Online Appendix Materials

Table A.1: Descriptive Statistics for Births in Rhode Island

Variable		All Births (1)	Births Between 1,300 - 1,700 g (2)	p-value (3)
Child Demographics	White (=1)	0.715	0.665	0.000
		(0.451)	(0.472)	
	Black (=1)	0.090	0.129	0.000
		(0.286)	(0.335)	
	Hispanic (=1)	0.129	0.149	0.005
		(0.335)	(0.356)	
	Asian (=1)	0.024	0.024	0.958
		(0.153)	(0.152)	
	Other (=1)	0.042	0.043	0.040
		(0.201)	(0.180)	
	Gestational Age (Weeks)	38.696	31.819	0.000
		(3.145)	(3.682)	
Maternal Characteristics	Age	28.261	28.920	0.000
		(6.238)	(7.228)	
	Married (=1)	0.655	0.563	0.000
		(0.475)	(0.496)	
	Less than High School (=1)	0.117	0.140	0.000
		(0.322)	(0.347)	
	High School (=1)	0.216	0.199	0.036
		(0.412)	(0.399)	
	College or Higher (=1)	0.332	0.275	0.000
		(0.471)	(0.446)	
	Smokes (=1)	0.168	0.229	0.000
		(0.374)	(0.420)	
	Drinks (=1)	0.024	0.027	0.477
		(0.152)	(0.161)	
Economic Self-Sufficiency (Prior to Birth)	Medicaid (=1)	0.349	0.406	0.011
		(0.477)	(0.492)	
	SNAP (=1)	0.205	0.261	0.003
		(0.404)	(0.440)	
	TANF (=1)	0.073	0.101	0.019
		(0.260)	(0.301)	
	HH Earnings ($) in RI, Annual	36,784	34,288	0.014
		(46,802)	(47,698)	
	Observations	407,697	2,726	

Notes: All self-sufficiency measures (Medicaid, SNAP, and TANF) are defined for the mother using the four quarters prior to the child's birth. Annual household earnings are defined as the sum of the mother's and father's earnings. A father is only observed if the mother is married at the time of birth. The reported p-value in column (3) is based on the diference in means between births in the 1,300 and 1,700 gram range and births outside the 1,300 and 1,700 gram range.

Table A.2: Rhode Island HCUP Analysis

	Mean for BW > 1,500 grams (1)	RD Est. BW < 1,500 grams (2)	Observations (3)	Birth Cohort (4)
Panel A: Baseline Balance Test				
White (=1)	0.727	-0.054	1,492	2002-2015
		(0.049)		
Medicaid Birth (=1)	0.505	-0.019	1,677	2002-2015
		(0.052)		
Lowest Inc. Quartile (=1)	0.330	-0.053	1,188	2006-2015
		(0.057)		
Joint *p*-value		0.565		
Panel B: Impacts for HCUP Outcomes				
Days in the NICU	9.925	3.427**	1,245	2006-2015
		(1.508)		
Length of Stay	24.25	0.192	1,724	2002-2015
		(1.818)		
Total Charges ($)	116,965	3,470.24	1,724	2002-2015
		(10,793.38)		

Notes: Column 1 reports the mean of the dependent variable for children born above 1,500 grams. Column 2 provides estimates of the impact of crossing the 1,500 gram threshold using Equation 1. Standard errors clustered at the gram level are presented in parentheses. Columns 3 and 4 report the total number of observations and describe the birth cohorts included in the analysis. The sample for all results includes children born with birth weight between 1,300 and 1,700 grams (excluding children born within 3 grams of the 1,500 gram threshold). The HCUP data for Rhode Island is available from 2002-2015. Statistical significance is denoted by ***$p<0.01$; **$p<0.05$; *$p<0.10$.

Table A.3: Baseline Balance Test

Variable		Mean for BW > 1,500 grams (1)	RD Est. BW < 1,500 grams (2)	Observations (3)
Child Demographics	White (=1)	0.673	-0.022 (0.052)	2,237
	Black (=1)	0.137	0.024 (0.028)	2,237
	Hispanic (=1)	0.134	0.001 (0.047)	2,237
	Asian (=1)	0.023	0.001 (0.017)	2,237
	Other (=1)	0.033	-0.004 (0.019)	2,237
	Gestational Age (Weeks)	32.381	-0.131 (0.471)	2,263
Maternal Characteristics	Age	28.75	0.453 (0.617)	2,399
	Married (=1)	0.559	0.046 (0.051)	2,722
	Less than High School (=1)	0.037	-0.006 (0.017)	2,726
	High School (=1)	0.198	-0.001 (0.065)	2,726
	College or Higher (=1)	0.157	0.055 (0.056)	2,726
	Smokes (=1)	0.245	-0.090* (0.049)	1,170
	Drinks (=1)	0.031	-0.007 (0.019)	1,166
Economic Self-Sufficiency (Prior to Birth)	Medicaid (=1)	0.381	-0.000 (0.101)	448
	SNAP (=1)	0.230	0.042 (0.101)	448
	TANF (=1)	0.084	-0.013 (0.064)	477
	HH Earnings ($) in RI, Annual	34,043	6,658.696 (4,329.335)	2,077
Joint Test p-value			0.932	

