Online Appendix: Corrected Tables for "The Impact of Family Income on Child Achievement: Evidence from the Earned Income Tax Credit"

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Table 1: Family Income, EITC Eligibility, and EITC Payments over Time (in Year 2000 $)

Year (i)	Number of Children (ii)	Median Lagged Family Income (iii)	Fraction of Children in EITC Eligible Families (iv)	Median EITC Payment (if Eligible) (v)	EITC Payment as a Fraction of Family Income (if Eligible) 1 Child Families (vi)	2+ Child Families (vii)
1988	1,187	24,824	0.31	547	0.05	0.05
1990	1,187	26,397	0.35	718	0.05	0.05
1992	1,648	28,464	0.31	833	0.06	0.06
1994	1,655	29,242	0.35	1,124	0.08	0.07
1996	1,682	33,588	0.34	1,917	0.09	0.11
1998	1,349	36,684	0.34	2,035	0.10	0.12
2000	1,088	38,399	0.34	2,226	0.10	0.13
All	9,796	31,043	0.34	1,129	0.07	0.08

Notes: Data are from the Children of the NLSY linked to their mothers in the main NLSY79. The unit of observation is a child. The sample is restricted to those used in our baseline IV analysis in Table 3. Children must have valid math and reading PIAT scores, child control measures in panel A of Table A1, and family income measures for the reported year. Children must also have at least two years of valid observations to be included. Year in column (i) refers to the NLSY survey year; income and EITC payment variables refer to the previous year's income. Family income includes tax payments and tax credits (including the EITC); the sources for family income include earned income, unearned income, and non-taxable income.

Table 2: OLS Estimates of the Effect of Family Income on Math-Reading Achievement

	(i)	(ii)	(iii)	(iv)
A. Estimated in Levels				
Current Income	0.0048**	0.0031**	0.0021	0.0023
	(0.0011)	(0.0014)	(0.0016)	(0.0015)
Lagged Income (a-1)		0.0024	0.0024	
		(0.0016)	(0.0024)	
Lagged Income (a-2)			0.0013	
			(0.0019)	
Sum of (a-1) and (a-2) Lagged Income				0.0018**
				(0.0009)
Medium-Term Effect of Increasing	0.0048**	0.0055**	0.0058**	0.0058**
Income by $1,000/Year for 3 Years	(0.0011)	(0.0013)	(0.0015)	(0.0015)
B. Estimated in Differences				
Current Income	0.0012*	0.0016*	0.0010	0.0016*
	(0.0007)	(0.0008)	(0.0010)	(0.0009)
Lagged Income (a-1)		0.0006	0.0014	
		(0.0009)	(0.0011)	
Lagged Income (a-2)			-0.0008	
			(0.0009)	
Sum of (a-1) and (a-2) Lagged Income				0.0002
				(0.0005)
Medium-Term Effect of Increasing	0.0012*	0.0022**	0.0016	0.0019
Income by $1,000/Year for 3 Years	(0.0007)	(0.0010)	(0.0013)	(0.0013)
Sample Size (for both panels)	8,609	6,543	5,019	5,019

Notes: Child achievement is a normalized average of math and reading scores. Income is measured in $1,000 of year 2000 dollars. Panel A 'levels' regressions (equation 1 in the paper) control for all variables listed in Appendix Table A1. Panel B 'difference' regressions (equation 2 in the paper) use two-period differences and control for baseline variables in Panel A of Table A1. Samples include children taking a math or reading PIAT test in the 1988 survey year or later. 'Medium-Term Effect' is given by the sum of current and all estimated lagged income coefficients in columns (i)-(iii) and the sum of the coefficient on current income plus twice the coefficient on the sum of lagged income measures in column (iv). Standard errors are reported in parentheses and are clustered at the family level. ** Significant at the 5% level, * significant at the 10% level.

