Appendix

We shall establish proposition 1 with the following two lemmas.

Lemma N1

(A1) and (A2) together imply that for every $k \in \{M, F\}$ and for every $J > 0$, there exists a unique $S^k(J)$, such that $[g^k(r^k(J - S^k(J)) + S^k(J)) = S^k(J)]$. Furthermore,

(a) $S^k(J) \in (0, J)$,

(b) $[g^k(r^k(J - s) + s) > s]$ for all $s \in (0, S^k(J))$,

and

(c) $[g^k(r^k(J - s) + s) < s]$ for all $s \in (S^k, J]$.

Proof of Lemma N1

Consider any $J > 0$ and any $k \in \{M, F\}$. First note that since the private good is normal by (A1) and $[r^k(0) = 0]$, it must be the case that for $s = J$ we have:

$[g^k(J) < J]$.

For $s = 0$, since $r^k(J) > 0$ by (A2), it follows from (A1) that:

$[g^k(r^k(J)) > 0]$.

(A2) implies that $[r^k(J - s) + s]$ is continuous and increasing in s. Then, noting that, by (A1), g^k is continuous and increasing in its argument, Lemma N1 is immediate.

◊

Lemma N2

Given any $J > 0$, consider any $s^*, \hat{s} \in [0, J]$. Suppose $[y(J, s^*) > s^*]$ and for some $k \in \{M, F\}$, $[y(J, s^*) > g^k(r^k(J - s^*) + y(J, s^*))]$. Then, given (A1) and (A2), if $[s^* < \hat{s}]$, then $[y(J, \hat{s}) > y(J, s^*)]$.

Proof of Lemma N2

Denote all Nash equilibrium variables under s^* and $\hat{s}$ by the corresponding superscripts * and ^, respectively. Suppose $[y^* > s^*]$ and for some $k \in \{M, F\}$, $[y^* > g^k(r^k(J - s^*) + y^*)]$. Then, in light of (5) and (6), it is clear that $[y^*_{-k} > 0]$ and $[y^*_k = 0]$. Suppose $[s^* < \hat{s}]$ but

(X1) $\hat{y} \leq y^*$.

Since, by assumption $[y^*_{-k} > 0]$, using (5), we have:

(X2) $y^* = g^{-k}(r^{-k}(J - s^*) + s^* + y^*_k)$.

From (5) we also get,

(X3) $g^{-k}(r^{-k}(J - \hat{s}) + \hat{s} + \hat{y}_k) \leq \hat{y}$.

Then, since g^{-k} is increasing in its argument, (X1), (X2), and (X3) together imply:

(X4) $[r^{-k}(J - s^*) + s^* + y^*_k] \geq [r^{-k}(J - \hat{s}) + \hat{s} + \hat{y}_k]$.

Now since r^k is increasing in its argument by (A2), (X4) implies:

(X5) $y^*_k > \hat{y}_k$.

Since by assumption $y^*_k = 0$, (X5) involves a contradiction, which establishes Lemma N2.

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Proof of Proposition 1

Let $J > 0$ be some arbitrary amount of total household income. By Lemma N1(a), there exists for all $k \in \{M, F\}$, $S^k(J) \in (0, J)$ such that:

(X6) $[S^k(J) = g^k(r^k(J - S^k(J)) + S^k(J))]$.

Let:

(X7) $\bar{S}(J) = \max\{S^k(J), S^{-k}(J)\}$.

In light of (X6), to establish part (i) of Proposition 1, it is sufficient to show that:

(X8) $[y(J, s) > s]$ for all $s \in [0, \bar{S}(J))$,

and

(X9) $[y(J, s) = s]$ for all $s \in [\bar{S}(J), J]$.

Lemma N1(b) immediately implies (X8). Now, by Lemma N1(c),

for all $k \in \{M, F\}$, $[s > g^k(r^k(J - s) + s)]$, for all $s \in (\bar{S}(J), J]$.

Since the private good is a normal good, it follows that:

(X10) for all $k \in \{M, F\}$, $[y > g^k(r^k(J - s) + s + y_{-k})]$, for all $s \in \bar{S}(J), J]$.

