

Thank you for many useful and critical comments. The followings are our replies and ways to reflect your comments.

1. Non understandable texts and fallacious econometric methods.

*Reply: We are professionally editing some parts of the article such that it would be more understandable. Below are our replies and corrections for empirical methods and results.*

2. P4. PSM is a semi-parametric econometric approach.

*Reply: We falsely used the term “non-empirical”. It should have been “semi-parametric”.*

3. P4. Gravity models with economics.

*Reply: Referring to Bikker (1987), we attempted to bring the importance of selection bias (substitution effects) to light. If it can be mistaken, we will replace it with other references that provide theoretic backgrounds on gravity models (e.g. Anderson and van Wincoop (2003); Baldwin and Taglioni (2006)).*

4. P6. Relevance of Chang and Lee (2011) as a reference

*Reply: The point is not the matter of multilateral vs. bilateral agreements. We simply intended to show that Chang and Lee (2011) uses a “pair-matching” method to estimate trade effects for WTO members under the FTA framework.*

5. P7. An interpretation of ATE and ATT

*Reply: Our definitions and interpretations on ATE and ATT shown by Equations 2 and 3 are the same as yours. Nevertheless, we had a fault in calculating ATE in Table 10. A new table below provides corrected estimates.*

6. Regarding Footnote 5.

*Reply: We followed the Epanechnikov kernel matching method by default.*

7. Units in Tables 8 and 9.

*Reply: Treatment and country groups indicate the number of countries while ATT is in terms of million USD. These units are marked in these tables.*

8. Table 10.

*Reply: We falsely recorded ATE and ATT by using Stata12 software package. Now we have a “new” feature of Stata13, that is, treatment-effects estimation such that they are correctly re-estimated them as follows:*

Table 10 Comparisons of ATE and ATT

Sample		Import (Mill. USD)		Export (Mill. USD)	
		2010	2012	2010	2012
ATE		230	273	153	116
ATT	Stratification matching	198	206	40.3	57.2
	Kernel matching	176	185	40.4	67.4
	Nearest-neighbor matching	113	156	40.0	47.7

*The text is accordingly revised.*

#### 9. P16. Study limitations

*Reply: Given very limited literature on analyzing agricultural trade effects of FTAs with matching, our study is hoped to be a positive contribution to this research development. If the sentence appears to be too strong in its sense, it can be revised as:*

*“Many prior studies on the effects of FTAs on agricultural trade have not often addressed the issue of selection bias and thus have overestimates their effects.”*