COMMENT

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These papers provide much valuable insight into the debate on the sustainability of fiscal policy. To situate their contribution I shall start at the beginning, with the question:

Why are we looking at these issues?

A first question to ask is why we are interested in this issue at the present juncture. The Growth and Stability Pact provides one prompting, illustrating as it does that fiscal and monetary policy cannot be treated as entirely separate entities. In particular, it is fashionable to use the ideas of 'fiscal dominance' and 'monetary dominance' to refer to situations in which, respectively, the fiscal authorities or the monetary authorities "call the shots".¹ This delineation follows (but is distinct from) the well-known demonstration of Sargent and Wallace that even a presently 'tight' monetary policy can be undermined by a fiscal policy that risks monetization in the future (Sargent and Wallace (1981)).

A related, but conceptually distinct concern, stems from the idea that the monetary union-equivalent of the foreign exchange crisis which disrupts quasi-fixed exchange rate regimes is a debt run. McKinnon (1994) drew attention to the fact that in the normal way governments can rely on their taxing powers and on their ability to coerce their Central Bank into printing money, to convince debt holders that they

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¹ See Canzoneri et al. (1997).

are secure. With the formation of the European Monetary Union, the power of governments to coerce their Central Banks into issuing currency goes. At the same time – though not as a result of EMU *per se* – European governments face increasingly mobile tax bases as integration of the European Union proceeds. These factors suggest that something of a regime change is occurring as regards the adequacy of debt ratios. Debt levels that were 'safe' before EMU are presumptively less safe after EMU. McKinnon (1994) compares debt/gross state product ratios for US states with the debt/GDP ratios of European countries to underline the point.

Then, as stressed in the paper here by Balassone and Franco – there has been the impact of demographics. It has become clear that the ageing of the populations of European countries will bring with it added state expenditures. The dimensions of this problem have obliged governments to 'look forward' in a self-conscious fashion, to find out what the implications might be for the path of deficits, debts and taxes.

The three factors mentioned above as prompting an interest in sustainability do so in different ways. From the perspective of the fiscal versus monetary dominance debate, the issue of sustainability per se is of indirect relevance. Some of those who have contributed to this debate explicitly assume that 'solvency' or 'sustainability' in the technical sense (see below) is not an issue in that governments will not default; but they look to a rise in the price level to guarantee solvency in the last resort. If we are interested in fiscal policies that do not threaten the dominance of monetary policy we will want to be clear that such pressures will not arise in the first place. From the debt run perspective, it appears that solvency considerations are not sufficient to pin down safe debt ratios, though insolvency would surely provoke a run. Finally, the kind of interest in sustainability that issues like demographic change provokes is to be related to considerations of the 'political constraint' on tax rates and the efficiency of private as compared to public sector pension arrangements and so on.

Solvency/Sustainability

The notion of sustainability seems clear enough in a general sense. It denotes whether a government can go on with the existing set of tax schedules and expenditure programmes – or not. If not, then current

COMMENT

policy needs to be changed and is, literally speaking, unsustainable. In the papers covered here, as elsewhere in the literature, 'sustainability' and 'solvency' are defined, most of the time, as the same thing. We should perhaps recognize solvency as a technical concept which is not necessarily the same thing as sustainability. One case in which a difference may become apparent (this is mentioned in the Artis-Marcellino paper here, whilst Chalk and Hemming also provide an illustration (see the discussion of their table 4)) is when there is a debt target that must be reached, for some reason, at a prespecified point in the future. The Maastricht timetable is a good example. Governments that were solvent could perfectly well find that this timetable required a change in fiscal policy, even though solvency was already satisfied. In a similar fashion, the avoidance of debt runs might indicate, for 'safety' reasons, debt targets lower than the values that a solvent government would encounter. This last consideration is perhaps particularly important. The technical ("present value") definition of solvency requires that the government "should be able to pay its debts": i.e. that the present discounted values of the future set of primary surpluses should be greater than or equal to the current stock of debt. This condition does not mean that the debt stock should be zero in finite time and can be satisfied in principle at any level of current debt. In particular, given any constant ratio of debt to GDP and the "efficiency condition" (that the interest rate exceeds the growth rate), the pdv condition can be satisfied. It seems paradoxical that the condition that "the government can pay its debt" should be capable of being satisfied by governments that apparently never do so! Some observers have grown tired of examining the solvency condition for (essentially) this sort of reason and, finding no other precise formulations to analyse, have turned to political economy issues, emphasising such issues as the controllability of fiscal policy, its flexibility and the political constraints on fiscal adjustments (e.g. von Hagen and Harden (1994)).

