Invited Reader: how we incorporated the comments

We thank the reader for the very complementary remarks. Regarding the suggestions for improvement, we have incorporated these comments as follows.

Section 1.

1. Page 2. We have deleted the word agreements as recommended.
2. We have clarified "gains" by indicating that we mean welfare gains.
3. We reduced the discussion of results by reducing the comparison of our results to those of the CASE study.

Section II. We added a phrase at the end of the section acknowledging the margin of error in the estimates.

Section III. Model Description.

1. We corrected the error on page 11 in the sentence beginning with "In our central model"
2. We changed affects to effects.
3. We added a discussion on closure rules, including the real exchange rate and the balance of trade and government revenues. We also added a discussion about labor and capital allocation, including firm types and their use of sector specific capital. We also added the equations to explain the Dixit-Stiglitz framework.

Section IV:

We have added a footnote to explain that while Georgia in not in the CIS, Armenia and Georgia have a bilateral free trade agreement on terms equivalent to CIS member countries. So it is best to treat Georgia as equivalent to a CIS member as we do in this model.

We have slightly shortened the data section.

Section V.

1. We added a sentence specifying that only in air transportation services and insurance are there significant discriminatory barriers against foreign direct investment.
2. We have significantly expanded the sector impacts section.
3. We have expanded the explanation of why non-discriminatory liberalization results in greater gains.
4. We mention that a full algebraic description of the model is available in Balistreri and Tarr (2011, appendix F).

Section VI.

We have added a paragraph on future extensions, including a reference to the distributional issues mentioned by the reader.

Referee Number One: how we incorporated the comments

We thank the referee for his very complementary remarks and for the suggestions for improvement. We have incorporated the suggestions for improvement as follows.

1. We eliminated the grammatical errors noted in point 1.
2. The model already incorporates the fact that Russian and CIS countries have majority shares in some of the services sectors. That results in larger gains from liberalization with the CIS as the referee suggests, but that impact is incorporated in the results.
3. We mention that "Over 85 percent of the gains from unilateral liberalization come from liberalization of services and less than 15 percent comes from tariff liberalization."
4. We have added a footnote on the issues of tariff revenue related to liberalization and how this relates to the welfare analysis in comparison to services.
5. As requested by the referee, we added the following paragraph in the introduction:
   "Finally, we mention that we conducted surveys in Armenia to assess the regulatory environment in the services sectors and calculated the shares of ownership by foreign region in the services sectors. We employed the former survey to estimate the ad valorem equivalents of the barriers to investment in the services sectors. We also constructed an input-output table for Armenia. This work is an example of our experience that shows that data limitations is a small developing economies can be overcome so that modern models can be applied in these countries."
6. We have added the following explanation as requested:
   "It has been established empirically that there are significant fixed costs of exporting and the heterogeneous firms literature has built on that idea, showing that only the most efficient firms export. Although we do not have heterogeneous firms, our new modeling extension allows us to be consistent with the heterogeneous firms models by allowing markups on fixed costs of exports."
7. We have added a much more detailed explanation of why the effective costs for users of Dixit-Stiglitz goods declines in the number of varieties.
8. We added the phrase:
   We also note that we have only three sectors where tariff rates apply in our model. It is well known that the distortion costs of a diverse tariff structure decline with aggregation. Thus, the limited number of sectors in our model is likely to lead to an underestimate of the welfare gains from tariff reduction.
9. The US data is used to define technology in the highly developed countries, not in Armenia. So we should be OK on this issue.
10. Small economies need to specialize more and be involved in production chains to a greater extent, but producers can adopt technologies in these situations. Moreover, we are discussing FDI, and the multinationals bring their technology with them when they invest in developing countries.

Referee Number Two: how we incorporated the comments

We thank the referee for the very complementary comments and the deeply insightful remarks that have helped to improve the paper, as well as very useful suggestions for future work. We also thank the referee for the careful editing and providing us with a marked up version of the paper.

Estimates on the number of firms. We have added text on this in two places: (i) in the section "Impact of the DCFTA with the EU—Aggregate Effects" we provided the data on the increase in the number of EU firms in services and varieties in goods; (ii) in the section "Small gains from preferential liberalization of services with the CIS region," we have added text. We have also added references to tables in Jensen and Tarr (2011) where more detailed results may be found.

Heterogeneous firms and other modeling extensions. We have added a modeling extensions section as the last paragraph of the paper. In that section we address most of the issues raised by the referee regarding extensions. Regarding poverty and distributional aspects, we mention that Rutherford and Tarr (2008) have developed a model with FDI and monopolistic competition, but no such model in a regional framework exists (this was an invited reader comment). We acknowledge that it would be a useful extension of this work to develop a heterogeneous firms version of this model to better capture industry structure aspects of trade and FDI reform, and mention the work of Balistreri, Hillberry and Rutherford. We mention the paper by Latorre and Gomez-Plana as an interesting model capturing various dimensions in which multinationals could differ from domestic firms.

Regarding the editing suggestions from the marked up version of the paper, we have incorporated the comments from the marked up version of the paper as follows:

We have spelled out "sanitary and phyto-sanitary for the acronym SPS.
We have corrected the year in the Jensen, Rutherford and Tarr reference on page 5.
We have added Jensen and Tarr (2011) to the references. We have also added Balistreri, Hillberry and Rutherford (2010, 2011) and Latorre and Gomez-Plana (2011) to the references.
We have listed tables based on the order they are referenced in the text as suggested by the referee. We believe it is crucial for the original table 1 to remain in its position, so we have added a reference to it earlier in the text, rather than renumbering the tables.
We have added the data on the share of specialized imported inputs used by the multinationals to a footnote in the text.
We now refer the specific column label and specific table number for all results.
We have eliminated table 8 and discuss the key results in the text.