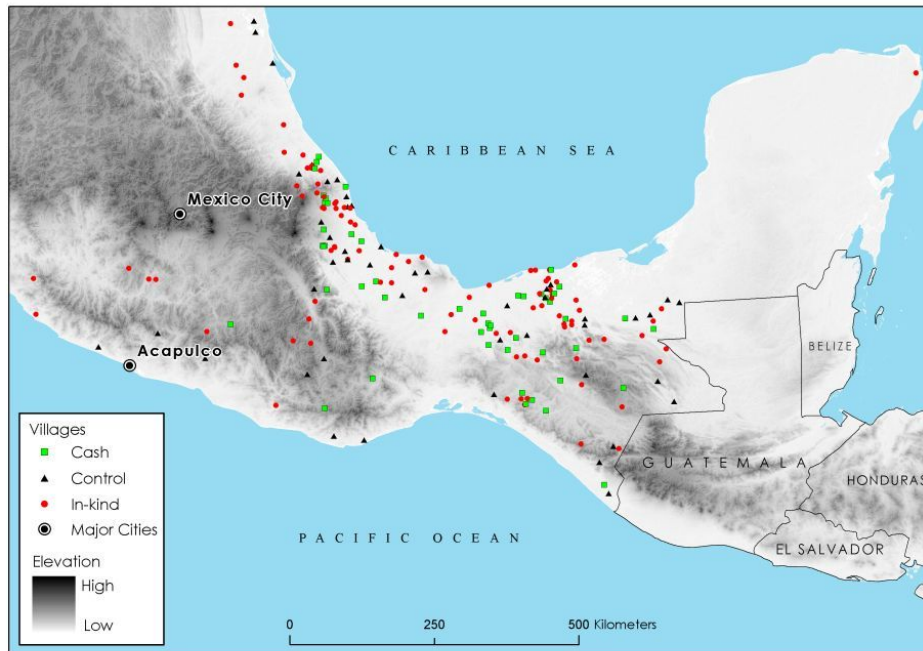


Online Appendix

“Testing Paternalism: Cash Versus In-kind Transfers”

Jesse M. Cunha

Figure A.1: Villages in the PAL experiment



A The education treatment

This appendix details the unsuccessful randomization of PAL experimental villages into educational classes. The treatment was motivated by a desire to test if information on nutrition, hygiene, and health is complementary to the receipt of in-kind food transfers. In practice, the education treatment was contaminated as many households in the “no education” in-kind treatment group did in fact attend classes.

Data on class attendance was collected in the post-treatment survey; no administrative attendance data is available. All households (regardless of treatment status) were first asked if they ever received PAL transfers; for those who responded affirmatively, they were asked the number of PAL classes they attended and what themes were covered. They were allowed to list up to four themes from the choices of: organization of PAL, nutrition, health, and hygiene. Table A.1 contains attendance rates amongst those households who

Table A.1: Receipt of education classes, by treatment group

<i>Treatment Group</i>	<u>Extensive margin</u>		<u>Intensive margin</u>	
	Percent of households that attended one or more classes		Average number of classes attended, conditional on attending at least one class	
	<u>Including</u>	<u>Excluding</u>	<u>Including</u>	<u>Excluding</u>
	Organizational Class	Organizational Class	Organizational Class	Organizational Class
	(1)	(2)	(3)	(4)
In-kind	0.76 (0.03)	0.63 (0.04)	4.16 (0.43)	3.73 (0.43)
In-kind plus education	0.85 (0.02)	0.75 (0.02)	5.03 (0.33)	4.63 (0.34)
Cash plus education	0.79 (0.04)	0.67 (0.04)	4.37 (0.41)	3.98 (0.40)
Observations	3,785	3,785	3,549	3,549
H_0: In-kind = In-kind plus education, p-value	0.03**	0.01**	0.11	0.11
H_0: In-kind = Cash plus education, p-value	0.59	0.44	0.73	0.68
H_0: In-kind plus education = Cash plus education, p-value	0.16	0.10	0.21	0.22

Notes: ***p<0.01, ** p<0.05, * p<0.1

(1) Sample includes households that self-report receiving transfers in cash and in-kind villages.

(2) Class attendance is from self-reports collected in the post-treatment survey. Any household that reported receiving PAL aid (either cash or in-kind) was asked the total number of PAL classes attended. They were then asked to list up to four themes that were covered in those classes from the choices of: organization of PAL, health, hygiene, and nutrition.

(3) Columns 1 and 3 include all classes regardless of theme.

(4) In columns 2 and 4, one class is subtracted from the total number of classes attended if a household listed "organization" as a theme covered in classes. Note that the in-kind only treatment group was supposed to attend organizational classes.

