the main ones are: productive capacity close to full use; higher interest rates from anticipated central bank interest rate changes that may crowd out private demand; fiscal policies that may cause the central bank to implement higher interest rates, reflecting higher risk premia; currency depreciation in a flexible exchange rate open economy; composition of the fiscal measure, where government spending is thought to be more effective than tax changes. These factors are likely to produce a positive, but small, fiscal policy multiplier. We examine carefully these factors in what follows in our attempt to defend the proposition that fiscal policy is a powerful tool of macroeconomic stabilization. It is amazing actually that despite the use of fiscal policy following the crisis that emerged in August 2007, which saved the world from the second "Great Depression" and produced only the "Great Recession", full faith in fiscal policy is not there. In this sense the statement by Strauss-Kahn (2011), mentioned above, is very apt.

We begin by a appraising the recent theoretical developments and empirical findings on the fiscal policy front in Section 2. This is followed by a discussion of "What role for fiscal policy", which is the main theme of Section 3. Finally, Section 4 summarises the argument and concludes.

2. Recent Theoretical and Empirical Developments

2.1 The Issues

There is a view in macroeconomic policy debate associated with the New Consensus in Macroeconomics that fiscal policy is ineffective (see, for example, Arestis 2008).[1] The rationalization of this proposition relies essentially on three assumptions: that households optimize intertemporally, that households are not subject to any liquidity constraints, and that households are able to anticipate intertemporal financial constraints (see Richard Hemming, Michael Kell, and Selma Mahfouz 2002, for a survey of both the theoretical arguments and the empirical findings). In Hemming, Kell, and Mahfouz (op. cit.) the empirical evidence reviewed is not in favour of using fiscal policy as a stabilization instrument of policy.

However, more recently that unfavourable empirical evidence on fiscal policy has been questioned (see, for example, Bas van Aarle and Harry Garretsen 2003). Studies have actually produced results that are contrary to the propositions of the New Consensus in Macroeconomics on the issue of the effectiveness of fiscal policy (Goran Hjelm 2002). Indeed, there have been studies that advocate greater emphasis on fiscal policy as a key economic policy tool in macroeconomic stabilization and that fiscal policy is more effective than previously thought (Simon Wren-Lewis 2000; Christopher Allsopp and David Vines 2005; Paul Krugman 2005; Campbell Leith and Wren-Lewis 2005). We explore these more recent contributions in what follows.

2.2 Theoretical Developments

Recent developments on the effectiveness of fiscal policy conclude that incorporating additional assumptions to the theoretical model of the New Consensus in Macroeconomics type, implies favourable results for fiscal policy. The most important of which can be succinctly and briefly summarized (see, for example, Dennis Botman and Manmohan S. Kumar 2006). Overlapping generation models in the tradition of Olivier J. Blanchard (1985) and Philippe Weil (1989), which enable the relaxation of the Ricardian equivalence assumption, is probably the most important one. Under such circumstances, a short-planning horizon by households is evident so that intertemporal smoothing of consumption is not possible. This implies that even temporary changes in fiscal policy affect household decisions to consume and work. Another assumption is that of liquidity-constrained households, consistent with the evidence that even in developed countries up to a third of households do not have sufficient access to financial markets (Botman and Kumar 2006). Under such circumstances, changes in fiscal policy that affect household disposable income would have significant real effects. Similarly, when firms are credit constrained (Philippe Aghion et al. 2005) fiscal policy can have positive effects on productivity growth through enhancing firms' ability to finance "innovative investment". Still another feature is the endogenisation of labour supply and capital accumulation. Since they are affected by

[1] John B. Taylor (2000) is, however, an exception amongst the proponents of the New Consensus in Macroeconomics who believe that fiscal policy is ineffective.

after-tax real wage and after-tax rate of interest, respectively, changes in fiscal stance, as they affect after-tax real wage and the rate of interest, can have real effects.[2]

