Association between economic growth and early childhood nutrition – Authors' reply

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Authors' reply

Anna Bershteyn and colleagues provide a useful comparison of estimates of the association between economic growth and early childhood undernutrition in our study[1] with those of previous studies. Their comparative exercise supports our key conclusion that the contribution of economic growth to the reduction in early childhood undernutrition in low-income and middle-income countries is very small. We had already reported both absolute and relative changes in our study (tables 2 and 3) underlining that absolute changes are much smaller than relative ones. Specifications with individual-level control variables, which are important for the reduction of bias of the estimates, show even smaller coefficients than those reported by Bershteyn and colleagues. The use of year fixed effects is also important to control for factors that are unrelated to the effect of economic growth; in that sense, we stand by their use which, as Bershteyn and colleagues show, also leads to smaller estimates.

We would like to also clarify that we do not underestimate the CIs in our study through the assumption that GDP was observed independently for every child in the survey. The multilevel design and clustering of standard errors at the survey level accounts for the fact that GDP is not observed independently for each child in the survey.[1] The larger CIs in our other paper on sub-Saharan Africa[2] seem to refer to the macro-level regressions and not the micro-level regressions, which are also reported in that paper.

The comparative exercise by Bershteyn and colleagues shows that a consensus should exist in the scientific literature that the contribution of economic growth to the reduction in early childhood undernutrition in low-income and middle-income countries is very small. Consequently, instead of relying solely on income-generation, either at the macro-level or micro-level, efforts to address child undernutrition should directly focus on known risk factors—both proximal and distal. Resources generated from economic growth could be helpful if they are used for this purpose.

We declare no competing interests.

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2 Harttgen K, Klasen S, Vollmer S. Economic growth and child undernutrition in sub-Saharan Africa. *Popul Dev Rev* 2013; **39:** 397–412.