

Evaluating Seasonal Food Storage and Credit Programs in East Indonesia (Online Appendix)

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1 Data

1.1 Describing the sample

In total, we sampled 2,877 households, followed over six survey rounds (odd rounds are lean season surveys and even rounds are harvest season surveys). Of these households, 720 were in credit villages, 1,440 were in storage villages (half were in pure and half in contract storage) and 717 were in control villages. There was no attrition. So, in total, we have 17,262 (calculated as 2,877 times 6) observations at the household-by-survey-round level.

We surveyed 30 households out of two hamlets per village in 96 villages. Hamlets within each village tended to be far apart so our survey team could only focus on surveying households in 2 hamlets per village. To increase the percent of surveyed households who would be offered treatment, we first instructed the survey team to select 30 households randomly within 2 hamlets in both the treatment and control villages. Then, we instructed the facilitators to offer all survey respondents in each village the option to participate. Since the selection of survey respondents was independent of the selection of program participants, the respondents in the treatment and control villages are still comparable, on average.

Our estimation sample includes 2,870 households (713 from control villages, 720 from credit villages and 1,437 from storage villages). We dropped 7 households because we were not able to use their ID in the household questionnaire to merge with any of the six rounds of individual questionnaires. Consequently, we do not have data on the demographics of these households and the number of household members (which we need to construct per capita variables).

Here are the number of observations for the main estimation samples:

- For the storage versus control villages comparison, the baseline regression (Table 1, column 5) includes 2150 observations (unless there are missing values, discussed below). For credit, we have 1433 observations (Table 1, column 8).
- The OLS estimation for storage (Tables 3 to 5) pools all post-treatment surveys (rounds 4 to 6) and has 6450 observations (calculated as 1437 + 713 households times 3 survey rounds).

The OLS estimation for credit pools rounds 2 to 6 and has 7165 observations (calculated as 720 + 713 households times 5 survey rounds).

1.2 Defining key variables

We designed the survey in consultation with researchers from the local agricultural institute, who conducted the survey. Whenever possible, the survey questions were taken directly from Indonesia's annual household survey, *Susenas*. We pre-tested the survey questions and made slight modifications to adjust for local crops and staples. In Table A1, we describe how each variable was constructed.

1.3 Mean effects analysis and summary indices

We construct a summary index for each category of outcomes. For each category with Y_1, \dots, Y_K outcomes, we calculate the standardized outcomes, y_1, \dots, y_K , as the outcome, Y_k , minus its baseline mean in the control group, divided by the baseline standard deviation in the control group. It is more common to standardize using the contemporaneous means and standard deviations for the control group. However, we chose to use the baseline control group mean and standard deviation because of the mis-assignment problem. Finally, we create the summary index by averaging over all K standardized outcomes. The *Consumption and Income Index* and the *Health Index* are defined so that an increase in the index is desirable. The *Seasonal Gap Index* is defined so that a reduction represents lower consumption variability within a cycle.

Using a summary index avoids the over-testing problem because each index is one regression and the probability of false rejection does not increase as we add outcomes to the index. The downside is that it is hard to interpret the indices. If we find that an index increased, we would like to know which components are significant in isolation. Therefore, in each table, we report results on both the summary index for each category of outcomes and the individual coefficients. Mean effects analysis is widely used by other randomized control trials. An alternative approach is to make Bonferroni adjustments. The basic Bonferroni adjustment calculates upper bounds for family-wise error rates by multiplying the per comparison p-value by the number of estimates within a family of hypotheses. This bound is the exact family-wise p-value when the outcomes in the family are independent of each other. Intuitively, the Bonferroni adjustments have lower statistical power when the outcomes are highly correlated, as in our case. In other words, the upper bound is less informative because we would fail to reject too often. See [Kling and Liebman \(2004\)](#) for more details.

1.4 Data issues

- Outliers: All measures related to income, consumption, production, storage and assets have been winsorized at the top 2% to minimize biases due to outliers. We also tried winsorizing at the top 5% and the results are similar.