(5) Standard errors in parentheses are clustered at the village level.

reported receiving transfers, on both the extensive and intensive margins, by treatment group. Columns 2 and 4 exclude attendance at introductory classes on the organization and operation of PAL, as every experimental village, regardless of treatment group, was instructed to hold these classes.

Several departures from the experimental design are of note. First, among households in the in-kind group that were not supposed to attend educational classes, 63 percent did in fact attend non-organizational classes (column 2). Second, of the households in the in-kind-plus-education and cash-plus-education groups that were supposed to receive educational classes, 25 and 33 percent, respectively, did not receive any non-organizational classes (again, column 2). Qualitative evidence from non-experimental regions in Mexico suggests that non-compliance with the educational component of PAL was not unique to the experimental villages (?).

Third, column 3 shows that conditional on attendance to at least one class, the mean

number of classes attended per household - between four and five classes - was insignificantly different across groups. This attendance pattern is much less than the one class per month specified in PAL rules and, given that households received on average 12 months of aid between survey rounds, it represents an attendance rate of about 40 percent. Column 4 shows that attendance is even lower - around four classes - upon excluding organizational classes.

Unfortunately, it is not possible to isolate why households did not attend more classes: whether they decided to not attend classes that were actually offered, or whether the classes were in fact not held by the Committee of Beneficiaries. In either case, the evidence strongly suggests that randomization into educational classes was not successful, greatly reducing the usefulness of this part of the experimental design for causal inference.

B Sample and data

B.1 Sample

Excluding incomplete surveys and split-off households, the entire surveyed sample contains 6,706 baseline and 5,851 follow-up households in 208 villages. Excluding the eight villages as described in the paper drops an additional 306 baseline and 216 follow-up households. Thirty-five baseline and 78 follow-up households with more than half of the consumption categories missing were then dropped, as were 11 more baseline households with no individual level information. Finally, 143 baseline households report that a meal was prepared in the last week for a special event. As this does not reflect normal consumption patterns, I exclude these baseline observations from all analyses. I do not use data from any attrited households. About 10 percent of the remaining households are missing information on one or more food items and thus various empirical exercises use fewer observations.

The sample of children is formed from all included households, and includes 4,550 baseline and 4,129 follow-up children aged zero to six years old. 200 children have reported ages that are inconsistent across survey waves; they are dropped. When nutritional and caloric intake are used as outcomes, 363 children are dropped who consumed more than 2000 or less than 200 calories in the past 24 hours. When weight and height are used as outcome variables, 10 children are dropped who decrease weight or height across survey waves, and one child is dropped with an extreme weight outlier.

B.2 Food consumption and unit-values

Households reported for each of 61 food items the quantity consumed (from all sources, whether purchased, donated, or self-produced), the quantity purchased, and the value of purchased quantities in the past seven days. Enumerators were instructed to convert reported units into either kilograms or liters; however, the option to record units as “pieces”, “packets”, or “other” were also available and were used in a minority of cases (this happened more often in the baseline than in the follow-up). Thus, I convert all reported units to kilograms or liters using conversion factors compiled by the INSP. Monthly quantities are obtained from the reported weekly quantities using a conversion factor of 4.35. I also calculate calories and micro-nutrients consumed using a separate conversion table from the INSP.¹

The value of food consumption is obtained as follows. First, unit-values are computed by dividing the monetary value of purchases by the quantity purchased, for all households with non-zero purchases. Households purchased an average of 15 items out of the 61 items asked about in the survey. The village level price is defined as the median observed unit-value in the village. Consumption values are thus the product of the quantity consumed and the village price. If I observe unit-values for fewer than 20 percent of households in a village, I use the municipality median unit-value to value consumption. If I do not observe a municipality unit value, I use the state median. Consumption in the follow-up is valued using baseline village unit-values.

B.3 Non-food consumption

Households also reported consumption expenditures, but not quantities, in the following categories: school and non-school transportation, tobacco, personal hygiene products, household cleaning products, medicine, doctor fees, school fees, fuel for cooking and heating, electricity, rent, household items, clothes, shoes, ceremonies, and hospitalizations. Some items were asked about at the weekly or semi-annual level and I convert them to monthly levels. Expenditures in the follow-up are deflated to baseline levels using the monthly CPI from the Bank of Mexico.

In defining total non-food consumption, I exclude three variables: rent, ceremonies, and hospitalizations. Rent is excluded as data is only available on monetized rent payments and I cannot value the informal rental agreements that are likely to be present in these rural villages. Furthermore, only one percent of the sample reports any rent pay-

¹I am grateful to Orazio Attanasio and Vincenzo di Maro for providing me with the INSP’s calorie/micro-nutrient and unit conversion factor tables.