There is the further argument that the experience of a number of countries, especially developing, suggests that fiscal policy is in practice pro-cyclical rather than counter-cyclical there. This means that budget deficit, as percentage of GDP, increases in booms, but decreases in recessions. This is contrary to the counter-cyclical case where the budget deficit, as a share of GDP, decreases during booms but increases in recessions (Graciela L. Kaminsky, Carmen R. Reinhart, and Carlos A. Vegh 2004; Alberto Alesina and Guido Tabellini 2005). The pro-cyclical argument applies particularly to the discretionary changes in fiscal policy, but would not apply in the case of the operation of the automatic stabilisers, which provide a counter-cyclical component of fiscal policy. Torsten Persson and Tabellini (2000) and Alesina and Tabellini (2005) resort to a political agency problem to explain it. In countries where voters lack significant information, and are faced with corrupt governments that use parts of government revenue for unproductive public consumption, pro-cyclical fiscal behaviour is possible. Voters demand higher utilities for themselves, especially so under booming conditions. They are not irrational; they merely lack full information of the ability of the government to satisfy their demands without creating budget deficits. The government is forced to borrow to satisfy voter demands, for otherwise there is the fear of future electoral losses. The more corrupt the country is, the more pro-cyclicality may be observed. In fact, pro-cyclical behaviour is mainly observed in countries with widespread corruption. Where governments are subject to "check and balances", voters would not impart pro-cyclicality to fiscal policy.[3] In fact, under conditions of recession corrupt governments are assumed to be able to reduce public deficits in the absence of voter pressure.

Despite these favourable contributions to fiscal policy discussions, it is the case that proponents of fiscal policy ineffectiveness would argue that there are perceived risks in the use of fiscal policy as a stabilization instrument and it would be a great deal better not to use fiscal policy for this purpose. These arguments concentrate on the following three propositions: (i) solvency and sustainability: proponents continually warn that deficits are unsustainable and that national solvency is at risk. It is true that "if solvency is satisfied, it is not clear why one should worry about sustainability. Presumably the real value of sustainability tests is that solvency is an elusive concept, and can always invoke solvency by appealing to some change in spending or taxation far into the future. But markets are not interested in the distant future, and for them sustainability is an important element of information" (Roberto Perotti 2007, p. 14). But, then, the only risk of deficits may just be inflation and balance-of-payments changes in view of their contribution to high demand stimulation. It is also

[2] Alan Blinder (2006) argues on similar grounds against the "Ricardian Equivalence" principle. It is based on the unrealistic theoretical assumptions of long-time horizons, perfect foresight, perfect capital markets and the absence of liquidity constraints.

[3] Alesina and Tabellini (2005) note that pro-cyclicality can only materialise in democratic regimes. In a dictatorship where corruption may be thriving, voters cannot influence fiscal decisions and thus pro-cyclicality would not be observed.

true to say that following the financial crises of the 1990s, many developing countries were thought of as sacrificing the potential of their long-term growth in their attempt to appear as fiscal disciplined (especially so under the pressures by international organisations), essentially because of the unfounded fears of fiscal unsustainability; (ii) generational issues: "we are leaving this debt to our children" is heard repeatedly. But then at the macro level each year's GDP gets distributed to whoever is alive, and the distribution process is under the full control of the government at any time; and (iii) financial burdens and danger of high interest rates due to deficits. This is not correct for the simple reason that government spending is not operationally revenue constrained. Government can spend whatever it wants regardless of whether it is in surplus or deficit. Indeed, the government sets the interest rate it pays on its debt, not the market.

We examine in the sub-section that follows immediately some of the empirical aspects and developments.

2.3 Empirical Developments

2.3.1 Evidence on Ricardian vs Non-Ricardian Behaviour

An interesting recent study on the possible effects of government spending on private consumption in the case of the euro area is Günter Coenen and Roland Straub (2005). The novelty of this study is that it attempts to resolve the contradiction between the typical predictions of the theoretical models, which conclude that government expenditure has a strong negative effect on consumption, with that of the empirical literature that concludes on a positive or at least not significantly negative effect on consumption of a government expenditure change. The study concludes that the evidence does not validate the predictions of the theoretical models. In view of this finding, Coenen and Straub (op. cit.) rely on the Gregory N. Mankiw (2000) study where the argument is advanced that models that attempt to study the effects of fiscal policy should allow for two types of households. One type of households (the "Ricardian" households) are those that behave in an optimizing, fully forward manner, by trading in asset and other markets and are, thus, able to smooth consumption over time; these households hold expectations about the future, which are essentially consistent with the assumptions of the models in question.