- Calculating per capita per month values: To calculate per capita values we divided by number of household members in the contemporaneous survey round. For some household-by-survey round observations, we filled in the missing values for household size with the mean for that household (calculated using other survey rounds with non-missing values). To convert weeks to months, we multiplied the total by 4.
- Potential bias due to missing values: As discussed above, the OLS estimation is missing some values because we take logs. Notably, the summary index (first row in each panel) is only defined if all outcomes used to calculate the index are non-missing. To check that the censoring due to logs is not driving the results, we tried dropping all observations where any of the logged outcomes are missing (about 8% of the sample). We end up with 5907 observations for storage and 6565 observations for credit. The results are broadly similar.

2 Other results

2.1 Seasonal differences

We chose to use absolute differences ($|Harvest - Lean|$) because we are interested in testing whether the treatments reduced the magnitude of the seasonal gap between harvest and lean seasons for the average household in the treated village. There are several advantages to using absolute differences. First, we were interested in measuring variability in consumption and pure differences ($(Harvest - Lean)$) would only detect mean effects but not higher order moments. Related to this, we did not want households with positive pure differences to cancel out households with negative pure differences as we average across households' seasonal differences in a village. Taking absolute seasonal gaps would add both positive and negative seasonal differences.

Second, a significant number of households in our sample have negative pure differences,¹ and for these households, a further reduction in the pure difference (by transferring from the harvest to the lean season) may not be a welfare improvement. The interpretation depends on whether the reduction in pure differences comes from preferences or from adverse shocks.

While the absolute difference in consumption across seasons is not independently a measure of welfare, it can be interpreted in conjunction with overall levels of consumption. In particular, suppose utility functions are concave, identical and separable across seasons. Then, a reduction of the absolute seasonal difference can be interpreted as a rise in welfare if total annual consumption remains the same. In Figure 1, this means that along any inter-seasonal budget constraint with a slope of -1 (all bundles along this line have the same total consumption levels, i.e. $M_H + M_L$ is constant), consumption bundles closer to the 45-degree line are associated with higher indifference curves.

We report results using other measures of consumption variability in Table A2. Instead of using an absolute difference metric to calculate seasonal differences (replicated in Panel A), we use a “standard deviation” metric in Panel B, where we square the pure differences and then take

¹In our control group, close to half of the households have larger staple consumption or non-food expenditures in the lean season than the harvest season (so, the pure difference of harvest minus lean is negative).

the square root. The results are very similar between Panels A and B. While Panels A and B examine consumption variability within a cycle (round 2 minus round 3, round 4 minus round 5) and report regressions at the household-cycle level, Panel C examines total consumption variability and reports regressions at the household level. For each household, we calculate the standard deviation of outcomes across all post treatment rounds (rounds 2 to 5 for credit and rounds 4 to 6 for storage). Credit reduced all measures of consumption variability, especially for Alfa Omega districts.

2.2 Heterogeneous treatment effects

We calculated the baseline retention rate using the total amount of rice and maize in stock in round 3 (lean) divided by the total amount of rice and maize in stock in round 2 (previous harvest). Then, we created an indicator for households' whose retention rate is below the median. Since retention rates are ratios, we had to drop some households that reported zero yield (the denominator) in round 2.

To estimate whether treatment effects differed by retention rates, we repeat Equation (6) but add two regressors: the indicator for households with below median retention rates and its interaction with the treatment dummy.

Table A5 in the appendix reports OLS estimates of these heterogeneous treatment effects. The column labeled, N(All) reports sample sizes for the regression using all seasons. In the same column, the p-values in brackets correspond to the test of a zero treatment effect for low gamma households (we test whether the sum of the coefficients on the treatment dummy and the interaction term is zero, using the estimation sample that pools both seasons). The results show that the effects are stronger amongst households with low baseline retention rates (the interaction term is significant). This is in line with our theory that the storage treatment expanded the budget set, with a more significant improvement for households with low baseline retention rates. Incidentally, we cannot construct baseline retention rates for credit households because we need a harvest and a lean season survey within the same agricultural cycle that is before treatment (rounds 2 and 3 for storage, but none exist for credit).

