Evidence from EITC Notification Laws (Online Appendix)

Taylor Cranor, Sarah Kotb, and Jacob Goldin April 12, 2019

Table 1: Effect of Notice Laws on EITC Claim Rate (No Economic Controls)

	(1)	(2)	(3)	(4)
Notice Law	-0.0089* (0.0044)	-0.0091* (0.0041)	-0.0088* (0.0041)	0.0007 (0.0032)
State and Year FE	Yes	Yes	Yes	Yes
Demographic Controls	No	Yes	Yes	Yes
Transfer Policy Controls	No	No	Yes	Yes
State-Specific Time Trends	No	No	No	Yes
Control Group Mean	0.1471	0.1471	0.1471	0.1471
Observations	780	780	780	780

Notes: Specifications are based on Table 3 with the exception that the time-varying state demographic controls exclude the following variables: wage, unemployment, and the fractions of employees eligible for maximum EITC, one-child EITC, and childless EITC. Standard errors clustered by state in parentheses. Asterisks denote significance at the 1% (***), 5% (**), and 10% (*) levels.

Table 2: Effect of Notification Laws on EITC Claim Rate (Quadratic State-Specific Time Trends)

	(1)
Notice Law	0.0027 (0.0015)
State and Year FE	Yes
Demographic Controls	Yes
Transfer Policy Controls	Yes
Quadratic State-Specific Time Trend	Yes
Control Group Mean	0.1471
Observations	780

Notes: The specification is based on Table 3, Column 4 except that the state-specific time trends are quadratic instead of linear. Standard errors clustered by state in parentheses. Asterisks denote significance at the 1% (***), 5% (**), and 10% (*) levels.

Table 3: Other Behavioral Effects of Notification Laws (Without State-Specific Time Trends)

	(1) Filing Rate	(2) EITC Claim Rate (Among Filers)	(3) Log Total Employees	(4) Bunching (Employees)	(5) Bunching (Self-Emp.)
Notice Law	0.0003 (0.0021)	-0.0052** (0.0016)	-0.0061 (0.0247)	0.0014 (0.0011)	0.0022 (0.0051)
State and Year FE	Yes	Yes	Yes	Yes	Yes
Demographic Controls	Yes	Yes	Yes	Yes	Yes
Transfer Policy Controls	Yes	Yes	Yes	Yes	Yes
State-Specific Time Trends	No	No	No	No	No
Control Group Mean	0.9150	0.1612	1,984,979	0.0379	0.1056
Observations	780	780	780	780	780

Notes: Specifications are based on Table 4, Column 3. The outcomes are as follows. Column 1: the fraction of employees who file a tax return. Column 2: fraction of employees who claim the EITC conditional on filing a tax return. Column 3: log of total quantity of employees in a jurisdiction. Column 4: fraction of employee EITC claimants whose reported earnings are within \$500 of the first EITC kink point associated with their household size. Column 5: fraction of all EITC claimants with positive self-employment income whose total reported earnings are within \$500 of the first EITC kink pointed associated with their household size. Standard errors clustered by state in parentheses. Asterisks denote significance at the 1% (***), 5% (**), and 10% (*) levels.

Table 4: Other Behavioral Effects of Notice Laws (No Economic Controls)

	(1) Filing Rate	(2) EITC Claim Rate (Among Filers)	(3) Log Total Employees	(4) Bunching (Employees)	(5) Bunching (Self-Emp.)
Notice Law	-0.0004 (0.0014)	0.0008 (0.0037)	-0.0164 (0.0336)	0.0012 (0.0010)	0.0079 (0.0041)
State and Year FE	Yes	Yes	Yes	Yes	Yes
Demographic Controls	Yes	Yes	Yes	Yes	Yes
Transfer Policy Controls	Yes	Yes	Yes	Yes	Yes
State-Specific Time Trends	Yes	Yes	Yes	Yes	Yes
Control Group Mean	0.9150	0.1612	1,984,979	0.0379	0.1056
Observations	780	780	780	780	780

Notes: Specifications are based on Table 3, Column 4 with the exception that the demographic controls exclude the following economic variables: wage, unemployment, and the fractions of the employees eligible for maximum EITC, one-child EITC, and childless EITC. Column 1: outcome is the fraction of employees who file a tax return. Column 2: fraction of employees who claim the EITC conditional on filing a tax return. Column 3: log of total quantity of employees in in a jurisdiction. Column 4: fraction of employee EITC claimants whose reported earnings are within \$500 of the first kink point associated with their household size. Column 5: fraction of all EITC claimants with positive self-employment income whose total reported earnings are within \$500 of the first EITC kink pointed associated with their household size. Standard errors clustered by state in parentheses. Asterisks denote significance at the 1% (***), 5% (**), and 10% (*) levels.