Another type of households (the "non-Ricardian" households) follow non-optimizing simple rules of thumb (they do not optimize intertemporally or intratemporally), cannot and do not participate in asset markets, and they merely consume their net-of-tax disposable income; their expectations of the future, therefore, need not be consistent with the assumptions of the models in question. There is actually empirical evidence that supports the contention that a significant proportion of consumers and firms are actually non-Ricardian in that they are not especially forward-looking or their behaviour is constrained (for example, evidence suggests that many households have little wealth, or are financially constrained, to be able to undertake intertemporal consumption smoothing). This finding is also supported by survey-based evidence (John Y. Campbell and Mankiw 1989; Mankiw 2000; HM Treasury 2003).

Coenen and Straub (2005) also rely on a study by Jordi Galí, David López-Salido, and Javier Vallés (2004), where a model is put forward that allows for the coexistence of non-Ricardian and Ricardian households and their interaction with firms that change prices infrequently and a fiscal authority that issues debt to finance part of its expenditure. This study concludes that calibrating such a model provides support to the evidence of a positive impact of government expenditure shocks on consumption. The study by Coenen and Straub (2005) proceeds to include both Ricardian and non-Ricardian households in an extended version of the euro area stochastic dynamic general equilibrium model developed by Frank Smets and Raf Wouters (2003),[4] and also employs Bayesian inference methods.[5] The presence of non-Ricardian households is crucial. The quantitative impact of government spending on consumption is higher as compared to the benchmark case without non-Ricardian households.

Nonetheless, the chance of government expenditure crowding-in consumption is rather small in view of the relatively low share of non-Ricardian households assumed in the study. However, the possibility of crowding-in is strengthened once it is recognized that the presence of non-Ricardian households and their behaviour can have significant effects on that of the Ricardian households. To the extent that the increase in consumption of non-Ricardian households following a budget deficit, impacts on the income stream of the Ricardian households, then crowding-in becomes a distinct possibility. Further possibilities suggest themselves. For example, allowing for an endogenous response of the long-run government debt-to-GDP ratio to persistent government spending may enhance our understanding of the empirical dimension of the problem. Furthermore, modifying the assumption of government expenditure evolving exogenously over time, so that agents would form expectations about government spending shocks, would give the model more realism and could produce results that strengthen the impact of government spending shocks.

2.3.2 Size of Models Employed

Blanchard and Perotti (2002) employ the Structural VAR (SVAR) approach in studying the quantitative impact of fiscal policy. They argue that this approach is superior to those that utilise large-scale econometric models or reduced-forms. Large-scale econometric models "largely postulate rather than document an effect of fiscal policy on activity" (p. 1), while the reduced-form approach registers the effect of a summary statistic of fiscal policy, and yet no theory suggests this is pertinent. The SVAR approach is argued to be more appropriate in the study of fiscal policy simply because, unlike monetary policy for example, decision and implementation lags imply that there is no response of fiscal policy to economic activity. So that fiscal shocks

[4] The study by Smets and Wouters (2003) is used as a benchmark specification in the Coenen and Straub (2005) study. The latter is an augmented specification with non-Ricardian households in relation to Smets and Wouters (2003).

[5] Bayesian inference methods rely on the use of prior information obtained from earlier studies in the estimation of a stochastic dynamic general equilibrium model. Such methods are particularly useful when the sample period of the data is short, and also when it is necessary to solve highly non-linear estimation relationships.

can be identified and their dynamic effects on economic activity can be traced through the SVAR approach. Blanchard and Perotti (2002) employ post-war US data along with SVAR to conclude that spending multipliers for consumption and output are anything between one third and unity.