2.3 Cost-benefit analysis

The procurement costs for storage were 714,031,000 Rp for YAO and 905,395,500 Rp for TLM. The total procurement costs for credit were 1,408,868,000 Rp for YAO and 484,784,000 Rp for TLM. The number of eligible households for each NGO was calculated by dividing the number of beneficiaries by the take-up rate for each NGO. The average procurement costs for each NGO was calculated by dividing the total procurement cost by the total number of eligible households. The average procurement cost for each program was then averaged across the NGO averages.

The calculations in the main text ignore the annual implementation costs (mostly wages for facilitators but also management fees for the NGOs, and indirect costs including rent for offices in the field). To divide these costs between storage and credit, we assume that one third of staff and facilitator time was spent on credit while two-thirds was spent on storage (the typical facilitator was assigned to three villages – two storage villages and one credit village). In practice, in the long

run, these implementation costs would not be so high for storage once communities learn to use the storage equipment and for credit, the programs were designed so they could be easily added as a component of a national women's microcredit program (mentioned in Section 4). The annual implementation cost for storage was 108,998 Rp per eligible household.² For credit, the annual implementation cost per eligible household was 99,139 Rp.³ If we added implementation costs, the benefit-to-cost ratios for storage and credit are 24% and 36% respectively and 31% and 53% if we amortized costs across two years.

References

Kling, J. R., Liebman, J. B., 2004. Experimental Analysis of Neighborhood Effects on Youth, Princeton IRS Working Paper 483.

²The total implementation costs over three years were 3,072,618,032 Rp for Alfa Omega and 2,616,875,216 Rp for TLM. The annual implementation costs are calculated by dividing by 3 years. The annual implementation cost for storage was calculated as $(\frac{2}{3}) * (\frac{1}{3\text{years}}) * (3,072,618,032 + 2,616,875,216)$. If we include both one-time procurement costs and annual implementation costs, the average cost per eligible household would be 243,551 Rp.

³This was calculated as, $(\frac{1}{3}) * (\frac{1}{3\text{years}}) * (3,072,618,032 + 2,616,875,216)$. If we include both one-time procurement costs and annual implementation costs, the average cost per eligible household was 424,985 Rp.

