

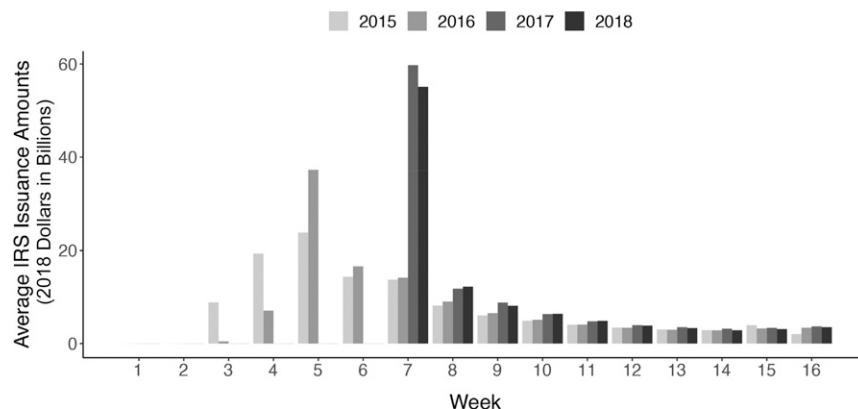
Supplemental Information

SHORT-TERM EFFECTS OF TAX CREDITS ON RATES OF CHILD MALTREATMENT REPORTS IN THE UNITED STATES

This supplement provides additional information on (1) dates

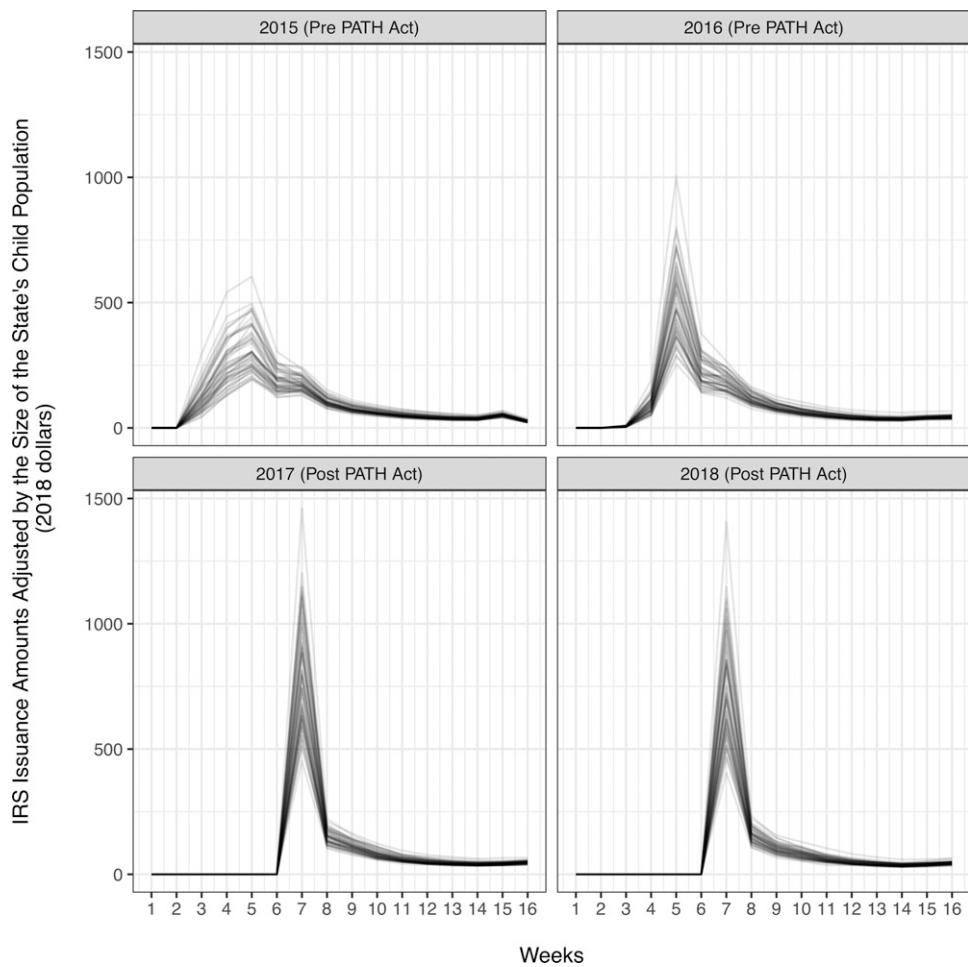
corresponding to each week in the analysis, (2) weekly EITC and CTC refund amounts by year and state, (3) average state-level child maltreatment rates and EITC and CTC refund amounts, (4) a