Noting that, by construction, $[y(J, \bar{S}(J)) = \bar{S}(J)]$, (X10) yields (X9). This establishes part (i) of Proposition 1.

Let $\underline{S}(J) = \min\{\bar{S}^k(J), \bar{S}^{-k}(J)\}$. By (X6) and (A3), we have:

$\underline{S}(J) \in [0, \bar{S}(J))$,

where $\bar{S}(J)$ is defined by (X7) above.

Hence, to establish part (ii) of Proposition 1, it suffices to show that:

(X11) $y(J, s)$ is an increasing function of s in the interval $(\underline{S}(J), \bar{S}(J))$.

From (X8) above, we have:

(X12) $[y(J, s) > s]$ for all $s \in (\underline{S}(J), \bar{S}(J))$.

By Lemma N1(c), we have:

for some $k \in \{M, F\}$, $[[s > g^k(r^k(J - s) + s)]$ for all $s \in (\underline{S}(J), J]$.

Since the private good is normal by (A1), it follows immediately that:

(X13) for some $k \in \{M, F\}$, $[[y(J, s) > g^k(r^k(J - s) + y(J, s))]$ for all $s \in (\underline{S}(J), \bar{S}(J))]$.

In light of Lemma N2, (X12) and (X13) together imply (X11). This completes the proof of part (ii) of Proposition 1.
◊

Illustration of Proposition 1

Consider two agents, *M* and *F* with utility functions:

$U_M(x^M, y) = \ln(y) + x^M$ and

$U_F(x^F, y) = (x^F y)^{0.5}$,

with household resources $I_M = 10$, $I_F = 10$, $T = 0$, and $S = 4$. Let prices for both goods equal 1, and let the consumption of the other agent not enter the utility function of each agent for simplicity. Treating the stamp income as cash income and letting each agent have exclusive control over her/his resources, it is easy to show that agent *M* would choose (1, 13) and agent *F* would choose (7, 7), when the first number is the amount spent on food and the second is the amount spent on the private consumption good.

The Nash equilibrium will have:

(a) consistency of beliefs about other agent's contribution to *y*, and

(b) $y \geq S + y_{-k}$.

It is easy to see that (b) will be binding for agent *M*, and thus he will not contribute to food purchases for the household. *F* will then choose to allocate (7, 7).

This is an unconstrained household in which food expenditure is greater than stamp income ($S = 4$, $FE = 7$) with a constrained individual, *M*.

What would happen under a cash-out? Assume agents *F* and *M*, each getting half of the cash transfer. Now, *M* would choose (1, 11) and agent *F* would choose (6, 6).

The Nash equilibrium allocations would be:

M: (0, 12) and

F: (6, 6).

Thus, the household is unconstrained, but food expenditure decreases when benefits are cashed out.

Sensitivity Analysis of Regressions

To determine which variables to include in the regression and to test the sensitivity of our models, we estimated both models for: (1) the full check and stamp data set; (2) the full data set, using interactive dummies for the stamp recipients; (3) only the check households; and (4) only the unconstrained stamp households. We also conducted these four regressions, using only single-adult headed households. Any variable significant in one of these regressions was included in all the regressions for the sake of completeness and comparison. (The dummy variable for Asian head of household was included only in the check/stamp comparison since it was never significant for any of the stamp subsamples.) The point was not to necessarily come up with the best model, but to show that the results are robust to specification and variable inclusion. Furthermore, we feel that it is important to include variables for which a strong *a priori* reason exists for that variable to influence the dependent variable. We have resisted the temptation to further pare down the model or to drop variables with unexpected signs.

We report pooled and separate regressions for most regressions. There are no contradictions between the sign or approximate magnitude of any of the control variables we considered across these various regressions. Thus, our results seem quite robust to dividing the sample in various ways.