However, Perotti (2005) and Ilian Mihov (2003), using VAR-based evidence, argue that after 1980 the effectiveness of fiscal policy weakened substantially in the US. Three possible explanations of this change have been put forward. One relates to the financial liberalization era, which took place at the time. The increasing asset market participation has enabled households to smooth consumption in the desired way, thereby influencing the impact of fiscal policy. Another explanation refers to the increasing use of monetary policy since the 1980s in relation to the pre-1980s. It is true that a considerable change has taken place in the way the nominal interest rate is adjusted in response to expected inflation; monetary policy has been more hawkish ever since the 1980s. And a third explanation emphasizes the change in the degree of deficit financing, which has assumed more persistence post-1980. These explanations imply that while fiscal policy has a strong and persistent effect on economic activity, this is less significant and persistent post-1980. Florin O. Bilbiie, André Meier, and Gernot J. Müller (2006) attempt to throw light on the empirical support of the three explanations just summarized. They conclude that increased asset market participation accounts for some of the change, while the degree of deficit financing is crucial. But the key quantitative factor is, in their empirical findings, the increasing use of monetary policy post-1980. But complementarity of the three factors is also very important.

2.3.3 Public Investment

Of equal, if not more, importance for fiscal policy is public investment, which assumes particular significance in view of the emphasis placed upon it in the UK over the recent past. "Golden rule" is the term used by the UK Treasury in its approach to public investment. Government deficit should only be undertaken for public investment but the current account should be balanced over the cycle, implying a balanced current account. This "golden rule" is also associated with a "sustainable investment rule", which limits net public debt to a "stable and prudent level" of no more than 40 per cent of GDP (HM Treasury 2002).[6] A question in this context is whether the "golden rule" can ensure a sufficient level of public investment without hurting the sustainability of public finances. One might also question whether it can insure adequate aggregate demand in light of geometrically increasing accumulation in pensions.

Recent research appears to be supportive of assigning a significant role to public investment. In their attempt to test for these propositions, Jérôme Creel, Paola Monperrus-Veroni, and Francesco Saraceno (2006) elaborate on the Blanchard and

[6] Other countries have adopted "fiscal rules", which are different from the UK's "golden rule". Examples range from the European Union's "Stability and Growth Pact", which expects the member countries not to exceed 3% deficit to GDP, to other cases such as Australia and New Zealand, where procedural and quantitative rules are typically combined (Luis Servén 2007). One may also mention the fiscal rule of Chile, which constrains the cyclically adjusted budget surplus to be no less than 1 percent of GDP.

Perotti (2002) approach, which, as implied above, popularized the VAR technique in a short-run analysis to account for the long-run properties of fiscal policies. Creel et al. (op. cit.) account for debt dynamics in the case of a closed economy, and by utilizing the SVAR approach, they conclude that public investment, and current outlays, in the UK have positive and permanent effects on real GDP. Blanchard and Francesco Giavazzi (2004) utilizing the mechanism that the golden rule allows spreading the cost of investment over time, show that reformulating the Stability and Growth Pact along the golden rule premise would allow improvement to the European Union public infrastructure investment without violating the deficit limits.

The experience of other countries in relation to public investment is interesting. A recent World Bank study (Servén 2007) shows that in the process of fiscal adjustment in developed and Latin America countries, over the last twenty years or so, public investment, which represents a small percentage of overall public expenditure and a small fraction of GDP for all countries, fell more abruptly than public consumption. In the case of the European Union, this evidence suggests that fulfillment of the Maastricht deficit criterion promoted the decline of public investment in these countries. In Latin America public infrastructure investment as a percentage of GDP fell when the percentage of public consumption to GDP rose.[7] A similar pattern is also evident in the case of virtually all countries around the world.

2.3.4 Counter-Cyclical vs Pro-Cyclical Assumptions

Alesina and Tabellini (2005) employ data on 87 countries over the period 1960 to 1999 to test the counter-cyclicality and the pro-cyclicality assumptions discussed in Sub-section 2.2. They conclude that in the OECD countries fiscal policy is counter-cyclical, while in 36 out of 64 non-OECD countries pro-cyclicality is confirmed. The 36 countries are essentially Sub-Saharan African and Latin American countries, thereby supporting the political agency phenomenon in the case of these countries. They also depend on the nature of the tax system and on the expenditure system – a progressive tax and social security system would aid counter-cyclical budgets whilst a regressive system would point in the other direction. It is also shown that credit constraints impose obstacles to developing country governments to borrow the desired amounts, but it does not appear to be as a significant variable of pro-cyclicality as the political agency variable.

