

Report on

David Laborde and Valeria Piñeiro (2018). Monitoring agricultural productivity for sustainable production and R&D planning. Economics Discussion Papers, No 2018-64, Kiel Institute for the World Economy. <http://www.economics-ejournal.org/economics/discussionpapers/2018-64>

Section 1:

Overall, the first section is a collection of different arguments without a consistent red thread. You jump between the general measurement problems of TFP without explaining the reasons and the fact that ecosystem services are not considered in traditional measures of TFP. There is also no literature review on the latter. Have researchers tried to include ecosystem services or not? I am not an expert on this but a quick google search showed that there seems to be a significant literature on the topic, e.g. what about Total Social Factor Productivity (TSFP) approach (Rao and Rogers, 2006)?

Page 3

- Typo: „if fully captured”
- “...Romer (1990) and Aghion and Howitt (1992)” → put citation at the end of sentence or change sentence accordingly. Right now it does not make sense.
- “Because of its strong theoretical properties Diewert (1976) and empirical robustness, the Törnqvist is probably the most popular method for measuring TFP.” → sentence does not make sense and Törnqvist has not been mentioned before, not clear what the Törnqvist is
- “Since the TFP measurement is intertwined with the issue of capital valuation, it could not be separated from the Cambridge controversies.” → delete sentence or explain capital valuation and Cambridge controversy in detail, footnote does not give any real information.
- “ However, in the context of agriculture, other challenges arise, given that the key to sustainable growth is having more efficient use of land, labor and other inputs through technological progress.” → Which challenges? And why is this the key? Citation?
- Figure 1 is unreadable, need better solution

Page 4

- Several typos and complicated wording in second paragraph

Page 5

- You mention a number of possible reasons for the difference between TFP estimates. Were these reasons tested? Is that Matthews’ (2014) finding? Are these reasons your thoughts? In any case, you should check whether these reasons really apply. Check the data and the methodologies, USDA at least should have papers on their methodology.
- Also typos
- Reference to the appendix without explaining the figure, although it seems to me the most important

Section 2:

Page 6:

- “In addition, existing methods weakly control for composition effects inside the production bundle”: what is meant by composition effects? Share of different crops/commodities? I think this sentence could simply be deleted as it does not convey any new information.
- “International comparisons and benchmarks”: This whole paragraph is a repetition from section 1 and redundant, delete.

Page 8:

- “Using lagged flows of expenditures without doing a true perpetual inventory and mixing two separate problems: adoption delays and knowledge depreciation using small weights for early years and for the most recent periods.” → I do not understand is at all, why is this in participles? How do the two sentences come together?
- WORLD KLEMS: explain briefly in the text, not only in footnote (footnote is also uninformative, what is it?); now it just falls from the sky and the reader has no idea what it is.
- “Beyond the broad picture presented in figure 1, ...”: This sentence is again a repetition of what was stated in section 1. Also the footnote (11) that explains reasons for the differences is good, but this needs to come already in section 1 when the differences are first mentioned. Last sentence of footnote 11 does not make sense, reformulate.
- “Third, there has not been systematic improvement in data and technical specification...”: improvement in which direction? Very general sentence, meaning not clear

Proposals + final comments

- Well written, but #2 and #3 could be more practical for policy makers

General comments:

- All figures need to be redone, low resolution
- Several typos and strange wording/syntax across the paper, please check and rewrite.