Appendix

A Construction of Birth Rates

Following the convention in demography, birth rates for birth order p in district d in year y $BR_{p,d,y}$ is defined as follows:

$$BR_{p,d,y} = \frac{NB_{p,d,y}}{fpop_{d,y}} \times 1000,$$

where $NB_{p,d,y}$ equals the number of the p-th order children born in district d in year y; $fpop_{d,y}$ is the female population of ages between 15 and 49 living in d in year y. Likewise, I define age-specific birth rates $BR_{a,p,d,y}$ as

$$BR_{a,p,d,y} = \frac{NB_{a,p,d,y}}{fpop_{a,d,y}} \times 1000,$$

where $NB_{a,p,d,y}$ equals the number of p-th order children born in district d in year y by mothers who belong to age group a (5-year intervals from 15 to 49); $fpop_{a,d,y}$ is the female population in age group a living in d in year y. Note that total fertility rate $TFR_{d,y}$ can be expressed as a function of the age- and order- specific birth rates. That is,

$$TFR_{d,y} = \sum_{\forall a,p} BR_{a,p,d,y} \times \frac{5}{1000}.$$

B Additional Figures and Tables

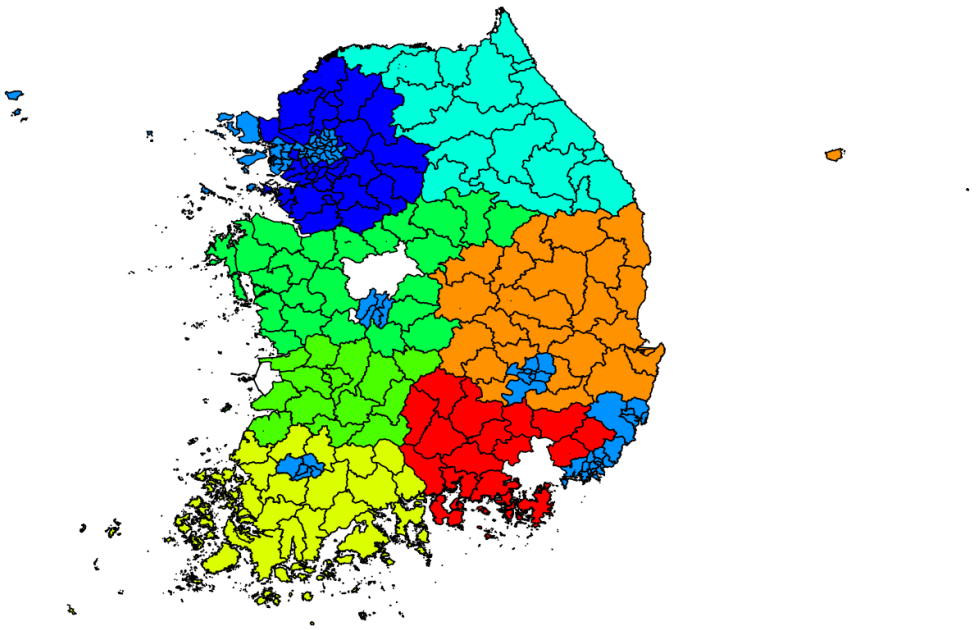

Figure A.1: Metropolitan Cities, Provinces, and Districts of South Korea

Notes: This figure map plots 222 districts in South Korea, which constitutes 15 metropolitan cities and provinces (refer to as cities in the main text) in different colors. Note that light blue indicates the districts located in 7 metropolitan cities including Seoul, Busan, Daegu, Daejeon, Gwangju, Incheon, and Ulsan.