These results, however, may very well reflect the fact that developed and developing countries are subject to different shocks (see Galí and Perotti 2003; Gita Gopinath 2004; and Roberto Rigobon 2004, in their respective comments on Kaminsky et al. 2004). Utilizing a sample of industrialized countries and developing countries, Galí and Perotti (2003), Gopinath (2004) and Rigobon (2004) confirm the observation to which we have just referred. They find that there is significant differ-

[7] Public infrastructure investment is defined in the case of Latin America to include land transportation, power, telecommunications and water and sanitation (Servén 2007, p. 2, fn. 5).

ence in the cyclical behaviour of fiscal policy in the two groups of countries. This they interpret as a consequence of the different shocks to which the two types of economies are subjected.[8]

2.3.5 Measurement Issues

An important and relevant point is the extent to which budget deficits are measured appropriately in the studies referred to above. Robert Eisner (1989) was very persistent on the importance of proper definitions. In fact in Eisner and Paul J. Pieper (1984), the point is made very well: "an appropriately adjusted high-employment budget turns out to have been not in deficit in recent years, as usually supposed, but in considerable surplus. The view that fiscal policy has generally been too easy and overstimulatory is contradicted" (p. 23). In the same study it is also argued that "official measures of the federal debt and budget deficits are misleading by any of several reasonable standards. Gross public debt figures ignore financial asset accumulation as well as the real assets, which have contributed to a growing government net worth. Budget flows have failed to distinguish between current and capital accounts, and measures of surplus and deficit have been inconsistent with changes in the real value of net debt" (Eisner and Pieper, op. cit., p. 23).

It is clear from the discussion in this section that fiscal policy does have a significant role to play in macroeconomic stabilization, provided fiscal measures are appropriately measured.

This conclusion leads to the question of the precise role of fiscal policy as a stabilization instrument of macroeconomic policy. We discuss this issue in Section 3.

3. What Role for Fiscal Policy?

It clearly follows from the discussion so far that relevant exercises undertaken provide strong support to fiscal policy as an instrument of stabilization policy. This conclusion is strengthened by more recent findings, which are based on the value of the fiscal multipliers under conditions of coordination between fiscal and monetary policy. Gauti B. Eggertsson (2006) utilizing a calibrated model, not dissimilar in substance to the New Consensus in Macroeconomics, concludes that under fiscal and monetary policy coordination fiscal multipliers are higher than when no policy coordination prevails. Indeed, they are bigger than those found in the traditional Keynesian literature.[9] This large difference in fiscal multipliers is explained by the expecta-

[8] It is important to note, along with Kaminsky et al. (2004) and Perotti (2007) that the terminology on the issues discussed in the text is clear. For otherwise there could be ambiguity over the notions of counter- and pro-cyclical fiscal policy. When budget outcomes are expressed as percentage of GDP, changes in the deficit or surplus might be ambiguous. For example, when growth is low the budget deficit as a percentage of GDP could fall even if in absolute terms it decreases. It is for this reason that whenever the focus is on the potential contribution of fiscal policy to aggregate demand is at issue, it is better that the absolute amount is utilized to avoid such confusion.

[9] The fiscal multipliers reported in Eggertsson (2006) under fiscal and monetary policy coordination are 3.4, in the case of the real spending multiplier, and 3.8, in the case of the deficit spending multiplier. When there is no policy coordination, i.e. when the central bank is "goal independent", the real spending multiplier is unchanged, while the deficit spending multiplier is zero.

tions channel, which is very much emphasized in the Eggertsson (op. cit.) study. This channel works via inflation expectations. Fiscal expansion increases expectations about future inflation, real rate of interest is reduced (provided the central bank collaborates with the fiscal authority) and spending is stimulated. Expectations of future income also improve, thereby stimulating spending further. This result is particularly important in view of much current theory and practice that see fiscal policy better divorced from monetary policy. This contribution would suggest that macroeconomic stability is the joint responsibility of the monetary and fiscal authorities. Potentially destabilising behaviour by one authority can be offset by an appropriate stance of the other authority. Perhaps more importantly the monetary authority can trade off some inflation for lower unemployment, even in the long run.