Appendix Tables

Table A1: Variable Construction

Variable	Data construction	Survey Question	Survey
<u>Panel A: Consumption and Income</u> Log(Staple consumed, kCal)	Calculated as $\ln[(\text{Rice consumed in kg} * 3.6 * 4 + \text{Maize consumed in kg} * 3.56 * 4) / (\text{Number of household members})]$. To convert kilograms to calories, we used rates available at http://www.fao.org/docrep/X5557e/X5557e04.htm#cereals . For rice, we used 100g to 360 calories (the rate for milled, white rice) and for maize, we used 100g to 356 calories (the rate for grain or whole meal).	Amount of rice and maize consumed in the past week.	Household
Log(Non-food expenditure, in 1000 Rp)	Calculated as $\ln[(\text{Monthly expenditure items}) + (\text{Seasonal expenditures}/6) + (\text{Annual expenditures}/12)] / (\text{Number of household members})$	We used the non-food expenditure module from Suesenas. We asked households for monthly expenditure items (including rent, utilities, personal expenditures such as soap, make up and phonecards, health expenditures and health insurance costs), seasonal expenditures (including festival expenditures for own and others, including weddings, birthdays, religious ceremonies, traditional ceremonies and other festivities) and annual expenditure items (including education expenditures, clothing, durables, taxes).	Household
Log(Reported income, in 1000 Rp)	Calculated as $\ln[(\text{Reported income}/\text{Number of household members})]$	We asked for the reported income in the past 3 months, including income from the sale of agricultural output, wages, remittance and other receipts.	Household
1(Lacked food last month)	1(Response = Yes)	Have you lacked food in the last month?	Household
<u>Panel B: Health</u> 1(Health expenditure shortages) Number of days affected by sickness Number of sick persons	1(Response = Yes) Calculated as the total number of sick days for the entire household, including zeros for households who were not sick. Calculated as the total number of households who reported any sickness in the past 3 months.	Did you have problems paying health expenses the last month? For any household members who were sick/passed away last 3 months how many days of school/work was affected? Which household members were sick/passed away last 3 months?	Household Household Household Household
<u>Panel C: Agricultural yields and storage</u> Amount of maize produced (kg) Amount of maize stored (kg) Amount of rice produced (kg) Amount of rice stored (kg) Ratio of rice stored Ratio of maize stored	Total maize produced. Total maize in storage. Total rice produced. Total rice in storage. Total rice in storage/total rice produced Total maize in storage/total maize produced	In the previous harvest season how much of maize did you produce (in kg)? In the past 3 months, what is the amount of maize in storage now (in kg)? In the previous harvest season, how much of rice did you produce (in kg)? In the past 3 months, what is the amount of rice in storage now (in kg)? Amount of rice stored, divided by amount of rice produced (in kg) Amount of maize stored, divided by amount of maize produced (in kg)	Household Household Household Household Household Household
<u>Panel D: Household characteristics</u> 1(Graduated primary school) 1(Graduated lower secondary school) Age of household head Number of chickens owned Number of cows owned Number of pig owned Number of motorcycles owned Household size 1(Has debt)	1(Household head completed primary school or more) 1(Household head completed lower secondary school or more) Year of survey - year of birth Number of chickens owned Number of cows owned Number of pig owned Number of motorcycles owned Number of household members 1(Total debt > 0)	What is the highest education achieved? (Response: 02 Primary education) What is the highest education achieved? (Response: 03 Lower secondary education) What is the year of birth? How many of chickens do you own? How many of cows do you own? How many of pigs do you own? How many of motorcycles do you own?	Individual Individual Individual Household Household Household Household Household Household
<u>Panel E: Seasonal Differences</u> Log(Food consumption last week, in kCal)	Absolute difference of round 2 minus round 3 (for first agricultural cycle) and absolute difference of round 4 minus round 5 (for second agricultural cycle).		
Log(Monthly non-food expenditure)	Only includes monthly expenditure items (including rent, utilities, personal expenditures such as soap, make up and phonecards, health expenditures and health insurance costs).		