Hazards in the empirical verification of sustainability

Much the cleanest implementation of the idea of sustainability comes in the kind of explicitly forward-looking context that the paper by Frederiksen in this volume occupies. Here, the budget is projected forward over future years, and – within the limits of the accuracy of this type of projection – it becomes possible to see whether fiscal policy

247

needs to be changed. Chalk and Hemming also illustrate how the IMF assesses sustainability in a similar way. The IMF makes 5-year forward projections, checking whether the debt ratio is rising and, if it is, iterating on to an alternative projection with a fiscal policy that is tight enough to produce a stable debt ratio. Many exercises in sustainability/solvency are not like this, however. They take data for the past and, essentially, ask whether policy is sustainable (the finances solvent) "if we go on like this". This is what the Artis-Marcellino paper in this volume does. Even the reference path here is rather imprecise - it is a DGP rather than a clearly-defined set of tax schedules and spending programmes. The use of econometric techniques here to check the solvency condition is of considerable analytical interest in that it brings together modern "cointegration econometrics" with modern inter-temporal macroeconomic theory. Only the data are a nuisance! Many of the techniques are rendered difficult to apply in practice by structural change in the data series. If a country has been facing fiscal problems it likely will have been introducing partial reforms, perhaps rendering homogeneous only the most recent part of the time series. Then the techniques cannot be applied through lack of observations. Technically, also, it is worth noting that many of the tests have the 'wrong' null and are consequently predisposed, being also none-too-powerful, to find in favour of a lack of solvency. The paper from de Castro Fernandez and Hernandez de Cos illustrates in a constructive fashion some of these pitfalls. These authors are careful to screen their data for abrupt and for gradual change. Accordingly, they find that fiscal processes in Spain are "becoming stationary" even if the sample as a whole appears to suggest insolvency or, at best, only "weak" sustainability. The care exercised in the application of technique here yields a conclusion that "strong sustainability" is the verdict supported by most recent data.

Was Maastricht helpful in 'forcing the pace'?

Balassone and Franco note that whilst the literature is often imprecise and inconsistent in its use of terms, the Maastricht Treaty and Stability Pact have "forced the pace" in fixing the definition of variables and values of critical targets. The literature certainly knows no 'reasons' for the 3 per cent deficit ratio and 60 per cent debt ratio figures, no reason why gross and not net debt figures should be used, why actual, not structural deficit figures should be made targets and so on. The COMMENT

differences between alternative definitions often seem quite startling: Chalk and Hemming quote the extraordinary Japanese figures for gross and net debt, where a difference of some 90 per cent exists between the two figures. In fact there are not a few 'warnings' in the literature that these choices of convenience are wrong, without serious intellectual rationale and could even be dangerous. Yet, oddly, most observers will probably agree that the Maastricht Process and the Stability Pact were necessary and (so far) highly successful enterprises. Whilst this is so, the substance of the warnings should not be forgotten by analysts.

The Stability and Growth Pact

In fact, the Stability and Growth Pact, though inheriting many of the arbitrary definitions introduced through the Maastricht Treaty, can be argued to be more 'economics-friendly'. This is because it has introduced the notion of a target medium-term balance, which is none other than the structural balance. The idea is that countries should aim for a structural balance which allows the built-in stabilizers to perform an adjustment function in normal cycles that keeps the actual deficit below the 3% level that would trigger the excessive deficit procedure. In fact, one of the papers published here, that by Hiebert and Rostagno, makes just the kind of objection to the introduction of the 'economics-friendly' concept of the structural deficit that motivated the earlier exclusive references to actual deficits. The objection is that the measurement of structural deficits is a controversial business and that to let policy be guided by such a concept is to invite political discord. This is a good point, especially as there are a number of differences, emerging in the literature, in the way in which structural deficits are measured. Although the OECD, IMF and EC largely share a common approach on this issue, which consists in finding a measure of the output gap and then applying budget elasticities for an agreed set of taxes and expenditures to the gap in order to 'correct' the budget, even this common approach can yield differences - in the estimates of the elasticities and, more important, in the estimate of the output gap. Outsiders have come up with even greater differences in approach: the literature is well summarized in Barrell and Pina (2000). In setting the target structural deficit, moreover, analysts need also to take account of projection errors, as Hiebert and Rostagno suggest in the case of interest rate shocks (but should include also 'pure' fiscal forecasting error). This illustration of the problems involved in moving to a more 'economics-friendly' approach is salutary of course: but it can hardly be a reason for ducking the issues. There is no way in which real problems can be avoided. The alternative of 'debt-targeting' suggested by Hiebert and Rostagno is interesting in seeking to avoid the problem of currently measuring the structural deficit and, as an "integral control" measure it can be seen to provide a check on the drift that "derivative control" measures (deficit targeting) permit. But it cannot escape the problems involved in calculating, in the first place, the desired structural deficit and corresponding debt.

Conclusions

The survey in the lead paper by Balassone and Franco rightly confirms that a number of notions of 'sustainability' exist in the literature and that policy makers have taken the lead in enforcing workable definitions over the finer points of academic debate. So far, this pragmatic approach has belied the warnings of academics; it has produced results of the right kind. It has also caused academic and policymakers' own research to proceed in more fruitful and pragmatic ways. The plea for more and better data bases, if uncontroversial, is surely a conclusion that needs underlining.

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