These particular policy prescriptions become increasingly of vital importance. The recent credit-crunch crisis testifies clearly to such a policy strategy. Sensible coordination of fiscal policy and monetary policy should be the basis of a new policy framework. The risk of recession in the US, which could have worldwide implications, dictates such a combination of policies. Given the effectiveness of fiscal policy, which is crucially supported by recent theoretical and empirical developments as argued in this paper, and avoiding potential over-reaction by monetary policy, is what is desperately needed.[10] This should be supplemented by regulatory policy measures to introduce institutional changes that are required as recent experience demonstrates.[11] For example, using monetary policy to bail out the distressed borrowers from the recent credit-crunched crisis would necessitate huge decreases in interest rates, which would not work in any case (see footnote 10), and would be incompatible with current monetary policy thinking in view of global inflationary pressures.[12] Indeed, aggressive monetary policy might turn the credit-crunch episode of the summer of 2007 into a serious and wider financial crisis - excessively low interest rates can easily create bubbles the burst of which would have devastating effects on the economy.

Using subsidies to bail out the distressed borrowers would be a much better and efficient way of tackling the problem, thereby avoiding the various risks of monetary policy over-reaction. In this way the fiscal stimulus would target those with low incomes and those that have suffered from the credit crunch of the summer of 2007. This would have to be accompanied by regulatory changes in the form of deposit insurance, and other similar measures, all designed to avoid the problems of what we now know as the credit-crunch crisis.

[10] Over-reaction by monetary policy in this context is a dramatic reduction of interest rates, which would not be effective in that it would only work for non-distressed borrowers (who can undertake refinancing immediately), but not for distressed borrowers – they can only be helped by direct action on the fiscal front.

[11] Such institutional changes would reverse a number of changes that were introduced in the era of "financial liberalisation". This epoch has produced unparalleled financial crises since its inception in the 1970s, culminating to the recent credit-crunch crisis of the summer of 2007.

[12] Interestingly enough, globalisation, which produced stable inflationary episodes through cheap goods, not such a long time ago, is now creating rising demand for resources with supply constraints, such as oil and food, which threaten to produce serious inflationary pressures.

Coordination of fiscal and monetary policy does not imply that the respective authorities need to lose their "independence". For example, this cooperation need not mean that central bank independence is reduced. So long as the fiscal and monetary authority have *a common objective*, for example maximisation of social welfare, this need not imply that the two authorities should lose their "independence" (Eggertsson 2006). This is not dissimilar to Wren-Lewis's (2000) proposal for delegating fiscal actions to an independent body, outside the government. This could take the form of a "fiscal regulator" with two objectives: to advise on short-run discretionary action and to supervise the long-run sustainability of the government finances. It is also argued that the Bank of England Monetary Policy Committee (MPC) can play such a role, alongside monetary policy. This is paramount in this view, given the requirement of proper coordination of fiscal and monetary policies (Wren-Lewis, op. cit., p. 104).[13] In the same spirit of analysis, Ludger Linnemann and Andreas Schabert (2003), utilizing a model of wage and price stickiness, demonstrate that fiscal policy can affect output if the monetary authority does not react aggressively to output changes. Furthermore, in models where capital accumulation is also accounted for, as in Arestis, Michelle Baddeley, and Malcolm Sawyer (2007) for example, aggregate demand, which would now include investment expenditure more prominently, would be more susceptible than otherwise to changes in the rate of interest. This consideration gives more credence to the proposition that coordination of fiscal and monetary policy becomes paramount.

4. Summary and Conclusions

We have looked at recent developments on the fiscal policy front, which emanate from an attempt to change a number of relevant assumptions. Most important of these assumptions are the existence of Ricardian and non-Ricardian economic agents, as well as liquidity-constrained households, and the endogenization of labour supply and capital accumulation. The conclusions from this discussion are of two types. The first is that fiscal policy does have a significant role to play as an instrument of economic policy. It is one of the crucial factors that determine the economic performance of a country through its impact on allocation, distribution and stabilization. As such, fiscal policy is a key component of any macroeconomic framework alongside monetary policy. This leads us to the second major conclusion of this contribution. Co-ordination of fiscal and monetary policies is probably the best way forward in terms of macroeconomic stabilization; in doing so the authorities should employ a great deal of discretion in the application of such coordination. It should also be added that such coordination becomes even more effective when the fiscal and monetary authorities have a common objective, for example maximization of social welfare.

