Interactive comment on “Evaluation of Economic Impacts from Flood Damages Using Hybrid Input-Output Analysis” by Cholapat Jongdeepaisal et al.

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Received and published: 28 January 2021

Thank you so much for your valuable comments. Please see my replies for each comment below;

1. The main question I have is whether there is any need to develop new virtual sectors. I would hesitate to make the statement “Since the garbage cleaning service and reconstruction for flood damages do not exist in the existing economy, the new process of consuming resources and producing the product has to be set up in the I-O table” (line 10). I find this hard to comprehend conceptually. Surely the cleaning and construction industry already exists prior to the disaster and you’re merely employing more resources to rebuild? As such, in accounting for the next IO table, these extra “production” from flood damages would be included.

REPLY: It is certainly that the garbage cleaning services already existed in the economy, but what we try to create is a virtual sector especially for flooding scenario. The activities and resources needed for this virtual sector are different in characteristic comparing with the usual garbage cleaning sector. We assume that manpower is obtained from the manpower sector which is taken from the final demand and truck use for removing garbage are taken from transportation sector. Therefore, the virtual garbage cleaning services sector’s resource consumption and production is new.

2. Line 21, it would be good to add role of international organisations such as the World Bank.

REPLY: This method can be used in other cases which is related to the policy making of World Bank. It should be applicable to foresee and analyze banking policy.

3. Line 24-25: please cite the studies that have looked at the cost of removing garbage and space cleaning. What is the evidence on the cost of removing garbage in percentages – any previous studies?

REPLY: I would say that the damage of flooding mainly depends on the observe area type, whether it is city, agriculture field, or partially wasteland. We could not find some certain evidences that could indicate or compare as an index for this case. Thus, we obtained the data through the simulation by 2-d inundation model from available grid data in Japan. We selected an example case of bank break area which resulted in flooding in Kochi City. The percentage of damage is made by ourselves.

4. Lines 18-31: might be a good idea to add a diagram/figure to illustrate the difference between traditional IO analysis and hybrid IO.

REPLY: I will add a new figure to show the hybrid I-O table and add more explanation regarding these figures.
Fig. 1.
### Fig. 2.

![Fig. 2](image-url)

### C5

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### Fig. 3.

![Fig. 3](image-url)

### C6