Table 5: Heterogeneity by State EITC Provision

	(1)	(2)
	State	No State
	EITC	EITC
Notice Law	0.0004	0.0011
	(0.0016)	(0.0031)
Control Group Mean	0.133	0.160
Observations	390	390

Note: The table replicates Table 3, Column 4, separating the sample by whether the state offers a State EITC during the sample period. The outcome is the EITC Claim Rate. Standard errors clustered by state in parentheses. Asterisks denote significance at the 1% (***), 5% (**), and 10% (*) levels.

0.0002 (0.0019)0.1471292 VATable 6: Effect of Notice Laws on EITC Claim Rate - Sensitivity to the Removal of Each Treated Jurisdiction 0.0010 (0.0018)0.1471 292 8 LA $0.0014 \\ (0.0015) \\ 0.1471$ 292 <u>-</u> $\mathbf{T}\mathbf{X}$ $0.0009 \\ (0.0019) \\ 0.1471$ 292 NJ 9 $-0.0007 \\ (0.0015) \\ 0.1471$ Phil 292 (\mathfrak{S}) -0.0005 (0.0017)0.1471 MD 292 (4) (0.0016)0.00040.1471 765 $\widehat{\mathfrak{S}}$ П (0.0019) 0.14710.0004 292 $\overline{\mathfrak{S}}$ CA $0.0004 \\ (0.0016) \\ 0.1471$ N/A280 (1)Excluded Jurisdiction Control Group Mean Notice Law

Notes: The table replicates Table 3, Column 4 with Columns 2-9 each dropping one treated jurisdiction. The outcome is EITC Claim Rate. Standard errors clustered by state in parentheses. Asterisks denote significance at the 1% (***), 5% (**), and 10% (*) levels.

Observations

Table 7: RMPSE for Different Control Specifications and Lagged Values of the Outcome Used to Construct the Synthetic Controls

	O	Control Specification	ecification	υ
	(1)	(1) (2) (3)	(3)	(4)
First and last year of pretreatment period	0.0032	0.0039	0.0039 0.0035	0.0037
First, middle, and last year of pretreatment period	0.0029	0.0032	0.0033	0.0032
Middle and last year of pretreatment period	0.0037	0.0042	0.0044	0.0046
Last pretreatment year and the average of other pretreatment years	0.0031	0.0033	0.0034	0.0035
Each pretreatment year	0.0014	0.0014	0.0014	0.0014
Each year from the middle to the end of the pretreatment period	0.0034	0.0040	0.0039	0.0043

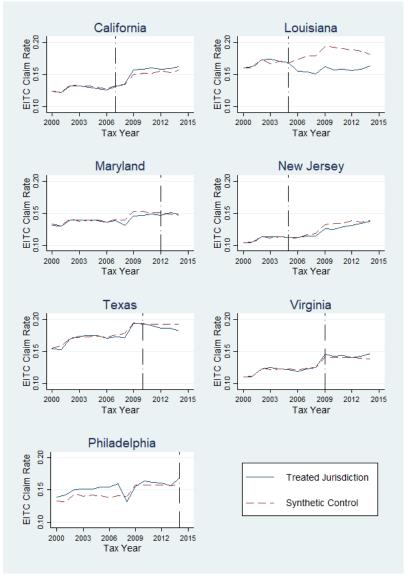
Note: The table shows the Root Mean Prediction Squared Error (RMPSE) for different lagged outcomes (rows) and control specifications (columns). The control specifications are as follows: (1) has no controls, (2) includes the fraction of population eligible for the maximum EITC, one-child EITC, and childless EITC; (3) includes the previous three variables and a set of demographic ones: log of population size, log of mean age, log of mean wage, and the fraction of linguistically isolated households; (4) includes the all the previous controls and state policy variables for state EITC, TANF, and SNAP.