[13] A number of authors have proposed delegating decisions on fiscal policy to "an independent fiscal policy committee" to improve its effectiveness and the financial discipline of the government. See HM Treasury (2003, p. 74) for a brief summary of a number of these propositions.

References

Aghion, Phillipe, George-Marios Angeletos, Abhijit Banerjee, and Kalina Manova. 2005. "Volatility and Growth: Credit Constraints and Productivity Enhancing Investment." NBER Working Paper 11349.

Alesina, Alberto, and Guido Tabellini. 2005. "Why is Fiscal Policy Often Procyclical?" Harvard University Discussion Paper 2090.

Allsopp, Christopher, and David Vines. 2005. "The Macroeconomic Role of Fiscal Policy." *Oxford Review of Economic Policy*, 21(4): 485-508.

Arestis, Philip. 2007. "What is the New Consensus in Macroeconomics?" In *Is There a New Consensus in Macroeconomics?,* ed. Philip Arestis, 22-43. Houndsmills, Basingstoke: Palgrave Macmillan.

Arestis, Philip. 2008. "Fiscal Policy within the New Consensus Macroeconomics Framework." In *Current Thinking on Fiscal Policy,* ed. Jérôme Creel and Malcolm Sawyer. Houndsmills, Basingstoke: Palgrave Macmillan.

Arestis, Philip, Michelle Baddeley, and Malcolm Sawyer. 2007. "The Relationship between Capital Stock, Unemployment and Wages in Nine EMU Countries." *Bulletin of Economic Research*, 59(2): 125-148.

Bilbiie, Florin O., André Meier, and Gernot J. Müller. 2006. "What Accounts for the Changes in U.S. Fiscal Policy Transmission?" ECB Working Paper Series 582.

Blanchard, Olivier J. 1985. "Debt, Deficits and Finite Horizons." *Journal of Political Economy*, 93(2): 223-247.

Blanchard, Olivier J., and Roberto Perotti. 2002. "An Empirical Characterization of the Dynamic Effects of Changes in Government Spending and Taxes on Output." *Quarterly Journal of Economics*, 117(2): 1329-1368.

Blanchard, Olivier, and Francesco Giavazzi. 2004. "Improving the SGP through a Proper Accounting of Public Investment." CEPR Discussion Paper 4220.

Blinder, Alan. 2006. "The Case against the Case against Discretionary Fiscal Policy." In *The Macroeconomics of Fiscal Policy*, ed. Richard W. Kopcke, Geoffrey M. B. Tootell, and Robert K. Triest, 25-61. London: MIT Press.

Botman, Dennis, and Manmohan S. Kumar. 2006. "Fundamental Determinants of the Effects of Fiscal Policy." IMF Working Paper 06/72.

Campbell, John Y., and Gregory N. Mankiw. 1989. "Consumption, Income and Interest Rates: Reinterpreting the Time Series Evidence." In *NBER Macroeconomics Annual 1989*, ed. Olivier J. Blanchard and Stanley Fischer, 185-216. Boston: MIT Press.

Coenen, Günter, and Roland Straub. 2005. "Does Government Spending Crowd in Private Consumption? Theory and Empirical Evidence for the Euro Area." IMF Working Paper 05/159, ECB Working Paper 513.

Creel, Jérôme, Paola Monperrus-Veroni, and Francesco Saraceno. 2006. "Estimating the Impact of Public Investment for the United Kingdom: Has the Golden Rule of Public Finance Made a Difference?" In *Research Department Public Finance Workshop - Fiscal Indicators*, 373-403. Perugia: Banca d'Italia.

Eggertsson, Gauti B. 2006. "Fiscal Multipliers and Policy Coordination." Federal Reserve Bank of New York Staff Reports 241.

Eisner, Robert. 1989. "Budget Deficits: Rhetoric and Reality." *Journal of Economic Perspectives*, 3(2): 73-93.

Eisner, Robert, and Paul J. Pieper. 1984. "A New View of the Federal Debt and Budget Deficits." *American Economic Review*, 74(1): 11-29.