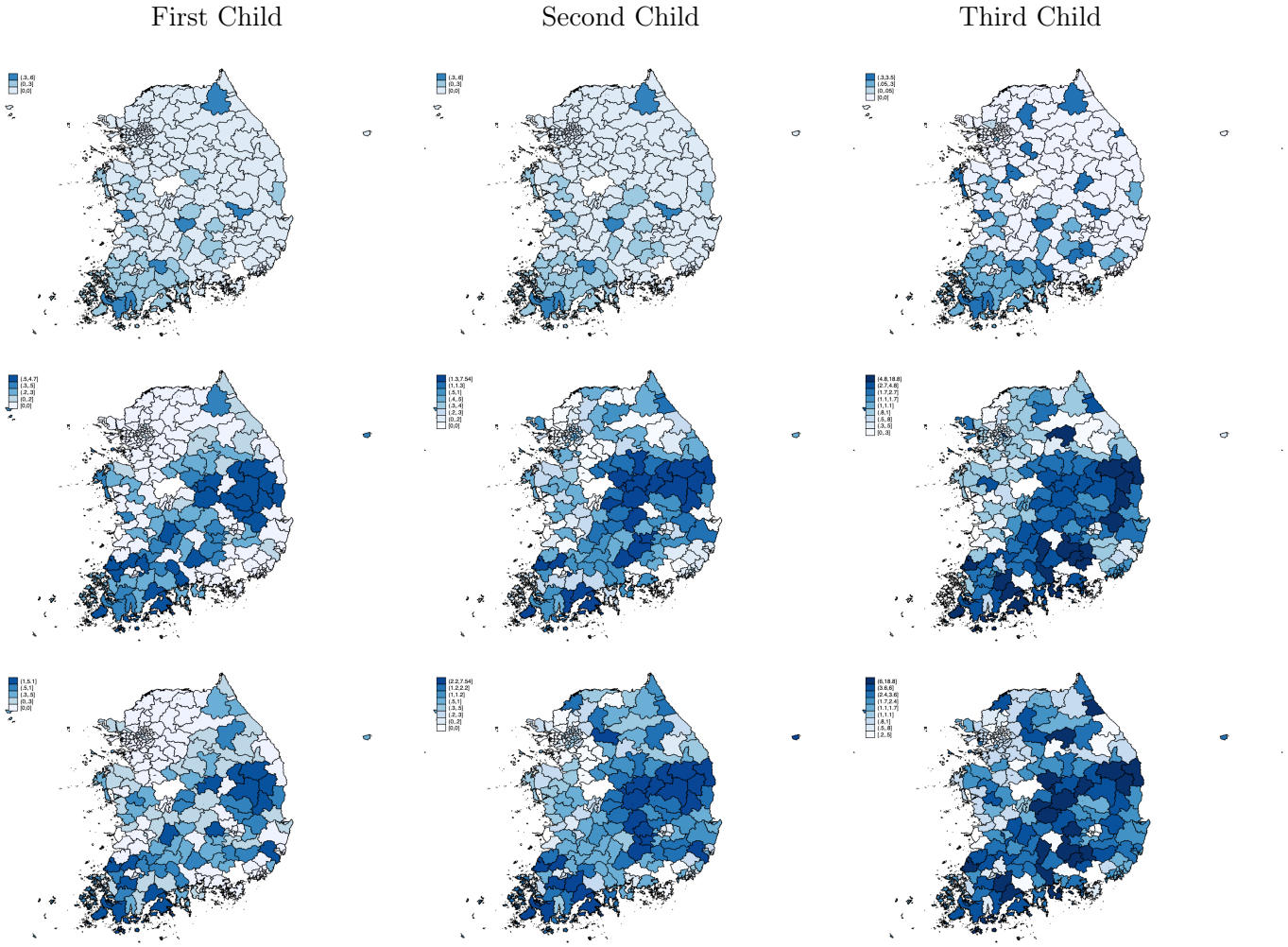

Figure A.2: Local Pro-natalist Cash Transfers across Districts (2005, 2010, 2015)

Notes: This figure presents a set of maps plotting the pro-natalist cash transfers for the 1st child (left), 2nd child (center), and 3rd child (right) across districts for years 2005 (top), 2010 (middle), and 2015 (bottom). Darker blue indicates more a greater amount of cash transfers.

	Year					
	2000	2003	2006	2009	2012	2015
A. Fraction of Male Births						
1st Child	0.515	0.512	0.514	0.513	0.513	0.515
	(0.500)	(0.500)	(0.500)	(0.500)	(0.500)	(0.500)
2nd Child	0.518	0.516	0.515	0.513	0.512	0.510
	(0.500)	(0.500)	(0.500)	(0.500)	(0.500)	(0.500)
3rd Child	0.587	0.574	0.548	0.533	0.521	0.513
	(0.492)	(0.495)	(0.498)	(0.499)	(0.500)	0.500)
	(0.483)	(0.492)	(0.482)	(0.490)	(0.488)	(0.499)
B. Birth Weight						
1st Child	3.246	3.256	3.236	3.219	3.206	3.202
	(0.443)	(0.452)	(0.450)	(0.449)	(0.450)	(0.458)
2nd Child	3.257	3.268	3.248	3.232	3.217	3.208
	(0.440)	(0.450)	(0.449)	(0.453)	(0.460)	(0.464)
3rd Child	3.303	3.292	3.262	3.238	3.229	3.212
	(0.483)	(0.492)	(0.482)	(0.490)	(0.488)	(0.499)
C. Gestational Age						
1st Child	39.409	39.280	39.182	39.019	38.918	38.818
	(1.450)	(1.562)	(1.585)	(1.588)	(1.600)	(1.644)
2nd Child	39.065	38.852	38.731	38.521	38.399	38.298
	(1.465)	(1.571)	(1.555)	(1.570)	(1.586)	(1.590)
3rd Child	39.085	38.803	38.650	38.404	38.297	38.172
	(1.576)	(1.679)	(1.666)	(1.691)	(1.672)	(1.719)

