

Dear all,

I am looking for some advice on/ideas for possible estimation strategies.

Currently I am working on the topic of terror/conflict and its impact on childmarriage. I try to estimate the effect the Boko Haram Insurgency (07/2009 - today) has on the probability to be married under the age of 18 years (childmarriage=1 if agefirstunion<18) and on the age of first union (0-17 yo). In order to answer this question I rely on Nigerian DHS data from 2008 and 2018 (Individual recode - Women 15-49yo). Based on Nigerian legislation I define my time interval of interest as August 2003 to 2018 (DHS 2018). This period can therefore be split into a pre-terror period (08/2003-06/2009) and a post-terror period (07/2009-2018).

First I intended to employ a Difference-in-Difference estimation in which women who are 18 or older at the start of the terror period are automatically defined as pre-terror (can not have married as child between 07/2009-2018). The other group would be women who would have been 7 or younger in 07/2009 as no Nigerian girl was married younger then 7 years old so these women are completely post-terror. Women who had neither been  $\geq 18$  or  $\leq 7$  in 07/2009 are dropped.

Now the issue is that with this definition I only have 2.548 observation in the post-period as only 15 and 16 year old women at time of survey in 2018 (being 7 years or younger in 07/2009) are interviewed. Of those 2.548 only 172 had been married as children and of those only 80 in the regions of interest (terror affected). Meaning my sample got tiny.

I dropped all women who had been 8 to 17 years old at the start of the terror period in 07/2009 to generate these two "extreme" groups (not at all affected VS affected completely). This results in the outlined tiny sample size. The women 8-17 years could not easily be sorted into pre or post-terror as they had been living in both periods (Example: 14 years old at start of terror in 07/2009 meaning she had lived years prior to terror but also four more years during violent times until she reaches her adult age 18).

Does anyone have an idea how I could estimate the effect of terror (binary (0/1) at this point living in affected or not affected region) maybe with a complete different setup as I have the feeling that Diff-in-Diff might not be the best solution here. The large group of women 8-17 years old should somehow be included but until now I could not come up with a better solution.

I know its quite a specific setup and maybe difficult to get into the topic but I would be very thankful for any ideas, suggestions or possible setups.

Thank you very much in advance!

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