# Summary of changes to the dissertation based on the comments in the external

## referee reports

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### Overall assessment

- The dissertation deals with issues that are both relevant and significant, is, generally, well-written and properly structured.
- It has exposed the student to an increasingly relevant research area and important research tools, which is something that is critical at this level of studies.
- While I have not replicated the analysis, I saw no red flags as the approach is appropriate and the results reasonable.
- Based on the above, I find that the dissertation satisfies formal and content requirements for a PhD degree in economics, and recommend it for a defense.

#### Minor comments

I have a few comments and suggestions below that are meant to strengthen the exposition and, perhaps, enhance the audience that this research can benefit:

- This research (i.e., all three essays but particularly essays one and two) would be strengthened by a better motivation, justification and discussion of its empirical relevance.
  - Why was this research undertaken?
  - What are relevant real world issues that it tackles?
  - What difference does it make (i.e., what are the relevant interest groups and how are they affected? In short,
     who cares?)

Given the increasing importance of quality in the market place, addressing these issues could broaden the impact of this research.

• Even when the relevance of the research is being discussed, its significance is not.

This is particularly important for Essay 2 where statements like "The aim of the present paper is to introduce a model which allows for the identification of the conditions at which the middle-quality bundles of two complementary vertically differentiated goods would be driven out from the market at equilibrium" hurt the quality of the exposition.

- Empirical grounding/relevance of key assumptions being made.
  - Why, for instance, having a Cobb-Douglas utility function in Essay 1, or the CES quality aggregation function in Essay 2?

I am sure there are good reasons for it but the way it stands it seems a bit ad hoc and arbitrary, which takes away from an otherwise tight analysis.

- Economic intuition of the key results this is relevant for all three essays and, most key results, I felt.

  This does not need to be lengthy, in most cases a sentence or two does the trick and allows the reader to maintain a view of the big picture.
- Essay three would benefit from a careful editing.

This essay felt kind of rushed, for luck of a better term. Could be the limited discussion of the results, the short conclusion, or, even my fatigue. It is certainly less polished, less refined than the other two essays.