Galí, Jordi, and Roberto Perotti. 2003. "Fiscal Policy and Monetary Integration in Europe." *Economic Policy*, 37: 535-573.

Galí, Jordi, David López-Salido, and Javier Vallés. 2004. "Understanding the Effects of Government Spending on Consumption." ECB Working Paper 339.

Gopinath, Gita. 2004. "Comments to Kaminsky et al." In *NBER Macroeconomic Annual 2004*, ed. Mark Gertler and Kenneth Rogoff, 54-61. Cambridge, MA: MIT Press.

Hemming, Richard, Michael Kell, and Selma Mahfouz. 2002. "The Effectiveness of Fiscal Policy in Stimulating Economic Activity: A Review of the Literature." IMF Working Paper 02/208.

Hjelm, Goran. 2002. "Is Private Consumption Higher (Lower) during Periods of Fiscal Constructions (Expansions)?" *Journal of Macroeconomics*, 24(1): 17-39.

HM Treasury. 2002. *Reforming Britain's Economic and Financial Policy*. Houndsmills, Basingstoke: Palgrave Macmillan.

HM Treasury. 2003. "Fiscal Stabilization and EMU." HM Treasury Discussion Paper.

Kaminsky, Graciela L., Carmen M. Reinhart, and Carlos A. Vegh. 2004. "When It Rains It Pours: Procyclical Capital Flows and Macroeconomic Policies." *NBER Macroeconomic Annual,* 19(2004): 11-53.

Krugman, Paul. 2005. "Fiscal Policy Poised for a Comeback?" *Oxford Review of Economic Policy*, 21(4): 515-523.

Leith, Campbell, and Simon Wren-Lewis. 2005. "Fiscal Stabilization Policy and Fiscal Institutions." *Oxford Review of Economic Policy*, 21(4): 584-597.

Linnemann, Ludger, and Andreas Schabert. 2003. "Fiscal Policy in the New Neoclassical Synthesis." *Journal of Money, Credit and Banking*, 35(6): 911-929.

Mankiw, Gregory N. 2000. "The Savers-Spenders Theory of Fiscal Policy." *American Economic Review*, 90(1): 120-125.

Mihov, Ilian. 2003. "Discussion of 'Understanding the Effects of Government Spending on Consumption' by Jordi Galí, J. David López-Salido, and Javier Vallés." http://faculty.insead.edu/mihov/files/Discussion%20Gali%20et%20al.pdf.

Perotti, Roberto. 2005. "Estimating the Effects of Fiscal Policy in OECD Countries." CEPR Discussion Paper 4842.

Perotti, Roberto. 2007. "Fiscal Policy in Developing Countries: A Framework." World Bank Development Research Group Working Paper 4365.

Persson, Torsten, and Guido Tabellini. 2000. *Political Economics: Explaining Economic Policy*. Cambridge, MA: MIT Press.

Rigobon, Roberto. 2004. "Comments to Kaminsky et al." In *NBER Macroeconomic Annual 2004*, ed. Mark Gertler and Kenneth Rogoff, 62-79. Cambridge, MA: MIT Press.

Servén, Luis. 2007. "Fiscal Rules, Public Investment, and Growth." World Bank Development Research Group Working Paper 4382.

Smets, Frank, and Raf Wouters. 2003. "An Estimated Stochastic Dynamic General Equilibrium Model of the Euro Area." *Journal of the European Economic Association*, 1(4): 1123-1175.

Strauss-Khan, Dominique. 2011. "Global Challenges, Global Solutions." An Address at George Washington University. http://www.imf.org/external/np/speeches/2011/040411.htm.

Taylor, John B. 2000. "Discretionary Fiscal Policies." *Journal of Economic Perspectives*, 14(1): 1-23.

Van Aarle, Bas, and Harry Garretsen. 2003. "Keynesian, Non-Keynesian or No Effects of Fiscal Policy Changes? The EMU Case." *Journal of Macroeconomics*, 25(2): 213-240.

Weil, Philippe. 1989. "Overlapping Families of Infinitely-lived Agents." *Journal of Public Economics*, 38(2): 183-198.

Wren-Lewis, Simon. 2000. "The Limits to Discretionary Fiscal Stabilization Policy." *Oxford Review of Economic Policy*, 16: 92-105.