



CHILD HEALTH EQUITY IN ETHIOPIA – TRENDS IN CHILD NUTRITIONAL OUTCOMES

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Content

- Background
- Objectives
- Data and Methods
- Preliminary Results
- Conclusions
- Next Steps

Background

- This study is part of the World Bank's research program on health service delivery in Ethiopia

- There are three planned and ongoing studies:
 1. Health Service Delivery Quality
 2. Child Malnutrition Mapping
 3. Health Equity



Background

- The health equity study looks at health outcomes with emphasis on MDG indicators and relevant interventions following recent similar studies (Wagstaff, Bredenkamp and Buisman 2014, Gwatkin et al. 2007 Gwatkin 2005).
- These include- child nutrition, under 5 mortality, contraceptive prevalence, skilled birth attendance, immunization, HIV.
- Today we'll look at a section of this study- trends in child health equity focusing on Stunting, Underweight and Wasting

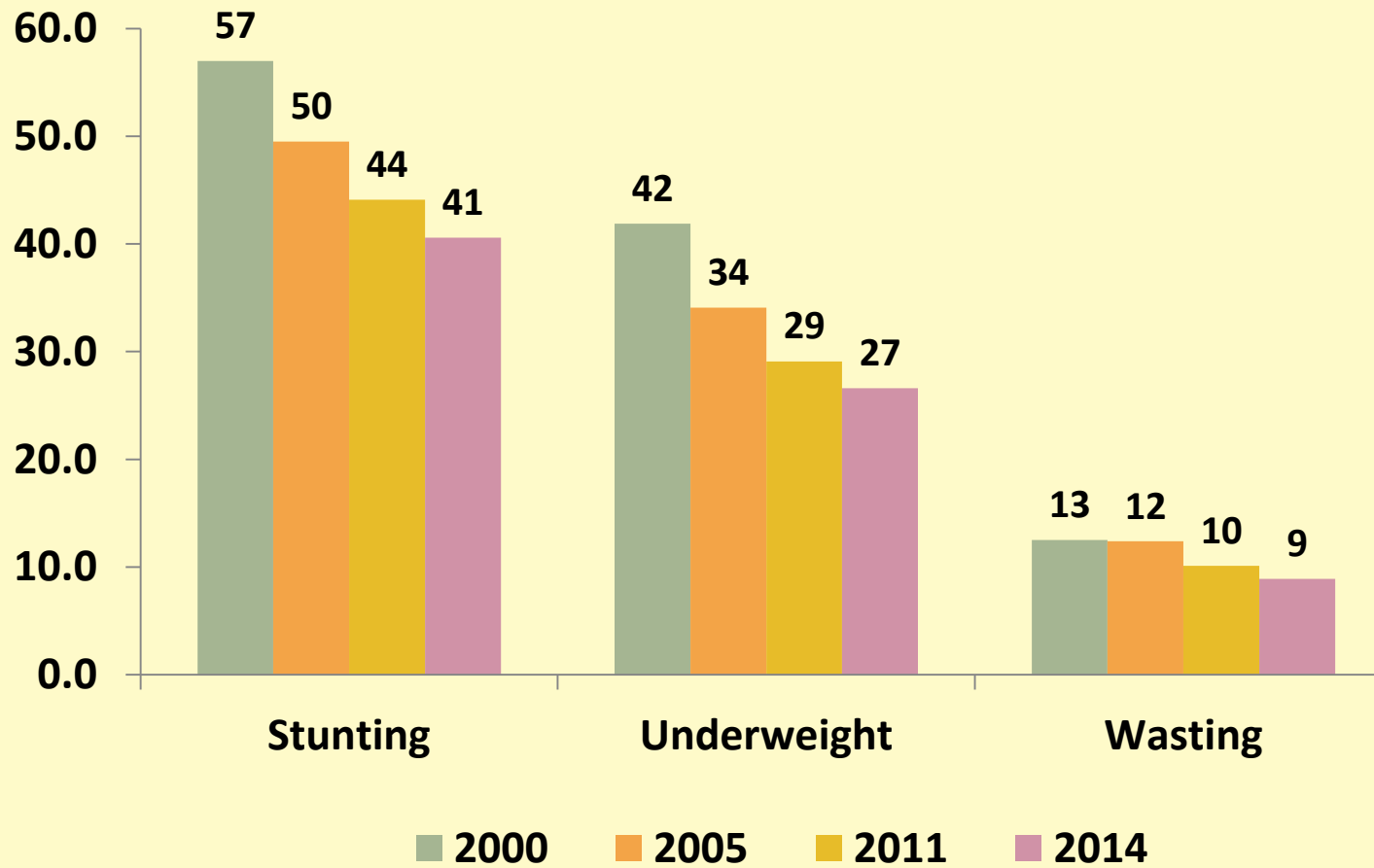


Background

- There is a vast literature on the role of early childhood development including child nutritional outcomes on health and human capital outcomes later in life (Victora et al., 2008).
- Child malnutrition is an important problem in Ethiopia. In 2014 there were 46% of children either stunted, underweight or wasted. This is equivalent to over 6 million children with at least one of these conditions.
- However, the situation is much better in 2014 than it was in 2000. In fact over 2000-2014- stunting, underweight and wasting declined by 16, 15, and 4 percentage points respectively.
- Roughly, it means that, if there were no any decline over 2 million more children would have been stunted and about the same underweight in 2014.



Fig-1 Trends in child stunting, underweight and wasting (age 0-59 months)



Background

- Now the question is – have the improvements been pro-poor or pro-rich? We look at this from the equity angle- following recent studies (Wagstaff, Bredenkamp and Buisman 2014, Gwatkin et al. 2007 Gwatkin 2005)
- We focus on the bottom 40% because shared prosperity or inclusive growth looks at this group for conceptual simplicity, target population that policy designs need to consider to benefit the least well-off and theoretical considerations (World Bank 2014).



Objective

- Therefore, the objective of this study is to explore if improvements in child nutritional outcomes were inclusive, i.e. did the inequality between the poor (bottom 40%) and the rich (top 60%) declined or increased over the 2000-2014 period?



