Empirical Analysis

- Perhaps my biggest concern about your empirical analysis is the clustering of standard errors.
 The map in Figure 2 shows that crop production is highly clustered in space. For example, a
 Sorghum price shock affects large parts of the sub-Saharan Sahel zone. A Maize shock affects
 almost all of East and Southeast Africa. Therefore, clustering at the grid-cell level is not enough
 to account for spatially correlated shocks. You should at least cluster at the country level and
 explore other options for spatially clustered standard errors.
- 2. I don't quite understand why you only use an indicator for the cell's major crop when calculating the price shock. This means you assume that the price shock is the same for largely non-agricultural cells where the biggest crop is grown on, say, 2% of the area, and cells where it is grown on 50% of the area. I think it would make more sense to interact price with the share of area dedicated to the major crop. This would also allow you to implement a robustness test that checks whether there is a dose-response relationship: you would expect a greater effect in cells where a lot of land is dedicated to the major crop.
- 3. You should also implement the standard robustness test for parallel trends that includes the "lead" of the price shock (i.e. it's value in year t+1).
- 4. I also don't fully understand why you use changes in price on the right-hand side of your regression, but levels of conflict on the left-hand side. Most papers in the literature use levels of both prices and conflict. Since the fixed effects already account for differences in long-run means across cells, this would be akin to regressing price deviations on conflict deviations. I could also see an argument for first-differencing both sides and regressing year-on-year changes in prices on changes in conflict, while dropping the fixed effects. But I'm not familiar with an argument for first-differencing the right-hand-side variable while keeping the fixed effects and using levels in the outcome. I suggest you use a more standard approach or explain in detail why your approach is preferable.

Framing and Contribution

5. You should clarify the paper's contribution and place it more carefully in the literature. Previous studies have already shown seasonal patterns in conflict intensity, as well as in the effect of economic shocks on conflict. For instance, Guardado and Pennings (2017) show that ... You should cite this paper and discuss how your results relate to theirs (I know it's still a working paper, but I think it's been around long enough to be considered prior work). Crost et al. show that rainfall shocks have different effects on conflict depending on whether they occur in the wet season or dry season.

Note that those papers didn't simply stop at showing that conflict is seasonal – they tried to use the seasonal patterns to deduce something deeper about the mechanism through which economic shocks affect conflict. Guardado and Pennings test the hypothesis that changes in the returns to peaceful labor affect conflict through a substitution effect and not only through an

income effect. Crost et al. test the hypothesis that rainfall affects conflict through its effect on agricultural production and not only through other channels. It is not clear what hypothesis your paper is testing, which is a major limitation. Given the state of the literature, simply showing that the effect of price shocks varies by season is probably not enough of a contribution for a top journal.

6. Related to the previous point, you should discuss in more detail what mechanism can explain the pattern of results you observe. I find the discussion of the specific effect on political militias unconvincing. On page 2, you say that the "strategic violence by political militias may intensify during harvest times because this is when political militias can maximize their opportunities for appropriation of agricultural products, as well as do the most damage to their opponents." Why wouldn't the same be true for rebel groups or identity militias? Wouldn't they also try to maximize their opportunities for appropriation and damage to their opponents? I think it is worth digging deeper into this to try to come up with a better explanation.