Reviewer's report

Title: Effects of the Convention on the Rights of the Child on child mortality and vaccination rates: a synthetic control analysis

Version: 0 Date: 24 Sep 2018

Reviewer: Reviewer 2

Reviewer's report:

PEER REVIEWER COMMENTS: To view the full report from the academic peer reviewer, please see the attached file.

REVIEWER COMMENTS FROM REPORT: This is an interesting study that could contribute to the research in this field

REQUESTED REVISIONS:

My suggested revisions:

1. P. 9, the line below [Insert Table 2], "Our independent variable was a dummy variable coded 1 if the country had adopted the CRC and 0 otherwise." -- How could it be the case since the authors had declared earlier that the main objective of their study was to compare "the group that adopted in 1990 (the treatment group) with the group that adopted in 1993 or later (the control group)" (p. 8, ln 2)? Stated differently, ALL sample countries should have adopted the CRC.

2. P. 10: The contents of the first paragraph of the Results section belong to Methods, indeed. And, there is a similar suggestion regarding the first part of the text under the Synthetic control analyses subsection (p. 12). The authors should recognize that it is improper to include any reference citation in the Results section; as such, they could avoid the aforementioned mistakes they had made.
3. Table 1 is quite perplexing. In 1991, there were 42 countries adopting CRC, but only 39 of them existed in 1990. Hence, it means that there had been 3 new countries founded in 1991 around the world. By the same token, there were 3 newly established countries in 1992, 6 in 1993, 5 in 1994, and so on? Is it really the fact?

4. Table 2: (a). "Table 2 shows descriptive statistics for the variables in our analyses; it includes all countries with under-5 mortality rates greater than 10 in 1990, regardless of their CRC adoption years, because we included all of these countries in our year fixed effect regressions." (p. 8, last para) -- It is difficult for me to accept this rationale since the authors declared that they intended to compare "the group that adopted in 1990 (the treatment group) with the group that adopted in 1993 or later (the control group)" (p. 8, ln 2). In view of that, it would be better for the authors to present comparative statistics between the two groups at baseline. (b). The second column heading is "N", but Table 2 contains infant mortality "rate" (with the data of 984, etc.), and other kinds of rates. Obviously, "N" is not equal to "rate", and thus infant mortality rate of 984 is rather horrific, for instance. (c). Following up on my pervious comment, the "N" values in Table 3 are 598, 509, 548, and 547. But, NONE of the N values could be located in Table 2. Put another way, a quite confusing use of the two Ns in Tables 2 and 3 by the authors. (d). Finally, why did the authors perform logarithmic transformation on "population" only, as many other variables (such as GDP per capita) were apparently not normally distributed, either?

5. Table 3: The first column is supposed to be the names of those independent variables used in regression models. Hence, how could it conceivably have an independent variable (the fourth to the last) named as "Dependent variable" and another one (the third to the last) as "Dependent variable in year t-5"? The same confusing presentations appear in Table 6, too.

6. In Table 3 and other tables of inferential analysis results, "*" was indeed referring to "p < 0.10" (pointed out in the footnotes). I would argue that it is sort of misleading usage since commonly the Type-I error threshold is set at 0.05.
Are the methods appropriate and well described?
If not, please specify what is required in your comments to the authors.

No

Does the work include the necessary controls?
If not, please specify which controls are required in your comments to the authors.

No

Are the conclusions drawn adequately supported by the data shown?
If not, please explain in your comments to the authors.

No

Are you able to assess any statistics in the manuscript or would you recommend an additional statistical review?
If an additional statistical review is recommended, please specify what aspects require further assessment in your comments to the editors.

Not relevant to this manuscript

Quality of written English
Please indicate the quality of language in the manuscript:

Acceptable

Declaration of competing interests
Please complete a declaration of competing interests, considering the following questions:

1. Have you in the past five years received reimbursements, fees, funding, or salary from an organisation that may in any way gain or lose financially from the publication of this manuscript, either now or in the future?

2. Do you hold any stocks or shares in an organisation that may in any way gain or lose financially from the publication of this manuscript, either now or in the future?

3. Do you hold or are you currently applying for any patents relating to the content of the manuscript?

4. Have you received reimbursements, fees, funding, or salary from an organization that holds or has applied for patents relating to the content of the manuscript?

5. Do you have any other financial competing interests?

6. Do you have any non-financial competing interests in relation to this paper?
If you can answer no to all of the above, write 'I declare that I have no competing interests' below. If your reply is yes to any, please give details below.

This reviewer has been recruited by a partner organization, Research Square. Reviewers with declared or apparent competing interests are not utilized for these reviews. This reviewer has agreed to publication of their comments online under a Creative Commons Attribution License attributed to Research Square and was paid a small honorarium for completing the review within a specified timeframe. Honoraria for reviews such as this are paid regardless of the reviewer recommendation.

I agree to the open peer review policy of the journal. I understand that my name will be included on my report to the authors and, if the manuscript is accepted for publication, my named report including any attachments I upload will be posted on the website along with the authors' responses. I agree for my report to be made available under an Open Access Creative Commons CC-BY license (http://creativecommons.org/licenses/by/4.0/). I understand that any comments which I do not wish to be included in my named report can be included as confidential comments to the editors, which will not be published.

I agree to the open peer review policy of the journal