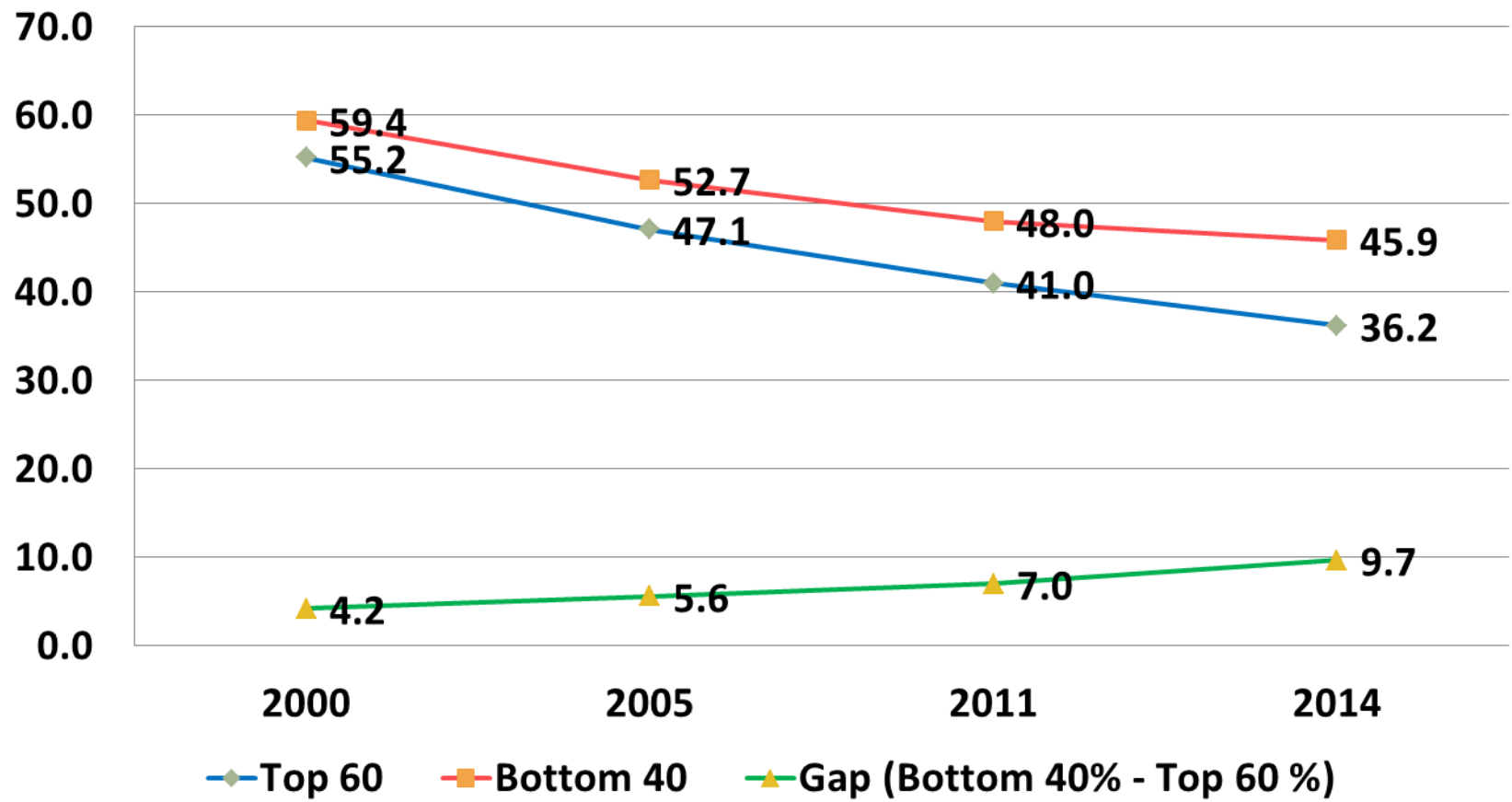
Methods

- We conduct trend and differential growth analyses based on absolute and relative inequalities.
- We disaggregate the results for different groups.
- We use data from the 2000, 2005, 2011 and 2014 Demographic and Health Surveys.



