## COMMENTS ON SESSION III: FISCAL POLICY AND GROWTH

## Stefania Zotteri<sup>\*</sup>

The papers of this session provide a rich and stimulating overview of many of the issues concerning the relationship between fiscal policy and economic growth.

Actually, the interesting paper by *Brunila et al.* refers to cyclical stabilisation issues rather than to growth ones; in particular, the analysis of this paper relies on the distinction between supply and demand shocks and stresses the potential trade-off between cyclical stabilisation and structural flexibility, where the latter stands for the responsiveness of the economy to permanent supply shocks.

The other five papers of this session focus on growth, making only some brief comments on the issue of stabilisation. These five papers are very heterogeneous: some of them refer to tax effects, some to public expenditure effects and others try to take into account the overall government budget effects on growth. Not surprisingly, the papers more focused on the role of the overall government budget are those referring to EU countries, that is countries which have to take into account the fiscal rules provided for in the Maastricht Treaty and in the Growth and Stability Pact. Moreover, some of the papers look at fiscal policy and growth from a general perspective and others, as the one on Portugal, are more like case studies.

If I were one of the authors of these five papers, I would organise a meeting with the other authors and ask them to work a little bit more on the papers, fill in some blanks and then publish a book made up of the papers themselves. A tentative title for this book could be: "Everything you always wanted to know about fiscal policy and growth, but were afraid to ask". In my view this book could be made up of two parts. Part I is the more general part of the book where the authors can split the issue of the relationship between fiscal policy and growth into two sections: the first one focusing on the effects of fiscal policies on individuals and firms' choices and the second one considering the growth implications of these

Research Department, Banca d'Italia.

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changes in choices. Part II of the book can be made up of more specific empirical studies.

The index of the book could be as follows:

Part I: General issues on fiscal policy and growth (in Europe)

- The effects of taxes on agents' decisions (*van den Noord* and *Heady*)
- The effects of public expenditure on agents' decisions (*to be written*)
- The contribution of public finances to the European growth strategy (*Lamo* and *Strauch*)

Part II: Specific empirical studies on fiscal policy and growth (in Europe)

- Fiscal policies and economic growth in Europe: an empirical analysis (*Hiebert et al.*)
- The tax reform in Portugal (*Pereira* and *Rodrigues*)
- Human capital and growth in OECD countries: the role of public expenditure on education (*Buysse*)

Most of the first bit of Part I of the book is already well written by *van den Noord* and *Heady*. Their analysis focuses on the effects of taxation on different decisions such as: (i) the decision to save; they take into account the impact of taxation not only on aggregate saving, but also on its composition and on international saving flows; (ii) the business funding decision; the authors importantly underline that in practice no tax system in OECD countries is neutral with respect to corporate financing and investment decisions and that in most countries tax systems are biased in favour of debt financing; Italy is not an exception and it is now going back to the less neutral tax system which was in place before the 1998 tax reform; (iii) the decision whether to participate in the labour market and on how many hours to work once working.

The authors of the book could add a paper on the effects of public expenditure on agents' choices. They could consider for example public investment expenditure, investment contributions and other types of transfers (either earmarked or not).

Having this rich and broad base which is both theoretical and empirical, one could consider within Part I of the book the *Lamo* and *Strauch* contribution. It refers to EU countries, but still takes a rather general perspective. The authors analyse the European growth strategy according to which the quality of public finances play a crucial growth-enhancing role via three mechanisms: (i) supporting macro-economic stability; (ii) making tax and benefit systems more employment friendly; (iii) changing the composition of public expenditures in favour of those expenditures which can stimulate physical and human capital accumulation and encourage technological progress.

They find evidence to indicate that public finances can be considered a source of endogenous growth even if considerable uncertainty remains as a far as the size of their impact is concerned.

So, we end up considering Part II of the book where there is room for more specific analyses including those by *Hiebert et al.*, by *Pereira* and *Rodrigues* and by *Buysse*.

