

Online Appendix for "Workers' Spending Response to the 2011 Payroll Tax Cuts"

Grant Graziani Wilbert van der Klaauw Basit Zafar*

*Corresponding author: Basit Zafar, Research and Statistics, Federal Reserve Bank of New York; E-mail: Basit.Zafar@ny.frb.org

Table C1: Determinants of Reporting Focal Responses

Dependent variable:	Dummy for 50 in: ^a		Dummy for 0/100 in: ^b	
	Ex ante use	Ex post use	Ex ante use	Ex post use
	(1)	(4)	(3)	(6)
College	-0.009 (0.063)	0.092 (0.066)	-0.061 (0.061)	0.006 (0.058)
Male	-0.077 (0.060)	-0.058 (0.063)	-0.005 (0.050)	0.048 (0.051)
Age	0.010* (0.006)	0.002 (0.006)	0.009* (0.005)	-0.007 (0.004)
High Income	-0.046 (0.065)	-0.077 (0.066)	0.052 (0.058)	-0.004 (0.057)
High Financial Literacy ^c	-0.030 (0.096)	-0.027 (0.086)	0.014 (0.075)	0.024 (0.068)
Constant	-0.342 (0.305)	0.062 (0.309)	0.417 (0.264)	1.24*** (0.214)
Joint sig of variables ^d	0.452	0.731	0.582	0.693
Mean of Dep. Variable	0.149	0.162	0.890	0.890
R^2	0.042	0.025	0.037	0.022
Observations	154	154	154	154

OLS regression of a dummy for focal responses (any 50; 0 or 100) onto covariates.

Robust standard errors in parentheses. ***, **, * denote significance at 1, 5, and 10%, respectively.

^a Dummy that equals 1 if the respondent answers 50 for any use (spend; save; pay debt)

^b Dummy that equals 1 if the respondent answers 0 or 100 for any use (spend; save; pay debt)

^c Dummy that equals 1 if respondent has high financial literacy (answers at least 3 of the 4 questions about financial literacy correctly).

^d p-value for the joint significance of all correlates.

Table C2: Present-Bias and Shift in Consumption

Dependent Variable: Ex post Mostly Consume - Ex ante Mostly Consume				
	(1)	(2)	(3)	(4)
College				0.064 (0.106)
Male				0.025 (0.098)
Age				0.010 (0.008)
High Income				0.014 (0.103)
Ex ante Aware of Tax Cut ^a				-0.114 (0.111)
Hyperbolic Dummy ^b	-0.121 (0.092)		-0.082 (0.103)	-0.073 (0.104)
High Financial Literacy ^c		0.015 (0.129)	0.154 (0.178)	0.191 (0.188)
Hyperbolic Dum x High Fin Lit.			-0.272 (0.253)	-0.318 (0.251)
Constant	0.307*** (0.064)	0.271*** (0.047)	0.289*** (0.067)	-0.310 (0.423)
Demog variables sig? ^d				0.542
R^2	0.012	0.000	0.019	0.045
Mean of Dep. Variable	0.263	0.273	0.263	0.263
Observations	152	154	152	152

OLS regression of the difference between mostly consume ex post and ex ante dummies, onto correlates. Dependent variable takes values -1, 0, 1.

Standard errors in parentheses. ***, **, * denote significance at 1, 5, and 10%, respectively.

^a Dummy that equals 1 if respondent reported knowing about the tax cut in first survey before we informed them of it.

^b Dummy that equals 1 if the respondent is hyperbolic (see text for construction of variable).

^c Dummy that equals 1 if respondent has high financial literacy (answers at least 3 of the 4 questions about financial literacy correctly).

^d p-value for the joint significance of all demographic correlates (age; income; college; male).

Table C3: Shift in MPC and State-Level Variation in Economic Indicators

	Dependent Variable: Ex post Mostly Consume - Ex ante Mostly Consume ^a								
	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	
$\Delta(\% \Delta \text{ Earnings})$	0.001 (0.002)								0.001 (0.002)
$\Delta(\Delta \text{ Unemployment Rate})$		0.012 (0.058)							-0.006 (0.069)
$\Delta(\% \Delta \text{ Payroll Emp.})$			-0.041 (0.076)						-0.063 (0.087)
$\Delta(\% \Delta \text{ Home Price Index})$				0.017 (0.014)					0.029* (0.016)
$\Delta(\% \Delta \text{ Gross State Prod.})$					0.011 (0.028)				-0.010 (0.031)
$\Delta(\Delta \text{ Delinquency Rate})$						-0.014** (0.007)			-0.026*** (0.009)
$\Delta(\% \Delta \text{ Auto Originations})$							-0.003 (0.004)		-0.002 (0.004)
Constant	0.261*** (0.046)	0.270*** (0.044)	0.264*** (0.046)	0.243*** (0.048)	0.289*** (0.060)	0.255*** (0.043)	0.213** (0.087)		0.113 (0.098)
F-test ^b									0.585
R^2	0.001	0.000	0.002	0.010	0.001	0.011	0.005		0.041
Mean of Dependent Var.	0.262	0.270	0.270	0.270	0.270	0.270	0.270		0.262
Number of Observations	141	152	152	152	152	152	152		141

Robust standard errors in parentheses. ***, **, * denote significance at 1, 5, and 10%, respectively.
^a OLS regression of the gap between ex-post mostly consume and ex ante mostly consume onto correlates.
^b p-value for the joint significance of all correlates (excluding constant).

