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Subject: Construction of wealth quintiles

Posted by [DHS user](#) on Thu, 01 Aug 2019 16:58:09 GMT

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Does DHS apply weights while constructing wealth quintiles? If yes, what weight is used?

I would want to construct deciles rather than quintiles in a consistent way.

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Subject: Re: Construction of wealth quintiles

Posted by [Bridgette-DHS](#) on Thu, 01 Aug 2019 17:00:38 GMT

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Following is a response from DHS Research & Data Analysis Director, Tom Pullum:

The wealth quintiles can be constructed from the PR file, using hv271 (the continuous wealth index), hv005 (the household weight), and hv102 (de jure residence). The goal is to have an equal number of weighted de-jure individual in the PR file in each quintile. Note that the residence criterion is de jure rather than de facto. For most purposes, DHS uses the de facto criterion. For this variable we use de jure, partly to be consistent (for this index) with MICS, which uses de jure for most purposes.

In Stata, this would mean opening the PR file and running this command:

```
xtile hv270_test=hv271 [pweight=hv005] if hv102==1, n(5)
```

To check this, run this line:

```
tab hv270_test hv270
```

If you do it the way I just described, you will split households on the boundaries of the quintiles, and that must be avoided. Everyone in the same household should be in the same quintile.

Instead, it is best to work from the HR file and then transfer the values to the PR and other files.

Open the HR file and then run these lines:

```
gen wt=hv005*hv012  
xtile test=hv271 [pweight=wt], n(5)
```

Then check with this:

```
tab hv270_test hv270
```

I just tested this with the latest Angola HR file and I see that four households are misclassified with these lines (out of more than 16,000 households). This may have to do with how ties are handled in Stata, versus how they are handled with SPSS, which I believe was used to calculate

the quintiles for this survey. I would not consider this a problem.

To calculate deciles you would just replace n(5) with n(10) in the xtile command. Then you could merge with other files OR you could identify the numerical values of the five additional cut points and just apply them to the other files.

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