Wellbeing in Ethiopia

In 2011/2012, Ethiopia's Central Statistical Agency (CSA), in collaboration with the World Bank, conducted the first wave of the Ethiopia Rural Socioeconomic Survey (ERSS), which collects detailed data on household welfare and income-generating activity. The ERSS' sample includes 4,000 households that are representative of small towns and rural areas; wave 2 will be expanded to include urban areas and will run from 2013 to 2014. This note looks at the relationship between wellbeing as measured by consumption and outcomes related to education, health, and demography.

Consumption Quintiles & Household Composition

Consumption quintiles are used to categorize households according to their welfare; the poorest households are grouped into the 1st quintile and the richest households fall in the 5th quintile. We calculated the annualized consumption aggregate using the index of selected food and non-food items that reflect the bulk of the consumption basket in Ethiopia. Final consumption quintiles were constructed based on the distribution of consumption per adult equivalent[1].

The dependency ratio, defined as the ratio of non-working individuals (<15 and >64 years old) to working individuals (15-64 years), can provide insight into the financial burden faced by specific populations[2]. Overall, we find that the dependency ratio for the poorest quintile is almost 40 percent larger than the ratio for the top quintile. The poorest have a dependency ratio of 121 percent, meaning for every productive-aged adult in the household, there are 1.21 non-working age individuals. This figure drops to 88 percent for the top quintile (see Table 1). This pattern is also observed within rural and small town households, though we note a lower burden of dependents in small towns.

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[1] Consumption per adult equivalent was calculated based on the equivalent scales from *Household Consumption and Expenditure (HCS) Survey 2010/11: Analytical Report,* Central Statistical Agency 2012

[2] Households with no working individuals were excluded from the dependency ratio calculations.

Table 1: Dependency Ratio (%), by Consumption Quintile and Rural/Small Town

	(poorest) Q1	Q2	Q3	Q4	Q5
Rural	121	114	105	102	89
Small town	108	100	74	81	65
Total	**121**	**114**	**105**	**102**	**88**

Education & Wellbeing Rankings

Literacy rates, although notably low throughout the country, increase steadily as we move up the wellbeing ladder. This positive correlation holds true for males and females, as well as rural and small town subgroups. However, note that the male literacy rate is 13 to 20 percentage points higher than the female literacy rate in any given quintile (see Figure 1).

Figure 1: Literacy, by Consumption Quintile & Gender
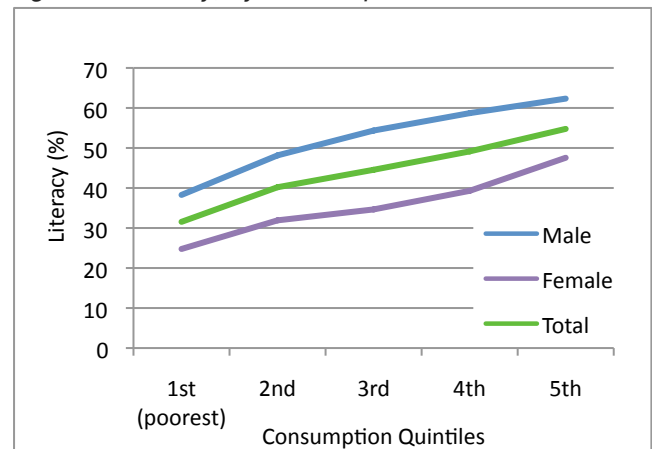
The positive correlation between consumption and literacy is mirrored, and likely driven, by a similar relationship between consumption and school attendance. As seen in Table 2, the likelihood of having ever attended school, regardless of gender, increases as the individual moves up the wellbeing ranking. Consistent with both males and females, the percentage of those ever having attended school increases more than 50 percent when moving from the

poorest to the top quintile.

Table 2: Ever attended school (%), by Consumption Quintile & Gender

	Q1	Q2	Q3	Q4	Q5
Male	43	53	59	62	67
Female	33	40	47	47	54
Total	**38**	**47**	**53**	**55**	**61**

A similar phenomenon emerges for current school enrollment which, when contrasted with having ever attended school, can shine light on the dynamic changes in the Ethiopian education system. Only 50 percent of school-aged children in the poorest consumption quintile are currently attending school, compared to 70 percent of those in the richest quintile[3]. However, we note that these figures are 10 percentage points higher than their counterparts in Table 2, suggesting improvement in recent years.

Health & Wellbeing Rankings

Although we observe a significant correlation between wellbeing and education outcomes, we find no evidence that the poorest are worse off with respect to health outcomes. Self-reports of an incidence of illness, chronic disease, or disability are not significantly different for individuals at each of the five consumption quintiles. There is also no statistically significant difference in type of illness endured (for those reporting an incidence of illness) as we move up the wellbeing ladder. However, malaria prevalence in the top quintile is 32 percent, compared to only 23 percent in the poorest quintile (see Table 3).

Table 3: Self-Reported Illness/Disability, by Consumption Quintile

	(poorest) Q1	Q2	Q3	Q4	Q5
Illness[4]	18	16	17	16	20
Malaria	23	32	34	26	32
Diarrhea	14	8	8	12	12
Other[5]	63	60	58	61	56
Disability	10	8	8	8	8

The ERSS also measures height and weight of children ages 6-59 months to monitor malnutrition. The primary

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[3] School aged children are those ages 7 to 18.
[4] Illness defined as incidence occurring in two months prior to survey.
[5] "Other" illnesses include injury, dental, skin diseases, ear/nose/throat problems, and TB.

indicators of malnutrition are: stunting, or low height-for-age; underweight, low weight-for-age; and wasting, low weight-for-height. Rates of stunting and underweight are inversely correlated with consumption; the stunting and underweight prevalence estimates are 60 percent and 36 percent, respectively, in the poorest quintile, vs. 36 percent and 20 percent in the top quintile. However, wasting prevalence estimates are not significantly different at each consumption quintile, and we note no pattern as we move up the welfare ranking (see Figure 2).

Figure 2: Malnutrition estimates, by Consumption Quintile
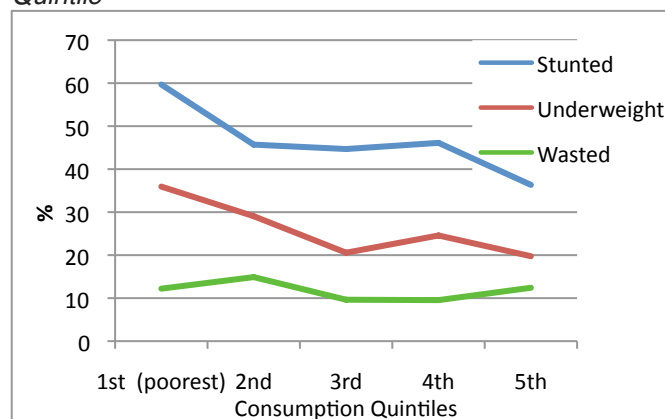
Conclusion

A substantial body of literature speaks to the positive correlation between household wealth and indicators of wellbeing. Analysis of the ERSS data supports this notion in the dimensions of household composition and education. However, we find that the relationships between consumption and health are only significant for stunting and underweight prevalence. Therefore, while household consumption may provide insight into many outcomes of wellbeing in Ethiopia, the ERSS data suggest that health outcomes are also tied to other factors.

This brief is based on data collected by the Central Statistical Agency as part of the Living Standards Measurement Study – Integrated Surveys on Agriculture (LSMS-ISA) project. The full dataset is available for download at CSA via http://www.csa.gov.et.

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