

Technical Appendix

Project name: Increasing voluntary tax compliance through outreach to clients of return preparers

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[Table 1. Effects of any letter and spillover effects on primary outcomes](#)

[Table 2. Effects of letter type on primary outcomes](#)

[Table 3. Family-wise error rate results](#)

[Table 4. Effects of any letter and spillover effects on secondary filing behavior outcomes](#)

[Table 5. Effects of any letter and spillover effects on secondary credit specific outcomes](#)

[Table 6. Effects of letter type on secondary filing behavior outcomes](#)

[Table 7. Effects of letter type on secondary credit specific outcomes](#)

Table 1. Effects of any letter and spillover effects on primary outcomes

	Change Method	Tax Benefit Error	Refund Amount	Sum of Erroneous Dollars
Any Letter	0.073***	-0.073***	-425.900***	-357.051***
	[0.017]	[0.008]	[67.450]	[43.772]
Spillover	0.033*	-0.032***	-200.644***	-158.537***
	[0.017]	[0.007]	[66.875]	[42.463]
Constant	0.382***	0.612***	4,597.074***	3,160.804***
	[0.015]	[0.006]	[55.747]	[33.934]
Observations	79,164	79,164	79,164	79,164
R-squared	0.023	0.051	0.119	0.207
Direct Effect	0.0397	-0.0415	-225.3	-198.5
F-test on dif between any letter and spillover	92.72	91.62	61.12	59.96
Prob > F	0	0	0	0
Control mean	0.385	0.605	4525	3132
Standard errors in brackets; *** p<0.01, ** p<0.05, * p<0.1				

A test-wise alpha of 0.00402 for the coefficients on Any Letter controls the FWER at 0.05. A test-wise alpha of 0.00412 for the coefficients on Spillover controls the FWER at 0.05. The F-test on the difference between Any Letter and Spillover was not pre-specified and we did not include these tests in our adjustments for multiple hypotheses.

Table 2. Effects of letter type on primary outcomes

	Change Method	Tax Benefit Error	Refund Amount	Sum of Erroneous Dollars
BI	0.057***	-0.044***	-244.553***	-204.762***
	[0.005]	[0.005]	[40.140]	[32.128]
TAU	0.023***	-0.039***	-205.262***	-195.721***
	[0.005]	[0.005]	[37.218]	[32.321]
Constant	0.414***	0.581***	4,407.613***	3,000.687***
	[0.002]	[0.003]	[18.477]	[16.016]
Observations	53,352	53,352	53,352	53,352
R-squared	0.208	0.097	0.173	0.240
Difference between letters	0.0344	-0.00500	-39.29	-9.040
F-test	30.44	0.575	0.674	0.0524
Prob > F	3.45e-08	0.448	0.412	0.819
Control mean	0.414	0.581	4409	3000
Standard errors in brackets, *** p<0.01, ** p<0.05, * p<0.1				

A test-wise alpha of 0.01464 for the difference in the coefficients on BI and TAU controls the FWER at 0.05.

Table 3. Family-wise error rate results

P-value that maintains the FWER at or below			
	0.01	0.05	0.1
Any letter family	0.00039	0.00402	0.01119
Spillover family	0.00039	0.00412	0.0111
BI vs. TAU family	0.00258	0.01464	0.03085

Notes: These are the results from re-randomizing clients to treatment groups 13,000 times.

Table 4. Effects of any letter and spillover effects on secondary filing behavior outcomes

	Did Not File	Filed and Changed Filing Method	Self-Filed	Filed and used same preparer	Dollar Value of Credits Claimed
Any Letter	0.026***	0.046***	0.005	-0.073***	-295.346***
	[0.005]	[0.016]	[0.007]	[0.017]	[39.011]
Spillover	0.012**	0.021	-0.000	-0.033*	-153.462***
	[0.005]	[0.016]	[0.007]	[0.017]	[37.611]
Constant	0.143***	0.239***	0.060***	0.618***	4,023.144***
	[0.004]	[0.014]	[0.006]	[0.015]	[29.743]
Observations	79,164	79,164	79,164	79,164	79,164
R-squared	0.008	0.022	0.005	0.023	0.227
Direct Effect	0.0149	0.0248	0.00523	-0.0397	-141.9
F-test	20.88	45.59	6.602	92.85	35.73
Prob > F	5.18e-06	0	0.0103	0	2.68e-09
Control mean	0.145	0.240	0.0575	0.615	3997

