Response memo: *Journal of Peace Research* manuscript JPR-15-0130.R1, “The Complex Structure of Commercial Peace: Contrasting Trade Interdependence, Asymmetry and Multipolarity”

We are very grateful for the conditional accept of our manuscript, “The Complex Structure of Commercial Peace: Contrasting Trade Interdependence, Asymmetry and Multipolarity,” for the *Journal of Peace Research*. The second round of comments from the reviewers was insightful, and responding to them has, we believe, produced again a much stronger manuscript. We thank the reviewers for helping us make such substantive revisions. In this response memo, we provide detailed responses to the editor as well as each reviewer and a description of the changes and additions to the manuscript that we have made in reaction to their suggestions and comments. We also shortened the manuscript in order to meet JPR’s maximum length requirement. Please let us know if further trimming is required. It will be our pleasure to further shorten the manuscript if needed.

**Editor’s comments**

**Use network model.** This is a valid point and we are grateful to the editor as well as reviewers 1 and 2 for again emphasizing this point. We have now included a section in the online appendix as well as a footnote in the article that refers to this section in which we present the results of some exploratory temporal exponential random graph models (TERGMs). While we still find the findings of these models and our zero-inflated negative binomial regressions difficult to compare given the differences of the nature of the dependent variables used, the results from the TERGMs point into the same directions as the findings of our main analysis.

**Compare results with relevant network studies.** We are grateful to the editor and reviewer 1 for drawing our attention to this point which is well taken. We have included several references to network studies that examine the relationship between the trade network and international conflict and highlight that their findings of a negative relationship between extra-dyadic dependencies in the trade network and the onset of international conflict is in line with our finding of a mitigating effect of extra-dyadic trade dependencies on the conflict enhancing effect of dyadic asymmetric trade dependence.

**Alternative operationalization of regime type variables.** This is a well taken point and we included a section in the online appendix that acknowledges the existence of alternative operationalizations of democracy and differences in regime types. We use these alternative operationalization and re-estimate our main models. The results show that our operationalization of democracy and difference in regime type does not drive the findings of our main analysis.

**Theoretical discussion.** We are grateful for the editor and reviewer 1 highlighting the importance of the concept of elasticity for our theoretical argument. We added a detailed footnote on elasticities in the manuscript that details how they are related to our own approach and why we do not pursue them in our analysis.

**Additional changes.** We further cut the article and hope that it now does not exceed the maximum of 10,000 words anymore. We moved some of the data description including tables I and II to the online appendix, as recommended. We also addressed all requests for technical changes. Finally, we unblinded the manuscript and included our bios and acknowledgements. We also included a reference to replication data and code. Please let us know in case further changes are needed.

**Reviewer 1**

*Theory*

**Elasticity.** We are grateful for the editor and reviewer 1 emphasizing the importance of the concept of elasticities for our theoretical argument. A detailed footnote now appears in the theory section explaining what elasticities are, how they have been used in the study of interdependence (including new cites), informing readers that elasticities complement our theoretical/empirical approach and why we do not pursue them in this manuscript. The footnote text appears below:

“Researchers have also measured the sensitivity of states to changes in the supply of particular traded goods (Gasiorowski 1986, Polachek et al. 1999, Crescenzi 2003). States with domestic markets that are inelastic in their demand for certain goods are more dependent than states with markets that can readily substitute other goods or suppliers for a given traded good. This approach complements our own; increasing trade partners should generally increase elasticities to the degree that trade partners act as substitutes for a given good. However, use of elasticities limits available data. It is also not clear that aggregate bilateral trade statistics are necessarily problematic for our purposes, since our hypotheses involve average effects. Future research might explore how elasticities further modify the behavior of interdependent trade networks, either enhancing or diminishing the effects we examine here.”

*Empirical analysis*

**Use network model.** Both reviewer 1 and reviewer 2 (the latter in comments to the editor) suggest that we should use network models to analyze our data. While we still find it challenging to translate our zero-inflated count model approach into a network model and to compare the results of what are two very different modeling approaches, we now include an exploratory analysis of our data that uses temporal exponential random graph models (TERGMs) in section E of the online appendix and include a footnote in the paper that refers to this analysis. Specifically, we conducted an exploratory TERGM analysis of the parsimonious model specification we present in section J of the online appendix. We included in these models a range of endogenous network effects including variables that capture clustering, popularity, and isolates in the militarized and non-militarized conflict events networks (we used a dichotomization threshold of 1 to create the dependent networks). The results presented in table A-V are in line with the findings of our main analysis.

**Compare results to relevant existing network studies.** We are very grateful for emphasizing this point. We included a few references in the conclusions and highlight that our finding that extra-dyadic dependencies in the trade network have a mitigating effect on the positive relationship between dyadic asymmetric dependence and conflict is in line with other network studies that found a negative effect of other extra-dyadic relationships in the trade network on international conflict.

**Alternative operationalizations of regime type variables.** We agree with reviewer 1 that the operationalization of democracy and regime type difference using the lower of the monadic regime scores and the difference of the monadic regime scores respectively is not the only possible operationalization and that other scholars have proposed alternatives. We added a discussion of the alternative operationalization using the lower and higher monadic regime scores as proposed by Choi (2015) to the online appendix and included a footnote in the article that refers to this analysis. As the results in section K of the online appendix show, the findings of our main analysis are not driven by our choice of operationalizing democracy and differences in regime types.

Reviewer 3

**Large number of variables in the models.** We understand the reasons that motivate reviewer 3 to highlight the large number of independent variables in our models, particularly those models that include the interaction effects. As explained in the paper and the response memo to the first round of reviews, we see a tradeoff between a more parsimonious model specification and the risk of omitted variable bias. The variables that we include in our set of econometric controls are widely used in the study of international conflict and a vast theoretical scholarship links them to the probability of different types of conflict. We therefore consider them important elements of a well specified theoretical model of international conflict. However, in order to address reviewer 3’s concern about the large number of independent variables in our models, we estimate a more parsimonious version of our main models in section J of the online appendix. In addition to the independent variables that capture our hypotheses and the duration component, these models only include the lower of the logged monadic GDPs, preference similarity, and geographic distance. As can be seen in table A-IX in the online appendix, the results of our main analysis are not affected by this more parsimonious model specification. Furthermore, while we have previously acknowledged Achen’s point in our discussion in the online appendix, we now also included a footnote in the article that cites Achen and acknowledges his point.