Notes: Column 1 reports the mean of the dependent variable for children born above 1,500 grams. Column 2 provides estimates of the impact of crossing the 1,500 gram threshold using Equation 1. Standard errors clustered at the gram level are presented in parentheses. Columns 3 and 4 report the total number of observations and describe the birth cohorts included in the analysis. The sample for all results includes children born with birth weight between 1,300 and 1,700 grams (excluding children born within 3 grams of the 1,500 gram threshold). All self-sufficiency measures (Medicaid, SNAP, and TANF) are defined for the mother using the four quarters prior to the child's birth. Annual household earnings are defined as the sum of the mother's and father's earnings. A father is only observed if the mother is married at the time of birth. Statistical significance is denoted by ***$p<0.01$; **$p<0.05$; *$p<0.10$.

Table A.4: Robustness Check - Impacts for Development and Education Outcomes

| | Linear RD Model | | | Quadratic RD Model | | | |
| | RD Est. BW < 1,500 grams | Observations | Bandwidth | RD Est. BW < 1,500 grams | Observations | Bandwidth | Birth Cohort |
Variable	(1)	(2)	(3)	(1)	(2)	(3)	
SSI, IEP, and Grade Rep.							
SSI Age 0	0.004	1,111	(1372-1628)	0.006	2,018	(1272-1728)	1996-2015
	(0.019)			(0.022)			
SSI Ages 0 - 3	-0.009	972	(1370-1630)	-0.006	1,683	(1285-1715)	1996-2012
	(0.025)			(0.029)			
Years on IEP (1-4)	-0.256	636	(1291-1709)	-0.298	1,169	(1144-1856)	1996-2006
	(0.248)			(0.294)			
Grade Repetition (1-4)	-0.228***	376	(1370-1630)	-0.214***	1,076	(1170-1830)	1996-2006
	(0.044)			(0.043)			
Avg. Std. Test Score							
3rd Grade	0.438***	677	(1262-1738)	0.266	689	(1252-1748)	1996-2005
	(0.139)			(0.209)			
5th Grade	0.342**	642	(1263-1737)	0.347**	1,218	(1093-1907)	1994-2003
	(0.139)			(0.164)			
8th Grade	0.358**	515	(1296-1704)	0.402**	830	(1170-1830)	1990-2000
	(0.160)			(0.199)			
All (3-8)	0.371***	2,818	(1316-1684)	0.391***	6,459	(1126-1874)	1990-2005
	(0.127)			(0.140)			

Notes: Table presents RD analysis using the optimal bandwidth selection procedure from Calonico et al. (2014). We also follow Calonico et al. (2014) to calculate robust standard errors. Statistical significance is denoted by *** $p<0.01$; **$p<0.05$; *$p<0.10$.

Table A.5: Robustness Check - Impacts for High School and Higher Education Outcomes

| Variable | Linear RD Model | | | Quadratic RD Model | | | Birth Cohort |
| | RD Est. BW < 1,500 grams | Observations | Bandwidth | RD Est. BW < 1,500 grams | Observations | Bandwidth | |
	(1)	(2)	(3)	(1)	(2)	(3)	
Disciplinary Off. (9-12)	-0.081 (0.059)	419	(1292-1708)	-0.133** (0.063)	958	(1097-1903)	1988-1998
College Prep. Index	0.185 (0.309)	714	(1223-1777)	-0.102 (0.419)	947	(1149-1851)	1993-2001
Any College Enroll. by 22	0.172*** (0.059)	596	(1220-1780)	0.121 (0.077)	596	(1220-1780)	1984-1994
4-Year College Enroll. by 22	0.217*** (0.069)	655	(1204-1796)	0.235*** (0.084)	1,094	(1062-1938)	1984-1994

Notes: Table presents RD analysis using the optimal bandwidth selection procedure from Calonico et al. (2014). We also follows Calonico et al. (2014) to calculate robust standard errors. Statistical significance is denoted by *** $p<0.01$; **$p<0.05$; *$p<0.10$.

Table A.6: Robustness Check - Impacts for Social Program Expenditure by Age

	Linear RD Model			Quadratic RD Model			
	RD Est. BW < 1,500 grams	Observations	Bandwidth	RD Est. BW < 1,500 grams	Observations	Bandwidth	Birth Cohort
Variable	(1)	(2)	(3)	(1)	(2)	(3)	
Panel A: Any Expenditures (=1)							
By Age 10	-0.054 (0.054)	1,602	(1185-1815)	-0.018 (0.073)	1,811	(1136-1864)	1997-2006
By Age 12	-0.049 (0.052)	1,693	(1081-1919)	-0.017 (0.085)	1,280	(1176-1824)	1997-2004
By Age 14	-0.052 (0.059)	1,430	(1029-1971)	-0.147* (0.081)	1,303	(1072-1928)	1997-2002
Panel B: Total Expenditures ($)							
By Age 10	-17,103 (17,517)	788	(1331-1669)	-22,086 (23,125)	1,168	(1262-1738)	1997-2006
By Age 12	-43,253* (25,316)	692	(1318-1682)	-46,623 (33,777)	1,051	(1225-1775)	1997-2004
By Age 14	-56,634* (32,320)	525	(1304-1696)	-52,871 (41,355)	912	(1181-1819)	1997-2002
*Panel C: Total Expenditures ($)	Any Expenditures (=1)*							
By Age 10	-41,476 (27,021)	434	(1345-1655)	-43,883 (32,588)	814	(1234-1766)	1997-2006
By Age 12	-71,118* (37,207)	428	(1304-1696)	-76,593* (39,632)	891	(1130-1870)	1997-2004
By Age 14	-61,533* (34,886)	287	(1310-1690)	-48,905 (47,689)	460	(1218-1782)	1997-2002