Table A2: Impact of Storage and Credit on Seasonal Differences

Treatment: NGO Districts:	Storage				Credit			
	All	YAO	TLM	N(All)	All	YAO	TLM	N(All)
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
<u>Panel A: Absolute Difference</u>								
Seasonal Difference Index	-0.031 (0.036)	-0.067 (0.057)	0.005 (0.045)	1834	-0.050 (0.033)	-0.103* (0.051)	0.005 (0.040)	2444
Log(Staple consumed in kCal)	0.007 (0.033)	-0.024 (0.039)	0.039 (0.052)	1909	0.001 (0.038)	-0.012 (0.031)	0.015 (0.072)	2593
Log(Monthly nonfood expenditure)	0.003 (0.040)	0.043 (0.068)	-0.038 (0.039)	1934	-0.066** (0.032)	-0.067 (0.044)	-0.065 (0.047)	2615
Log(Reported income)	-0.035 (0.064)	-0.052 (0.066)	-0.017 (0.110)	1858	-0.024 (0.054)	-0.087 (0.067)	0.039 (0.083)	2472
1(Lacked food last month)	-0.036 (0.042)	-0.087 (0.061)	0.015 (0.057)	2150	-0.003 (0.040)	-0.062 (0.055)	0.056 (0.057)	2866
<u>Panel B: Variance</u>								
Seasonal Variance Index	-0.029 (0.035)	-0.065 (0.055)	0.006 (0.044)	1834	-0.049 (0.032)	-0.100* (0.049)	0.004 (0.039)	2444
Log(Staple consumed in kCal)	0.007 (0.033)	-0.024 (0.039)	0.039 (0.052)	1909	0.001 (0.038)	-0.012 (0.031)	0.015 (0.072)	2593
Log(Monthly nonfood expenditure)	0.003 (0.040)	0.043 (0.068)	-0.038 (0.039)	1934	-0.066** (0.032)	-0.067 (0.044)	-0.065 (0.047)	2615
Log(Reported income)	-0.035 (0.064)	-0.052 (0.066)	-0.017 (0.110)	1858	-0.024 (0.054)	-0.087 (0.067)	0.039 (0.083)	2472
1(Lacked food last month)	-0.036 (0.042)	-0.087 (0.061)	0.015 (0.057)	2150	-0.003 (0.040)	-0.062 (0.055)	0.056 (0.057)	2866
<u>Panel C: Standard Deviation</u>								
Standard Deviation Index	-0.066 (0.064)	-0.067 (0.067)	-0.066 (0.110)	2036	-0.038 (0.060)	-0.127* (0.071)	0.052 (0.095)	1411
Log(Staple consumed in kCal)	0.003 (0.020)	-0.045** (0.019)	0.051 (0.032)	2043	0.018 (0.034)	-0.019 (0.021)	0.055 (0.065)	1414
Log(Monthly nonfood expenditure)	0.019 (0.020)	0.050 (0.035)	-0.011 (0.019)	2050	0.003 (0.021)	-0.034 (0.030)	0.040 (0.027)	1415
Log(Reported income)	-0.240 (0.169)	-0.056 (0.050)	-0.427 (0.335)	2044	-0.182 (0.145)	-0.048 (0.052)	-0.316 (0.286)	1411
1(Lacked food last month)	-0.036 (0.028)	-0.069 (0.042)	-0.002 (0.036)	2150	-0.014 (0.022)	-0.048 (0.036)	0.020 (0.024)	1433

* p<0.1, ** p<0.05, *** p<0.01

Notes—Panel A replicates the results in Table 5 in the main paper. Panel B repeats the same analysis but instead of using the absolute difference metric to difference between harvest and lean season outcomes in a cycle, we now use a "standard deviation" metric that first squares the differences between harvest and lean season outcomes, then takes the square root. While Panels A and B only examine consumption variability within a cycle and report regressions at the household-cycle level, Panel C examines total consumption variability and reports regressions at the household level. For each household, we calculate the standard deviation of outcomes across all post treatment rounds (rounds 2 to 5 for credit and rounds 4 to 6 for storage).

Table A3: IV Impact of Treatment for Alfa Omega Districts

Treatment: Season:	Storage			Credit		
	All	Lean	Harvest	All	Lean	Harvest
	(1)	(2)	(3)	(4)	(5)	(6)
<u>Panel A: Consumption and Income</u>						
Consumption and Income Index	0.232** (0.099)	0.258 (0.169)	0.220*** (0.081)	0.192** (0.084)	0.072 (0.106)	0.273*** (0.096)
Log(Staple consumed in kCal)	0.045 (0.069)	-0.026 (0.113)	0.079 (0.068)	0.057 (0.075)	-0.044 (0.088)	0.125 (0.092)
Log(Non-food expenditure, in 1000 Rp)	0.285** (0.142)	0.309 (0.236)	0.275** (0.129)	0.129 (0.128)	-0.003 (0.157)	0.218 (0.147)
Log(Reported income)	0.214 (0.216)	0.294 (0.333)	0.175 (0.210)	0.390** (0.152)	0.287 (0.239)	0.459*** (0.150)
1(Lacked food last month)	-0.143* (0.077)	-0.216 (0.133)	-0.107 (0.070)	-0.132* (0.078)	-0.101 (0.087)	-0.152 (0.095)
<u>Panel B: Health</u>						
Health Index	-0.116 (0.107)	0.107 (0.121)	-0.228* (0.131)	-0.112 (0.125)	0.243 (0.187)	-0.349** (0.144)
1(Health expenditure shortages last month)	0.032 (0.035)	-0.045 (0.057)	0.070** (0.034)	0.044 (0.034)	-0.002 (0.039)	0.074* (0.042)
Number of sick days	0.098 (0.089)	-0.054 (0.060)	0.174 (0.125)	0.069 (0.122)	-0.235 (0.194)	0.272** (0.137)
Number of sick household members	0.004 (0.006)	-0.005 (0.010)	0.009 (0.007)	0.005 (0.007)	-0.015 (0.010)	0.018** (0.008)
<u>Panel C: Seasonal Differences, Harvest-Lean </u>						
Seasonal Difference Index	-0.135 (0.111)			-0.206** (0.101)		
Log(Staple consumed in kCal)	-0.049 (0.077)			-0.024 (0.060)		
Log(Monthly nonfood expenditure)	0.086 (0.138)			-0.135 (0.093)		
Log(Reported income)	-0.105 (0.134)			-0.175 (0.131)		
1(Lacked food last month)	-0.179 (0.124)			-0.132 (0.110)		

