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

The Harvard community has made this article openly available. Please share how this access benefits you. Your story matters.

<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Published Version</td>
<td>doi:10.1016/S2214-109X[14]70380-8</td>
</tr>
<tr>
<td>Citable link</td>
<td><a href="http://nrs.harvard.edu/urn-3:HUL.InstRepos:26568296">http://nrs.harvard.edu/urn-3:HUL.InstRepos:26568296</a></td>
</tr>
<tr>
<td>Terms of Use</td>
<td>This article was downloaded from Harvard University’s DASH repository, and is made available under the terms and conditions applicable to Other Posted Material, as set forth at <a href="http://nrs.harvard.edu/urn-3:HUL.InstRepos:dash.current.terms-of-use#LAA">http://nrs.harvard.edu/urn-3:HUL.InstRepos:dash.current.terms-of-use#LAA</a></td>
</tr>
</tbody>
</table>


Association between economic growth and early childhood nutrition

Authors’ reply

Anna Bershteyn and colleagues provide a useful comparison of estimates of the association between economic growth and early childhood undernutrition in our study1 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 Africa2 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.

Sebastian Vollmer, Kenneth Harttgen, Malavika A Subramanyam, Jocelyn Finlay, Stephan Klasen, *S V Subramanian
svsubram@hsph.harvard.edu

Department of Economics and Courant Research Centre Poverty, Equity and Growth in Developing Countries, University of Göttingen, Göttingen, Germany (SV, SK); NADEL, ETH Zurich, Zurich, Switzerland (KH); Social Sciences, Indian Institute of Technology Gandhinagar, Ahmedabad, Gujarat, India (MAS); and Harvard Center for Population and Development Studies, Harvard School of Public Health, Cambridge, MA 02138, USA (SV, JF, SVS)