

## COMMENTS ON SESSION I: ASSESSING PUBLIC LIABILITIES

*Carl Andreas Claussen\**

My comment focuses on issues discussed in the four papers on public debt in emerging markets. The comments are fairly general, not so much to each paper separately.

The papers give a useful account of the public debt situation in emerging market economies. The papers were interesting and informative.

Generally, they report that the level of public debt in emerging market countries has been on the rise since the mid-Nineties. The rise seems to be caused by interest and exchange rate movements and the recognition of off-balance sheet and contingent liabilities. The transition countries in Europe are important exceptions. Here the debt ratios have fallen sharply as many of these countries have taken measures necessary for accession to the European Union. Generally, the primary fiscal balance has not itself added to the debt stock during this period. Another interesting observation is that the share of domestic debt has increased in Asia and Latin America.

### **Why worry?**

We may worry about the high levels of debt if it hampers economic growth and development. There may be two channels through which that might happen. First, debt servicing requires resources that otherwise could be used for productive investments. Second, a risk of default or an actual default might create uncertainty and turbulence that reduce investments, trade, retrench demand and create other types of turbulence that reduce growth and development.

Empirically, the high interest rates on emerging-market public debt show that the risk of a default is costly. There are also costs from actual default, but those costs might have been somewhat exaggerated. As far as I know, there are only a limited number of empirical studies concerning penalties from default, but these studies do not provide evidence of a very strong punishment in terms of the premia charged to countries with default histories (see references in Rose and Spiegel, 2002, and in note 37 in Daniel and co-authors' paper). However, several studies indicate that debt rescheduling is followed by reductions in trade (see, for example, Rose, 2002).

I am not aware of any empirical study of public debt and growth. Daniel and his co-authors report in footnote 35 that a simple correlation between public debt

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\* Norges Bank (Central Bank of Norway). E-mail: carl-andreas.claussen@norges-bank.no. The views expressed here are those of the author and do not necessarily reflect the views of Norges Bank.

and growth in emerging-market economies since 1990 shows a clear negative relationship. Theory and empirical studies suggest a non-linear concave relationship between external debt and growth (Pattillo *et al.*, 2002). There is, probably, a similar relationship between public debt and growth. The optimal level of lending is where the gain from additional investments (or consumption) is smaller than the cost from additional borrowing. Where the optimal level of debt is may be hard to say, however, and will probably vary considerably between countries.

Apart from our concerns regarding the development in each specific country, we may worry about the high levels of debt because of contagion to other countries. The risk of a debt crisis and an actual debt crisis is likely to be contagious between countries. The default on Russian government debt in August 1998 led to significant turbulence in financial markets worldwide, including financial markets in the developed world.

### **Assessing sustainability**

In the papers presented this morning, the authors try to assess whether the high debt levels are sustainable.

When comparing actual external debt to GDP with the levels at which a credit event has occurred earlier, Clavijo finds that most non-oil based economies in Latin America have surpassed the range of external debt tolerance. Using different measures of debt sustainability, Daniel and his co-authors indicate that the level of public debt in many emerging-market economies is higher than what is sustainable. Martner and Tromben come to similar conclusions for many countries in Latin America. Rial and Vicente also use several approaches and find that the debt levels in Uruguay prior to 2002 were unsustainable.

As Daniel *et al.* point out, there is no simple rule for determining whether, in practice, a government's debt is sustainable or not. In some of the approaches used, the current debt levels are compared with some historic threshold values. The threshold values may be levels where historically there have been defaults, or they may be levels of debt where historically the fiscal policies have stopped correcting rising debt. Other approaches are based on extrapolation of current primary surpluses into the future or other assumptions that seem somewhat unrealistic.

Considered together, these measures may give a useful account of the situation for the emerging markets as a group, but when assessing the situation in each country separately, we should be more careful. Historical threshold values may not be good measures of sustainability today. The cost of default is one factor that may change over time and influence the government's willingness to service the debt. If a country was not willing to service its debt at some levels in the past, it may be now if, for example, the cost of default has increased. Furthermore, if the government is investing heavily today and can expect a higher primary surplus in the coming years, extrapolation of current surpluses is unsatisfactory.

