## **\*NOT FOR PUBLICATION**

# Online Appendix: "The Costs of Consumption Smoothing: Less Schooling and Less Nutrition"

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A Lifecycle Expenditure and Consumption Controlling for Cohort & Time Effects



Figure A1: Lifecycle Nondurable, Food, and Nonfood Expenditure Controlling for Cohort Effects

*Notes:* The expenditure profiles in rural and urban Malawi are decomposed into nondurable, food, and nonfood expenditure in panel (a), (b), and (c), respectively. Also household's hours of agricultural work in rural and urban Malawi are shown in panel (d). In controlling for both cohort and time effects, we assume a cubic polynomial for age effect. The age profiles are normalized to 0 (in logs) at age 25. The solid lines are the estimated age profiles controlling for time effects only. The dotted lines show the estimated age polynomials controlling for both cohort effects and time effects. All profiles are plotted in adult-equivalent terms.

## **B** Lifecycle Expenditure by Sub-samples



Figure B.1: Subsets of the Sample Over the Lifecycle

*Notes:* The left panel (a) refers to nondurable expenditure and the right panel (b) refers to food expenditure in Malawi. Note that food expenditure includes the monetary value of self-farm food, purchases, and food received as gifts (see main text for a discussion). In both panels, the black (dot) profile is the same as estimated in the main text. The blue (triangle) profile excludes households with an adult member who is not a spouse. The pink (circle) profile keeps only households with school-aged children. The orange (square) profile keeps only households with school-aged children and no adult other then spouse and head.

## C Schooling and Children Self-Farming Hours: Unconditional and Restricted



Figure C.1: Primary school-age children

*Notes:* Panel (a) and (c) include all household with children in primary school-age. Panels (b) and (d) restrict the samples to households in which all children in primary school-age have both parents present. We normalize log hours in per capita terms to 0 (in logs) at age 35 and show the percentage of school-age children currently not attending school also normalized to 0 at age 35.



*Notes:* Panel (a) and (c) include all household with children in secondary school-age. Panels (b) and (d) restrict the samples to households in which all children in secondary school-age have both parents present. We normalize log hours in per capita terms to 0 (in logs) at age 35 and show the percentage of school-age children currently not attending school also normalized to 0 at age 35.

# D Lifecycle Expenditure and Consumption in Uganda



*Notes:* We use the four available waves of the Uganda LSMS-ISA data 2005/06, 2009/10, 2010/11, and 2011/12. The expenditure profiles in rural and urban Uganda are decomposed into food and nonfood expenditure in respectively panel (a) and (b). We plot the food share of total nondurable expenditure in panel (c). The age profiles are normalized to 0 (in logs) at age 25. The graphs show estimated age dummies (marked with dots) and associated cubic polynomials following the specification with time controls described in Section 3.3. All plotted variables are deseasonalized, annualized, and in adult-equivalent terms.

(a) Food Expenditure

### Figure D2: Deconstructing Lifecycle Food Expenditure, Rural and Urban Uganda



*Notes:* We use the four available waves of the Uganda LSMS-ISA data 2005/06, 2009/10, 2010/11, and 2011/12. We break down food expenditure by its origin (left axis): self-farmed food in panel (a), food purchases in panel (b), and food received as gift in panel (c). In each panel we overlay the lifecycle profiles with the expenditure share out of total food expenditure (right axis). See our discussion in Section 4. The age profiles are normalized to 0 (in logs) at age 25 The graphs show estimated age dummies (marked with dots) and associated cubic polynomials following the specification with time controls described in Section 3.3. All plotted variables are deseasonalized, annualized, and in adult-equivalent terms.

#### (a) Self-Farmed Food



Figure D3: Lifecycle Consumption and Its Quality in Old Age, Rural and Urban Uganda

(a) Iron, Zinc, and Macronutrients Intake (Rural)

*Notes:* We plot consumption (nutrient intake) profiles by minerals (iron and zinc) in the top panels, micro nutrients (vitamins A, B12 and C) in the center panels, and macro nutrients (fat and sugar) in the bottom panels. The left panels refer to rural areas, and the right panels refer to urban areas. In each panel, we overlay nutrient intake with calories and food expenditure profiles from Figure 6. See our discussion in Section 4. The age profiles are normalized to 0 (in logs) at age 45. The graphs show estimated age dummies (marked with dots) and associated cubic polynomials. All profiles are plotted in adult-equivalent terms.

#### (b) Iron, Zinc, and Macronutrients Intake (Urban)

# E Lifecycle Expenditure and Consumption in Nigeria



Notes: We use the two available waves of the Nigeria LSMS-ISA data 2010/11 and 2012/13. The expenditure profiles in rural and urban Uganda are decomposed into food and nonfood expenditure in respectively panel (a) and (b). We plot the food share of total nondurable expenditure in panel (c). The age profiles are normalized to 0 (in logs) at age 25. The graphs show estimated age dummies (marked with dots) and associated cubic polynomials following the specification with time controls described in Section 3.3. All plotted variables are deseasonalized, annualized, and in adult-equivalent terms.

(a) Food Expenditure

### Figure E2: Deconstructing Lifecycle Food Expenditure, Rural and Urban Nigeria



*Notes:* We use the two available waves of the Nigeria LSMS-ISA data 2010/11 and 2012/13. We break down food expenditure by its origin (left axis): self-farmed food in panel (a), food purchases in panel (b), and food received as gift in panel (c). In each panel we overlay the lifecycle profiles with the expenditure share out of total food expenditure (right axis). See our discussion in Section 4. The age profiles are normalized to 0 (in logs) at age 25 The graphs show estimated age dummies (marked with dots) and associated cubic polynomials following the specification with time controls described in Section 3.3. All plotted variables are deseasonalized, annualized, and in adult-equivalent terms.

(a) Self-Farmed Food



### Figure E3: Lifecycle Consumption and Its Quality in Old Age, Rural and Urban Nigeria

Notes: We plot consumption (nutrient intake) profiles by minerals (iron and zinc) in the top panels, micro nutrients (vitamins A, B12 and C) in the center panels, and macro nutrients (fat and sugar) in the bottom panels. The left panels refer to rural areas, and the right panels refer to urban areas. In each panel, we overlay nutrient intake with calories and food expenditure profiles from Figure 6. See our discussion in Section 4. The age profiles are normalized to 0 (in logs) at age 45. The graphs show estimated age dummies (marked with dots) and associated cubic polynomials. All profiles are plotted in adult-equivalent terms.