

Review of: “Deep Trade Policy Options for Armenia: The Importance of Trade Facilitation, Services and Standards Liberalization”

For the Journal: “Economics: Open-Access, Open-Assessment E-Journal”

Assessment: I recommend publication of this journal, with minor revisions

Summary:

The paper: “*Deep Trade Policy Options for Armenia*” provides a comprehensive, interesting, and informative assessment of service-sector trade integration for a small, open economy (Armenia). The authors have overcome a number of challenges that could have obstructed the analysis – in particular the lack of specific data sources and a limited supply of local analysts who are familiar with this type of work. Their perseverance has allowed the authors to explore the potential gains from trade through productivity in a small, remote country such as Armenia.

The authors provide an estimate of potential gains by utilizing an advanced CGE formulation that combines perfectly-competitive industries with imperfect competition. The formulation also incorporates Dixit-Stiglitz style product variety effects within key service sectors. The data needs for this type of analysis go beyond formulation of the standard Social Accounts. An assessment of the non-tariff barriers to trade in key sectors is required, as well as share-value assessments for local versus foreign material participation within a particular sector, such as banking. To this reviewer’s knowledge, these are first-time evaluations of this type for Armenia. These assessments, aside from the CGE analysis, can themselves serve as a foundation for further analysis related to local productivity, foreign ownership, and FDI for Armenia.

The study finds moderate but positive gains from a Deep and Comprehensive Free Trade Agreement (DCFTA) with the EU. Most of the 1.4 to 1.8 percent gains come from lower border costs within service sector areas, and by service sector liberalization. The study also finds that tariff reductions, taken alone, yields a loss for Armenia. The small loss (-0.08 percent) comes from lower tariff revenues, which can be important for a small country, and from the reduction in number of varieties as Armenia diverts trade to the EU.

Further scenarios include deeper free trade with the former Soviet Union countries (CIS), where gains are significantly smaller, mostly because Armenia already has low non-tariff barriers for these regions. The comparison is effectively a tariff reduction, which yields 0.01 percent gains. The authors also claim that gains from the EU are larger because the EU is a technology-intensive region that promotes technology diffusion. A combined, non-discriminatory scenario yields the greatest gains through higher productivity and lower border costs combined.

Overall, the report provides a detailed and comprehensive assessment of the non-traditional gains from trade that have become so important over the last decade: those from services, border costs, and standardization. The report will serve as a useful template for similar assessments in other small, open

economies. The paper demonstrates that a detailed and advanced analysis is not limited to large, advanced economies.

Review Details:

This section of the review provides some details and thoughts that are intended to make the report stronger, more interesting, and easier to read. The specific suggestions are not mandatory – the authors may choose to adopt them or to omit them, as necessary. However, some of the basic grammatical items should be edited before publication.

- 1) A few grammatical errors and omissions still exist in the report. For example, the Abstract contains a repeated phrase: “in order of importance”. Page 27, line 3 uses “hare” instead of “have.” A few additional awkward phrasings or wordings may also exist and are worth finding.
- 2) The small gains from CIS trade deepening occur because Armenia has already leveraged the product-variety effects available from those countries. It may be worth mentioning that those gains have already been realized, and possibly to consider the relative gains from countries with a similar background and language. It seems like those types of gains could have been larger than the EU-DCFTA gains, even if CIS countries are not as high-tech as the EU, because the technological dispersion effect would be greater. For example, most telecom companies in Armenia appear to be Russian multinationals.
- 3) The authors state that gains from a non-discriminatory liberalization of service and tariff barriers are three times larger than from a preferential agreement. Since tariff barrier reductions are not the source of these gains, it must be through a larger product-variety impact. Perhaps a rough breakdown-estimate of the contribution for each part (goods vs. services) could be interesting there as an additional sentence.
- 4) Although the impact of lost tariff revenues is mentioned in the results, the fact that small, open economies depend upon border revenues much more than large countries is worth emphasizing. This fact makes free trade in services (where border revenues are near zero, but inland revenues are potentially significant) much more salient from a fiscal point of view than free trade in goods.
- 5) As mentioned in the summary of this review – an important innovation here is that new and important tools can be applied to small, developing countries in a meaningful way. Too often, economists and other scientists dismiss small countries because they lack the depth of data and analytical support to perform cutting-edge analysis. This paper shows how that is not necessarily true. But the report fails to point this out to future prospective investigators from small, remote countries.

- 6) On page 13, the authors introduce a downward-sloping demand curve for exports. While the mechanics are explained, it would be useful to understand the motivation for this assumption. Is it simply to characterize reality more carefully? Or are there modeling considerations that encouraged the need for the additional level of complexity?
- 7) On page 14, the authors mention that the effective cost for users of goods declines with the number of firms, does this implicitly assume that the market size stays constant?
- 8) Weighted tariff aggregation (page 18). It may be worth reminding readers that aggregated tariffs tend to have a smaller distortionary effect per unit of tax-collection, compared with disaggregated data. The fact that CGE models are limited by the number of sectors defined within the economy can cause the effect that the gains from eliminating weighted-average distortions are attenuated, while the revenue-losses remain constant.
- 9) R&D Intensive Sectors (page 21): The authors use US Data in order to classify Armenian sectors as low/medium/high R&D intensive. This is fine, but it seems like some Armenian industries may be low-tech, compared to US industries. For example, farming in Armenia is largely small-plot, labor-intensive, and low R&D, whereas US farming and agriculture is high R&D and highly capital-intensive. Perhaps the literature contains some sort of “Kuznets curve” for industrial technology within sectors.
- 10) Finally, the authors may consider the potential importance of country size for adoption and dispersion of productivity-enhancing technology. Large countries can absorb two types of new technology: user-friendly technology such as cellular telephones, which improves personal productivity for consumers; but also sector-specific technology, such as advanced CAD, robotics, and biotech systems that make producers more efficient. Small countries seem to have the capacity for absorption of the first type, but not necessarily the second, due to limited market scale and size. This concept, if it could be incorporated in a meaningful way, could mitigate some of the product variety and productivity gains – leading to a more empirically-accurate development pattern where most technology-led growth is consumer driven in small developing economies, but where large developing countries can capture both types of gains (e.g., the BRIC countries).