Gift income is the only variable that seems to differently affect the check and stamp households. For the stamp households, the sign is opposite of that which we would expect. When the sample is pooled, this variable is insignificant. Dropping this variable had no effect on the marginal propensity to consume out of food stamps or income or on any substantive result. Lunch subsidies were, surprisingly, positively related to food expenditure for all groups. This was consistent for every subsample of data. It could reflect an effect on preference development or taste for certain kinds of food that may increase family food expenditure. The age proportion variables was generally significant only for the double-log model. The higher the proportion in the 2- to 17-year age range, the higher the expenditure on food. This may reflect a focus on nutrition for children or the effects of advertising and peer pressure. We tested several different ways of separating the age ranges and this did not affect the main results. We also tested definition of food stamp benefit variables, income variables, and the definition of single- and multiple-adult families. Our results are robust for any reasonable definition of these variables.

We also explored the possibility of measurement error in the reported food expenditure data. It could be that there are many households considered unconstrained that are in fact constrained and clustered very close to the kink in the budget constraint. We allowed for food expenditure to be overstated by 5 and 10 percent and re-estimated the model, using that data to form the constraint. There was only 1 household within 5 percent of being constrained and less than 20 within 10 percent. We estimated the model after re-classifying these 20 households, but there was no effect on the results.

Appendix table 1—Comparison of stamp and check households

Item	Received stamps	Received checks
Sample size	510	467
Monthly cash income ($)	891	907
Monthly food stamp benefit ($)	116	117
Benefits as proportion of income (%)	13.7	13.9
Monthly food expenditure ($)	310	284
Households with WIC vouchers (%)	11.8	13.7
Average amount ($)	60	52
Households with school breakfast (%)	19.2	20.1
Average amount ($)	30	32
Households with school lunch subsidy (%)	50.0	50.5
Average amount ($)	56	58
Weekly average number of meals eaten as guest per household member	2.36	2.26
Weekly average number of meals eaten by guests per household member	3.66	2.92
Information on household head:		
Employed (%)	13.1	13.5
Hispanic (%)	32.9	32.8
Black (%)	22.4	18.2
Married (%)	22.4	24.2
Widowed (%)	2.9	3.6
Divorced (%)	19.4	19.5
Legally separated (%)	17.8	14.1
Completed high school (%)	58.8	56.5
Own home/pay mortgage (%)	1.0	1.3
Household information:		
Average size	3.9	3.6
Percentage of households with--		
Child(ren)	95.1	93.1
One adult	59.0	60.4
Female head	76.1	76.4
Single parent with child(ren)	56.3	57.0
Percentage of households with--		
Child(ren) age 0 to 11	85.7	84.4
Child(ren) age 12 to 17	30.8	30.8
Member(s) over age 51	13.1	11.6
Average number of children for households with children	2.5	2.3

Notes: WIC is the Special Supplemental Nutrition Program for Women, Infants, and Children.

Source: Data are from the San Diego Cash-Out Experiment, conducted by the U.S. Department of Agriculture, Food and Consumer Service (currently Food and Nutrition Service).

Appendix table 2—Comparison of stamp households: Constrained and unconstrained

Item	All stamp households	Constrained	Unconstrained
Sample size	510	23	487
Monthly cash income ($)	891	700	900
Monthly food stamp benefit ($)	116	141	115
Benefits as proportion of income (%)	13.7	21.3	13.3
Monthly food expenditure ($)	310	109	320
Households with WIC vouchers (%)	11.8	17.4	11.5
Average amount ($)	60	67	60
Households with school breakfast (%)	19.2	17.4	19.3
Average amount ($)	30	44	30
Households with school lunch subsidy (%)	50.0	34.8	50.7
Average amount ($)	56	78	55
Weekly average number of meals eaten as guest per household member	2.36	3.38	2.32
Weekly average number of meals eaten by guests per household member	3.66	3.39	3.68
Information on household head:			
Employed (%)	13.1	4.3	13.6
Hispanic (%)	32.9	34.8	32.9
Black (%)	22.4	8.7	23.0
Married (%)	22.4	21.7	22.4
Widowed (%)	2.9	4.3	2.9
Divorced (%)	19.4	17.4	19.5
Legally separated (%)	17.8	30.4	17.2
Completed high school (%)	58.8	60.9	58.7
Own home/pay mortgage (%)	1.0	0	1.0
Household information:			
Average size	3.9	3.5	3.9
Percentage of households with--			
Children	95.1	78.3	95.9
One adult	59.0	69.6	58.5
Female head	76.1	78.3	76.0
Single parent with child(ren)	56.3	56.5	56.3
Percentage of households with--			
Child(ren) age 0 – 11	85.7	69.6	86.4
Child(ren) age 12 – 17	30.8	30.4	30.8
Member(s) over age 51	13.1	4.3	13.6
Average number of children for households with children	2.5	2.7	2.4