Notes: Table presents RD analysis using the optimal bandwidth selection procedure from Calonico et al. (2014). We also follow Calonico et al. (2014) to calculate robust standard errors. Statistical significance is denoted by *** $p<0.01$; **$p<0.05$; *$p<0.10$.

Table A.7: Robustness Check - Impacts for Early Childhood Investment Outcomes

Variable	Linear RD Model			Quadratic RD Model			Birth Cohort
	RD Est. BW < 1,500 grams	Observations	Bandwidth	RD Est. BW < 1,500 grams	Observations	Bandwidth	
	(1)	(2)	(3)	(1)	(2)	(3)	
Maternal Care Index	0.111	550	(1247-1753)	-0.004	671	(1194-1806)	2002-2014
	0.150			0.185			
Maternal Stress Index	-0.12	534	(1254-1746)	-0.079	770	(1160-1840)	2004-2014
	0.324			0.403			
Maternal Employment Ages 0-2 (=1)	-0.011	3,473	(1135-1865)	-0.011	6,418	(915.1-2085)	1991-2014
	0.035			0.041			
Avg. Maternal Earn. Ages 0-2 ($)	715.5	2,031	(1274-1726)	-635.5	3,709	(1120-1880)	1991-2014
	(2,042)			(2,436)			
Medicaid Enrollment Ages 0-2 (=1)	-0.026	3,774	(1223-1777)	-0.03	5,616	(1119-1881)	1989-2014
	0.057			0.078			
Medicaid Exp. Ages 0-2 ($)	-2520	2,143	(1193-1807)	-6636	2,386	(1168-1832)	1984-2016
	(5,972)			(8,397)			
Birth Within 3 Years (=1)	0.037	4,131	(1146-1854)	0.073**	4,130	(1146-1854)	1989-2014
	0.023			0.034			

Notes: Table presents RD analysis using the optimal bandwidth selection procedure from Calonico et al. (2014). We also follow Calonico et al. (2014) to calculate robust standard errors. Statistical significance is denoted by *** $p<0.01$; **$p<0.05$; *$p<0.10$.

Table A.8: Robustness Check - Impacts for School Based Mechanisms

	Linear RD Model			Quadratic RD Model			
	RD Est. BW < 1,500 grams	Observations	Bandwidth	RD Est. BW < 1,500 grams	Observations	Bandwidth	Birth Cohort
Variable	(1)	(2)	(3)	(1)	(2)	(3)	
Value Added (Elementary)	0.013* (0.008)	2,361	(1228-1772)	0.013 (0.009)	3,461	(1125-1875)	1993-2006
Value Added (Middle)	0.021* (0.012)	1,380	(1314-1686)	0.026* (0.015)	2,343	(1212-1788)	1990-2002
Value Added (College Enrollment)	0.000 (0.011)	1,140	(1225-1775)	-0.007 (0.014)	1,714	(1117-1883)	1984-2001

Notes: Table presents RD analysis using the optimal bandwidth selection procedure from Calonico et al. (2014). We also follow Calonico et al. (2014) to calculate robust standard errors. Statistical significance is denoted by *** $p<0.01$; **$p<0.05$; *$p<0.10$.

Table A.9: Impacts for Test Score Outcomes Restricted to 2002-2015 Births

	Mean for BW > 1,500 grams	RD Est. BW < 1,500 grams	Observations	Birth Cohort
	(1)	(2)	(3)	(4)
Avg. Std. Test Score				
3rd Grade	0.153	0.476*	222	2002-2005
		(0.280)		
5th Grade	-0.065	0.172	101	2002-2003
		(0.389)		
All (3-5)	-0.116	0.295	483	2002-2005
		(0.285)		

Notes: Column 1 reports the mean of the dependent variable for children born above 1,500 grams. Column 2 provides estimates of the impact of crossing the 1,500 gram threshold using Equation 1. Standard errors clustered at the gram level are presented in parentheses. Columns 3 and 4 report the total number of observations and describe the birth cohorts included in the analysis. The sample for all results includes children born with birth weight between 1,300 and 1,700 grams (excluding children born within 3 grams of the 1,500 gram threshold). Average test scores for the birth cohorts born in the HCUP data range (2002-2015) are only available for grades 3 through 5. Statistical significance is denoted by ***$p<0.01$; **$p<0.05$; *$p<0.10$.