Table A.1: Summary Statistics (Birth Weight, Gestational Age, Sex Ratio)

Notes: This table reports the mean fraction of male births (Panel A), birth weight in kilograms (Panel B), and gestational age in weeks (Panel C) for the 1st, 2nd, and 3rd child based on the universe of confidential birth registry records for every three years from 2000 to 2015 . Standard deviations are reported in parentheses.

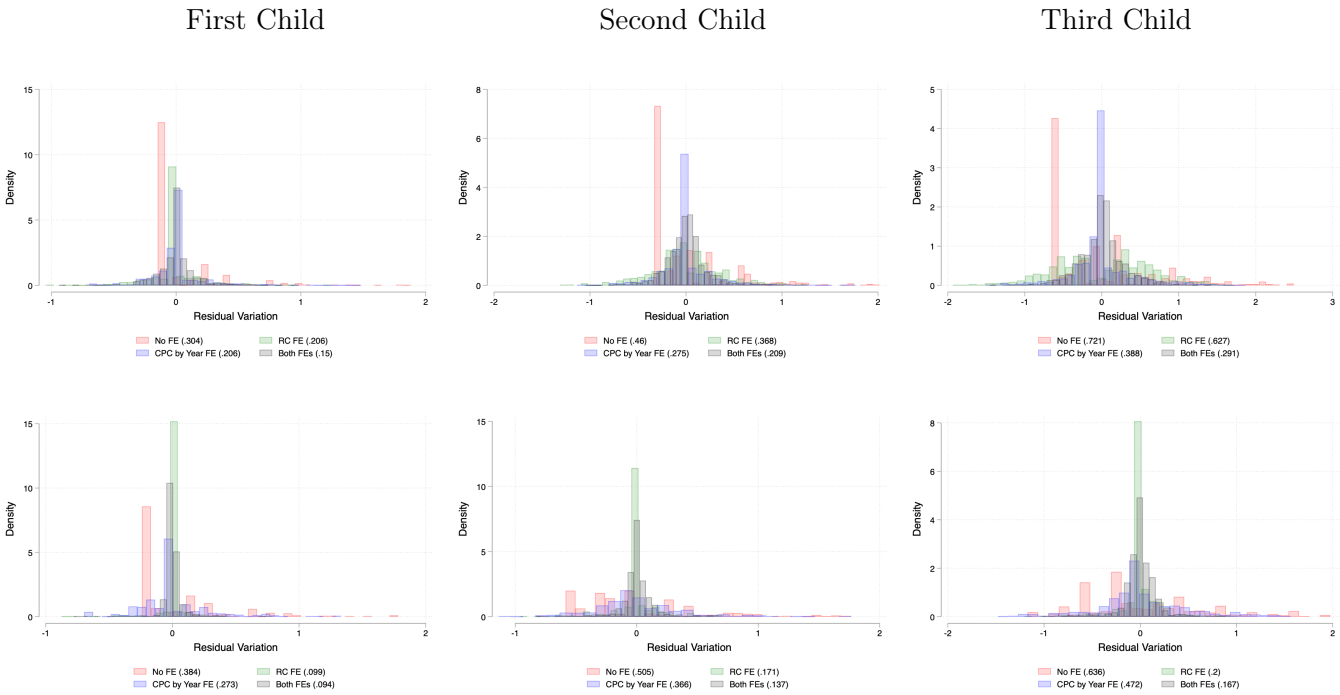

Figure A.3: Residual Variation in Baby Bonus Generosity

Notes: This figure plots the histogram of the inverse hyperbolic transformed values of local pro-natalist cash transfers for 1st child (left), 2nd child (center), and 3rd child (right). The top panels use all the sample periods (i.e., 2001-2015) used for estimating the baby bonus effects on fertility and infant health, except mortality; the bottom panels use only the sample periods for which the the birth-death matched administrative data set is available (i.e., 2010-2013). Each panel contains the histogram of the inverse hyperbolic sine transformed cash transfers residualized by a constant ("No FE" in red), district fixed effects ("RC FE" in green), city-by-year fixed effects ("CPC by Year FE" in blue), and both fixed effects together ("Both FEs" in gray). Standard deviations are reported in parentheses.