Notes: WIC is the Special Supplemental Nutrition Program for Women, Infants, and Children.

Source: Data are from the San Diego Cash-Out Experiment, conducted by the U.S. Department of Agriculture, Food and Consumer Service (currently Food and Nutrition Service).

Appendix table 3—Comparing multi- and single-adult unconstrained stamp households estimates for linear model

Item	Unconstrained households (n = 487)	Single-adult households (n = 281)	Multi-adult households (n = 206)
Cash income per household member	0.070**	0.017	0.071**
	(0.018)	(0.021)	(0.018)
Cash income per household member interacted with number of adults	-.038		
	(.025)		
Food stamp benefits per household member	.675**	.030	.687**
	(.222)	(.180)	(.224)
Food stamp benefits per household member interacted with number of adults	-.474*		
	(.274)		
Household size	-.692*	-1.055	-.605
	(.402)	(.699)	(.497)
Money value of gifts of food per household member	.717**	.728**	.919**
	(.230)	(.276)	(.438)
In-kind food commodity donations per household member	-.697**	-.831*	-.511
	(.376)	(.450)	(.702)
Breakfast subsidy per household member	.200	.051	.410
	(.405)	(.562)	(.584)
Lunch subsidy per household member	.430**	.398*	.459*
	(.162)	(.214)	(.253)
Female-headed household	-.566	-2.487**	-.062
	(1.430)	(2.857)	(1.663)
Weekly meals eaten as guest per household member	-1.220**	-1.319**	-.872**
	(.189)	(.230)	(.352)
Weekly meals eaten by guests per household member	1.062**	1.139**	.941**
	(.135)	(.183)	(.206)
Proportion of households with child(ren) age 0 to 1	-6.767	-8.647	-7.778
	(4.386)	(5.748)	(7.471)
Proportion of households with child(ren) age 2 to 17	-4.887	-8.842*	-.281
	(3.560)	(5.046)	(5.199)
Proportion of households with member(s) over age 60	-2.704	-8.180	1.744
	(5.394)	(8.236)	(7.207)
Number of adults in the household	8.843**		
	(2.989)		
Constant	16.350**	33.007**	12.771**
	(2.768)	(4.746)	(3.230)
Adjusted R^2	.3036	.2830	.2624
Single-adult:			
MPC(Y)	.030	.017	
	(.019)	(.021)	
MPC(FSB)	.201	.030	
	(.166)	(.180)	
MPC(FSB) - MPC(Y)	.171	.013	
	(.167)	(.180)	
Multiple-adult:			
MPC(Y)	.070**		.071**
	(.018)		(.018)
MPC(FSB)	.675**		.687**
	(.222)		(.224)
MPC(FSB) - MPC(Y)	.607**		.616**
	(.222)		(.224)

Notes: MPC(Y) is the marginal propensity to consume out of income, and MPC(FSB) is the marginal propensity to consume out of food stamp (check) benefits. The dependent variable is per-person food expenditure. The standard errors are in parentheses. * indicates that the variable is statistically significant at the 90-percent confidence level; ** indicates that the variable is statistically significant at the 95-percent confidence level.

Source: Data are from the San Diego Cash-Out Experiment, conducted by the U.S. Department of Agriculture, Food and Consumer Service (currently Food and Nutrition Service).