robustness check for our main results in which we included state-specific linear time trends in our models, and (5) additional analyses excluding either post-PATH Act year 2017 or 2018.



SUPPLEMENTAL FIGURE 2

EITC and CTC refunds from January to April of years 2015 through 2018. Sources include the Internal Revenue Service: Research, Applied Analytics, and Statistics. Dollar amounts include entire refunds containing the EITC or refundable portion of the CTC. All refund amounts are expressed in 2018 dollars.



SUPPLEMENTAL FIGURE 3

Per-child EITC and CTC refunds by state from January to April of years 2015 through 2018. Sources include the Internal Revenue Service: Research, Applied Analytics, and Statistics. Dollar amounts include entire refunds containing the EITC or refundable portion of the CTC. All refunds amounts are expressed in 2018 dollars. Weekly EITC and CTC refund amounts were made comparable across states by dividing the amounts by the state child population. Each line represents refunds containing the EITC or refundable portion of the CTC for individual states.

SUPPLEMENTAL TABLE 2 Dates Associated With Each Week in Analysis

Year	Week	Dates
2015	1	1/12/15 – 1/18/15
2015	2	1/19/15 – 1/25/15
2015	3	1/26/15 – 2/1/15
2015	4	2/2/15 – 2/8/15
2015	5	2/9/15 – 2/15/15
2015	6	2/16/15 – 2/22/15
2015	7	2/23/15 – 3/1/15
2015	8	3/2/15 – 3/8/15
2015	9	3/9/15 – 3/15/15
2015	10	3/16/15 – 3/22/15
2015	11	3/23/15 – 3/29/15
2015	12	3/30/15 – 4/5/15
2015	13	4/6/15 – 4/12/15
2015	14	4/13/15 – 4/19/15
2015	15	4/20/15 – 4/26/15
2015	16	4/27/15 – 5/3/15
2016	1	1/11/16 – 1/17/16
2016	2	1/18/16 – 1/24/16
2016	3	1/25/16 – 1/31/16
2016	4	2/1/16 – 2/7/16
2016	5	2/8/16 – 2/14/16
2016	6	2/15/16 – 2/21/16
2016	7	2/22/16 – 2/28/16
2016	8	2/29/16 – 3/6/16
2016	9	3/7/16 – 3/13/16
2016	10	3/14/16 – 3/20/16
2016	11	3/21/16 – 3/27/16
2016	12	3/28/16 – 4/3/16
2016	13	4/4/16 – 4/10/16
2016	14	4/11/16 – 4/17/16
2016	15	4/18/16 – 4/24/16
2016	16	4/25/16 – 5/1/16
2017	1	1/9/17 – 1/15/17
2017	2	1/16/17 – 1/22/17
2017	3	1/23/17 – 1/29/17
2017	4	1/30/17 – 2/5/17
2017	5	2/6/17 – 2/12/17
2017	6	2/13/17 – 2/19/17
2017	7	2/20/17 – 2/26/17
2017	8	2/27/17 – 3/5/17
2017	9	3/6/17 – 3/12/17
2017	10	3/13/17 – 3/19/17
2017	11	3/20/17 – 3/26/17
2017	12	3/27/17 – 4/2/17
2017	13	4/3/17 – 4/9/17
2017	14	4/10/17 – 4/16/17
2017	15	4/17/17 – 4/23/17
2017	16	4/24/17 – 4/30/17
2018	1	1/8/18 – 1/14/18
2018	2	1/15/18 – 1/21/18
2018	3	1/22/18 – 1/28/18
2018	4	1/29/18 – 2/4/18
2018	5	2/5/18 – 2/11/18
2018	6	2/12/18 – 2/18/18
2018	7	2/19/18 – 2/25/18
2018	8	2/26/18 – 3/4/18
2018	9	3/5/18 – 3/11/18
2018	10	3/12/18 – 3/18/18
2018	11	3/19/18 – 3/25/18

