Report on

The Impact of Tax, Product and Labour Market Distortions on the Phillips Curve and the Natural Rate of Unemployment (MS 91)

Summary

This paper introduces distortionary taxation into a general equilibrium model with product and labor market imperfections. In this setting, which is closely related to work by Blanchard and Givazzi (2003), the authors discuss different types of reforms and their implications for wages, unemployment and welfare. In particular, it is argued that considering distortionary taxation is important in order to obtain a detailed picture on the effectiveness of different reform projects with respect to their short-run and long-run implications for wages, unemployment and welfare.

I really like the topic addressed in the paper and I think that discussing tax reforms in a setting with unemployment is meaningful. I think that the formal analysis is properly done and that the main results are interesting and plausible. At the same time, however, I have several reservations concerning the exposition of the paper (and some specific assumptions). My main comments are listed below.

General remarks

- I think that the paper has too little focus on its main contribution, which clearly lies in discussion of tax reforms. Redoing the analysis of labor and product market deregulation in Blanchard and Giavazzi (2003) is not very interesting and provides only a few additional insights. Therefore, I would suggest to focus on the issue of tax reforms and to compare the insights from this analysis with the results in Blanchard and Giavazzi (2003) in a discussion section.
- 2. Related to point 1. above, I think that the whole discussion on the determination of the natural unemployment rate on pages 5 and 6 is ad hoc, not necessary for the main point of the paper and confusing for the reader. Therefore I would recommend to omit this discussion.
- 3. I found it difficult to understand the function $w_r(u)$, with $w'_r(u)$. It is argued that " $w_r(u)$ may represent labor market institutions that affect wage bargains: minimum wages, hiring

and firing costs, ..." Although such interpretations may be suitable for the respective shortcut in Blanchard and Giavazzi (2003), they are less appropriate in this paper, because it is argued that $w_r(u)$ is financed by the public sector, using tax income (see eq. (10)). Therefore, I think that unemployment compensation payments would be an adequate interpretation in this paper's context. However, then it is not clear, why there should be a positive relationship between w_r and u. There is some discussion on this issue in the third paragraph of p. 5. However, this discussion is rather vague. I think that the authors need to be more explicit with respect to the formulation of the outside income opportunities of workers, in order to provide a consistent story for the relationship between taxation and unemployment.

- Introducing unemployment benefits would also be useful for discussing a further policy instrument, which can be influenced by governments in order to arrive at a better labor market outcome.
- 5. There are two further assumptions, which I do not find particularly plausible. First, similar to Blanchard and Giavazzi (2003), it is assumed that governments can manipulate the elasticity of substitution between different varieties (see pages 4 and 8). However, in a framework of the Dixit-Stiglitz (1977)-type this implies that governments by changing $\overline{\delta}$ manipulate preferences of individuals, which from my perspective seems to be problematic. I have also difficulties with the assumption that fixed costs are proportional to output. Although I can understand that this assumption makes the analysis much simpler, it imposes one additional effect relative to a model with fixed costs that are independent of a firm's output level, which at least needs to be discussed. In the comparative static analysis, any parameter change that affects output per firm also affects the fixed cost requirements. Therefore, the resources needed to set up firms are influenced through a channel that is different from the adjustment in firm number. What are the consequences of this particular effect?
- 6. The discussion in the last paragraph of p. 7 is rather confusing. Reading the first and the second sentence, it seems to me that the concept of efficient bargaining and the concept of Nash bargaining are assumed to be identical. But of course, right to manage models typically rely on the Nash bargaining concept as well. Furthermore, I am not convinced that there is strong empirical support for choosing an efficient bargaining instead of a right to manage approach. My own reading of the literature is that the evidence is mixed.

Furthermore, I think that the assumption of firm-level bargaining by itself seems to have only little support for European countries. Therefore, I would not put too much emphasis on the empirical support for the considered bargaining setting. The main advantage of relying on efficient bargaining, when discussing labor market reforms, has been formulated by Blanchard and Giavazzi (2003, p. 884): This framework allows "for the fact that, when there are rents, stronger workers (...) may be able to obtain a higher wage without suffering a decrease in employment, at least in the short run." I would suggest to motivate the choice of an efficient bargaining framework by pointing to this model feature, which, at least to a certain extent, should also depend on the chosen specification of union objective. Would the main properties be the same if a Stone-Geary objective function that attributes different weights to employment and the excess wage were considered (instead of a utilitarian object function)?

- I did not fully understand the line of reasoning in the last paragraph of p. 9. There it is argued that μ may be negative. However, below it is discussed that δ≥1 implies a positive μ (if tax rates fulfill the usual properties: t_w ∈ [0,1) and t_p > 0) and that δ≥1 is required for positive prices. Therefore, the discussion in this paragraph is not clear to me.
- 8. I was also confused by the discussion about "non-monotonicity" on p. 12. In this paragraph it is argued that "the number of firms and the degree of competition has to fall in the short term". However, on p. 3 it is argued that the number of producers is fixed in the short run. This seems to be a contradiction.
- 9. Related to point 2. above, I suggest to omit the discussion on institutional reforms.
- 10. In section 5, the effectiveness of different reforms is compared. Isn't it possible to determine an optimal reform package by combining product market deregulation with labor market deregulation and tax reforms?