Appendix table 4—Comparing multi- and single-adult unconstrained stamp households estimates for double logarithmic model

Item	Unconstrained households (n = 487)	Single-adult households (n = 281)	Multi-adult households (n = 206)
Log of cash and benefit income per household member	0.534**	0.058	0.536**
	(0.067)	(0.091)	(0.078)
Log of cash and benefit income per household member interacted with number of adults	-.417**		
	(.099)		
Proportion of food stamp benefits in total cash and benefit income	1.345**	.215	1.420**
	(.317)	(.356)	(.349)
Proportion of food stamp benefits in total cash and benefit income member interacted with number of adults	-.921**		
	(.452)		
Log of household size	-.356**	-.242**	-.399**
	(.092)	(.122)	(.141)
Money value of gifts of food per household member	.032	.022*	.066**
	(.010)	(.012)	(.021)
In-kind food commodity donations per household member	-.022	-.024	-.026
	(.017)	(.019)	(.033)
Breakfast subsidy per household member	.002	-.007	.008
	(.020)	(.024)	(.028)
Lunch subsidy per household member	.020**	.018**	.025**
	(.007)	(.009)	(.012)
Female-headed household	-.050	-.131	-.015
	(.063)	(.120)	(.080)
Weekly meals eaten as guest per household member	-.055**	-.059**	-.044**
	(.008)	(.010)	(.016)
Weekly meals eaten by guests per household member	.036**	.039**	.032**
	(.006)	(.008)	(.010)
Proportion of households with child(ren) age 0 to 1	.166	-.211	.302
	(.215)	(.277)	(.369)
Proportion of households with child(ren) age 2 to 17	.334*	-.141	.685**
	(.188)	(.260)	(.274)
Proportion of households with member(s) over age 60	-.013	-.165	.086
	(.240)	(.340)	(.348)
Number of adults in the household	1.845**		
	(.450)		
Constant	.896**	3.270**	.730*
	(.341)	(.492)	(.439)
Adjusted R^2	.3677	.2733	.3916
Single-adult:			
MPC(Y)	.018	.009	
	(.019)	(.020)	
MPC(FSB)	.145	.073	
	(.111)	(.114)	
MPC(FSB) - MPC(Y)	.127	.064	
	(.105)	(.107)	
Multiple-adult:			
MPC(Y)	.110**		.108**
	(.016)		(.018)
MPC(FSB)	.506**		.526**
	(.096)		(.107)
MPC(FSB) - MPC(Y)	.396**		.418**
	(.093)		(.103)

Notes: MPC(Y) is the marginal propensity to consume out of income, and MPC(FSB) is the marginal propensity to consume out of food stamp (check) benefits. The dependent variable is log of per-person food expenditure. The standard errors are in parentheses. * indicates that the variable is statistically significant at the 90-percent confidence level; ** indicates that the variable is statistically significant at the 95-percent confidence level.

Source: Data are from the San Diego Cash-Out Experiment, conducted by the U.S. Department of Agriculture, Food and Consumer Service (currently Food and Nutrition Service).

Appendix table 5—Households with children comparing multi- and single-adult unconstrained stamp households estimates for linear model

