COMMENTS ON SESSION 2
SUSTAINABILITY ASSESSMENT AND POLICY IMPLICATIONS

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Comments on: Carone *et al.*, "Economic Growth and Fiscal Sustainability in the EU: The Impact of an Ageing Population", Balassone *et al.*, "Fiscal Sustainability Indicators and Policy Implications for the Euro Area" and Cournède and Gonand, "Restoring Fiscal Sustainability in the Euro Area: Raise Taxes or Curb Spending?"

Introduction

I was hoping to find a common thread that ran through all three papers and to provide a discussion relevant to all three pieces of research. Unfortunately, other than their obvious relation to the broad topic of fiscal sustainability, the only common theme was their focus on the euro area.

Being from Canada, I must confess a limited knowledge of European institutions and of the circumstances and challenges of its various member countries. Consequently, I have little to contribute with regarding the validity of the methodology or results as they apply to specific countries.

Nevertheless, my work on fiscal sustainability and on the policy implications of population ageing in the Canadian context has exposed me to several of the general issues dealt with in the three papers. My comments will therefore focus on those areas where I have encountered issues and problems similar to those investigated by the authors. This, however, implies that I will not be reviewing every paper evenly. In fact, my comments are increasing in the order of the papers.

Comments on Carone et al.*, "Economic Growth and Fiscal Sustainability in the EU: The Impact of an Ageing Population"*

The first paper develops sustainability indicators to measure the size of the fiscal challenge in the various EU countries.

Since the methodology used to construct the fiscal projections and calculate the fiscal gaps are fairly standard, the paper's value lies in the specific country results and the assessment of actual and potential progress. Consequently, I have very little to say about this paper.

The only comment I might venture, for the benefit of the authors, is that as an outsider I found it hard to understand the context in which the paper was being written. That is, why another European sustainability study? Several already exist. How does this study improve on those existing studies? Is it just an update or is there more being done here than in previous work?

I suspect the answer is self evident for anyone living in the EU but may nevertheless be of value if the paper is eventually targeted at an international audience.

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Comments on Balassone et al.*, "Fiscal Sustainability Indicators and Policy Implications for the Euro Area"*

The second paper begins by assessing and adjusting the public expenditure projections of the Working Group on Ageing Populations and updating sustainability gap indicators. However, its main purpose is assessing different budgetary strategies to restore fiscal sustainability through the lens of intergenerational distribution. To do this, they use the tool of generational accounts.

Given the difficulties associated with compiling full-fledged generational accounts this paper takes a step in the right direction. Indeed it explicitly calculates total lifetime generational accounts for all cohorts born between 1970 and 2050 taking into consideration all age-specific revenue and expenditure categories. This is obviously much more complete than the traditional approach of simply accounting for differences in future taxes paid and in-kind transfers received.

I have two small thoughts on their work.

The first is an issue the author's highlight repeatedly in their text so I will not dwell on it too much but, in my experience, it inevitably comes up in discussions regarding intergenerational distribution. The issue is the allocation of general non-age-related government consumption and capital spending. In the paper non-age-related revenue and spending is simply distributed evenly over all age cohorts. In addition, capital spending in these data is expensed rather than accrued so the benefits are not appropriately distributed, and this is true for all categories of spending.

Ironically, it is unclear whether this is really that important. However, when it comes to the public policy debate, until a way can be figure out to appropriately impute general government consumption and deal adequately with capital spending, there will always be a sense that a piece of the puzzle is missing.

My second point relates to intergenerational equity and whether generational accounts could be used to assess it. I noted that the authors repeatedly used the term "intergenerational equity" to describe their criterion for assessing the different budgetary strategies. Given the type of calculations that they conduct, I wonder if they would not be better be served by using the term "intergenerational balance". The distinction made between the two is more than just semantics because it tends to be useful in policy discussions.

In their study, the authors use what is commonly known as the cost-based calculations of generational accounting rather than the utility-based calculations. In the literature, the term generational balance is the one usually associated with cost-based calculations.

To be clear, intergenerational balance refers to the idea that each generation as a group should pay taxes commensurate to the benefits they receive from government spending. While this criterion may, for some, represent an adequate definition of intergenerational equity this will not generally be the case. As the authors recognise, assessing equity inevitably involves some sort of value judgement, requiring normative assumptions to reach any conclusion.

Comments on Cournède and Gonand, "Restoring Fiscal Sustainability in the Euro Area: Raise Taxes or Curb Spending?"

The third paper is somewhat different in nature from the other two in that rather than using an accounting framework to assess fiscal sustainability and measure the size of the fiscal challenge, this paper uses a dynamic general equilibrium life cycle model of the euro area to compare different policy options aimed at restoring fiscal sustainability.