SUPPLEMENTAL TABLE 2 Continued

Year	Week	Dates
2018	12	3/26/18 – 4/1/18
2018	13	4/2/18 – 4/8/18
2018	14	4/9/18 – 4/15/18
2018	15	4/16/18 – 4/22/18
2018	16	4/23/18 – 4/29/18

Weeks match those in the tax refund data that we obtained from the IRS's Research, Applied Analytics, and Statistics Group. The first week of each year begins with the second full week in January. All weeks begin on a Monday.

SUPPLEMENTAL TABLE 3 Average EITC and CTC Dollars Per Child and Child Maltreatment Rates
From January to April in Years 2015 Through 2018

	EITC and CTC Dollars per Child (\$2018)	Weekly Reports of Child Maltreatment Per 100 000 Children	Weekly Substantiated Reports of Child Maltreatment Per 100 000 Children
Alaska	1067	94	21
Alabama	2023	48	13
Arkansas	1827	102	20
Arizona	1502	58	9
California	1323	53	10
Colorado	1110	55	12
Connecticut	1199	49	15
District of Columbia	1627	121	18
Delaware	1540	65	9
Florida	2037	83	13
Georgia	1844	73	10
Hawaii	1408	13	5
Iowa	1256	81	20
Idaho	1230	42	6
Illinois	1526	54	13
Indiana	1538	151	22
Kansas	1309	71	6
Kentucky	1694	111	27
Louisiana	1993	42	14
Massachusetts	1131	67	29
Maryland	1274	33	9
Maine	1427	69	18
Michigan	1470	84	22
Minnesota	1049	51	8
Missouri	1537	108	6
Mississippi	2351	76	20
Montana	1259	86	17
North Carolina	—	—	—
North Dakota	1040	48	13
Nebraska	1278	52	8
New Hampshire	1108	79	5
New Jersey	1269	60	5
New Mexico	1806	87	25
Nevada	1728	49	9
New York	1589	81	23
Ohio	1523	65	14
Oklahoma	1538	75	17
Oregon	1177	66	14
Pennsylvania	1437	35	3
Rhode Island	1630	66	21
South Carolina	1812	71	19
South Dakota	1291	22	7
Tennessee	1849	99	10
Texas	1679	54	11
Utah	988	46	15
Virginia	1357	38	4
Vermont	—	—	—
Washington	1148	47	5
Wisconsin	1203	44	6
West Virginia	1736	135	21
Wyoming	1133	45	8

Sources include EITC and CTC refund data from the Internal Revenue Service: Research, Applied Analytics, and Statistics Group; and child maltreatment data from the National Data Archive on Child Abuse and Neglect between January and April of years 2015 through 2018. Weekly, state-level rates of child maltreatment per 100 000 children were constructed using information about the date of each report and the state in which each report was made. All state-level EITC and CTC refund amounts are expressed in 2018 dollars. Refund amounts were made comparable across states by dividing the total EITC and CTC dollars by state child population. Annual state-level child population estimates were obtained from the US Census Bureau (<https://www.census.gov/data/tables/time-series/demo/popest/2010s-state-detail.html>). Observations for Vermont and North Carolina were excluded because these states were not consistently observed in the child maltreatment dataset. —, not available.