•	(7) PHIL	DC (0.521) MS (0.345) ND (0.134)	
Lable 8: Weights Assigned to Donor Pool States for Each Treated State	(6) VA	CT (0.291) AL (0.214) CO (0.152) DC (0.135) NE (0.091) WY (0.090) MO (0.027)	`
tates for Each	(5) TX	NY (0.404) AL (0.312) FL (0.165) MS (0.073) AR (0.047)	
Donor Pool S	(4) NJ	DC (0.281) MA (0.257) NY (0.162) NE (0.100) FL (0.085) NM (0.069) AZ (0.047)	` '
its Assigned to	(3) MD	DC (0.379) AL (0.309) ND (0.168) NM (0.123) NE (0.021)	
Lable 8: Weigh	(2) LA	DC (0.454) MS (0.416) AL (0.104) NM (0.026) -	
<u>.</u> '	(1) CA	NM (0.341) MA (0.326) DC (0.186) NY (0.141) FL (0.006)	

Note: The table shows the weights used to construct the synthetic control for each treated jurisdiction.

Table 9: Pre-treatment Balance Between Each Treated Jurisdiction and its Synthetic Control	nent Bal	ance Bet	ween Ea	ch Irea	ted Juris	diction a	and its Sy	ynthetic	Control					
	(1)	(2)	(3)	(4)	(5)	(9)	(7)	(8)	(6)	(10)	(11)	(12)	(13)	(14)
	CA		Γf	_	MD	Q	NJ		XL	V	VA	_	Phil	il
	Treated Synth	Synth	Treated	Synth	Treated	Synth	Treated	Synth	Treated	Synth	Treated	Synth	Treated	Synth
Lagged values of the outcome: Fraction claiming BITC	claiming E.	ITC												
First year of pretreatment period	0.12	0.12	0.16	0.16	0.13	0.13	0.10	0.10	0.15	0.16	0.11	0.11	0.14	0.14
Middle year of pretreatment period	0.13	0.13	0.17	0.17	0.14	0.14	0.11	0.11	0.18	0.17	0.12	0.12	0.16	0.16
Final year of pretreatment period	0.13	0.13	0.17	0.17	0.15	0.15	0.11	0.11	0.19	0.19	0.12	0.12	0.16	0.16
Fraction eligible controls														
Fraction eligible for maximum EITC	0.63	0.63	0.62	0.61	0.64	0.64	0.59	0.59	69.0	69.0	0.62	0.62	0.63	0.63
Fraction eligible for childless EITC	0.31	0:30	0.27	0.27	0.28	0.30	0.28	0.27	0.32	0.32	0.26	0.27	0.30	0:30
Fraction eligible for 1 child EITC	0.58	0.58	0.56	0.56	0.57	0.58	0.53	0.53	0.63	0.64	0.56	0.56	0.56	0.57
State characteristics														
Log (population size)	17.37	14.97	15.32	14.17	15.54	14.10	15.96	15.04	16.94	16.09	15.83	14.70	14.23	13.85
Log (unemployment rate)	1.74	1.63	1.77	1.82	1.54	1.73	1.57	1.63	1.69	1.69	1.23	1.51	2.05	1.88
Log (average age)	3.66	3.68	3.67	3.69	3.71	3.69	3.68	3.69	3.63	3.68	3.71	3.68	3.70	3.70
Log (average wage)	10.56	10.46	10.37	10.40	10.56	10.51	10.62	10.52	10.43	10.46	10.52	10.53	10.64	10.56
Fraction linguistically isolated	4.46	2.50	0.34	0.47	1.97	1.63	1.23	1.00	5.02	2.95	1.46	1.69	1.52	1.42
State-level transfer policy controls														
TANF generosity	682.71	502.31	230.00	272.86	507.17	351.69	424.00	468.63	219.60	396.25	358.22	397.44	409.43	331.71
State EITC generosity	0.00	0.13	0.00	0.10	0.50	0.12	0.17	0.14	0.00	0.12	0.07	0.04	0.00	0.17
SNAP generosity	365.86	365.86	353.80	353.80	409.17	409.17	353.80	354.15	385.80	386.19	377.22	377.22	425.86	425.86

Figure 1: Trends in EITC Claim Rate For Each Treated Jurisdiction and its Synthetic Control



Notes: The figure presents the results from the synthetic control method. The vertical line represents the year that the Notice Law was first effective.