Table A.2: Food and non-food goods used in the analysis, indicating PAL in-kind goods

Goods used in analysis	PAL good	Goods used in analysis	PAL good	Goods used in analysis	PAL good	
Fruit and Vegetables		Dairy		Non-food		
<i>Vegetables</i>		34	fortified powdered milk	x	1	transportation
1	tomatoes	35	milk (liquid)		2	toys
2	onions	36	cheese		3	tobacco
3	potatos	37	yogurt		<i>School</i>	
4	carrots				4	school transportation
5	leafy greens	Animal			5	school tuition
6	squash	38	chicken		6	school uniforms
7	chayote	39	beef and pork		7	school shoes
8	nopales (cactus)	40	seafood (fresh)		8	school supplies
9	fresh chilis	41	canned tuna / sardines	x	9	school fees
10	tomato paste	42	eggs		<i>Clothing</i>	
11	canned chilis	<i>Other animal</i>			10	children's clothes
<i>Fruit</i>		43	goat and lamb		11	children's shoes
12	guava	44	processed meats		12	women's clothes
13	mandarin	45	consome (broth)		13	women's shoes
14	papaya	Fats			14	men's clothes
15	oranges	46	vegetable oil	x	15	men's shoes
16	plantains	47	mayonnaise		<i>Medicine and hygiene</i>	
17	apples	48	lard		16	medicine
18	limes	Other food			17	doctor's fees
19	watermelon	49	alcohol		18	personal hygiene products
Grains		50	coffee		<i>Household items</i>	
20	corn tortillas	51	sugar		19	cleaning supplies
21	corn kernels	<i>Other starch</i>			20	combustables (gas,wood, oil)
22	corn flour	x	52	oats	21	electricity
23	loaf of bread		53	soy	22	cookware
24	bread rolls		54	atole (corn based drink)	23	linens
25	sweet bread		<i>Junk food and drink</i>			
26	wheat flour		55	pastelillo (snack cakes)		
27	dry pasta soup	x	56	corn or potato chips		
28	wheat tortillas		57	chocolate		
29	rice	x	58	candy		
30	biscuits (cookies)	x	59	soft drinks		
31	breakfast cereal	x	60	fruit drinks		
Pulses			61	powdered fruit drinks		
32	beans	x				
33	lentils	x				

ments. Ceremonies and hospitalizations are excluded as they happen infrequently, often unexpectedly, and therefore do not represent normal consumption patterns. This is evidenced by the fact that fewer than five percent of households report consumption on these items.

Table A.3: Lee bounds for treatment effects on aggregated household consumption outcomes, pairwise comparisons across treatment groups

<i>Outcome = Differenced consumption per capita of</i>	Food plus non-food	All food items	PAL food items	Non-PAL food items	Non-food items
In-kind versus Cash					
Lower Lee bound	-35.14 (27.21)	-8.578 (19.61)	32.87*** (5.004)	-45.09*** (16.93)	-33.21** (16.46)
Upper Lee bound	17.18 (25.40)	24.32 (18.63)	41.90*** (4.503)	-15.50 (15.30)	0.140 (14.49)
Observations	4,891	4,891	4,891	4,891	4,891
In-kind versus Control					
Lower Lee bound	-16.31 (31.66)	2.605 (19.68)	28.40*** (5.508)	-34.20* (17.97)	-36.39** (16.94)
Upper Lee bound	105.9*** (23.55)	80.07*** (16.60)	50.18*** (4.398)	35.33** (15.36)	41.27*** (12.47)
Observations	4,773	4,773	4,773	4,773	4,773
Cash versus Control					
Lower Lee bound	-0.718 (39.73)	-0.0449 (25.53)	-3.340 (2.931)	0.103 (26.77)	-16.60 (19.35)
Upper Lee bound	104.7*** (28.39)	64.57*** (20.28)	8.681*** (2.509)	59.01*** (19.56)	52.96*** (14.75)
Observations	3,279	3,279	3,279	3,279	3,279

Notes: *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$

(1) All outcomes vary at the household level and are measured in pesos. They are calculated as the post-minus-pre-treatment difference in the variable. Standard errors in parentheses are bootstrap clustered at the village level with 500 replications.

(2) Food consumption is defined as in-home food consumption of 61 food items, valued using village median unit-values, plus out-of-home food consumption.

(3) PAL In-kind food items include: corn flour, rice, beans, pasta soup, vegetable oil, milk powder, biscuits, lentils, canned fish, and breakfast cereal.

(4) Non-food consumption is defined as the value of aggregate consumption of 23 non-food, non-durable goods.