Table A.10: Attrition Analysis

	Mean for BW > 1,500 grams (1)	RD Est. BW < 1,500 grams (2)	Observations (3)	Birth Cohort (4)
Has 3rd Grade Test Score (=1)	0.604	-0.080 (0.068)	940	1996-2005
Has 5th Grade Test Score (=1)	0.621	-0.098 (0.076)	878	1994-2003
Has 8th Grade Test Score (=1)	0.567	-0.104* (0.055)	894	1990-2000
Has Any Test Score (3-8) (=1)	0.634	-0.077 (0.048)	1,366	1990-2005
Enrolled in Public High School (=1)	0.698	0.026 (0.063)	676	1986-2001

Notes: Column 1 reports the mean of the dependent variable for children born above 1,500 grams. Column 2 provides estimates of the impact of crossing the 1,500 gram threshold using Equation 1. Standard errors clustered at the gram level are presented in parentheses. Columns 3 and 4 report the total number of observations and describe the birth cohorts included in the analysis. The sample for all results includes children born with birth weight between 1,300 and 1,700 grams (excluding children born within 3 grams of the 1,500-threshold.) Statistical significance is denoted by *** $p<0.01$; **$p<0.05$; *$p<0.10$.

Table A.11: Examining Impacts on Cutoffs for Selected Outcomes (Cutoffs Between 1,500 and 3,000 grams)

Gram Threshold	3rd Grade Avg. Std. Test Score (1)	Grade Repetition (1-4) (2)	Disciplinary Offenses (9-12) (3)	Any College Enrollment by Age 22 (4)	Total Social Expend. by Age 14 (5)
1500	0.444***	-0.131***	-0.131**	0.171**	-66,997.351**
	(0.162)	(0.039)	(0.061)	(0.067)	(33,622.243)
1600	-0.21	0.065**	-0.039	-0.148	-34,816.011
	(0.143)	(0.031)	(0.066)	(0.089)	(44,008.394)
1700	0.142	-0.032	0.118**	-0.14	46,948.115
	(0.200)	(0.040)	(0.054)	(0.089)	(57,363.462)
1800	0.123	0.011	-0.068*	0.139**	-43,018.037*
	(0.100)	(0.029)	(0.041)	(0.061)	(21,751.957)
1900	-0.027	0.012	0.018	-0.076	-8,245.931
	(0.079)	(0.031)	(0.054)	(0.06)	(16,621.581)
2000	-0.055	0.075***	-0.088**	-0.009	28,473.172**
	(0.08)	(0.024)	(0.037)	(0.05)	(11,894.619)
2100	-0.081	-0.009	0.032	0.058	-17,838.113
	(0.074)	(0.022)	(0.033)	(0.044)	(12,909.573)
2200	-0.091	-0.002	-0.039	-0.009	2,403.226
	(0.056)	(0.02)	(0.027)	(0.038)	(12,483.468)
2300	0.026	0.005	-0.027	0.03	-3919.248
	(0.056)	(0.016)	(0.021)	(0.030)	(14,430.155)
2400	-0.034	0.036***	-0.025	-0.051***	9729.01
	(0.046)	(0.013)	(0.023)	(0.019)	(11,273.191)
2500	0.06	-0.014	0.015	0.008	-11,117.321
	(0.041)	(0.012)	(0.018)	(0.013)	(11,044.726)
2600	-0.065**	0.017	-0.001	0.02	-2,313.72
	(0.033)	(0.012)	(0.015)	(0.016)	(7,264.108)
2700	0.041	-0.002	-0.024	-0.003	3,328.503
	(0.035)	(0.012)	(0.017)	(0.013)	(7507.523)
2800	-0.007	-0.006	0.018	-0.013	-3,759.513
	(0.039)	(0.008)	(0.015)	(0.022)	(6,346.463)
2900	-0.027	-0.003	-0.007	0.017	13,237.808***
	(0.026)	(0.008)	(0.014)	(0.014)	(3,882.636)
3000	0.021	-0.011	-0.01	-0.013	-4,185.27
	(0.027)	(0.011)	(0.013)	(0.019)	(5,273.798)

Notes: Each row provides estimates of the impact of crossing a birth weight threshold defined at 100-gram intervals between 1,500 and 3,000 grams using Equation 1. The first row replicates the main estimates of the impact of crossing the 1,500 gram threshold (as reported in Tables 2, 3, and 4). Standard errors clustered at the gram level are presented in parentheses. The sample for all results includes children born with birth weight within 200 grams of the specified 100-gram threshold (excluding children born within 3 grams of the gram threshold). Statistical significance is denoted by ***$p<0.01$; **$p<0.05$; *$p<0.10$.

Table A.12: Impacts for Selected Outcomes by Mother's Education Level

	Mean for BW > 1,500 grams (1)	RD Est. BW < 1,500 grams (2)	Observations (3)	Birth Cohort (4)
Panel A: Mother's Education Some College or Above				
3rd Grade Avg. Std. Test Score	0.166	0.011 (0.334)	205	1996-2004
Grade Repetition (1-4)	0.039	-0.063 (0.051)	204	1996-2004
Disciplinary Offenses (9-12)	0.122	-0.09 (0.086)	159	1988-1998
Any College Enrollment by Age 22	0.781	0.246** (0.105)	122	1985-1994
Total Social Expenditure by Age 14	65,267	13,612 (44,225)	246	1997-2002
Panel B: Mother's Education High School or Lower				
3rd Grade Avg. Std. Test Score	-0.62	0.130 (0.226)	234	1996-2004
Grade Repetition (1-4)	0.186	-0.142 (0.112)	239	1996-2004
Disciplinary Offenses (9-12)	0.226	-0.124 (0.075)	209	1988-1998
Any College Enrollment by Age 22	0.432	0.149* (0.081)	274	1985-1994
Total Social Expenditure by Age 14	216,133	-59,901 (59,692)	249	1997-2002

