

## ADDENDUM FOR

### Effective Policy for Reducing Inequality: The Earned Income Tax Credit and the Distribution of Income

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The elasticity calculation in the published paper had an inconsistency in the terms used in the numerator and denominator. Here we revise the discussion of the elasticity (originally reported in the Online Appendix), present a supplementary table with descriptive statistics needed for replication of elasticity calculations, and provide a set of tables containing the original and corrected elasticities for each table in the published paper and appendix.

### Elasticity Calculation:

We implement the extensive margin elasticity in Chetty, Guren, Manoli and Weber (2013). We define this elasticity as

$$\epsilon = \frac{\ln(P_0^T + \beta) - \ln(P_0^T)}{\ln(I_1^{T,W} - I_1^{T,N}) - \ln(I_0^{T,W} - I_0^{T,N})},$$

where  $\beta$  is the estimated difference-in-difference estimate in equation (1) in the paper<sup>1</sup>,  $P_0^T$  is mean participation in the pre-treatment period (subscript 0) among the treated group (superscript T),  $I_1^{T,W}$  is mean after tax and transfer income (ATTI) in the post-treatment period among the treated group who are working (superscript W),  $I_1^{T,N}$  is mean ATTI in the post-treatment period among the treated group who are not working,  $I_0^{T,W}$  is mean ATTI in the pre-treatment period among the treated group who are working, and  $I_0^{T,N}$  is mean ATTI in the pre-treatment period among the treated group who are not working. Intuitively, we can think of this elasticity estimate as the log change in labor force participation due to the EITC over the log change in after tax and transfer income from working induced by the EITC. We modify this elasticity for use with poverty rates. In particular, we replace  $P_0^T$  with  $S_0^{T,100\%}$ , the share of taxpayers above 100% of the federal poverty threshold in the pre-treatment period, among the treated group. The result is an elasticity measuring tax unit movement out of poverty due to EITC induced changes in after tax and transfer income.

For the parameterized difference-in-difference model, an additional adjustment needs to be made. In that model, the model beta is the impact of a \$1000 of SIMEITC. We multiply the estimated coefficient by the change in mean SIMEITC in the treatment group compared to the control group. So if the estimated coefficient is 0.10 and the SIMEITC increases by \$500 with the OBRA93 expansion then  $\beta$  in the elasticity formula =  $0.10 \times 0.5 = 0.05$ .

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<sup>1</sup> In the published paper, for the  $\beta$  in the elasticity formula we used “Estimated impact per \$1,000 increase in the EITC”. Here we correct that formula to use the “total treatment effect” over the period, or the difference in difference estimate. Estimates in the denominator are realized (not simulated).

Here we provide two tables with the means necessary for calculating the elasticities in the paper.

### Means for Elasticity Calculations: Difference-in-Difference Models

	Treatment Group	
	1+ Children	2+ Children
<u>Main Sample: Table 1, App Table 7</u>		
Employment, pre period	0.750	0.674
Above 100% FPL, pre period	0.584	0.491
ATTI, pre-period, working	\$24,020	\$24,477
ATTI, pre-period, not working	\$11,331	\$12,563
ATTI, post-period, working	\$25,892	\$26,218
ATTI, post-period, not working	\$9,547	\$10,969
<u>All Education (App Table 3)</u>		
Employment, pre period	0.768	0.696
Above 100% FPL, pre period	0.620	0.531
ATTI, pre-period, working	\$26,218	\$26,884
ATTI, pre-period, not working	\$12,051	\$13,010
ATTI, post-period, working	\$28,251	\$28,221
ATTI, post-period, not working	\$9,946	\$11,206
<u>HS or less (App Table 3)</u>		
Employment, pre period	0.690	0.607
Above 100% FPL, pre period	0.498	0.401
ATTI, pre-period, working	\$21,757	\$21,912
ATTI, pre-period, not working	\$10,991	\$12,095
ATTI, post-period, working	\$23,304	\$23,337
ATTI, post-period, not working	\$9,329	\$10,686

