

Hello -

I am working with the 2015 Zimbabwe DHS to replicate the wealth quintiles. I want to apply the cut-off values to a wealth index we collected in rural Zimbabwe (we asked the same questions used in ZDHS 2015) to show how our sample compares to the population of Masvingo county (where our survey was fielded).

I have downloaded the principal component output for Zimbabwe 2015 from here:
<https://dhsprogram.com/topics/wealth-index/Wealth-Index-Construction.cfm>.

I am trying to replicate the quintiles in Stata. But they are not exactly as in the spreadsheet provided.

In the spreadsheet, the values are:

Mean -.1347808
Std. Error of Mean .00903679
Median -.3942115
Mode .03433a
Std. Deviation .92749292
Minimum -1.63862
Maximum 3.24577
Percentiles
 20 -1.0280612
 40 -.6095050
 60 -.0076580
 80 .8723670

Here is how I calculated the HHMEMWT:

```
gen dejure = hv012  
replace dejure = hv013 if hv012 == 0  
gen HHMEMWT = (dejure*hv005)/1000000
```

After weighting, I have the same number of observations and min/max as the spreadsheet but a different mean and slightly different standard deviation: :

```
. sum hv271 [aw=HHMEMWT]
```

Variable	Obs	Weight	Mean	Std. Dev.	Min	Max
-----+-----						
hv271	10,534	42909.8382	-183250.4	927336	-1638620	3245770

The output from using xtile in Stata gives the below, which does not match the spreadsheet:

```
. _pctile hv271 [pw=HHMEMWT], nq(5)
```

```
. return list
```

scalars:

```
    r(r1) = -1050290
```

```
    r(r2) = -654000
```

```
    r(r3) = -175310
```

```
    r(r4) = 860240
```

This matches with the summary by quintile in the ZDHS data:

```
. bysort hv270: sum hv271 [aw=HHMEMWT]
```

-> hv270 = poorest

Variable	Obs	Weight	Mean	Std. Dev.	Min	Max
hv271	1,758	8581.44865	-1267315	133072.1	-1638620	-1050780

-> hv270 = poorer

Variable	Obs	Weight	Mean	Std. Dev.	Min	Max
hv271	1,707	8581.49289	-851790.8	111743.7	-1050290	-654100

-> hv270 = middle

Variable	Obs	Weight	Mean	Std. Dev.	Min	Max
hv271	1,774	8582.97362	-441030.8	133150	-654000	-175310

-> hv270 = richer

Variable	Obs	Weight	Mean	Std. Dev.	Min	Max
hv271	2,690	8582.03223	409289.8	322580.7	-175210	860240

-> hv270 = richest

Variable	Obs	Weight	Mean	Std. Dev.	Min	Max
hv271	2,605	8581.89077	1234530	312694.8	860620	3245770

Why does creating quintiles in Stata not match the principal component output?

Many thanks!
Amy

Subject: Re: Zimbabwe 2015 Wealth Index quintiles
Posted by [Liz-DHS](#) on Mon, 26 Feb 2018 16:47:37 GMT
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A response from Dr. Shea Rutstein:

Quote:

The statistics of the combined national wealth score are calculated using the household weights (hv005, not hhmemwt). The quintiles are calculated using hhmemwt. That is the difference.

Subject: Re: Zimbabwe 2015 Wealth Index quintiles
Posted by [amyfinnegan](#) on Mon, 26 Feb 2018 19:00:06 GMT
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Hi Liz and Dr. Rutstein,

Thank you for this information!

I can see now that when we want to know the population level statistics of the wealth distribution, we use the household weight (hv005). When we want to know how to divide the households into quintiles, we must use the hhmemwt.

All the best,
Amy

Subject: Re: Zimbabwe 2015 Wealth Index quintiles
Posted by [mmapingure](#) on Fri, 23 Mar 2018 02:03:17 GMT
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Hello

Do you happen to have the stata syntax that creates wealth quintiles for Zimbabwe. I need to

use it elsewhere. With thanks

Subject: Re: Zimbabwe 2015 Wealth Index quintiles
Posted by [Liz-DHS](#) on Thu, 28 Jun 2018 15:50:05 GMT
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Dear User, At this time we do not have wealth construction files in Stata. Thank you!