SUPPLEMENTAL TABLE 4 EITC and CTC Tax Refund Effects on Child Maltreatment Report Rates; Robustness Check With State-Specific Linear Time Trends

	Number of Child Maltreatment Reports Per 100 000 Children (95% CI)	Number of Substantiated Child Maltreatment Reports Per 100 000 Children (95% CI)
EITC and CTC	−2.8 (−5.2 to −0.4)*	−0.8 (−1.7 to 0.2)
EITC and CTC: 1 wk before	−3.5 (−6.6 to −0.5)*	−0.4 (−1.0 to 0.3)
EITC and CTC: 2 wk before	−2.2 (−5.0 to 0.6)	0.1 (−0.6, 0.9)
EITC and CTC: 3 wk before	−6.9 (−10.1 to −3.7)**	−0.9 (−1.6 to −0.2)*
EITC and CTC: 4 wk before	0.1 (−4.2 to 4.4)	0.7 (−0.1 to 1.5)
Cumulative effect	−15.3 (−24.4 to −6.1)**	−1.2 (−2.8 to 0.4)
<i>N</i>	3136	3136

Sources include EITC and CTC refund data from the Internal Revenue Service: Research, Applied Analytics, and Statistics Group; and child maltreatment data from the National Data Archive on Child Abuse and Neglect between January and April of years 2015 through 2018. Data are at the state-week-year level. Standard errors were clustered at the state level. Models included state, week, year, holiday fixed-effects, and state-specific linear time trends. EITC and CTC refund amounts were adjusted for inflation and expressed in 2018 dollars. Refund dollars were made comparable across states by dividing dollar amounts by the state child population. Each coefficient represents a change in the state-level child maltreatment report rate associated with an additional \$1000 in per-child EITC and CTC tax refunds.

* $P < .05$; ** $P < .01$.

SUPPLEMENTAL TABLE 5 EITC and CTC Tax Refund Effects on Child Maltreatment Report Rates; Analyses Excluding Either Post PATH Act Year 2017 or 2018

	Number of Child Maltreatment Reports Per 100 000 Children (95% CI)	Number of Substantiated Child Maltreatment Reports Per 100 000 Children (95% CI)	Number of Child Maltreatment Reports Per 100 000 Children (95% CI)	Number of Substantiated Child Maltreatment Reports Per 100 000 Children (95% CI)
Post-PATH Act years included	2017 only	2018 only	2017 only	2018 only
EITC and CTC	−4.9 (−7.1 to −2.7)**	−3.3 (−6.8 to 0.3)	−0.8 (−1.8 to 0.2)	−1.4 (−2.8 to 0.1)
EITC and CTC: 1 wk before	−4.3 (−6.7 to −1.9)**	−2.3 (−6.2 to 1.6)	−0.5 (−1.3 to 0.2)	0.0 (−0.8 to 0.7)
EITC and CTC: 2 wk before	−3.0 (−5.7 to −0.3)*	−3.9 (−7.7 to −0.2)*	0.1 (−0.7 to 1.0)	−0.4 (−1.3 to 0.5)
EITC and CTC: 3 wk before	−8.7 (−12.3 to −5.1)**	−5.4 (−8.6 to −2.3)**	−1.4 (−2.2 to −0.5)**	−0.5 (−1.2 to 0.2)
EITC and CTC: 4 wk before	−0.2 (−3.6 to 3.2)	−1.4 (−7.3 to 4.5)	0.8 (0.0 to 1.5)	0.3 (−0.6 to 1.2)
Cumulative effect	−21.1 (−29.3 to −12.8)**	−16.4 (−28.6 to −4.1)**	−1.9 (−3.8 to 0.1)	−2.0 (−4.2 to 0.2)
<i>N</i>	2352	2352	2352	2352

Sources include EITC and CTC refund data from the Internal Revenue Service: Research, Applied Analytics, and Statistics Group; and child maltreatment data from the National Data Archive on Child Abuse and Neglect between January and April of years 2015 through 2018. Data are at the state-week-year level. Standard errors were clustered at the state level. Models included state, week, year, and holiday fixed-effects. EITC and CTC refund amounts were adjusted for inflation and expressed in 2018 dollars. Refund dollars were made comparable across states by dividing dollar amounts by the state child population. Each coefficient represents a change in the state-level child maltreatment report rate associated with an additional \$1000 in per-child EITC and CTC tax refunds.

* $P < .05$; ** $P < .01$.