

Comments on “An equilibrium displacement approach to analyzing the effects of tariff reduction on farmers’ profits: The Korea-Chile FTA’s effects on Korean Grape producers”

### Assessment

- 1) The paper does not bring a new methodology to the literature, but rather uses a developed methodology to address a question that is relevant to Korean policy-makers. Namely “what are the economic losses that Korean grape producers suffered as a result of the tariff reductions embodied in the Korea-Chile FTA?” In my judgement, answering this question alone is not enough to make a significant contribution to the literature.
- 2) The analytical work appears to be correct. The econometric work behind the estimation of elasticities of production cost could be better presented.

### Comments

- 1) While equilibrium displacement models (EDMs) have an established place in the agricultural economics literature, they will not be familiar to a wider audience. In principle EDMs are applications of the hat calculus techniques in Jones (1965) to a partial equilibrium setting. It may be helpful for the reader to develop this link in an early footnote. One might also refer to more recent papers that apply these techniques in studies of international trade, especially Dekle *et al.* (2008). The purpose of these citations would be to orient readers that study international trade but are not familiar with the EDM literature.
- 2) On page 3, when there is a discussion of the opposition to the payments to farmers, it would be useful to cite a source, even if the only available sources are from Korean press. Alternatively one might also provide a quote from an influential politician or an interest group. The magnitude of the losses (and thus the magnitude of the compensating payments) is the central question in the paper. It would help the paper rhetorically to have evidence that this is an issue of real controversy in Korea.
- 3) On page 9 when you say that you assume  $\varepsilon_h$  to be zero you should make clear that this is because you are only investigating the first-order effects of the tariff reduction. In principle the tariff reduction leads to price reductions which lead to lower quantities, but these are higher order effects, if I understand the model correctly. You can clarify this by saying in the same sentence that you evaluate only the “first-order” impacts of the FTA.
- 4) The econometric estimation is not the most important aspect of the paper, but it should be better presented nonetheless. You should make clear what is the unit of analysis (region, subregion, farm-level). You should also include the number of observations in Table 2. I take it from the description on page 10-11 that the data are at the region-year level. This suggests that you have about  $18 \times 5 = 90$  observations. The very best that one could say about these results is that they are “rough and ready.” There are quite a few issues with time series estimation etc, that arise here. It might be useful to spend a little more effort justifying the particular approach that you take to estimation (i.e. imposing a common trend). You could do this by citing earlier papers that do cost function estimation in a similar way.
- 5) In the conclusion on page 19 it would be useful to link back to the issue of compensation for farmers. How do your estimates inform the public policy question of how much grape farmers

should be compensated if the effects of the agreement are to be just offset. To me this is the central question in the paper, but you leave it unanswered.

### **References**

Jones, Ronald W. (1965), "The Structure of Simple General Equilibrium Models," *The Journal of Political Economy*, 73(6), pp. 557-572.

Dekle, Robert, Jonathan Eaton, and Samuel S. Kortum (2008): "Global Rebalancing with Gravity: Measuring the Burden of Adjustment," *IMF Staff Papers*, 55(3), 511-540.