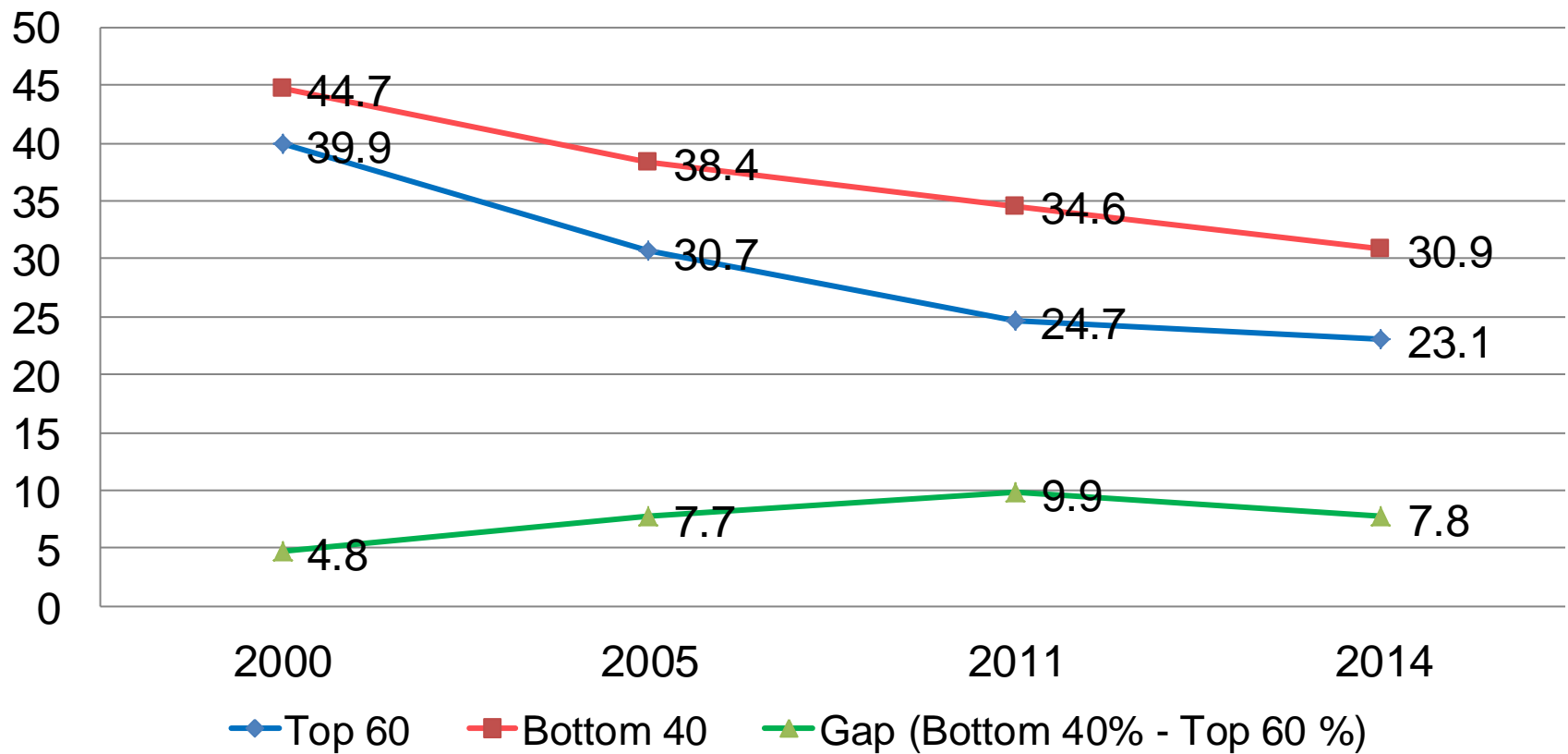
Results

Fig 2. Trends in Stunting (bottom 40% and top 60%)