Notes: Column 1 reports the mean of the dependent variable for children born above 1,500 grams. Column 2 provides estimates of the impact of crossing the 1,500 gram threshold using Equation 1. Standard errors at the gram level are presented in parentheses. Columns 3 and 4 report the total number of observations and describe the birth cohorts included in the analysis. The sample for all results includes children born with birth weight between 1,300 and 1,700 grams (excluding children born within 3 grams of the 1,500 gram threshold). Statistical significance is denoted by ***$p<0.01$; **$p<0.05$; *$p<0.10$.

Table A.13: Impacts for School Based Mechanisms

	Mean for BW > 1,500 grams (1)	RD Est. BW < 1,500 grams (2)	Observations (3)	Birth Cohort (4)
Value Added (Elementary)	-0.029	0.014 (0.009)	1,637	1993-2006
Value Added (Middle)	-0.029	0.013 (0.010)	1,489	1990-2002
Value Added (College Enrollment)	-0.022	-0.007 (0.012)	799	1984-2001

Notes: Column 1 reports the mean of the dependent variable for children born above 1,500 grams. Column 2 provides estimates of the impact of crossing the 1,500 gram threshold using Equation 1. Standard errors clustered at the gram level are presented in parentheses. Columns 3 and 4 report the total number of observations and describe the birth cohorts included in the analysis. The sample for all results includes children born with birth weight between 1,300 and 1,700 grams (excluding children born within 3 grams of the 1,500-threshold.) We construct value-added as follows. For test scores in elementary and middle school, we regress average standardized test scores on lagged test scores (including their square and cube), indicators for a student's race, gender, IEP status, Limited English Proficiency status, and Free and Reduced Price Lunch status. For college enrollment, we regress an indicator of whether a student enrolled in any college by the age of 22 on eighth grade standardized test scores (averaged over math and reading), indicators for a student's race, gender, IEP status, and Free and Reduced Price Lunch status. Based on these regressions, we use the school-level mean of the resulting residuals. Statistical significance is denoted by *** $p<0.01$; **$p<0.05$; *$p<0.10$.

Figure A.1: Density of Birth Weight Around 1,500 Grams
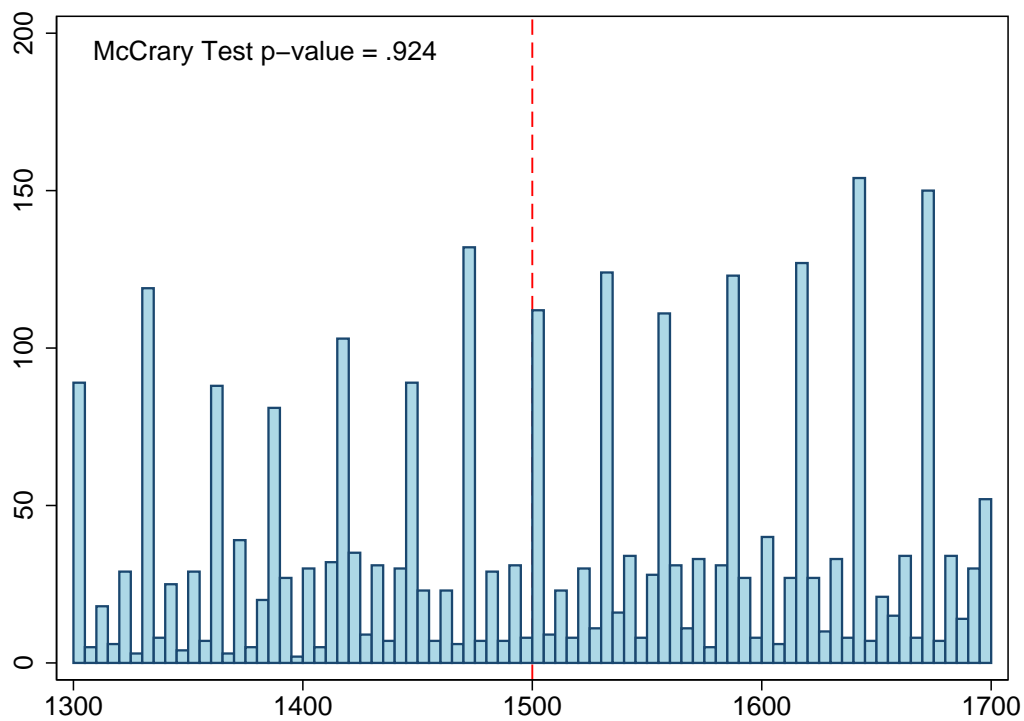
Notes: This figure shows a histogram of the birth weight distribution be-
tween 1300 and 1700 grams for all births in Rhode Island (1984-2016).
The bins have a width of 5 grams. We conduct a McCrary (2008) test for
a discontinuity in the density of the running variable at the 1,500 gram
threshold. We fail to reject the null hypothesis of continuity with $p <
0.924$.

