Technology Shocks and Employment
in Open Economies

Referee report

This paper (in the spirit of Gali 1999) shows that in a two country open economy model with sticky prices and monetary targeting, a positive productivity shock leads to a decline in worker hours and hence employment. The decline in employment occurs under **both** LCP and PCP pricing (Figure 1e); however the effect is more pronounced under PCP pricing owing to the presence of the expenditure switching effect. The model employed follows Betts-Devreux (2000) extended to include Calvo style staggered prices and productivity shocks.

Comments:

1. The assumption that the monetary authority does not vary the money supply in response to productivity shocks is not innocuous. Dotsey (1999), in the context of a closed economy shows that if the central bank does respond to deviations of inflation or output gap from their targeted values a la Taylor (1993) or Clarida et al (2000), then the effect of technology shocks on employment is no longer negative. Intuitively such a policy by stimulating demand raises output and employment. This critique would also apply to the open economy model presented in this paper. In other words under a sufficiently responsive monetary policy, employment would rise following a positive productivity shock. Importantly, a more responsive monetary policy would cause the exchange rate to depreciate which via the expenditure switching effect would further stimulate demand and increase employment. Thus the impact of the expenditure switching effect on employment would crucially depend on the monetary policy specified. The paper therefore resorts to the same mechanism as Gali (1999), i.e., strict monetary targeting under sticky prices to explain why employment falls in response to a positive productivity shocks. It is therefore not clear to me how this paper improves our understanding of the phenomena.

2. The author should elaborate on the motivation behind the paper. Is there evidence that links the fall in employment under a positive productivity shock to the degree of openness of an economy? Alternately, does the inclusion of the expenditure switching effect help better account for business cycle facts on employment?

3. I am not quite sure why the author needs to assume staggered prices to derive the results of the paper. In the context of the objectives/results of the paper I see no value added by assuming staggered prices (in fact there is no discussion of inflation dynamics anywhere in the paper). Instead, I would suggest that the author stick to the Betts-Devereux assumption of one period sticky price. This should allow the author to derive all the results of the paper including welfare analytically. The current version of the paper makes a passing reference to welfare and the discussion carried out is grossly inadequate.

4. The paper finds that when the economy is faced with a positive productivity shock, lowering the elasticity of substitution between domestic and foreign goods reduces the decline in employment (Figure 2f). This result stands in contrast to what is obtained in the literature under flexible prices (Collard and Dellas 2007)). This is an important distinction and needs to be further elaborated. As is standard practice in the literature the author should first solve for the flexible price case and then contrast the results with those obtained under sticky prices. Such an exercise would highlight the differences in the transmission mechanism between sticky and flexible prices. This should be fairly straightforward to accomplish in the Betts-Devereux framework.

References

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