Item	Unconstrained households (n = 465)	Single-adult households (n = 270)	Multi-adult households (n = 195)
Cash income per household member	0.062**	0.023	0.069**
	(0.019)	(0.023)	(0.019)
Cash income per household member interacted with number of adults	-.020		
	(.027)		
Food stamp benefits per household member	.622**	-.126	.661**
	(.228)	(.208)	(.221)
Food stamp benefits per household member interacted with number of adults	-.650*		
	(.293)		
Household size	-.935**	-1.325*	-.704
	(.414)	(.777)	(.476)
Money value of gifts of food per household member	.772**	.861**	.992**
	(.232)	(.289)	(.419)
In-kind food commodity donations per household member	-.706*	-.853*	-.506
	(.371)	(.452)	(.666)
Breakfast subsidy per household member	.239	.094	.480
	(.399)	(.564)	(.554)
Lunch subsidy per household member	.377**	.374*	.417*
	(.161)	(.217)	(.242)
Female-headed household	-.269	-1.870**	-.024
	(1.486)	(3.267)	(1.623)
Weekly meals eaten as guest per household member	-1.179**	-1.332**	-.842**
	(.188)	(.233)	(.345)
Weekly meals eaten by guests per household member	1.023**	1.177**	.764**
	(.137)	(.187)	(.203)
Proportion of households with child(ren) age 0 to 1	-.801	-3.827	-.750
	(5.127)	(7.275)	(8.363)
Proportion of households with child(ren) age 2 to 17	.827	-4.126	5.757
	(4.364)	(6.764)	(6.055)
Proportion of households with member(s) over age 60	-1.312	-23.563	7.193
	(7.292)	(15.547)	(8.045)
Number of adults in the household	7.827**		
	(3.123)		
Constant	15.224**	31.103**	10.174**
	(3.012)	(5.534)	(3.625)
Adjusted R^2	.2695	.2488	.2392
Single-adult:			
MPC(Y)	.042**	.023	
	(.021)	(.023)	
MPC(FSB)	-.028	-.126	
	(.194)	(.208)	
MPC(FSB) - MPC(Y)	-.070	-.148	
	(.195)	(.208)	
Multiple-adult:			
MPC(Y)	.062**		.069**
	(.019)		(.019)
MPC(FSB)	.622**		.661**
	(.228)		(.221)
MPC(FSB) - MPC(Y)	.560**		.591**
	(.227)		(.220)

Notes: MPC(Y) is the marginal propensity to consume out of income, and MPC(FSB) is the marginal propensity to consume out of food stamp (check) benefits. The dependent variable is per-person food expenditure. The standard errors are in parentheses. * indicates that the variable is statistically significant at the 90-percent confidence level; ** indicates that the variable is statistically significant at the 95-percent confidence level.

Source: Data are from the San Diego Cash-Out Experiment, conducted by the U.S. Department of Agriculture, Food and Consumer Service (currently Food and Nutrition Service).

Appendix table 6—For households with children, comparing multi- and single-adult unconstrained households estimates for double logarithmic model

Item	Unconstrained households (n = 465)	Single-adult households (n = 270)	Multi-adult households (n = 195)
Log of cash and benefit income per household member	0.561**	0.050	0.562**
	(0.070)	(0.095)	(0.079)
Log of cash and benefit income per household member interacted with number of adults	-.470**		
	(.104)		
Proportion of food stamp benefits in total cash and benefit income	2.446**	.194	2.432**
	(.465)	(.378)	(.483)
Proportion of food stamp benefits in total cash and benefit income member interacted with number of adults	-2.159**		
	(.582)		
Log of household size	-.326**	-.223*	-.336**
	(.092)	(.128)	(.137)
Money value of gifts of food per household member	.032	.026**	.067**
	(.010)	(.012)	(.020)
In-kind food commodity donations per household member	-.022	-.024	-.021
	(.017)	(.019)	(.032)
Breakfast subsidy per household member	.003	-.007	.014
	(.018)	(.024)	(.027)
Lunch subsidy per household member	.019**	.019**	.021*
	(.007)	(.009)	(.012)
Female-headed household	-.021	-.129	-.004
	(.066)	(.139)	(.079)
Weekly meals eaten as guest per household member	-.054**	-.060**	-.040**
	(.008)	(.010)	(.017)
Weekly meals eaten by guests per household member	.037**	.041**	.030**
	(.006)	(.008)	(.010)
Proportion of households with child(ren) age 0 to 1	.180	-.214	.237
	(.240)	(.327)	(.401)
Proportion of households with child(ren) age 2 to 17	.347	-.150	.639**
	(.212)	(.313)	(.299)
Proportion of households member(s) over age 60	.059	-.821	.358
	(.326)	(.665)	(.386)
Number of adults in the household	2.193**		
	(.480)		
Constant	.594**	3.288*	.413
	(.362)	(.529)	(.455)
Adjusted R^2	.3468	.230	.3948
Single-adult:			
MPC(Y)	.016	.007	
	(.020)	(.020)	
MPC(FSB)	.101	.065	
	(.117)	(.120)	
MPC(FSB) - MPC(Y)	.085	.058	
	(.111)	(.113)	
Multiple-adult:			
MPC(Y)	.079**		.080**
	(.018)		(.020)
MPC(FSB)	.799**		.795**
	(.133)		(.140)
MPC(FSB) - MPC(Y)	.720**		.715**
	(.137)		(.142)