Table 3: Baseline IV Estimates of 'Contemporaneous Effects' Model

	Combined Math and Reading (i)	Reading Recognition (ii)	Reading Comprehension (iii)	Math (iv)
Current Income	0.0411**	0.0296**	0.0391**	0.0362**
	(0.0131)	(0.0128)	(0.0163)	(0.0158)
1st Stage Coefficient on Instrument	1.758**	1.758**	1.758**	1.758**
	(0.361)	(0.361)	(0.361)	(0.361)

Notes: Income is measured in $1,000 of year 2000 dollars. All specifications control for 'baseline variables' listed in Appendix Table A1, an indicator for positive lagged pre-tax income, and a fifth order polynomial in lagged pre-tax income. All models are estimated in two-year differences to account for unobserved child fixed effects. See the Online Appendix for all other first- and second-stage coefficient estimates. Sample size is 8,609 for all the columns. Standard errors are reported in parentheses and are clustered at the family level. ** Significant at the 5% level, * significant at the 10% level.

Table 4: IV Estimates of 'Contemporaneous Effects' Model Accounting for Time Trends and Time-Varying State Policies (Math-Reading Achievement)

	Effect of Current Income	1st Stage Coefficient on Instrument
A. Year Dummies	0.0446** (0.0200)	1.167** (0.361)
B. Linear Time Trend	0.0623** (0.0222)	1.188** (0.345)
C. Linear Time Trend Interacted with Control Function	0.0597** (0.0240)	1.567** (0.509)
D. State School Accountability Policies Interacted with Control Function	0.0358** (0.0129)	1.801** (0.387)
E. State Welfare Policies Interacted with Control Function	0.0448** (0.0149)	1.854** (0.428)
F. Time Trend, Accountability and Welfare Policies Interacted with Control Function	0.0479** (0.0221)	1.629** (0.540)

Notes: Child achievement is a normalized average of math and reading scores. Income is measured in $1,000 of year 2000 dollars. All specifications control for 'baseline variables' listed in Appendix Table A1. All specifications are estimated in two-year differences to account for unobserved child fixed effects. Sample size is 8,609 for all specifications. Standard errors are reported in parentheses and are clustered at the family level. ** Significant at the 5% level, * significant at the 10% level.

Table 5: IV Estimates of Achievement Models with Lasting Income Effects

	(i)	(ii)	(iii)
Current Income	0.0351*	0.0539	0.0429**
	(0.0203)	(0.0455)	(0.0172)
Lagged Income (a-1)	0.0129	0.0031	
	(0.0361)	(0.0488)	
Lagged Income (a-2)		0.0217	
		(0.0344)	
Sum of (a-1) and (a-2) Lagged Income			0.0159
			(0.0180)
Medium-Term Effect of Increasing	0.0479*	0.0786	0.0746*
Income by $1,000/Year for 3 Years	(0.0249)	(0.0526)	(0.0440)
F-statistics from 1st Stage	11.02, 5.42	5.76, 2.74, 3.94	8.40, 2.85
Sample Size	6,543	5,019	5,019

Notes: Child achievement is a normalized average of math and reading scores. Income is measured in $1,000 of year 2000 dollars. All specifications control for 'baseline variables' listed in Appendix Table A1, an indicator for positive lagged pre-tax income, and a fifth order polynomial in lagged pre-tax income. All models are estimated in two-year differences to account for unobserved child fixed effects. 'Medium-Term Effect' is given by the sum of current and all estimated lagged income coefficients in columns (i) and (ii) and the sum of the coefficient on current income plus twice the coefficient on the sum of lagged income measures in column (iii). F-statistics are for tests that all instruments equal zero in first-stage equations. See the Online Appendix for all other first- and second-stage coefficient estimates. Standard errors are reported in parentheses and are clustered at the family level. ** Significant at the 5% level, * significant at the 10% level.

