

Interactive comment on “Weigh(t)ing the dimensions of social vulnerability based on a regression analysis of disaster damages” by Vincent David Corvin Heß

V. Heß

vincent.hess@uni-graz.at

Received and published: 1 November 2017

I would like to thank all three referees again for their valuable, helpful and considerate comments. In this final comment I want to take up the common remarks and explain how I want to address them in an updated manuscript to make this a much more valuable contribution to the research field of social vulnerability.

What becomes evident from the reviews is that I need to refine the definition of social vulnerability as used in this paper. Some ambiguity of the social indicators stems from the fact that they can act differently depending on what dimension of social vulnerability is under investigation. Therefore, I will make it clearer from the beginning that this paper

C1

deals with social vulnerability related to direct and tangible losses. This clear definition allows to test the adequateness of social indicators by regressing them on damage data. Although this requires further research, I will argue why I strongly believe that we can draw the same conclusions for other dimensions of social vulnerability.

Another common remark of the referees was the inadequateness of some indicators. This shows that the assumed influence of a social indicator is to some extent subjective and depends on the definition of social vulnerability. With the regression analysis I have shown that some of these assumptions were indeed not applicable for our study. This is exactly what this paper tries to show. Up to now most studies give little to no reference to their assumptions. Our goal was not to calculate a “correct” social vulnerability index for Styria, but that such a calculation must include the place and domain specific contexts. In an updated manuscript I will clarify this research goal more clearly already in the abstract and throughout the manuscript.

For my suggestions on how to incorporate the specific minor issues and helpful recommendations, please consult the respective referee responses. I would like to address both of the main issues and the smaller issues in an updated manuscript, which I believe to be greatly improved by the referees’ comments.

Interactive comment on Nat. Hazards Earth Syst. Sci. Discuss., <https://doi.org/10.5194/nhess-2017-74>, 2017.

C2