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Subject: Comparative Wealth Index - detailed instructions for computation

Posted by [SophiaMV](#) on Wed, 27 Jan 2016 19:32:08 GMT

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Hi!

I need to calculate the comparative wealth index for a set of more recent DHS surveys. To check that I am doing the correct procedure, I have been trying to replicate the results for the baseline survey Vietnam 2002 from the "Making the DHS Wealth Index comparable" document (<http://www.dhsprogram.com/pubs/pdf/MR9/MR9.pdf>).

I have been following very closely the methodology outlined in that paper and I have managed to replicate the anchor points for households at the middle and upper end of the economic distribution. However, I struggle to obtain the same figures as outlined in table 2.1 (p. 11, document linked above) for the cutpoints regarding the UBN score. My percentages for Vietnamese households in each UBN score category do not match up with those in table 2.1. I therefore have a few more detailed questions on how exactly these percentages were calculated:

1.) UBN overcrowded housing: Was hv009 (number of household members) or hv012 (number of de jure members) used to calculate the indicator?

2.) UBN inadequate sanitation:

2.1) Inadequate toilet facilities: In the Vietnam 2002 survey no distinction is made between a pit latrine with or without slab. The only category here is a "traditional pit toilet". Was the traditional pit toilet classified as inadequate sanitation?

2.2.) Inadequate water source:

In urban areas, was "public tap" classified as adequate water source?

3.) UBN economic dependency:

3.1) I used the individual recode file to obtain information on the employment status of women and their husbands. For women I used v714 ("currently working"). However, for their husbands there was only information available on the type of employment and not directly on their current employment status. Is this correct? How would I be able to identify unemployed husbands? Would they show up as missing values for the occupation variable (v704)?

3.2) For quite many households (around 1,500) the number of workers per household members cannot be calculated as there is no information on that given household in the individual recode file. It says in the PDF document that "all households are assumed to have a minimum of one worker". Does this mean that for a household with a missing value, it was assumed that there was only one worker in the household and the number of household members was divided by 1 to obtain the indicator for economic dependency?

3.3) In order for the household to be highly economic dependent, do both criteria (more than three household members per worker AND no working-age adult with completed primary education) have to be satisfied? Or is either one of them enough to assign the household the UBN score in this category?

Sorry for all these questions. Thank you so much for your help!

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Subject: Re: Comparative Wealth Index - detailed instructions for computation

Posted by [Liz-DHS](#) on Mon, 15 Feb 2016 16:20:44 GMT

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Dear User,

A response from Dr. Shea Rutstein:

Quote:

1. Hv009 was used.
- 2.1 Considered as unimproved sanitation, therefore inadequate.
- 2.2 Public tap is not adequate in urban areas.
- 3.1 Men of working age are assumed to be working.
- 3.2 Households without women 15-49 have no information in the individual file so number of workers is assumed to be one.
- 3.3 Both criteria need to be met.

Thank you!

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Subject: Re: Comparative Wealth Index - detailed instructions for computation

Posted by [linch](#) on Fri, 19 Aug 2016 22:02:48 GMT

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Hi, I am replicating the computation of CWI, and having problem to get the same numbers as table 2.1 in the document. I hope you can help.

- 1) For the four items(car, refrigerator, fixed telephone), when I calculated the % of households with item. I can't get the exact same number as in table 2.1. I wonder if household that have missing values in these 4 items as well as UBN score were excluded when running logit regression?
- 2) For dwelling, was hv215(main roof material) used? What should I do when hv214(main wall material) is missing from the questionnaire, for example, Vietnam 2002 survey miss all the data on hv214. In that case, does it mean we will only use hv213 (main floor material) to define inadequate dwelling for all other surveys as well?
- 3) For inadequate sanitation and consider expand to include "inadequate toilet facilities", did you use "type of toilets (hv205) " or "share toilet with other households (hv225)" or both? I notice that the latter has a lot of missing value.
- 4) Should I recalculate the cutoff values of baseline survey for each specific survey? I.e. should I worry that the cutoff values in Vietnam 2002 should be different if the specific survey using different criterial? I understand that would be the case if the specific survey has less than 8 anchoring points.
- 5) For Benin 2006, "types of toilet (hv205)" does not include latrine pit with or without slab. Was "non-ventilated pit latrine" and "Ventilated pit latrine" both counted as inadequate toilet facilities?
- 6) The document mentioned that the "inadequate sanitation" can be expanded to included either

"inadequate toilet facilities" or "inadequate source of drinking water". Do you mean that as long as one of these was inadequate then the household has inadequate sanitation? Or was only one of the two used when defining "inadequate sanitation"?

7) Following the previous poster's question 3.1. How did you define working age? Is age above 15 can be defined as employed?

8) Family member still in school are missing in some surveys. How should we deal with this when your footnote 7 mentioned for member age between 15-24, education is only considered if they are not attending school?

9) Was "tube well or borehole" counted as adequate drinking source for rural area?

Thank you!

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Subject: Re: Comparative Wealth Index - detailed instructions for computation  
Posted by [Liz-DHS](#) on Thu, 01 Sep 2016 00:34:17 GMT

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Dear User,

A response from Dr. Shea Rutstein:

Quote:

Response to questions:

1. Missing values are not included in the logistic regressions.
2. Only flooring was used for Vietnam 2002.
3. and 4. Both v205 and v225 are used. Toilets should be improved but not shared. Also please check country specific variables since many times sharing is part of the original data. I have attached files for when the questions were not asked.
5. When slab is not asked, only VIP latrines are considered improved. Ventilated pit latrine in Benin is improved.
6. If either water supply or toilet inadequate then household has an unmet basic need in sanitation.
7. Number of workers has a minimum of 1 for any household. The number is the sum of all interviewed women who are working and their partners if working.
8. Highest level of education for workers is determined in two parts: the education of any household member 25 to 64 and for members not attending school ages 15 to 24. If no data on whether attending school, is assumed that is not attending.
9. Yes, tube well or borehole is adequate water supply for rural areas.

Best regards,  
Shea

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### File Attachments

1) [Comparative\\_Wealth\\_Index\\_SR.zip](#), downloaded 932 times

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