* p<0.1, ** p<0.05, *** p<0.01

Notes—This table repeats the IV regressions in Table 6 for storage and credit, but including Alfa Omega districts only.

Table A4: IV Impact of Treatment for TLM Districts

Treatment: Season:	Storage			Credit		
	All	Lean	Harvest	All	Lean	Harvest
	(1)	(2)	(3)	(4)	(5)	(6)
<u>Panel A: Consumption and Income</u>						
Consumption and Income Index	0.214 (0.194)	0.198 (0.193)	0.223 (0.207)	0.084 (0.216)	0.014 (0.228)	0.130 (0.247)
Log(Staple consumed in kCal)	-0.028 (0.127)	-0.044 (0.189)	-0.016 (0.135)	0.064 (0.182)	-0.100 (0.220)	0.176 (0.237)
Log(Non-food expenditure, in 1000 Rp)	0.378 (0.255)	0.313 (0.289)	0.410 (0.262)	0.106 (0.241)	-0.032 (0.277)	0.195 (0.262)
Log(Reported income)	0.923 (0.729)	0.615 (0.444)	1.085 (1.027)	0.772 (0.581)	0.497 (0.485)	0.966 (0.840)
1(Lacked food last month)	0.009 (0.096)	-0.124 (0.148)	0.076 (0.110)	0.096 (0.124)	-0.048 (0.133)	0.191 (0.155)
<u>Panel B: Health</u>						
Health Index	0.159 (0.100)	0.172 (0.112)	0.153 (0.123)	-0.137 (0.176)	0.108 (0.242)	-0.301 (0.191)
1(Health expenditure shortages last month)	-0.032 (0.039)	-0.064 (0.044)	-0.016 (0.044)	0.077 (0.060)	-0.035 (0.080)	0.151** (0.068)
Number of sick days	-0.057 (0.069)	-0.006 (0.073)	-0.082 (0.092)	0.015 (0.136)	-0.049 (0.203)	0.057 (0.150)
Number of sick household members	-0.014* (0.008)	-0.017 (0.013)	-0.013 (0.009)	0.009 (0.010)	-0.007 (0.013)	0.019* (0.012)
<u>Panel C: Seasonal Differences, Harvest-Lean </u>						
Seasonal Difference Index	0.014 (0.116)			0.016 (0.115)		
Log(Staple consumed in kCal)	0.105 (0.138)			0.043 (0.206)		
Log(Monthly nonfood expenditure)	-0.103 (0.110)			-0.198 (0.139)		
Log(Reported income)	-0.046 (0.287)			0.120 (0.249)		
1(Lacked food last month)	0.044 (0.160)			0.174 (0.186)		

* p<0.1, ** p<0.05, *** p<0.01

Notes—This table repeats the IV regressions in Table 6 for storage and credit, but including TLM districts only.

