

**Comments on Islands in Trade: Disentangling Distance from Border Effects by José Luis Groizard,
Helena Marques, and Maria Santana**

Overview

This paper studies the border effect in Spain between 1995-2011 trying to disentangle the role of distance and the fixed costs induced by being an Island region. The paper combines international and interregional aggregate flows for the 17 Spanish regions NUTS 2 (autonomous communities). The empirical strategy used to estimate the “island effect” proceeds in two steps. First an augmented gravity model is estimated for mainland and island regions; then a Blinder–Oaxaca decomposition is applied to the gravity estimation results in order to disentangle the distance and border effects for those regions, net of all other factors controlled for in the gravity estimations. Results show that island regions are at a substantial disadvantage compared to continental regions, which is due more to the lack of adjacency imposed by the sea border rather than to the higher average distance.

General Comments

The paper deals with an interesting topic, discussing to what extent Island regions face advantages/disadvantages when enrolling in international and interregional trade, with regards to non-island regions of the same country. The results are reasonable and suggest an interesting line for further developments. The use of the Blinder–Oaxaca decomposition, borrowed from the labor economics literature can be also considered as a methodological contribution. Along to these virtues, the paper also presents some drawbacks. Some of them can be easily applied in a revised version of this paper. Others, in my opinion, will require some improvements in the data used and maybe can be considered in further investigations. Next you will find some comments and suggestions.

Specific comments

Aim and motivation: in general the aim and motivation is ok. However it could be improved saying something about the following points:

- The paper suggests the potential disadvantage of Island regions with regards to “interregional trade”, taking the mainland regions as reference. Although this is reasonable, it will be interesting to try to connect that with the expected results found in border effect and international trade literature, as well as on the complex relation between trade and transport logistics. For example: 1) in international trade literature, “land-locked” regions are usually considered the most disadvantaged locations. Ships are [still] the main mode for long distance deliveries, and ports have also enjoyed mayor geographical advantages throughout history as strategic enclaves for trade, inducing economic agglomeration. Is it possible that the “island effect” considered here (as a disadvantage), which plays in the opposite direction than having access to the sea, may just take place for small ore remote Islands? Is this effect the same for the Canary Island and the Balearics? Having this in mind, apart from decomposing the effects with regards to Non-Island Spanish regions, maybe the reference group should be the “landlocked” regions in Spain. It is important to consider that Catalonia and Comunidad Valenciana (coastal regions) have a kind of “geographical monopoly” over the Balearic Islands. Something similar happens with Andalusia with respect to the Canaries. Thus, if firms have decided to locate in these coastal regions with the aim of serving the Island on distance, probably these coastal regions should not be considered in the reference group, since their exporting capacity (interregionally) is inflated “over the average”.
- It would be also nice to include some comments about the complex relation between “transport mode-trade-trade costs” for Islands, Coastal and Inner regions with respect to trade. For example: 1) Although it is true that for the case of the two Spanish Island regions considered here, the ship is the main transport mode, aircraft also plays a role, which is more relevant for longer distances and more expensive products. For this flows using aircraft, the right distance is the straight line, deliveries are quicker but the transport cost per Ton*km increases; 2) Moreover, although the combination of two transport modes rises the transportation cost (road-ship), a large part of interregional deliveries with the two Islands use the “roll-and-roll” strategy, where the truck is loaded into the ship, reducing the logistic cost in

the two maritime terminals (Puertos del Estado provides some information about this); 3) Canary Island enjoy a specific tax systems that is supposed to promote trade (interregional as well as international), something that can compensate higher transport costs...

- A robust check using 2 time periods (before/after the crisis) may be interesting.

Flow Data:

- The paper combines international (Datacomex) and interregional (C-intereg) flows for a long period. It seems that this paper just uses the aggregate flows. I think that this is right as a first step, but the paper should be clearer about this, since there are some implications for such option. For example, two points are worth mentioning: 1) C-intereg's aggregate flows usually include "R-16. Production and Distribution of Water, Gas and Electricity", a sector that is not included in the international equivalent flows, and which may introduce some bias for the Island regions; 2) In the case of Canary Islands, C-intereg is based on the official data offered by the AEAT, which may include flows between inner regions (non-coastal peninsular regions) and the Canary Islands by ship (implying a transport mode combination); however, this is not possible for the case of Balearic Islands, where AEAT data is not available. I think that such limitations can just be solved using an improved version of the dataset, which is out of author's hands at this moment. However, having this in mind, I will recommend: 1) including a robust analysis where the Balearic and the Canary Islands are analyzed separately. Not just the different quality of the data, but the geographical and economic differences between both also support this option; 2) including a reference to the paper where the C-intereg dataset is explained (Llano et al, 2010) which explains in detail such limitations. Also including a reference to other paper estimating border effects and using a similar dataset (Llano et al, 2011; Garmendia et al, 2012) will raise the comparability of the results.
- A potential problem when estimating flows between Islands and non-island regions is the asymmetric number of zeros, mainly considering the case of non-observable or non-existing flows between the Balearic Islands with inner regions (i.e. Madrid). Such limitation is small at the Nuts 2 level, a point that can be used by the authors with regards to some suggestions raised about the use of Nuts 3 level data. Anyway, commenting this potential limitation, and providing the % of zero flows for the Islands/Non-Islands when describing the dataset may elude further criticism. Robust checks using PPML will also be interesting.
- Figure 2 provides statistics about transport mode in regional trade. The labels and source are not clear. You should emphasize more clearly if this graph just considered interregional or international flows, since the mode-mix is clearly different. What about "train".

Regressors:

- In addition to the regressors included in the paper [standard] it would be interesting to include the followings:
 - Split the Island dummy for considering the case of being an exporter or an importer Island region/country. It is interesting to see if the transport mode fixed cost is working similarly in the two directions.
 - Split the Island dummy for the two Island regions. As commented, in addition to the singularities of the data, interregional exports from the Canary Island are mainly driven by "the refinery located in Tenerife" (as well as agricultural products. i.e: banana, tomatoes...) which implies a complex logistical links with other enclaves, not always associated with pure distance, GDPs or Population (i.e. intra-firm trade between the refineries located in different regions in Spain: Cartagena, Tarragona, La Coruña, Bilbao...).
 - As another reviewer has suggested, it would be nice to know additional details about the distance variable used in the paper. What about interacting the distance with the "Island dummy" in order to capture the "obliged" transport mode combination that implies trading with an Island?

Llano. C., Esteban. A., Pulido. A., Pérez. J (2010): "Opening the Interregional Trade Black Box: The C-intereg Database for the Spanish Economy (1995-2005)". *International Regional Science Review*. 33. 302-337.