Notes: MPC(Y) is the marginal propensity to consume out of income, and MPC(FSB) is the marginal propensity to consume out of food stamp (check) benefits. The dependent variable is log of per-person food expenditure. The standard errors are in parentheses. * indicates that the variable is statistically significant at the 90-percent confidence level; ** indicates that the variable is statistically significant at the 95-percent confidence level.

Source: Data are from the San Diego Cash-Out Experiment, conducted by the U.S. Department of Agriculture, Food and Consumer Service (currently Food and Nutrition Service).

Appendix table 7—Stamp and check households: Linear model (a)

Item	Pooled sample (n = 953)	Unconstrained stamp (n = 487)	Check (n = 466)
Food stamp benefit per household member	0.318**	0.416**	0.221*
	(0.089)	(0.132)	(0.122)
Income per household member	.046**	.051**	.037**
	(.010)	(.014)	(.014)
Household size	-1.362**	-1.183**	-1.488**
	(.258)	(.362)	(.371)
Money value of gifts of food per household member	.217	.704**	-.015
	(.136)	(.231)	(.173)
In-kind food commodity donations per household member	-.270	-.742**	-.076
	(.187)	(.378)	(.215)
Household head is Asian	2.064**	.571	2.756**
	(.903)	(1.312)	(1.256)
Breakfast subsidy per household member	.340	.159	.491
	(.283)	(.408)	(.394)
Lunch subsidy per household member	.359**	.442**	.258
	(.117)	(.163)	(.171)
Female-headed household	-1.109**	-1.186**	-.968**
	(.135)	(.191)	(.193)
Weekly meals eaten as guest per household member	.978**	1.039**	.986**
	(.104)	(.136)	(.165)
Weekly meals eaten by guests per household member	-.155	.726	-1.069
	(.850)	(1.177)	(1.242)
Proportion of households with child(ren) age 0 to 1	-3.901	-2.182	-5.196
	(2.876)	(4.086)	(4.083)
Proportion of households with child(ren) age 2 to 17	1.593	-.291	3.017
	(2.198)	(3.162)	(3.070)
Proportion of households with member(s) over age 60	3.249	-3.780	7.713
	(3.562)	(5.404)	(4.785)
Household receives food stamp benefits	2.001**		
	(.577)		
Constant	18.597**	19.179**	20.238**
	(1.727)	(2.491)	(2.341)
Adjusted R2	.2571	.2937	.2172
MPC(FSB)	.318**	.416**	.221*
	(.089)	(.132)	(.122)
MPC(Y)	.046**	.051**	.037**
	(.010)	(.014)	(.014)
MPC(FSB) - MPC(Y)	.272**	.365**	.184
	(.089)	(.132)	(.122)

Notes: MPC(Y) is the marginal propensity to consume out of income, and MPC(FSB) is the marginal propensity to consume out of food stamp (check) benefits. The standard errors are in parentheses. * indicates that the variable is statistically significant at the 90-percent confidence level; ** indicates that the variable is statistically significant at the 95-percent confidence level.

Source: Data are from the San Diego Cash-Out Experiment, conducted by the U.S. Department of Agriculture, Food and Consumer Service (currently Food and Nutrition Service).