*Note: Pre is 1991-1993 and Post is 1994-1998.*

**Additional Means Used for Elasticity Calculations: SIMEITC Models**

	1+ Children	No Children	2+ Children	1 Child
<u>Table 2 (pre=1991-93, post=1994-98)</u>				
SIMEITC, pre	0.676	0.000	0.679	0.672
SIMEITC, post	1.197	0.039	1.396	0.947
ATTI (same as Table 1)				
<u>Table 3 (pre=1984, post=1994-98)</u>				
Above 100% FPL, pre period	0.568	-	0.465	-
ATTI, pre-period, working	\$22,644	-	\$22,351	-
ATTI, pre-period, not working	\$11,979	-	\$13,050	-
ATTI, post-period (same as T1)				
SIMEITC, pre	0.169	0.000	0.177	0.159
SIMEITC, post	1.197	0.039	1.396	0.947
<u>App Table 4 (pre=1991-93, post=1994-98)</u>				
SIMEITC, pre	0.705	0.000	0.674	0.745
SIMEITC, post	1.303	0.036	1.475	1.089
ATTI (same as Table 1)				
<u>Appendix Table 6 (pre=1984, post=2013)</u>				
ATTI, pre-period (same as T3)				
ATTI, post-period, working	\$26,514	-	\$27,659	-
ATTI, post-period, not working	\$5,832	-	\$7,119	-
SIMEITC, pre	0.169	0.000	0.177	0.159
SIMEITC, post	1.273	0.039	1.519	0.923

Below are tables summarizing the original and corrected extensive margin elasticities for each table in the published paper and online appendix.

Table 1: Difference-in-Difference Estimates of OBRA 93 on ATT Income above 100 percent of the Federal Poverty Threshold

	0 vs 1+ Children			1 vs 2+ Children		
Original	0.65	0.53	0.72	0.54	0.42	0.51
Corrected	0.55	0.45	0.47	0.44	0.34	0.22

Table 2 : Parameterized DD Estimates of OBRA 93 on ATT Income above 100 Percent of the Federal Poverty Threshold

	0 vs 1+ Children		1 vs 2+ Children	
Original	0.46	0.51	0.43	0.50
Corrected	0.39	0.37	0.34	0.28

Table 3: Parameterized DD Estimates of TRA86, OBRA 90, and OBRA 93 on ATT Income above 100 Percent of the Federal Poverty Threshold

	0 vs 1+ Children		1 vs 2+ Children	
Original	0.43	0.46	0.51	0.49
Corrected	0.39	0.39	0.20	0.17

Appendix Table 3: Difference-in-Difference Estimates of OBRA93 on ATT Income Above 100% of the Poverty Threshold by Education Level

	0 vs 1+ Children		1 vs 2+ Children	
<i>All education levels</i>				
Original	0.43	0.57	0.42	0.40
Corrected	0.34	0.35	0.32	0.16
<i>HS grad or less</i>				
Original	0.56	0.83	0.46	0.54
Corrected	0.50	0.56	0.35	0.20

Appendix Table 4: Parameterized DD Estimates of OBRA93 on ATT Income Above 100% of the Poverty Threshold (1993 CPS)

	0 vs 1+ Children		1 vs 2+ Children	
Original	0.46	0.50	0.46	0.58
Corrected	0.40	0.41	0.35	0.36

Appendix Table 5: Relaxing Restrictions (Difference-in-Difference Estimates of OBRA93 on ATT Income Above 100% of the Federal Poverty Threshold)

	Baseline		Add 21-23 yr olds	Add disabled, in school	Remove some coll			
Original	0.53	0.72	0.67	0.96	0.71	0.92	0.56	0.87
Corrected	0.45	0.47	0.54	0.58	0.55	0.52	0.49	0.58

Appendix Table 6: Parameterized DD Estimates of TRA86, OBRA90 and OBRA93 on ATT Income Above 100% of the Federal Poverty Threshold, 1984-2013

	0 vs 1+ Children		1 vs 2+ Children	
Original	0.31	0.26	0.34	0.28
Corrected	0.41	0.29	0.26	0.18

Appendix Table 7: Difference-in-Difference Estimates of OBRA93 on Any Work During the Year

	0 vs 1+ Children		1 vs 2+ Children	
Original	0.36	0.37	0.45	0.32
Corrected	0.31	0.24	0.35	0.14