## Referee Report on:

Glenn Magerman, Zuzanna Studnicka, and Jan Van Hove (2015). Distance and Border Effects in International Trade: A Comparison of Estimation Methods. Economics Discussion Papers, No 2015-69, Kiel Institute for the World Economy. <u>http://www.economics-</u> ejournal.org/economics/discussionpapers/2015-69

## Summary:

The paper analyses different implications of distance and border effects in international trade flows. It proposes different estimation methods to deal with the underlying effects. That is, depending on the econometrics tools used the magnitude of point estimates varies significantly. However, the authors confirm previous negative effect of distance on trade flow.

## Main Comments:

The paper uses different approaches to show how border and distance coefficients varies across those methods. Thus, one might have expected to see how those methods differ when using aggregate and disaggregated product data. Indeed, at disaggregated level other methods might perform relatively better that the proposed ones. That is, using zero-inflated Poisson Quasi Likelihood (PQL) or Gamma Two Parts model for gravity at product level might suggest how distance and border effects impact trade flows.

Another point that is not clear is why the authors choose border and distance at continental level, no explanation is provided for this. One might expect large heterogeneities between USA and Europe, but also Sub-Saharian or between countries with different level of income – I.e. developing and developed countries. Therefore, I suggest the authors to offer additional evidence on how border and distance impact trade flow by considering additional countries heterogeneities -- i.e. democracy -- since considering continents is hardly enough.

Eq(8) presents a linear effect of border and distance on trade flow. However, a squared distance term might be relevant. In fact, the term in level might capture a negative effect but non-linear effect of distance on trade. But with a squared term we might see a positive effect that captures the high concentration of trade over the shortest distance. Similar argument might apply for border effects.

Agglomeration is barely touched by the authors. Again this might have important implication on why economic activities cluster in some regions. More, emphasis on this should be put in place with border and distance effect on trade flows.

## Minor Comments

The authors propose a local polynomial regression, but whether there exist potential problems with bandwith or smoothing selection is not argued. Since, the paper compare econometrics methods to potentially solve problems that arise with these models, one might expect to see if the proposed models might have some limitation compared to previous approaches. p.6 it is presented a log-linearization of Eq(3). However, in the text it states that  $\varepsilon = \eta \exp(X\beta)$  where it should be  $\varepsilon = \ln(\eta)$