## Referee Report for

# FDI, Skill-specific unemployment and Institutional Spillover effects

### **Summary:**

The author analyses how unilateral changes in labor market institutions affect unemployment and wages of different skill groups in the home as well as in the foreign country. To do so the author merges a Feenstra and Hanson (1996, 1997) trade model with a Pissarides (2000) matching model. The model is similar to Schmerer (2011), but differs by introducing different skill groups, which is the focus of the paper.

The additional insight gained from this analysis is that changes in labor market institutions affect not only the skill group in the home country, which is directly affected by the institutional change, but also all other skill groups at home and abroad. The reason for this spillover effect is that changes in labor market institutions affect the wage and thereby the competitiveness of the industries of the affected workers. This triggers a change in the specialisation pattern of the involved countries and a capital flow (FDI) to the country that becomes more competitive. The subsequent effect on firm's productivity and therefore on labor demand in the home and the foreign country affects employment and wages of those that were not directly affect by the change in labor market institutions.

The main results are given in Proposition 6 and 7. Proposition 6 states that a labor market reform that increases unemployment benefits, bargaining power or search costs leads to an increase in unemployment and wages in the home country, and to a reduction in unemployment and an increase in wages in the foreign country. Proposition 7 states that even if only one skill group is directly affected by the reform, the other skill group is affected in the same way. This result only holds due to the complementarity assumption in the production function. The second part of Proposition 7, which states that workers in the foreign country are affect in the opposite direction, should however be independent of this assumption.

#### **Recommandation:**

I find the results very interesting and suggest a revision based on the comments below.

#### **Comments:**

- The author assumes that low and high skilled workers are complements in the production function. He should (i) sight empirical studies that support (or do not support) this assumption, and (ii) state clearing which results are not expected to hold, if low and high skilled are not complements. In the last case he should also give an intuition of what he expects to happen, if he drops the assumption.
- Another assumption made by the author is that vacancy posting costs are linear in output prices. He should discuss (in a footnote) what happens, if he assumes differently, e.g. constant costs.

- The last sentence in footnote 6 "Thus, the standard small firm assumption is not feasible anymore" sounds inconsistent with the way the labor market is modelled in the paper. The author should defend his approach.
- What makes the paper sometimes difficult to follow is the fact that the author has not defined the labor market and the product market equilibrium. He has rather included elements of the definitions in Propositions 2 to 5. I therefore suggest that the author clearly defines the labor market and the product market equilibrium, i.e., the endogenous variables which constitute the equilibrium and the equations that determine the endogenous variables. The following elements of Propositions 2 to 5 belong to the equilibrium definition and NOT in a Proposition:
  - Proposition 2, except the last sentence "Wages map into intermediate goods' prices" belongs to the equilibrium definition. Since this last statement follows from the equilibrium definition, I would not state this as a Proposition but just mention it in the text.
  - o Proposition 3, except the last sentence "The equilibrium is unique..." belongs to the equilibrium definition.
  - o Proposition 4 is ok, but due to the technicality of the result, I would call it a Lemma. (See also the comment below regarding Proposition 4)
  - o Proposition 5, first sentence is ok. The second sentence "A free trade equilibrium..." belongs again to the equilibrium definition.
- Proposition 4 refers to the labor market clearing conditions. The author should clearly state in the text before the Proposition, which equation is meant? Are these equations (14) and (15) or the subsequent equations that are not numbered? It is also not clear how the cutoff z\* enters in these equations. Thus, the author should clearly state the labor market clearing condition and make the cutoff z\* visible in these equations!
- For the uniqueness result for the labor market clearing condition (compare Figure 1) the author should provide an intuition also in terms of vacancy creation and wage equations.
- The proofs of Propositions 6 and 7 are incomplete. I still think that the Propositions hold. However, the change in wages must also consider the indirect effect on output prices and market tightness. These equilibrium effects also affect wages and might in some cases go into the opposite direction. In general, however, these effects are dominated by the direct effect. This must, however, be shown!