## Referee Report on "Size Effect, Neighbour Effect, and Peripheral Effect in Cross-Border Tax Games" Economics 1200-1

This paper offers a theoretic treatment of cross-border commodity shopping. The price is determined by the local tax, which is set by officials competing to maximize their own tax revenues. Two structures are considered: a Salop model in which countries are spaced on a circle and a Hoetelling model in which they are spaced on a line. Two features of the equilibrium are notable. First, larger countries set higher taxes. Second, countries with large neighbours set higher taxes.

The paper has several difficulties. First, it is very poorly written and hard to read. Beyond that, it is not clear at all what is new in the results or the approach. The paper cites several Hoetelling type models in the literature but makes no attempt to compare its results to the existing literature. This comparison should extend beyond commodity taxation to include the work on country size in corporate taxation (e.g. Haufler and Wooton, 1999, *Journal of Public Economics*). In addition, it should attempt to discuss the model in light of in the empirical spatial tax competition literature which is highly relevant to the topic given its interest in geographic proximity. Beyond this, key variables are poorly defined (such as  $L_i$  which is initially defined as "where a country ends" but then used as  $L_i - L_{i-1}$ , i.e. the population of the country). Further, many of the key results rely on the designation of a "large" country. But what is a large country? Is it large relative to the average on the planet, the median on the planet, or the size of one's neighbours? This is not at all clear and has important implications for mapping from the model to reality.

The second major issue is the modelling choice on transport costs. To travel within a country seems to be costless, otherwise prices would not be the same in equilibrium within a country. However, there are border costs which appear to be functions of x, the distance to the border. This strikes me as a very strange mix. Some effort to justify it needs to be made (perhaps by referring to the trade literature on the border effect). But even still, the notion that the size of the border cost varies with distance from the border but distance within a country plays no role feels very inconsistent.