Figure A.2: Impacts for Development and Education Outcomes
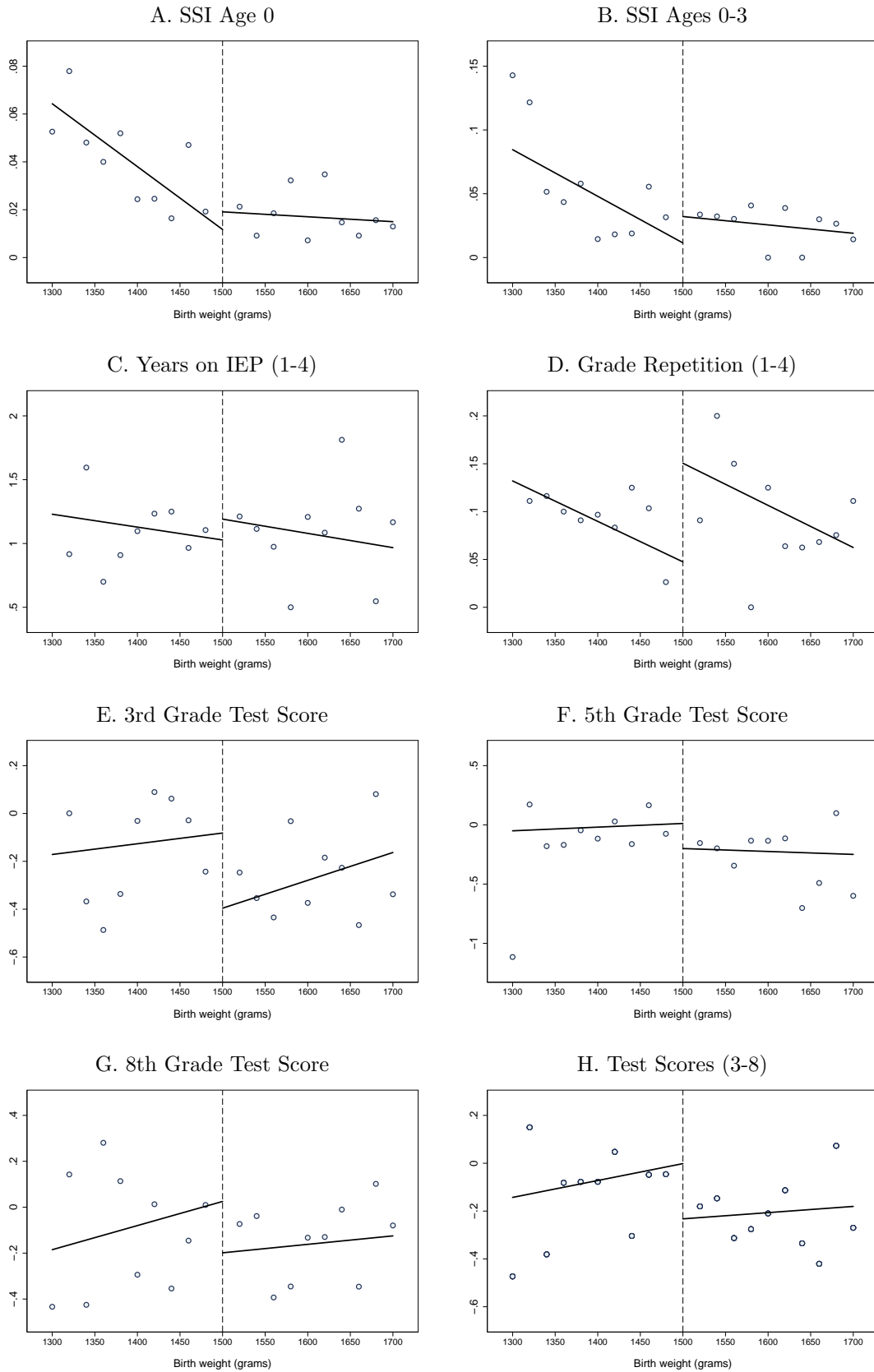
Notes: Each panel shows the relationship between birth weight and various post-birth outcomes. Dots represents means within 20 gram bins of the running variable. The dark lines are predictions from a linear regression using the individual-level data.