I therefore think a good measure will have to take seriously that the borrowing and default decision of a government is the result of a dynamic political economy game.

A government finds it optimal to default if the cost of doing that – including political cost – are smaller than the cost of creating the necessary primary surplus to service the debt. It does not matter if the country is economically able if its government is not willing. Similarly, a borrowing decision is the result of the government optimizing its expected utility.

Creating a measure or approach that takes seriously that the borrowing and default decision of a government is the result of a dynamic political economy game is not easy. But let me briefly sketch an idea. The idea is inspired by a model in an IMF working paper by Jahjah and Montiel (2003). To simplify, I will only have one period.

Some symbols:  $U$  is the utility of the incumbent government,  $y$  is GDP,  $t$  is the tax rate and  $g$  is government spending. The level of government debt is  $D$ . The policy parameter  $\theta$  measures the share of  $D$  that is in default. The variable  $a$  measures the cost of default.

I abstract from explicit politics and many other relevant elements and assume that the government's utility be given by:

$$U = (1-t-z(t))y+g-a\theta D, \quad z'(t) > 0, \quad z''(t) > 0 \quad (1)$$

and the government's budget constraint by:

$$ty \geq g+(1-\theta)D \quad (2)$$

We may think of  $a$  as capturing some vital dynamic elements, namely the consequences of a default on the future utility.  $z(t)$  may capture both economic and political costs of rising taxes.

Isolating  $\theta$  in (2) and plugging this into (1) and maximizing with respect to the tax rate  $t$ , we get the following first order condition for the government's utility:

$$1+z'(t^*) = a \quad (3)$$

The default strategy  $\theta^*$  is then given by:

$$\theta^* = 1-(t^*y-g)/D \quad (4)$$

Using (3), (4) and simply assuming that  $z(t) = \frac{1}{2}t^2$ , we find that we may express the cost of default as

$$a = 1+ [(1-\theta)D+g]/D \quad (5)$$

The variables on the right hand side are observable. So we might calculate the costs of default for the different countries. We may then regress this series on the factors we believe determine the cost of default to construct an econometric model for the cost of default. The right-hand side variables should be factors that have been suggested as explaining sovereign debt repayment in the literature (see, for example,

Eaton and Fernandez, 1995 and Amador, 2002). This could be the variation in GDP growth and/or export revenue, a measure of the diversification of trade, a measure of the degree of access to asset markets abroad, a measure of the degree of collusion between banks and potential lenders, the value of assets abroad and so on.

This model of the cost of default may then be used to predict the running cost of default. Plugging the predicted  $a$  together with predictions for the other variables in the model into (4), we have a prediction for the default rate.

This model is probably too simple to be useful, but a more elaborate model along this line and with explicit dynamics could be useful, and is probably possible to develop.

### **Political institutions**

Before concluding, I would like to make a final observation/comment to the question of what can be done to get out of the situation where countries borrow too much. To answer this question, it is useful to ask if it is actually a rational strategy for the governments to borrow extensively, knowing that they will default later. Similarly, is it rational for the lenders to lend to the defaulters?

If we answer “yes” to both of these questions, and at the same time worry about the rising levels of debt, then we are saying that we are in some inferior equilibrium. In this equilibrium there are high interest rates and the countries default regularly. This creates turbulence and risks and reduces growth, compared to an equilibrium without default. How can we get out of such a bad equilibrium?

I am tempted to suggest that something has to be done with political institutions. Limited political competition and information asymmetries allow politicians to extract rents and to maximize something else than social welfare. Furthermore, political competition can be a strong force pulling towards economically-efficient policies regardless of the aim of policies (see Becker, 1976, and other proponents of the so-called Chicago view in political economy).

Finally, a question to the authors: I have searched for the datasets used in some of the papers but have not found any. It would be useful for further research on these issues if the datasets were made public.

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