Dear Statalisters

I want to analyse potential sources of the differences in total fertility rates (TFRs) between two DHS surveys for Zimbabwe, 2005 and 2010. I aim to apply the decomposition method by Oaxaca-Blinder to identify contributions to fertility change.

I had initially planned to conduct the decomposition using the mvdcmp programme by Powers et al. (2011) using as my outcome variable children ever born (v201). The problem with v201 however, is that it is not age standardised and therefore not an optimal indicator for total fertility rate. In fact, average children ever born is higher in the Zimbabwe DHS2005-06 compared to ZDHS2010-11 whereas the ASFR and TFR estimates are higher in 2010-11 compared to 2005-06 survey. My intention now is to use age-specific fertility rate (ASFR) as a proxy for TFR as my dependent variable given that it is age standardised.

My question then is that how can I generate in STATA a variable for ASFR for single-year age groups (v012) in DHS. I tried the following;

For exposure [person-years];
gen top = v008 - 1
gen bot = v008 - 36
gen turn15 = v011 + 180
replace bot = turn15 if turn15 > bot
drop if bot>top

gen agebot = int(((bot+top)/2 - v011)/12)
gen expo= top - bot + 1

Then for events [since I'm not well versed with looping];
gen birth1=0
replace birth1=1 if b3_01!=.

gen birth2=0
replace birth2=1 if b3_02!=.

gen birth3=0
replace birth3=1 if b3_03!=. I did this upto birth20 then generated variable for births by summing birth1 to birth20. However, deriving an ASFR indicator from here is not working out well.

I am aware of tfr2 which computes single-year age-group ASFRs through the tabexp command. My problem is that I want to generate a variable in the dataset which assigns by age (v012) an estimate of the ASFR that I will be able to use as an outcome variable in decomposition analysis.

I thank you in advance for your assistance.

Best regards,

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