Referee report on "FDI, Skill-Specific Unemployment, and Institutional Spillover Effects"

January 30, 2012

1 Summary and evaluation of the paper

The paper investigates the effect of skill-specific labor market reforms on capital flows, wages, and unemployment in a variation of the Feenstra and Hanson (1996, 1997) model. A unilateral increase in replacement rates for high-skilled workers increases not only unemployment in the respective country but also increases wages and leads to an outflow of capital. In addition, the receiving country will experience a fall in its unemployment and an increase in its wages.

I think the paper addresses a relevant topic as the impact of the foreign activity of firms on domestic labor market outcomes is still an underresearched area in the literature.

The model advances the literature by modeling FDI, capital flows, and skill-specific labor markets at the same time. The empirical relevancy of skill-specific labor market reforms, a central focus of the paper, can be debated, however.

Overall, the paper does make some progress on topics which are hotly debated in policy circles.

2 Major comments

- 1. The author motivates his study by relating to "recent improvements in the Chinese security system" (p. 3) without providing the reader any details on the specific changes the author has in mind. I think the motivation for the paper would be considerably more appealing by relating to some sort of data, the specific policy change the author has in mind, or some reference. The same applies to the very vague allusion to "the recent surge in protectionism as observed in countries like Brazil, China, or the U.S." (p. 2).
- 2. The author states on page 4 that the paper by Beissinger (2011) is closely related as it also studies the impact of labor market reforms on capital flows. I would like the author to clearly state the difference between his contribution and the model presented by Beissinger (2011).
- 3. I think the paper could do a better job of stressing the fact that it presents a model concerned with both FDI, i.e. capital flows, as well as the offshoring / intermediate goods trade phenomenon, i.e. the slicing up of the value chain across countries to reap gains from lower labor costs. This is different to standard offshoring models as e.g. Grossman and Rossi-Hansberg (2008) or standard FDI models as e.g. Helpman et al. (2004) which do not model capital flows. Comparing the paper to these models would also stress the novelty of the paper. For example, Kohler and Wrona (2010) do model offshoring and search unemployment but do not consider capital flows.
- 4. Finally, I wonder about the relevancy of the comparative static exercises shown in paper. I have a hard time to think about skill-specific institutional changes in the labor market as institutional differences on labor market regulation tend to be sector-specific. Sure, high-skilled workers have higher absolute wages, but replacement rates are normally defined in terms of a percentage of the last wage, irrespective of a person's skill level. Also, without being a legal expert, I can imagine that differential labor market policies according to educational attainment may well be unconstitutional in several countries. I think the paper would be considerably strengthened by pointing out the empirical relevancy of these exercises, at best already in the introduction. I think this would considerably increase the potential audience of the paper.

Relatedly, I would find it interesting to compare multilateral coordinated labor market reforms, though this is merely a suggestion for future work.

5. The paper is written in a very sloppy way. I encourage the author to polish the paper considerably.

3 Minor comments

- 1. The author repeatedly changes between "I" and "we".
- 2. p. 1: The model does not *explain* skill-specific institutional changes as the institutional variables are exogenous parameters in the model. Your model can *analyze* these changes.
- 3. p. 5: Drop "equilibrium" from the sentence "The product market equilibrium is characterized". The production function does not imply an equilibrium relation in and of itself.
- 4. *ibd.*: Equation (1) describes a production/utility function, not a demand function (see the second paragraph on p. 6).
- 5. p. 6f.: I am puzzled by the author's wording: On the one hand, he writes that the "input coefficient curves that pin down low- and high-skill labor requirement are both steeper in the foreign country than in the home country" (p. 6), i.e. there exists a clear difference in production technologies between the two countries. On the other hand, the author writes "that technology plays a minor role" (p. 7). Offshoring in the model is triggered by the labor cost differences due to the technology-differences between countries, so technology does seem to play a role. And if technology is not important, why does technology then have to be different across countries?
- 6. p. 6, footnote 3: It should be "Integrating up", not "Summing up".
- 7. p. 9: "market tightness" θ in the first paragraph is undefined; furthermore, the grammatical style is awkward in the last sentence of the first paragraph.
- 8. *ibd.*: Reference Dutt et al. (2010) is missing from the bibliography.
- 9. *ibd.*: β is not defined in the text, neither is η_d nor $m(\theta_{hd})$. Some of these variables are not even defined in the appendix. The author should make sure that the text can be read without consulting the appendix or second-guessing any variable definitions, even if they may be standard in the search and matching literature.
- 10. p. 10: δ undefined.
- 11. *ibd.*: Fourth line of section 2.1 should read "search costs".
- 12. *ibd*.: Proposition should be reformulated as "given that those wages are optimal" does not specify any criterion of optimality. Again, second-guessing may help the reader but the propositions should be especially precise.
- 13. p. 11: The mass of a single industry is *exactly* zero, not close to zero.
- 14. *ibd*.: "To understand the implication of the assumption made above" is rather vague.
- 15. p. 13: Skip comma after "Notice"
- 16. p. 14: Change "an" to "a" in proposition 5.
- 17. p. 15: Why is general equilibrium not section 2.2 as it belongs to the model description?
- 18. *ibd.*: "Shepard's Lemma".
- 19. *ibd.*: Change "spend" to "spent".
- 20. *ibd.*: Change "solves" to "solved".
- 21. ibid.: Last sentence. Change to "4 labor market-specific market tightness values".
- 22. p. 16: Change to "implied by Walras' law".
- 23. p. 17: b and β are not defined.
- 24. ibid.: Change "prove" to "proof".
- 25. *ibid*.: Change "expanding" to "expansion".

- 26. pp. 22-24: The bibliography is not consistent in using upper and lower case letters.
- 27. p.25; p. 28: The appendix is inconsistently structured (1. vs. A).
- 28. p. 27: The musings on the discount rate and the capital rental are confusing or probably outright wrong.
- 29. p. 28: Change "produced" to "produces".
- 30. *ibid*.: "equal to the intermediate".
- 31. *ibid*.: Missing fullstop at end of first paragraph.
- 32. *ibid*.: Missing definition of "ETC".
- 33. p. 29: Missing definition of "LMC".
- 34. The author introduces varying expenditure shares $\varphi(z)$ in the utility function definition on p. 5 only to assume that it is a constant on p. 29. So why clutter notation by $\varphi(z)$?
- 35. Feenstra (2010) is missing from the bibliography.
- 36. p. 30: What does "equation (37) is asymptotic in θ " mean? A function can approach a value asymptotically, but to be asymptotic seems to be a misnomer.
- 37. *ibid.* It would be nice to have a discussion about the restriction on θ_k .

References

- Grossman, G. M. and Rossi-Hansberg, E. (2008). Trading tasks: a simple theory of offshoring. *American Economic Review*, 98(5):1978–1997.
- Helpman, E., Melitz, M. J., and Yeaple, S. R. (2004). Export versus FDI with heterogeneous firms. *American Economic Review*, 94(1):300–316.

Kohler, W. and Wrona, J. (2010). Offshoring tasks, yet creating jobs?