

Nat. Hazards Earth Syst. Sci. Discuss., referee comment RC3  
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## Reply on AC1

Anonymous Referee #1

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Referee comment on "Are the Rich less Prone to Flooding? A Case Study on Flooding in the Southern Taiwan during Typhoon Morakot and Typhoon Fanapi" by Yen-Lien Kuo et al., Nat. Hazards Earth Syst. Sci. Discuss., <https://doi.org/10.5194/nhess-2022-38-RC3>, 2022

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I would like to thank the authors for responding to my review. I would like to raise a few points, that were addressed in their response text.

First, the authors state that "Rent-seeking is one of the reasonable and possible mechanism because the village's rainfall is totally exogenous and the rainfall, terrain, population, and house price of the village were paired by PSM to be no significant difference between high income and non-high income villages." First of all, I think that rent-seeking is a term used normally for more direct benefits from e.g. subsidies, or other special treatment by the government. I am not sure if benefits of risk reduction investments really includes this. But I am not an economist.

Second, the term "migration" is not mentioned by me. I am not sure why the authors bring this up.

In this context, I would encourage the author to write a comment-by-comment response. I found it very hard to see how they have respond to each of my (and the other reviewers) comments.

Third, the authors write that: "more population and high real estate price area are democratic and economic (cost- benefit analysis) mechanisms, respectively, rent-seeking is a possible mechanism."

I have two issues with this statement. If the process was democratic, then rent seeking would not be a problem. This seems to contradict the main statement from the authors, that the process is in fact not doing justice to welfare, or equity, and is therefore not democratic.

Also, real estate prices are not used for cost-benefit analyses to decide on measures to reduce risks from natural hazard. It is damage costs, or more precisely, replacement and repair costs in the event of a flood. This is highly problematic, as I also write in my comment on the author response to RC2, below.

Fourth, and finally, the authors write that "Concerning flooding reducing income, typhoons in 2009 and 2010 can deteriorate 2006 income". But then later: "Nevertheless, 2009 and 2010 typhoons cannot affect 2006 income." I am not sure if I can follow that.

The mere adjustment of the title of the paper is also not sufficient. The authors should indicate how they can support the rent-seeking argument with their analysis. The current responses do not make a sufficient argument for that, nor do the authors indicate how they think they can adjust the manuscript text to account for this main comment.