

RESPONSES TO REFEREE 3

We would like to thank you for the thoughtful and detailed report on our paper. For your convenience, we repeat your comments (emphasized) and summarize how we plan to deal with them in a revision.

1. *The paper's exposition feels rather lengthy in places and could be streamlined without weakening the paper's core message. In particular, the theoretical discussion in Section 2 could be integrated into the introduction. The theories discussed there are inherently non-nested and often do not seem to be compatible with each other. Thus, I find it hard to derive actual testable hypothesis from this literature review in the way the authors do. In any case, the main conclusion drawn from the discussion seems to be that the theoretical predictions are unclear and that empirical work is needed. This conclusion could certainly have also been reached after quickly mentioning the relevant literature in the introduction. Secondly, I would substantially shorten the detailed exposition of the relatively standard econometric techniques used in the paper. Most readers will be familiar with these techniques and for those who are not, referencing the relevant papers should be sufficient.*

We see your point and recognize that you know the literature really well. However, other referees seemed to be happy to read more about the theoretical background and even urged us to extend it. Balancing these wishes will be a tough task. Maybe the suggested compromise in the manuscript is still a good balance.

The same applies to the discussion of the econometric technique.

2. *I did not find the argument that the use of aggregate data is justified by the interest of policymakers in the impact of aggregate migration flows very convincing. Surely, using more disaggregated data would help to understand the underlying mechanisms and would make the identification much more credible. If desired, one could always back out an average overall effect from more disaggregated data. It would be more honest to admit that data limitations are the true determinant of the choice of aggregation level in this paper.*

We agree with your argument that one always can back out aggregate level effects from more disaggregated data. However, our approach was to provide a complementary study in the vein of existing studies in the trade and unemployment literature. We are happy to tone down the motivation of the use of aggregate data in the revised version of the paper.

3. *I would like to see more discussion of the validity of the gravity instrument used. In essence, this instrument is (among other things) a proxy for the remoteness of a country, since bilateral predictions are aggregated into one unilateral value. As is well-known, remoteness or proximity to foreign markets is an important determinant of a large number of aggregate variables such as per-capita income (e.g., Redding and Venables, 2004). So it is at least imaginable that it might also have a direct impact on unemployment rates, thus invalidating the underlying identification assumption.*

We fully agree that the validity of the external instrument may be debated. Exactly for this reason we provide results based on a variety of estimators without using the external instrument.

4. *It would have been nice to use more direct policy measures for openness. For example, average levels of tariff barriers or measures for non-tariff barriers should be available for the countries in the sample. Such proxy variables are arguably less endogenous than the proxies currently used, which will be jointly determined with the dependent variable in general equilibrium. Alternatively, the authors could use the gravity approach used for migration flows to also instrument for trade flows, following Frankel and Romer (1999, cited in the paper).*

We followed the literature on trade and unemployment in using the different openness measures. We fully agree that using other, more direct measures of trade openness like tariff measures would be an interesting extension for future research.

5. *The authors should cite the paper by Ottaviano, Peri and Wright (2010) which is also interested in the nexus between employment, trade and migration from a trade perspective.*

We thank the referee for pointing us to this paper. We are happy to include this reference in the revised version of the manuscript.