Table A5: OLS for Storage Treatment, by Baseline Retention Rate

Season:	N(All) [p-value]	All		Lean		Harvest	
		(1)	(2)	(3)	(4)	(5)	(6)
<u>Panel A: Consumption and Income</u>							
Consumption and Income Index	5494	0.052	(0.050)	0.074	(0.055)	0.041	(0.053)
Consumption and Income Index_LG	[0.003]	0.101*	(0.051)	0.071	(0.060)	0.115**	(0.054)
Log(Staple consumed in kCal)	5583	-0.027	(0.034)	-0.048	(0.051)	-0.017	(0.038)
Log(Staple consumed in kCal)_LG	[0.210]	0.070*	(0.036)	0.081	(0.049)	0.065	(0.042)
Log(Non-food expenditure, in 1000 Rp)	5603	0.074	(0.064)	0.068	(0.079)	0.078	(0.066)
Log(Non-food expenditure, in 1000 Rp)_LG	[0.002]	0.117*	(0.066)	0.131*	(0.070)	0.109	(0.071)
Log(Reported income)	5515	0.127	(0.126)	0.160	(0.126)	0.113	(0.166)
Log(Reported income)_LG	[0.064]	0.226*	(0.123)	0.075	(0.136)	0.301**	(0.146)
1(Lacked food last month)	5916	-0.041	(0.033)	-0.087*	(0.047)	-0.018	(0.036)
1(Lacked food last month)_LG	[0.204]	0.006	(0.029)	0.014	(0.046)	0.002	(0.031)
<u>Panel B: Health</u>							
Health Index	5916	0.020	(0.038)	0.108**	(0.046)	-0.024	(0.047)
Health Index_LG	[0.584]	-0.041	(0.047)	-0.098**	(0.042)	-0.013	(0.062)
1(Health expenditure shortages last month)	5916	-0.003	(0.015)	-0.023	(0.023)	0.007	(0.016)
1(Health expenditure shortages last month)_LG	[0.377]	0.013	(0.014)	0.0008	(0.022)	0.019	(0.017)
Number of sick days	5916	0.009	(0.029)	-0.042*	(0.024)	0.035	(0.039)
Number of sick days_LG	[0.738]	0.003	(0.045)	0.046*	(0.025)	-0.019	(0.062)
Number of sick household members	5916	-0.003	(0.003)	-0.009**	(0.004)	-0.0004	(0.003)
Number of sick household members_LG	[0.699]	0.004	(0.003)	0.010***	(0.003)	0.001	(0.004)
<u>Panel C: Seasonal Differences, Harvest-Lean </u>							
Seasonal Difference Index	1721	-0.035	(0.042)				
Seasonal Difference Index_LG	[0.315]	-0.010	(0.046)				
Log(Staple consumed in kCal)	1788	0.033	(0.034)				
Log(Staple consumed in kCal)_LG	[0.900]	-0.038	(0.038)				
Log(Monthly nonfood expenditure)	1801	0.0004	(0.044)				
Log(Monthly nonfood expenditure)_LG	[0.971]	0.001	(0.050)				
Log(Reported income)	1735	0.001	(0.071)				
Log(Reported income)_LG	[0.229]	-0.101	(0.088)				
1(Lacked food last month)	1972	-0.077	(0.048)				
1(Lacked food last month)_LG	[0.794]	0.063	(0.055)				

* p<0.1, ** p<0.05, *** p<0.01

Notes—This table reports heterogeneous treatment effect regressions by the baseline retention rate of each household. Each regression corresponds to an OLS regression at the household-season level where the two main independent variables are (i) the treatment assignment (ii) treatment interacted with a dummy for below median retention rate. Each group of four cells above reports the coefficient estimate and standard error for these two independent variables in a regression. The dependent variable for each regression is noted in the table. All regressions include district (kabupaten) fixed effects because assignment of treatment was within each district. Standard errors reported in the parentheses. All standard errors are clustered at the village level. Columns 1-2 use all the post treatment data (rounds 4 to 6). Columns 3-4 only include lean season data (round 5). Columns 5-6 only include harvest season data (rounds 4 and 6). N(All) reports the sample size for the regression using all seasons (columns 1 and 2). P-values (in brackets) correspond to a test that the sum of the treatment dummy and the interaction is equal to zero, for the regression with all seasons.