Completion Rates

Proposals for model specification

Technical Cooperation Group
Working group on household surveys

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Global Education Monitoring Report
Recap

Problem to solve: multiple competing estimates of completion from different surveys, all of which are noisy.

Solution: adapt approach adopted by health community for SDG monitoring of U5 and maternal mortality, namely hierarchical Bayesian model. This replaces carrying forward “latest available” single data point with a “nowcast” using all available data.

GEM Report had a consultant statistician review and improve the model and implementation for the last 4 months. All technical problems have been resolved, and results are available for benchmarking and combined “completion with learning” measure.
Discussion Points and Recommendations I

No trend breaks

I.e. neither positive “SDG effect” nor negative, e.g. COVID-19. N.b. model does allow for “sticky” short-/medium-term shocks.

Rationale:

• Could be re-visited in a few years, but too little data yet to robustly estimate post-2015 changes in trends.

• Also, for projection, can serve as a counterfactual “business as usual” baseline against which to assess COVID-19 effect once it is actually observed.
Discussion Points and Recommendations II

Hard-wired optimism

Model technically allows for, but strongly discourages estimation of negative long-term trends.

Rationale:

Truly long-term trend cannot have been negative, given current non-zero levels of completion.
Discussion Points and Recommendations III

Gender disaggregation

• Status quo: total/female/male completion modeled separately
• Next step: joint model
• Alternative 1: model female/male completion jointly, derive total (bottom up)
• Alternative 2: model total, model gender parity index separately (top down)

Question: Either way, build in safeguards against gender divergence?

Question: Either way, in the meantime, only report total?
For TCG

1. Endorse absence of long-term trend breaks for the time being.

2. Endorse optimistic specification of no long-term decline.

3. Comment on alternative approaches to gender disaggregation.