Table C4: Marginal Propensities of Tax Cuts Use by Demographics (Unweighted)

	All	Male	Female	Age > 54	Age ≤ 54	High Inc ^a	Low Inc	Aware ^b	Not Aware
Ex ante Response to Payroll Tax Cuts									
Observations	154	79	75	82	72	77	77	41	113
Consume	14.31 [0.00] (24.93)	17.03 [0.00] (28.02)	11.44 [0.00] (21.00)	13.21 [0.00] (23.05)	15.56 [0.00] (27.02)	14.71 [0.00] (27.64)	13.90 [0.00] (22.06)	16.22 [0.00] (27.86)	13.61 [0.00] (23.87)
Saving	37.39 [20.00] (41.19)	43.48* [40.00] (42.74)	30.97 [0.00] (38.75)	41.13 [36.50] (42.16)	33.13 [10.00] (39.92)	43.48* [33.00] (43.67)	31.30 [10.00] (37.86)	52.80** [50.00] (43.65)	31.80 [10.00] (38.97)
Pay down debt	48.31 [47.50] (46.44)	39.49** [10.00] (45.27)	57.59 [80.00] (46.14)	45.66 [22.50] (47.22)	51.32 [50.00] (45.68)	41.81 [10.00] (46.48)	54.81 [75.00] (45.78)	30.98*** [0.00] (44.09)	54.59 [75.00] (45.85)
Ex post Response to Payroll Tax Cuts									
Observations	154	79	75	87	67	79	75	41	113
Consume	38.86 [30.00] (40.31)	44.62 [40.00] (41.85)	32.80 [25.00] (37.94)	41.49 [33.00] (40.40)	35.45 [20.00] (40.23)	43.70 [34.00] (41.75)	33.77 [20.00] (38.34)	44.83 [33.00] (42.65)	36.70 [25.00] (39.39)
Saving	25.36 [0.00] (35.05)	29.33 [2.00] (37.91)	21.19 [0.00] (31.47)	26.16 [0.00] (34.44)	24.33 [0.00] (36.05)	27.35 [0.00] (37.43)	23.27 [0.00] (32.46)	28.24 [0.00] (36.35)	24.32 [0.00] (34.67)
Pay down debt	35.77 [0.00] (43.66)	26.05*** [0.00] (40.53)	46.01 [34.00] (44.75)	32.34 [0.00] (41.54)	40.22 [0.00] (46.21)	28.95** [0.00] (41.85)	42.96 [33.00] (44.65)	26.93 [0.00] (40.10)	38.98 [10.00] (44.62)

Table reports the average propensities (on a 0-100 scale), median in square brackets, and standard deviations in parentheses. Unweighted statistics reported.

^a High income is the group of respondents with annual income ≥ \$75,000.

^b Respondent is aware if she reported knowing about the tax cut in first survey before we informed her of it.

Wilcoxon rank-sum test conducted for equality of responses for female against male; age > 54 vs. age ≤ 54; high income vs. low income; aware versus not aware. ***, **, * denote difference significant at 1, 5, and 10 percent, respectively. Asterisks shown on the female, age > 54, high inc., and aware columns, respectively.

Table C5: Tax Cut "Mostly" Uses, by Demographics

	All	Male	Female	Age > 54	Age ≤ 54	High Inc ^a	Low Inc	Aware ^b	Not Aware
Panel A: Ex ante									
Observations	154	79	75	82	72	77	77	41	113
Mostly Consume	0.12	0.19***	0.05	0.09	0.14	0.16	0.09	0.18	0.10
Mostly Save	0.35	0.40	0.29	0.37	0.33	0.39	0.31	0.49**	0.30
Mostly Pay down debt	0.53	0.41***	0.66	0.54	0.53	0.45*	0.59	0.33***	0.60
Chi-Square Test ^c		0.002		0.618		0.212			0.012
Panel B: Ex post									
Observations	154	79	75	87	67	79	75	41	113
Mostly Consume	0.37	0.44*	0.29	0.40	0.34	0.41	0.33	0.40	0.36
Mostly Save	0.21	0.29**	0.13	0.18	0.24	0.27	0.18	0.25	0.20
Mostly Pay down debt	0.42	0.26***	0.58	0.42	0.42	0.32**	0.49	0.36	0.44
Chi-Square Test		0.001		0.695		0.124			0.714

Table shows the fraction of each column group who assign the highest probability (out of 100) to that purpose. Weighted fractions reported.

^a High income is the group of respondents with annual income \geq \$75,000.

^b Respondent is aware if she reported knowing about the tax cut in first survey before we informed her of it.

^c p-value of a Pearson Chi-square test for independence of distributions by demographic groups (female against male; age > 54 vs. age \leq 54; high income vs. low income).

In addition, Chi-square conducted for equality of proportions for females and males; age > 54 and age \leq 54; high income and low income; aware versus not aware. ***, **, * difference significant at 1, 5, and 10 percent, respectively.

