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Subject: Re: Mapping Z-scores

Posted by [Reduced-For\(u\)m](#) on Sun, 06 Jul 2014 21:16:54 GMT

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I just want to bump this question up, in case someone at the DHS has a good answer. I've been thinking about it, but this is a problem we haven't really dealt with here specifically.

My (totally unofficial, based solely on experience and answers to similar problems) two cents - I don't think you can reliably estimate cluster-level mean HAZ, at least not in the sense that the estimate would be representative of the population of the cluster (and I'm guessing that some cluster samples are really small, so there is a small sample problem too for inference).

One thing that might make sense is to only use the smallest nationally representative unit, and then interpolate from there - basically assuming a smooth change in mean HAZ from one regional center to the neighboring regional center (which may or may not make any sense). That could maybe be refined to adjust for urban/rural differences. All this assumes of course that all three survey years are representative at the same geographic levels, that you've re-normalized your weights across survey rounds, that you are happy to assume away time-dependent changes in HAZ from 2000-2010, etc.

I think the trade-off you'll have to make is either getting really spatially rough maps (interpolated from just a few big geographic units) that are population-representative, versus getting finer grained maps that are just representative of the DHS sampling frame - which you could do without using the weights at all. The consensus among the DHS people seems to be to always use weights, but this is not the consensus among academic economists who regularly seem to say "oh, I don't use the weights."

But like I said - I'm hoping someone from DHS weighs in on this, because its a hard question, but one that I think is important given current interests in mapping things like this.

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