The paper by *Hiebert et al.* first reviews the methodological issues concerning the analysis of the empirical assessment of the determinants of economic growth and then provides a new contribution to a literature where there is no clear consensus on the relationship between government intervention and economic growth. In the paper, the sample refers to EU countries over the last three decades. According to my understanding of the paper, an important contribution of the analysis is the use of a new dependent variable for measuring long-term growth. Indeed, the authors build up annual estimates of trend economic growth estimates based on the HP filter. As the authors themselves stress, this choice is not only more analytically grounded but also allows for the extension of the time series considered in analyses which typically use annual data.

The authors conclude that there is a negative robust relationship between government size and economic growth in EU countries. If I understood it correctly, this conclusion is obtained from an estimation which do not control for the financing element of the budget constraint (i.e. the way any measure is financed). When the budget surplus is included as a control variable for the government budget constraint, government expenditure is no longer significant and improvements in the budget balance have a significant growth-enhancing impact. This suggest a positive growth-enhancing role for improvements in the budgetary position of EU countries and a limited role for more government spending.

The paper by *Pereira* and *Rodrigues* could be the other paper belonging to Part II of the book. It is an interesting case study on the

Portugal tax shock which has been an important topic of the public debate for quite some time before the elections which took place last Sunday. This tax shock includes a reduction in the corporate income tax rate, a reduction in employer's social security contribution rate and in the personal income tax rate corresponding to the highest income bracket. The authors find out that the tax shock effects on growth crucially depend on the way the measures are financed. As intuitive, the strongest positive growth effects occur under lump sum taxes financing. Moreover, interestingly, positive growth effects go together with positive welfare effects when the tax shock is financed via a reduction in public spending. I wonder whether and how the conclusions about the tax package would be affected if the imperfections in the labour market were explicitly modelled. I am thinking about something in Daveri and Tabellini's fashion.<sup>1</sup>

Buysse presented an empirical analysis on the Then, growth-enhancing role played by human capital. According to my understanding of the paper, it follows the Nelson-Phelps approach. This means that the level of human capital rather than its growth rate is one of the determinants of growth. The analysis also stresses the importance of accounting not only for the quantity, but also for the quality of human capital. As it generally happens both in empirical and in theoretical analyses concerning human capital and growth, human capital is identified with education. Nevertheless, as an issue for future research, I believe it is important to account for other components of human capital such as training. When training is accounted for as an investment in human capital, the interaction between the individual incentives to invest in schooling and the firm incentive to invest in training could be crucial.

Two final remarks before concluding.

First, it is apparent from Part II of the book, but it is also somewhat said in Part I, that both the revenue and the expenditure side of the government budget should be considered in evaluating the impact of fiscal policy on economic growth. Indeed, the growth-enhancing effects of any measure could be, at least partially, compensated by the effects of the financing side of the measure. This holds both for empirical and for theoretical analysis. We all know that it is very difficult in practice.

Secondly, when assessing the growth effects of fiscal policy, one should bear in mind that growth is only one of many policy targets. Here I

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<sup>&</sup>lt;sup>1</sup> Daveri, F. and G. Tabellini (2000), "Unemployment and Taxes", *Economic Policy*.

would like to mention one of the other important goals of fiscal policy: income redistribution. This leads to the equality-efficiency trade-off, where equality can be considered in terms of income distribution and efficiency in terms of growth. The well known Okun's leaky-bucket experiment can be used to test our attitude towards this trade-off.<sup>2</sup> Consider a programme for transferring money from the richest to the poorest families of a given economy; "the programme has an unsolved technological problem: the money must be carried from the rich to the poor in a leaky bucket. Some of it will simply disappear in transit, so the poor will not receive all the money that is taken from the rich. [...] Of course, the leak represents an inefficiency. The inefficiencies of the real world redistribution include the adverse effects on the economic incentives of the rich and the poor, and the administrative costs of tax collection and transfer programs" (Okun, 1975, pp. 91-92). The point is how much leakage we would accept and still support the redistribution programme. So in the end, while looking at the growth effects of fiscal policy, we should be aware of the relative importance of this growth target as compared to the other goals we want fiscal policy to track.

<sup>&</sup>lt;sup>2</sup> Okun, A.M. (1975), *Equality and Efficiency: the Big Tradeoff*, Washington D.C., The Brookings Institution.