Subject: Place of delivery
Posted by amanki2002@yahoo.com on Mon, 29 Nov 2021 07:13:22 GMT
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Dear all,
I am in the process of writing my thesis. I am using the Zambia DHS dataset 2018/19. I have used conindex to compute the concentration index (Erreygers) and I tried to draw the Lorenz curve using the following Stata code. The variable of interest is binary = place of delivery (0=Home, 1=health facility) with the wealth index (v190) as a background variable and compare by place of residence (v025) (0 =urban, 1=rural).

```
conindex PLD_Grouped [pw=wgt], rankvar(v190) bounded limits(0 1) erreygers cluster(v021)
lorenz estimate v190 , over(place_residence)
lorenz graph, overlay aspectratio(1) xlabel(, grid)
```

However the result concentration index value and the curve does not correspond for different regions.
When I used a glcurve using the following code, the graph appear shaded and non smooth:

```
glcurve PLD_Grouped(aw=wgt), glvar(x) pvar(rank) sortvar(v190) replace by(v025) split lorenz
gen rank2=rank
label variable x_1 "conc curve Urban"
lab var x_2 "conc curve Rural"
lab var rank "cumul share of Wealth_status (poorest first)"
lab var rank2 "line of equality"
sort rank
twoway (line x_1 rank , sort clwidth(medthin) clpat(solid) clcolor(orange)) ///
    (line x_2 rank, sort clwidth(medthin) clpat(longdash) clcolor("153 204 0")) ///
    (line rank2 rank , sort clwidth(medthin) clcolor(gray)) ///
    , ytitle(cumulative share of HFD, size(medsmall)) ///
    yscale(titlegap(5))  xtitle(, size(medsmall)) legend(rows(5)) xscale(titlegap(5)) ///
    legend(region(lwidth(none))) plotregion(margin(zero)) ysize(5.75) xsize(5)
plotregion(lcolor(none))
    graph export "cc curves Rural and Urban.emf" , replace
```

I am using stata 14. Can you please help me in sending me a do-file on how I can compute the concentration index and decomposition analysis using Stata 14. I really appreciate your help in advance. I look forward to your reply.
Thank you
Amanuel.

Subject: Re: Place of delivery
Posted by Bridgette-DHS on Mon, 29 Nov 2021 20:35:43 GMT
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Following is a response from DHS Research & Data Analysis Director, Tom Pullum:

To get your code to run, I had to change "glcurve PLD_Grouped(aw=wgt)" to "glcurve PLD_Grouped [aw=wgt]". The graphs produced by "glcurve" and then "twoway" (using x_1 and

x_2 produced by glcurve) show discontinuities because v190 is categorical. If you want a continuous version of the wealth index you can use v191. Frankly, I think "conindex", with the Erreygers option, produces the best figure. It also produces the value of the concentration index. I don't know why you asked for a way to calculate that index, or why you want to use "glcurve".

You say you want to do a decomposition analysis. Please be more specific about that. Decomposition usually refers to a change or difference between two regressions. What is your outcome and what are your predictors? We can perhaps point you in the right direction but only with more information about what you want to do.

Subject: Re: Place of delivery
Posted by amanki2002@yahoo.com on Tue, 30 Nov 2021 06:15:49 GMT
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Dear Tom Pullum,
Thank you so much for the information. Your response is always appreciated. I tried to calculate the concentration index using the code:
conindex PLD_Grouped [aw=wt0_9], rankvar(v191) bounded limits(0 1) erreygers cluster(v021) compare(place residence)
And construct figures using the code:
conindex PLD_Grouped [aw=wt0_9], rankvar(v191) bounded limits(0 1) erreygers cluster(v021) lorenz estimate v191 , over(place_residence)
lorenz graph, overlay aspectratio(1) xlabel(, grid)
The CI values and figures are not the same, while both values for urban and rural are positive but the curve for rural comes above the 45 degrees diagonal. Please find attached the results.
I am trying to estimate the socioeconomic inequality on health facility delivery (dependent variable) among women in 9 countries and I want to see the socioeconomic variation by country, place of residence, provinces/administration, and women's educational and employment status between and within countries.
Kind regards,
Amanuel

File Attachments
1) Different CI value and figure of conindex with the erreygers .doc, downloaded 179 times

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Subject: Re: Place of delivery
Posted by Bridgette-DHS on Tue, 30 Nov 2021 15:27:35 GMT
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Following is another response from DHS Research & Data Analysis Director, Tom Pullum:

Unfortunately, I cannot get into the differences you are finding. I'm very interested in measures of concentration but can't go beyond the kind of support this forum is intended to provide. I'm not convinced that measures of concentration really do what you want. I would use logit regression, with PLD_Grouped as the binary dependent variable, and wealth quintile, urban/rural residence, etc., as categorical predictors. The proportion of variation explained (one of the pseudo-R2 measures) and odds ratios are good ways to describe inequality. You can find other graphical methods, even something as simple as bar graphs, to show the results.