Appendix table 8—Stamp and check households: Double-log model (c)

Item	Pooled sample (n = 953)	Unconstrained stamp (n = 487)	Check (n = 466)
Log of cash and benefit income per household member	0.338**	0.385**	0.295**
	(0.045)	(0.091)	(0.069)
Proportion of food stamp benefits in total cash and benefit income	.836**	1.065	.608**
	(.186)	(.247)	(.277)
Log of household size	-.375**	-.327**	-.420**
	(.057)	(.076)	(.084)
Money value of gifts of food per household member	-.012*	.030**	-.036**
	(.007)	(.002)	(.009)
In-kind food commodity donations per household member	-.028**	-.024	-.028**
	(.009)	(.017)	(.012)
Household head is Asian	.109**	.039	.144**
	(.045)	(.059)	(.068)
Breakfast subsidy per household member	.007	.002	.009
	(.014)	(.018)	(.021)
Lunch subsidy per household member	.021**	.021**	.019**
	(.006)	(.007)	(.009)
Female-headed household	-.053**	-.053**	-.048**
	(.007)	(.009)	(.010)
Weekly meals eaten as guest per household member	.037**	.036**	.044**
	(.005)	(.006)	(.009)
Weekly meals eaten by guests per household member	-.091**	-.030	-.165**
	(.045)	(.057)	(.069)
Proportion of households with child(ren) age 0 to 1	.184	.233	.117
	(.151)	(.193)	(.234)
Proportion of households with child(ren) age 2 to 17	.451**	.376**	.499**
	(.122)	(.158)	(.183)
Proportion of households with member(s) over age 60	.279	-.068	.445*
	(.178)	(.242)	(.259)
Household receives food stamp benefits	.110**		
	(.029)		
Constant	1.634**	1.442**	1.925**
	(.240)	(.317)	(.359)
Adjusted R^2	.2854	.3462	.2523
MPC(FSB)	.307**	.393**	.235**
	(.057)	(.078)	(.084)
MPC(Y)	.069**	.075**	.063**
	(.010)	(.013)	(.014)
MPC(FSB) - MPC(Y)	.238**	.318**	.172**
	(.053)	(.074)	(.078)

Notes: MPC(Y) is the marginal propensity to consume out of income, and MPC(FSB) is the marginal propensity to consume out of food stamp (check) benefits. The MPC's are calculated at median values. The standard errors are in parentheses. * indicates that the variable is statistically significant at the 90-percent confidence level; ** indicates that the variable is statistically significant at the 95-percent confidence level.

Source: Data are from the San Diego Cash-Out Experiment, conducted by the U.S. Department of Agriculture, Food and Consumer Service (currently Food and Nutrition Service).

Appendix table 9—Comparison of unconstrained single- and multi-adult households

Item	Multi-adult	Single-adult
Sample size	206	281
Monthly cash income ($)	1,088.48	762.57
Monthly food stamp benefit ($)	128.02	105.14
Benefits as proportion of income (%)	13.02	13.50
Monthly food expenditure ($)	371.12	281.99
Households with WIC vouchers (%)	14.56	9.25
Average amount ($)	51.63	68.62
Households with school breakfast (%)	23.30	16.37
Average amount ($)	29.08	30.38
Households with school lunch subsidy (%)	53.88	48.40
Average amount ($)	57.21	53.23
Weekly average number of meals eaten as guest per household member	1.87	2.47
Weekly average number of meals eaten by guests per household member	4.47	3.09
Information on household head:		
Employed (%)	14	13
Hispanic (%)	37	30
Black (%)	18	27
Married (%)	42.70	7
Widowed (%)	1.94	3.57
Divorced (%)	11.65	25.27
Legally separated (%)	11	21
Completed high school (%)	52.90	62.99
Own home/pay mortgage (%)	3.40	1.07
Household information:		
Average size	4.97	3.06
Percentage of households with—		
Children	94.66	96.09
One adult	19.90	96.09
Female head	0	96.09
Single parent with child(ren)		
Percentage of households with—	87.86	85.41
Child(ren) age 0 – 11	31.10	30.60
Child(ren) age 12 – 17	24.76	5.34
Child(ren) age 12 – 17	24.76	5.34
Members over 51		
Average number of children for households with child(ren)	2.64	2.06

Notes: WIC is the Special Supplemental Nutrition Program for Women, Infants, and Children.

Source: Data are from the San Diego Cash-Out Experiment, conducted by the U.S. Department of Agriculture, Food and Consumer Service (currently Food and Nutrition Service).