Table 5. Effects of any letter and spillover effects on secondary credit specific outcomes

	EITC Error	HOH Error	ACTC/CTC/ODC Error	AOTC Error	EITC Erroneous Dollar Amount	ACTC/CTC/ODC Erroneous Dollar Amount	AOTC Erroneous Dollar Amount
Any Letter	-0.052***	-0.014***	-0.051***	-0.039***	-208.313***	-106.619***	-42.119***
	[0.007]	[0.005]	[0.007]	[0.010]	[30.595]	[18.762]	[10.628]
Spillover	-0.017***	-0.004	-0.018***	-0.027***	-80.844***	-48.415***	-29.278***
	[0.006]	[0.005]	[0.006]	[0.010]	[29.514]	[18.441]	[10.536]
Constant	0.516***	0.102***	0.517***	0.127***	2,042.071***	990.999***	127.734***
	[0.005]	[0.004]	[0.005]	[0.009]	[23.362]	[15.273]	[9.923]
Observations	79,164	79,164	79,164	79,164	79,164	79,164	79,164
R-squared	0.179	0.010	0.179	0.159	0.222	0.145	0.145
Direct Effect	-0.0340	-0.0100	-0.0337	-0.0120	-127.5	-58.20	-12.84
F-test	72.28	17.31	70.98	25.56	51.08	32.28	28.10
Prob > F	0	3.31e-05	0	4.68e-07	0	1.53e-08	1.28e-07
Control mean	0.515	0.101	0.515	0.115	2030	987.1	114.6

Table 6. Effects of letter type on secondary filing behavior outcomes

	Did Not File	Filed and Changed Filing Method	Self-Filed	Filed and used same preparer	Dollar Value of Credits Claimed
BI	0.013***	0.044***	0.012***	-0.057***	-148.067***
	[0.004]	[0.005]	[0.003]	[0.005]	[30.500]
TAU	0.016***	0.007	-0.001	-0.023***	-135.731***
	[0.004]	[0.004]	[0.003]	[0.005]	[30.719]
Constant	0.155***	0.259***	0.059***	0.586***	3,866.476***
	[0.002]	[0.002]	[0.001]	[0.002]	[15.039]
Observations	53,352	53,352	53,352	53,352	53,352
R-squared	0.058	0.226	0.066	0.208	0.260
Difference between letters	-0.00281	0.0372	0.0130	-0.0344	-12.34
F-test	0.314	43.81	15.52	30.44	0.107
Prob > F	0.575	0	8.16e-05	3.45e-08	0.743
Control mean	0.155	0.259	0.0590	0.586	3866

Table 7. Effects of letter type on secondary credit specific outcomes

	EITC Error	HOH Error	ACTC/CTC/OD C Error	AOTC Error	EITC Erroneous Dollar Amount	ACTC/CTC/OD C Erroneous Dollar Amount	AOTC Erroneous Dollar Amount
BI	-0.034***	-0.008**	-0.034***	-0.016***	-130.523***	-57.872***	-16.367***
	[0.005]	[0.003]	[0.005]	[0.003]	[22.134]	[13.041]	[3.076]
TAU	-0.034***	-0.012***	-0.033***	-0.008***	-124.970***	-61.127***	-9.624***
	[0.005]	[0.003]	[0.005]	[0.003]	[22.342]	[13.022]	[3.112]
Constant	0.499***	0.098***	0.499***	0.102***	1,957.942***	941.958***	100.786***
	[0.003]	[0.002]	[0.003]	[0.002]	[11.070]	[6.531]	[1.608]
Observations	53,352	53,352	53,352	53,352	53,352	53,352	53,352
R-squared	0.213	0.073	0.213	0.204	0.259	0.180	0.195
Difference between letters	-0.000567	0.00417	-0.000374	-0.00762	-5.553	3.255	-6.743
F-test	0.00834	1.185	0.00363	4.483	0.0416	0.0417	3.262
Prob > F	0.927	0.276	0.952	0.0342	0.838	0.838	0.0709
Control mean	0.499	0.0981	0.499	0.102	1957	941.6	100.9