

Construction of Consumption Aggregates for the Ethiopia Socioeconomic Survey Wave 3: *Supplemental Information*

Introduction

A third wave of the Ethiopia Socioeconomics Survey (ESS3) was conducted in 2015-2016. Since the ESS is a panel survey, all households interviewed in ESS2 were attempted to be interviewed in ESS3. The panel aspect of the ESS allows for analysis of dynamics across time for the same household. In order to allow dynamic analysis on wellbeing from the perspective of consumption expenditures, a consumption aggregate was calculated for ESS3. In order to make the ESS3 consumption aggregate comparable to the aggregates for ESS1 and ESS2, the same methodology was adopted for the main ESS3 aggregate. However, there are several minor differences between the ESS1 and ESS3 aggregates. This document only serves to describe these differences and is a supplement to the consumption aggregate documentation provided for ESS1¹. Unless otherwise noted in this document, the same methodology used for ESS1 was applied for ESS3.

Differences from ESS1 Method

The ESS1 and ESS3 collected very similar data on food and non-food consumption. As for ESS1, the consumption data was collected during the third visit of the ESS3 between February and April 2016.

1. The same regional spatial price index (from MoFED from the HCE) is included with the consumption aggregate data file for ESS3. The index is exactly the same as ESS2 (which added Addis Ababa). It is again left to the data user to apply this index or to use/calculate a separate spatial price index.
2. Winsorization of per capita quantity consumed for each food item was done at the 99th percentile level, instead of at the 98th percentile. Based on feedback from the first and second waves, better training of enumerators led to fewer outlier values in consumption of various items, and winsorizing at the 99th percentile for wave 3 leads to similar maximum values of per capita consumption as winsorizing at the 98th percentile for wave 1.
3. In ESS1, kocho and bula (two staples produced from the same starchy plant) were collected together on the same line of the consumption module (food id #17, “kocho/bula”). In ESS3 (as in ESS2), kocho and bula were collected on separate lines (food id #17 and #26 in the ESS3 questionnaire). Both of these lines were included in the ESS3 consumption aggregate.
4. Likewise, meat was captured on a single line in ESS1 and ESS2. In ESS3, meat was disaggregated into three separate items: beef, goat & mutton, and poultry. In the ESS3 aggregates, these three items were included in the aggregate. However, when applying outlier checks and price calculations, they were considered together in order to be consistent with ESS1 and ESS2.²

¹ The consumption aggregate documentation for ESS1 can be found at <http://go.worldbank.org/ZK2ZDZYDD0>.

² Treating these three items separately was tested to see if it had a substantial effect in the final consumption

5. Beginning in ESS3, 18 additional food items were added to the consumption list. In order to maintain comparability with ESS1 and ESS2, these additional items were excluded from the main ESS3 aggregate (for panel analysis). However, an additional consumption aggregate which includes these additional items is planned, though it will not be comparable with ESS1 & ESS2.
6. The list of nonfood items included in the ESS1 and ESS3 aggregates are identical. Although one item (house rent) was added to the ESS2 and ESS3 questionnaire, it was excluded from the aggregate to maintain comparability with ESS1.
7. In ESS3, a substantially larger set of nonstandard units were reported for consumption quantities of food items. Food conversion factors included with the ESS3 data (*Food_CF_Wave3.dta*) were applied to convert to standard units (kg or L). As in ESS1 and ESS2, there were some cases where nonstandard units could not be converted and these households (n=187) were excluded from the consumption aggregate calculation and are identified by the variable *no_conv*.
8. There were some cases (50 households) which reported no food consumption in ESS3. As for ESS1 and ESS2, these households were excluded from the consumption aggregate calculation and are identified by the variable *no_cons*.

Variables Included in Data File

- *household_id*: household identifier for households interviewed in ESS1 (for merging with ESS1)
- *household_id2*: household identifier, unique for all ESS3 households
- *ea_id*: enumeration area identifier for ESS1 (only for merging with ESS1)
- *ea_id2*: enumeration area identifier for ESS3
- *saq01*: region code
- *rural*: rural vs small town indicator
- *pw_w3*: household survey weight for ESS3
- *adulreq*: adult equivalent household size
- *hh_size*: basic household size
- *no_conv*: indicator for cases where at least one consumption quantity could not be converted to standard units
- *no_cons*: indicator for cases where a household did not report any food consumption
- *food_cons_ann*: total (nominal) annualized food consumption
- *nonfood_cons_ann*: total (nominal) annualized nonfood consumption
- *educ_cons_ann*: total (nominal) annual expenditure on education
- *total_cons_ann*: total (nominal) annual consumption expenditure
- *price_index_hce*: spatial price index from MoFED, calculated from HCE
- *nom_totcons_aeq*: nominal total annual per adult equivalent consumption expenditure
- *cons_quint*: (population weighted) consumption quintiles based on *nom_totcons_aeq*

aggregate. The change in the aggregate under this assumption was minimal.