Table 6: IV Estimates of 'Contemporaneous Effects' Model for Various Subgroups

	Mother's Education	Race	Mother's Marital Status	Mother's AFQT	Child's Age	Child's Gender
	High School or Less	Black or Hispanic	Not Married	Low AFQT	Age ≤ 12	Male
Effect of Current Income	0.0360**	0.0523**	0.0494**	0.0428**	0.0481**	0.0518**
	(0.0122)	(0.0157)	(0.0208)	(0.0162)	(0.0200)	(0.0195)
1st Stage Coefficient on Instrument	1.930**	1.851**	1.340**	1.669**	1.704**	1.721**
	(0.382)	(0.413)	(0.381)	(0.409)	(0.460)	(0.457)
'Percent in EITC Range'	56.4	62.8	90.1	64.9	46.4	49.6
Sample Size	6,253	4,602	2,977	4,311	4,654	4,261
	Some College or More	White (not Hisp.)	Married	High AFQT	Age ≥ 12	Female
Effect of Current Income	0.4240	0.0090	0.0279	0.0366	0.0349**	0.0291*
	(2.0237)	(0.0210)	(0.0172)	(0.0254)	(0.0158)	(0.0157)
1st Stage Coefficient on Instrument	0.218	1.594**	2.352**	1.726**	1.808**	1.797**
	(1.048)	(0.755)	(0.849)	(0.777)	(0.432)	(0.453)
'Percent in EITC Range'	30.8	34.1	27.9	33.3	53.0	49.3
Sample Size	2,356	4,007	5,632	4,040	3,955	4,348

Notes: Income is measured in $1,000 of year 2000 dollars. All specifications control for 'baseline variables' listed in Appendix Table A1 and are estimated in two-year differences to account for unobserved child fixed effects. 'Percent in EITC Range' is calculated as the fraction with lagged pre-tax income less than or equal to $30,000. Standard errors are reported in parentheses and are clustered at the family level. ** Significant at the 5% level, * significant at the 10% level.

Table 7: Robustness of IV Estimates for 'Contemporaneous Effects' Model

	Effect on Child Achievement	1st Stage Coefficient on Instrument
A. Additional Control Variables		
Effect of Current Income	0.0484**	1.405**
	(0.0181)	(0.376)
B. No Control Variables (Except Control Function, i.e., Polynomial in Lagged Earnings)		
Effect of Current Income	0.0443**	1.811**
	(0.0130)	(0.362)
C. Interact Control Function with Baseline Regressors		
Effect of Current Income	0.0410**	1.785**
	(0.0128)	(0.367)
D. Include State Dummies with Baseline Regressors		
Effect of Current Income	0.0426**	1.679**
	(0.0140)	(0.369)
E. Use NLSY-supplied Weights		
Effect of Current Income	0.0354**	1.642**
	(0.0158)	(0.443)
F. Log Family Income Measure		
Effect of Log Current Income	0.6993**	0.103**
	(0.2573)	(0.029)
G. Controls for Mother's Labor Market Participation and Work Hours		
Effect of Current Income	0.0526**	1.337**
	(0.0191)	(0.349)
Effect of Mother's Participation	-0.0137	
	(0.0349)	
Effect of Mother's Work Hours (in 100's)	-0.0169**	
	(0.0061)	

Notes: Specifications identical to those for 'Combined Math and Reading' in Table 3 with the noted exceptions. Specification A controls for all variables in Appendix Table A1 and state school accountability and welfare policies (in addition to the control function in lagged pre-tax income). Specification B controls only for the control function. Specification C interacts the control function with all baseline regressors. Specification D includes state indicators along with all baseline regressors. Specification E uses the NLSY-supplied weights for mothers (includes baseline controls and control function). Specification F uses log family income rather than income measured in levels (includes baseline controls and control function). Specification G controls for mother's labor market participation and hours worked in addition to baseline regressors and control function. Sample sizes are 8,609 for Specifications A–F and 8,239 for Specification G. Standard errors are reported in parentheses and are clustered at the family level. ** Significant at the 5% level, * significant at the 10% level.