Figure A.3: Impacts for High School and Higher Education Outcomes

A. Disciplinary Offenses (9-12)
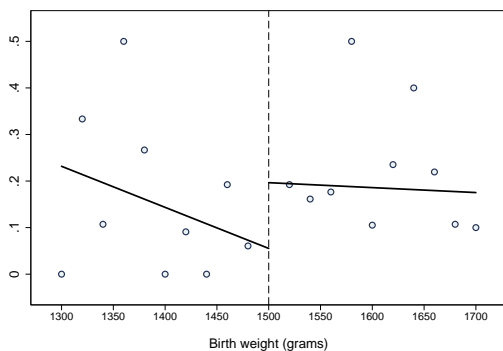
B. College Preparation Index
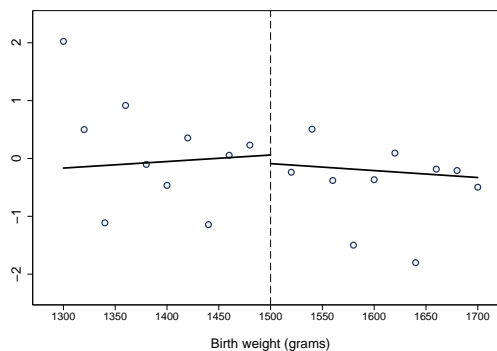
C. Any College Enrollment by 22
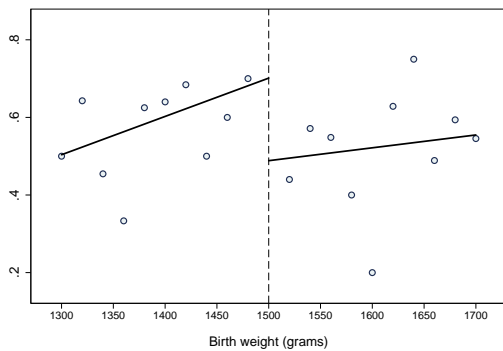
D. 4-Year College Enrollment by 22
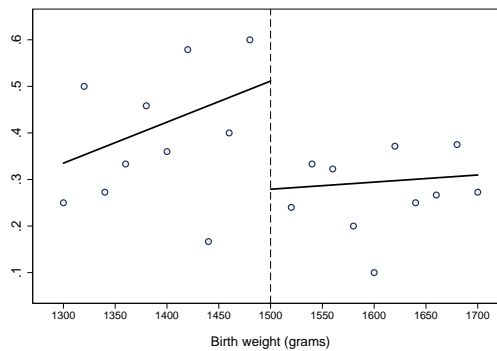
Notes: Each panel shows the relationship between birth weight and various post-birth outcomes. Dots represents means within 20 gram bins of the running variable. The dark lines are predictions from a linear regression using the individual-level data.

Figure A.4: Impacts for Early Childhood Investment Outcomes

A. Maternal Care Index
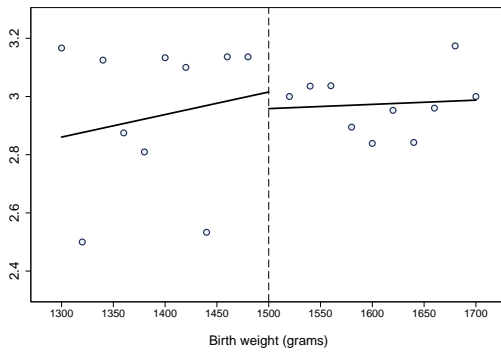
B. Maternal Stress Index
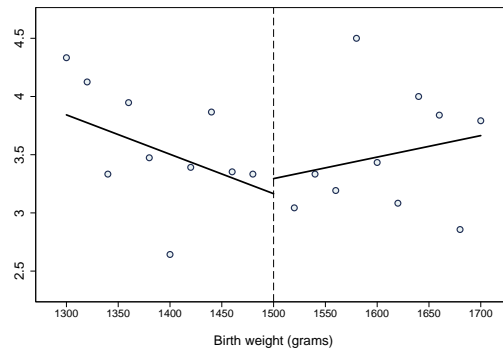
D. Birth Within 3 Years
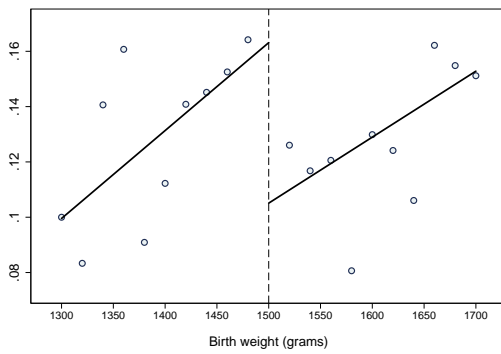
E. Maternal Employment Ages 0-2
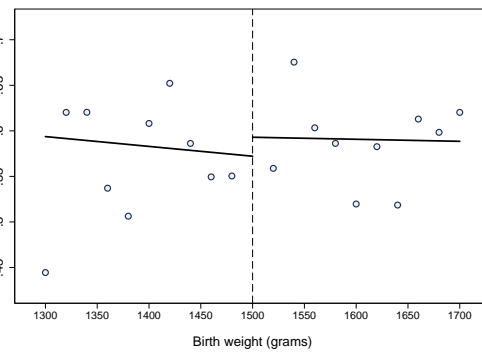
F. Avg. Maternal Earn. Ages 0 - 2
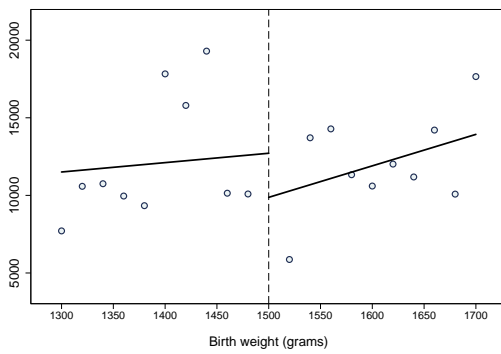
G. Medicaid Enrollment Ages 0-2
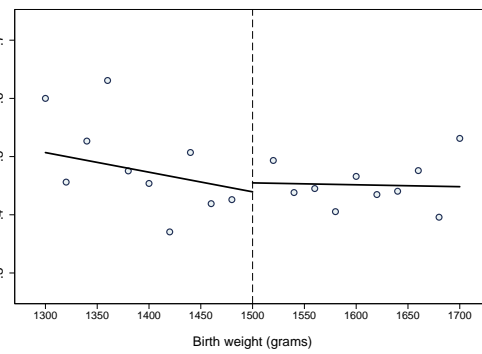
H. Medicaid Expenditures Age 0-2
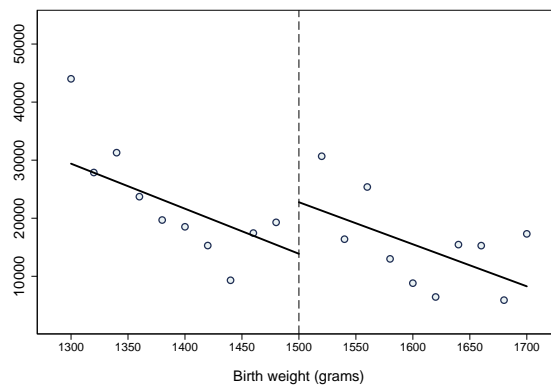
Notes: Each panel shows the relationship between birth weight and various post-birth outcomes. Dots represents means within 20 gram bins of the running variable. The dark lines are predictions from a linear regression using the individual-level data.