In particular, the model used in the paper is a variation of the famous Auerbach and Kotlikoff (1987) model. The key modification is the introduction of a two-step maximization problem in the individual's labour supply decision. The consequence is that the labour supply decision on the intensive margin (*i.e.*, how much to work) remains endogenous while the decision along the extensive margin (*i.e.*, whether or not to work) becomes exogenous.

The model is then used to compare four different policy scenarios that achieve fiscal consolidation; defined as repaying the debt by 2025.

I have a couple of comments on both the methodology and the results.

Comments on the methodology

Given that fiscal "unsustainability" in the euro area stems primarily from public pensions the authors focus on the labour supply decision is justified. Separating the retirement decision from the intensity of work decision is particularly useful in this context because it allows the retirement age to become a policy parameter. Under the traditional shadow wage methodology one does not have direct control over the age of retirement. Furthermore, matching actual retirement behaviour in the pure life cycle model is particularly challenging given the amount heterogeneity across individuals and the complexity of private and public pension plans. While the paper strikes a good compromise in this regard there are unfortunately some associated costs.

The main drawback is just the flip side of the previous argument. Clearly, by making retirement an exogenous policy parameter any insight as to the impact of a certain policy on retirement behaviour is lost. Indeed, retirement is ultimately an endogenous individual decision and as governments attempt to raise employment rates among older workers at least in developed countries that face the prospect of aging populations, it will become crucial to understand and model the intricacies of retirement behaviour.

The second drawback is that their approach seems to have complicated the incorporation of other standard policy parameters. Indeed, their basic model does not incorporate capital and consumption taxes. While they have sensitivity analysis incorporating capital taxes, it seems to me that when it comes to applied fiscal policy work all major taxes should automatically be part of any analytic framework. While their relevance is clearly limited for the simulations conducted in this paper it does cast some thought on the validity of the framework as a more general policy assessment tool.

My second comment is minor but I wonder why the authors ignore government spending on education and unemployment benefits. These are generally viewed as mitigating factors to spending increases on pensions and health care. While I would be surprised if their inclusion significantly altered the results it is an odd omission as they would be overstating the amount of required fiscal consolidation.

My last methodological comment relates to the closed economy assumption. While I am also guilty of making this simplifying assumption in my own work, using the same rational as the authors, recent work by Fehr, Jokisch, and Kotlikoff (2005) and by Ludwig, Krueger, and Boersch-Supan (2007) has highlighted the importance of international capital flows; be it with developing economies such as China or amongst developed economies.

Given the current pace of globalization, the closed economy assumption may get harder and harder to justify going forward.

Comments on the results

My first comment is about how they simulate a reduction in spending in their model. To make my point, the inter-temporal budget constraint used in the households sector's maximizing behaviour is given by (see their Annex 1 for details):

$$y_{t,0} + \sum_{j=1}^{\Psi_{t,0}} \left[y_{t+j,j} \prod_{i=1}^{j} \left(\frac{1}{1+r_{t+i}} \right) \right] = c_{t,0} + \sum_{j=1}^{\Psi_{t,0}} \left[c_{t+j,j} \prod_{i=1}^{j} \left(\frac{1}{1+r_{t+i}} \right) \right]$$

where *y* stands for total income net of taxes such that:

$$y_{t,a} = \ell_{t,a} w_t \varepsilon_a (1 - \tau_{t,D} - \tau_{t,P} - \tau_{t,H} - \tau_{t,NA}) + d_{t,NA} + \Phi_{t,a}$$

and $d_{t,NA}$ stands for the non-ageing related public spending that one individual consumes irrespective of age and income. This variable is used as a monetary proxy for goods and services in kind bought by the public sector and consumed by households.

Upon inspection, however, one realizes that this term is analytically equivalent to a lump sum tax. Thus, the simulation of a reduction in non-ageing related expenditures is equivalent to imposing a lump sum tax that is constant across individuals. While the authors' characterisation of the simulation as "€1 of public expenditure that is worth €1 of income to households in the form of public services received" is accurate it is also a little vague. If one were to re-read the paper but replace "spending reduction" with "imposing a lump sum tax" the interpretation would be quite different.

There should have been a discussion of this issue and this equivalence in the paper.

My final comment relates to the metric used to report the aggregate results. Indeed, the headline results are reported in terms of GDP growth and GDP per capita (see their Figure 2). However, for policy evaluation it is the impact on welfare that is the appropriate metric. While I am conscious of the less than pleasing aesthetics involved in reporting welfare results for 79 overlapping generations it is fairly routine in the literature.

The SU scenario is a case in point of why this is important. In this scenario, anticipating that future overall taxes will be lower and that stronger capital deepening will boost future wages, households realise that the implemented reforms raises their permanent income. As a result they increase both their current consumption and the optimal level of leisure (see their Figure 4).

Looking at the results it seems plausible that in terms of welfare this policy scenario is superior to some of the others. At the very least, it seems that the discrepancy would be diminished.

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