
Subject: Re: Trend analysis of dichotomous categorical outcome variable on stata
Posted by [Reduced-For\(u\)m](#) on Mon, 11 Jan 2016 20:22:57 GMT

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I'm not sure exactly what you have in mind - but in this setup, to me, you have essentially 3 "observations" at the country level from which to do your "trend analysis". That is, you have 3 nationally representative stunting rates (or wasting, or whichever categorical variable you are using).

Why not just estimate the means of each survey and then test whether the means are equal (and graph them out to literally see the trend)? One way would be to use the standard OLS regression on each dataset separately (using the "svy" prefix and the "regress" command) and then to use the "seemingly unrelated regressions" (google "stata help suest") to test the equality of means (so, just the constant without any covariates included in the original regression). Mean here being proportion stunted/wasted.

Or you could put all the individual observations in one regression model with dummy variables for each survey round and use a standard F-test (using the "svy" prefix before the regression and the "test" command after). You'd have to carefully re-define your strata and PSU for each round.

But maybe you have something more complex in mind? Remember, that since these are, as a whole, nationally representative datasets, you aren't, at the national level, ever really getting much more information than you get from the 3 mean stunting/wasting rates, although maybe if the covariates are changing over time you might learn a little bit more (but that is part of the "trend" itself in my opinion, since nutritional status doesn't just change on its own, it changes because the country is changing in some way).

So I'm not sure this helps, but if you have a more specific question of what you mean by "trend analysis" I could maybe help a little more.
