Response to Reviewer Comments

The research team greatly appreciates the comments and suggestions of the reviewers. In response we have modified the proposal to address the stated concerns.

Reviewer 1

This reviewer did not suggest any changes.

Reviewer 2

This reviewer did not suggest any changes.

Reviewer 3

1. Appears to have major focus on China, which is appropriate, but attention still needs to be given to other major markets such as Canada, Mexico and Japan.

- Thus, we revised the text by stating on page 7:

  Previous Literature

  - However, the traditional trade partners like Canada, Mexico and Japan are still important trade partners. Therefore, future work must consider these countries.

  Procedures

  - We intend to cover these countries in our analysis, especially in the analysis of different trade agreements under Objective 1 Procedure 2.A Impact of international agreements (regional and bilateral trade).

Reviewer 4

1. In motivating the project the notion of "competitiveness" is referred to several times without being defined in any precise way - this term gets bandied around in public discourse about trade, and yet seems to be a difficult notion to pin down. Before conducting policy analysis in this area, I think it behooves project members to define precisely what is meant by the term - assuming of course it is a meaningful economic concept.

- We added a footnote to define competitiveness on page 1. We stated the following:

  - For the purpose of this proposal we define competitiveness as the capacity of U.S. producers and agribusinesses to profitably maintain and grow agricultural exports and find new markets for U.S. food and agricultural goods.

2. While it is true that increased biofuel production in the US and elsewhere has had an impact on world food prices, it is well-documented Wright (2011), (Martin, 2012) that other factors - declining rates of agricultural productivity, export and import policies, storage - have also had an impact, which ought to be acknowledged, and probably analyzed in more detail.

- See Reviewer 4's comment 3

3. Related to the previous point, I am not sure I would agree with the argument that the food-fuel debate is about food price volatility. Bellemare (2011) and Gouel (2012) both point out that poor consumers care about high food prices not price volatility, while farmers care about low food prices and perhaps volatility. From this you would expect policymakers to choose policies such as export controls/safety nets to avert consumer losses when food prices are high, and choose other policies such as farm and export subsidies when prices are low/volatile. For example, see Giordani, Rocha and Ruta's (2011) piece testing Freund and Ozden's story of trade policy and loss aversion with agricultural data.

- We addressed comment 2 and 3 together. In doing so, we revised our discussion of the food price literature. We added additional material to the Previous Literature on page 5 and added a discussion to the Procedures to address this concern on page 9:

  <u>Previous Literature</u>

  - The food-versus-fuel debate has centered on food price volatility. Several papers have looked at these issues in light of international trade such as: (Alghalith (2010), Apergis and Rezitis (2011), Jin and Kim (2012), McPhail, et al. (2012), Qiu, et al. (2012), Serra, et al. (2011), Shepherd and Wilson (2013), Thompson, et al. (2012), Wilson (2012), and Yeboah, et al. (2012)).
  - However, Barrett and Bellemare (2011) and Gouel (2013) suggest that volatility may not matter to poor consumers though high prices are important and farmers care about low prices and perhaps volatility. Furthermore, the price volatility seen in the recent past could be the result of a number of other mitigating factors such as declining rates of agricultural productivity, trade policies and storage (Martin and Anderson, 2012, Wright, 2011). Additionally, Giordani, et al. (2012) find evidence of a complementarity between export policies and food prices in international markets such that export restrictions increase food price volatility.

  <u>Procedures</u>

  - Though not assigned to any research or team of researchers, the group will consider the multifarious factors that have led to the food price increases

and the associated increase in volatility. In particular, the team will consider the effects of trade policies on price levels and volatility.

4. The gravity model gets cited a lot in the proposal, but there is no sense of how this well-known model will be pushed forward either analytically or empirically - for example, how do project researchers propose to handle zero observations in trade data?

- We revised our procedure on page 11 to expand our work to address gravity model methodology:
    - A number of researchers in the group use the gravity model. These researchers will explore modifications to the model and new specifications including generalized and specific gravity models, models with a power transformation (Alabama, North Carolina, North Dakota, South Carolina, and Virginia). Additionally, the team of researchers will investigate new methods to deal with zero trade and non-tariff measures.

5. Quite a bit has been written about why the GATT worked and perhaps why the current Doha Round of the WTO is not working - especially the issue of special and differential treatment of developing countries (Bagwell and Staiger, 2012). I think the project researchers ought to acknowledge that literature when thinking about why the WTO is held up over the negotiations concerning agriculture, and why the focus has shifted so much to preferential trading arrangements that often do not tackle controversial issues relating to this sector.

- We have added a discussion of this omitted literature in the Previous Literature on page 4:

    - Economists have conducted a number of studies to explain the devleopment and success of the GATT and the current challenges of the WTO and the failure of the Doha Development Agenda (Bagwell and Staiger, 2010, Bagwell and Staiger, 1999, Bagwell and Staiger, 2012, Bagwell and Staiger, 2004, Chisik, 2012).

6. Finally, there is no mention in the proposal of the literature on firms and trade - this is really the hottest research area in international economics since Melitz's (2003) seminal paper, and one that ought to be acknowledged, if not actively researched with respect to value-added food trade. While I do recognize the difficulty in getting firm-level trade data sets, it would be worthwhile trying to get a handle on how many US firms do actually export food products, and how trade liberalization through free trade agreements might affect both the intensive and extensive margin of trade.

- We have added a discussion of this omitted literature in the Previous Literature on page 5 and we expanded the procedures to address this issue on page 9:

Previous Literature

- Several articles in the gravity model literature build upon the work of Melitz (2003) and Helpman, et al. (2008), which looks at the decision of firms to export. The literature has been spawned an extensive literature.

Procedures

- Also the team will consider firm-level analysis á la Helpman, et al. (2008) and Melitz (2003) to understand better the effects of policies especially non-tariff measures at the firm level.

Cited Works

Bagwell, K., and R.W. Staiger. 2010. "Backward Stealing and Forward Manipulation in the WTO." *Journal of International Economics* 82(1):49-62.

---. 1999. "An Economic Theory of GATT." *American Economic Review* 89(1):215-248.

---. 2012. "The Economics of Trade Agreements in the Linear Cournot Delocation Model." *Journal of International Economics* 88(1):32-46.

---. 2004. "Multilateral Trade Negotiations, Bilateral Opportunism and the Rules of GATT/WTO." *Journal of International Economics* 63(1):1-29.

Chisik, R. 2012. "Trade Disputes, Quality Choice, and Economic Integration." *Journal of International Economics* 88(1):47-61.