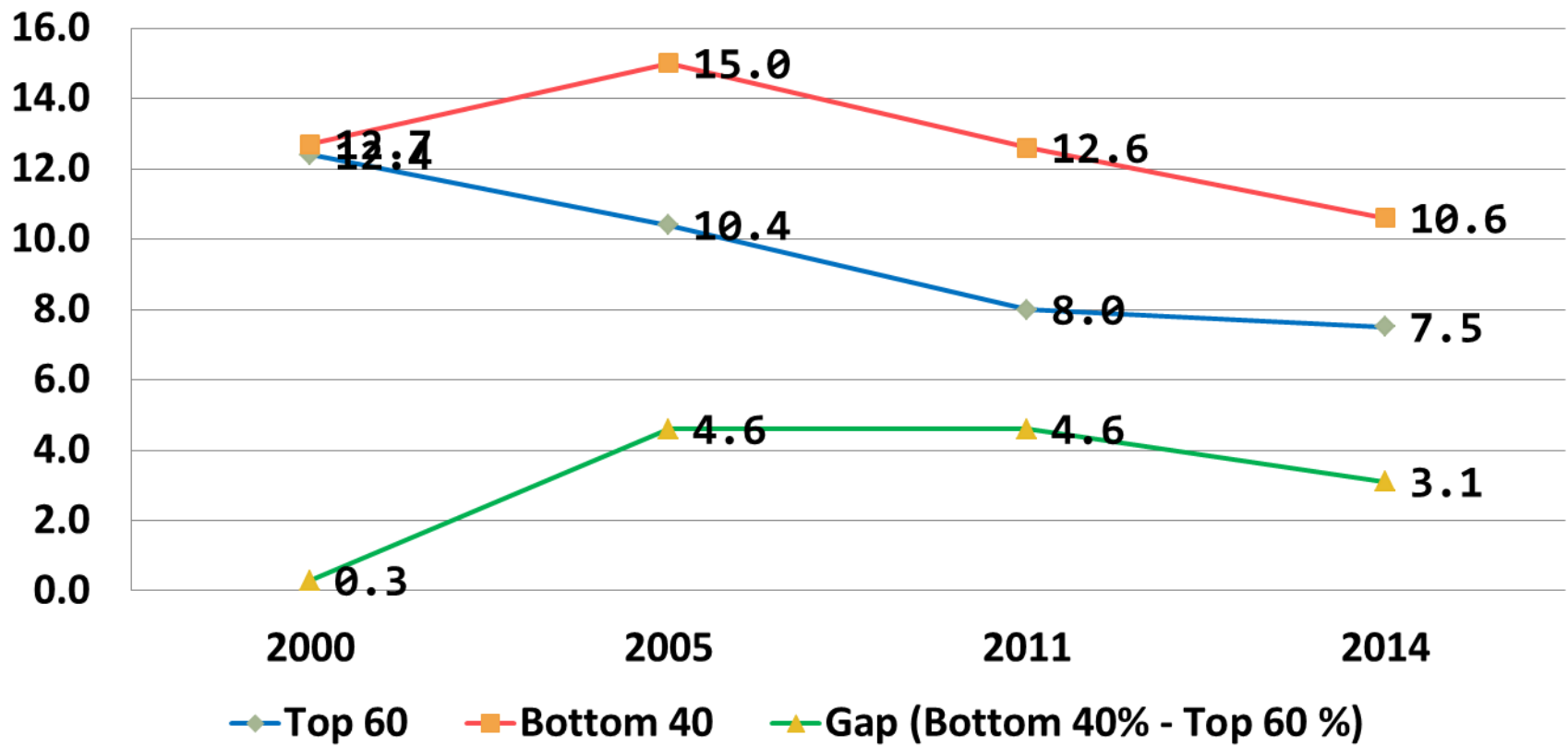
Results

Fig 3. Trends in Underweight (bottom 40% and top 60%)



Results

Fig 4. Trends in Wasting (bottom 40% and top 60%)



Results

**Table 1: Trends in absolute inequalities in child nutritional outcomes
Gap between bottom 40% and top 60%**

	Stunting		Underweight		Wasting	
	difference	95% CI	difference	95% CI	difference	95% CI
2000	4.2%	[-0.4, 8.8]	4.8%	[0.7, 8.9]	0.3%	[-3.7, 4.3]
2005	5.6%	[1.0, 10.2]	7.7%	[3.6, 11.8]	4.6%	[0.6, 8.6]
2011	7.0%	[2.4, 11.6]	9.9%	[5.8, 14.0]	4.6%	[0.6, 8.6]
2014	9.7%	[5.1, 14.3]	7.8%	[3.7, 11.9]	3.1%	[-0.9, 7.1]

Results

**Table 2: Trends in relative inequalities in child nutritional outcomes
Ratio of bottom 40% and top 60%**

	Stunting	Underweight	Wasting
2000	1.1	1.1	1.0
2005	1.1	1.3	1.4
2011	1.2	1.4	1.6
2014	1.3	1.3	1.4

Results: Overall trends

- Stunting and underweight are still important child health problems. In 2014 over 5.4 million children under the age of 5 were stunted and over 3.6 million children were underweight.
- However, in both measures, the is much better compared with the 2000 values. On average, over the 2000-2014 period, stunting and underweight rates declined by about 16 and 15 percentage points. Although, not as big, the same is true for wasting.
- However, in all cases the declines happened more in the top 60 than in the bottom 40 implying an increase in the relative inequality.

Results: Overall trends--continued

- As presented in Tables 1 and 2 respectively, over the period (2000-2014) absolute inequality and relative inequality between the bottom 40% and the top 60% have increased.
- For example, in 2000 a child from the household in the bottom 40% was 1.1 times more likely to be stunted than the child in the top 60%. However, in 2014 it was 1.3 times.
- The same is true for underweight and wasting when we compare the 2000 and 2014 values. However, there is also a sign of some improvement in relative inequality for these two measures over the period 2011 and 2014.

Conclusions

- Ethiopia has registered considerable progress in several dimensions including maternal and child health outcomes. However, this progress has not always been inclusive. Improvements in child nutritional status happened proportionally more in the top 60% of households than in the bottom 40%. Both absolute and relative measures of inequalities show that the bottom 40% of the households were lagging in terms of benefiting from the improvements in child nutritional status. Owing to the long and short term effects of child malnutrition on health and other human capital outcomes this predicament would constrain the country's poverty eradication effort .

Next Steps

- This study is just started and is in progress. We have plans to do the following:
 - We will include other health outcomes in the analysis.
 - We'll estimate the correlates of those outcomes to identify more intervention variables.
 - Provide more results for rural and urban areas as well as for different regions

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