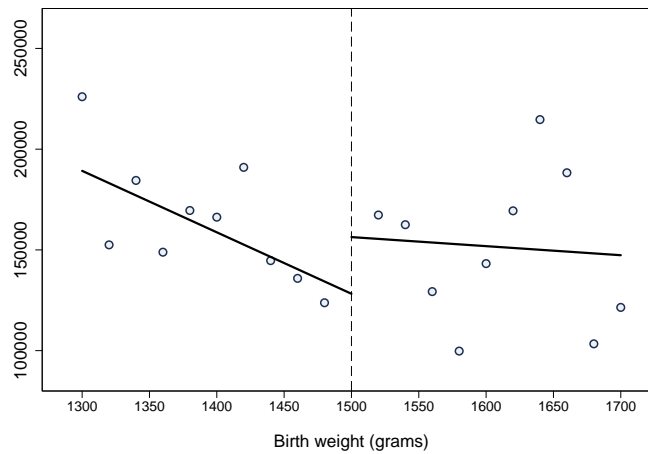Figure A.5: Impacts for Social Program Expenditures by Age 10

Panel A: Any Expenditures (=1)
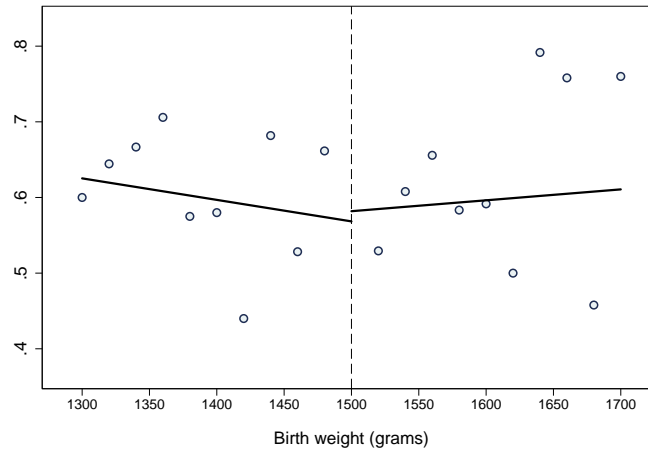
Panel B: Total Expenditures by Age 10 ($)
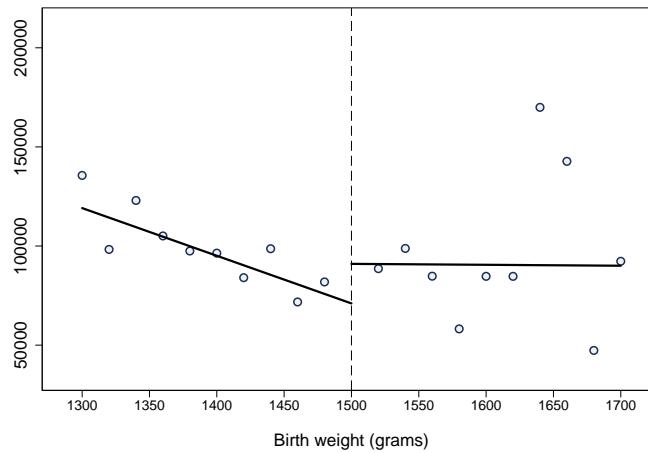
Panel C: Total Expenditures ($) | Any Expenditures (=1)

Notes: Figure shows the relationship between birth weight and total social expenditures by age 10. Total social expenditures include SNAP payments, Medicaid expenditures, Medicaid pharmacy payments, TANF payments, and IEP costs. Dots represent means within 20 gram bins of the running variable. The dark lines are predictions from a linear model using the individual-level data.