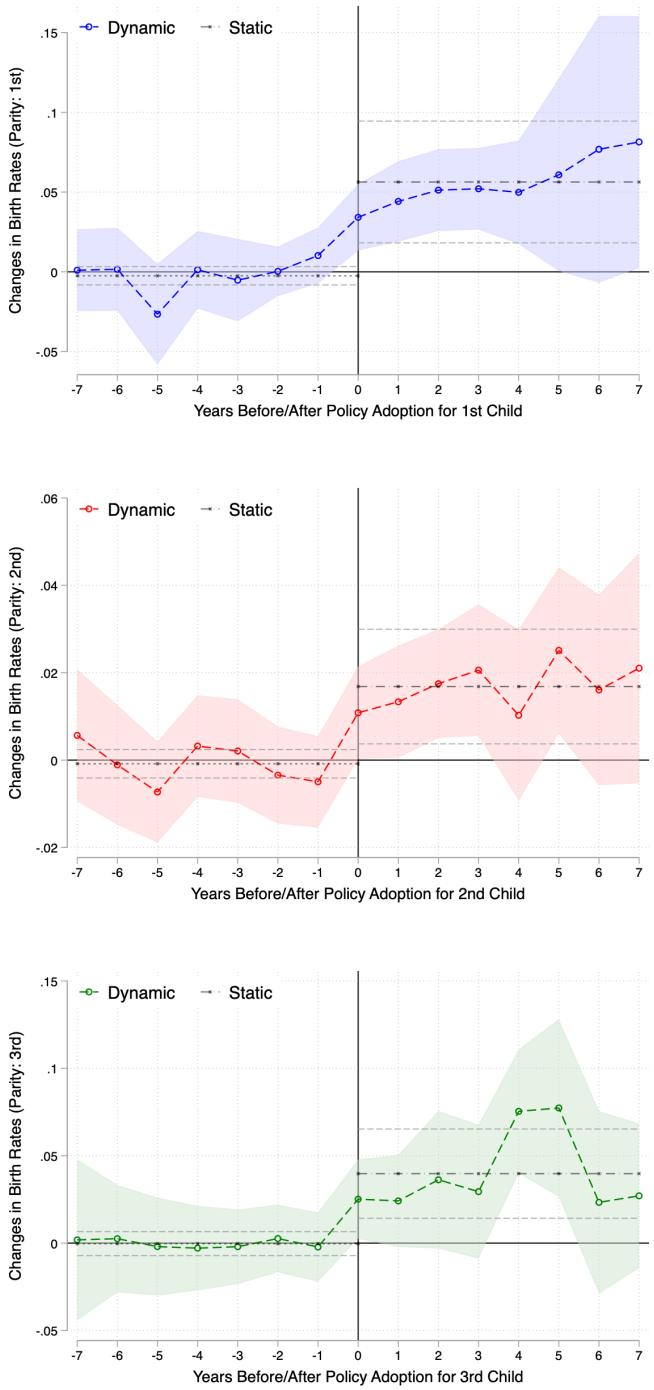

Figure A.4: Parity-specific Birth Rates Before and After Baby Bonus Adoption (Larger Window)

Notes: This event-study figure plots the estimated changes in the birth rates before and after pro-natalist cash-transfer policy implementation for the first child (top, in blue), second child (middle, in red), and third child (bottom, in green). The event-study coefficients are estimated based on equation 3 using the doubly robust difference-in-differences estimator (Sant'Anna and Zhao, 2020; Callaway and Sant'Anna, 2021). For each panel, the average values of the estimated coefficients in pre- and post-treatment periods are plotted in black dash-dotted lines. Standard errors are bootstrapped and clustered at the district level. Error bars show 95% confidence intervals. Each observation corresponds to a district-year pair and is weighted by the female population aged 15 to 49. Across each panel, the same set of fixed effects (that is, district fixed effects and city-by-year fixed effects) and district-level control variables are included. The district-level control variables include the total population, the percentage of the female population, the percentage of the adult population (aged 20 to 64), the percentage of the elderly (older than 64), the net migration rate (lag), marriage rate (lag), indicators for the gender and political-party affiliation of the local-government head, and the financial-independence rate. In addition, the estimations for the second child (resp. the third child) include the lagged number of births for the first child (resp. the first and second child).

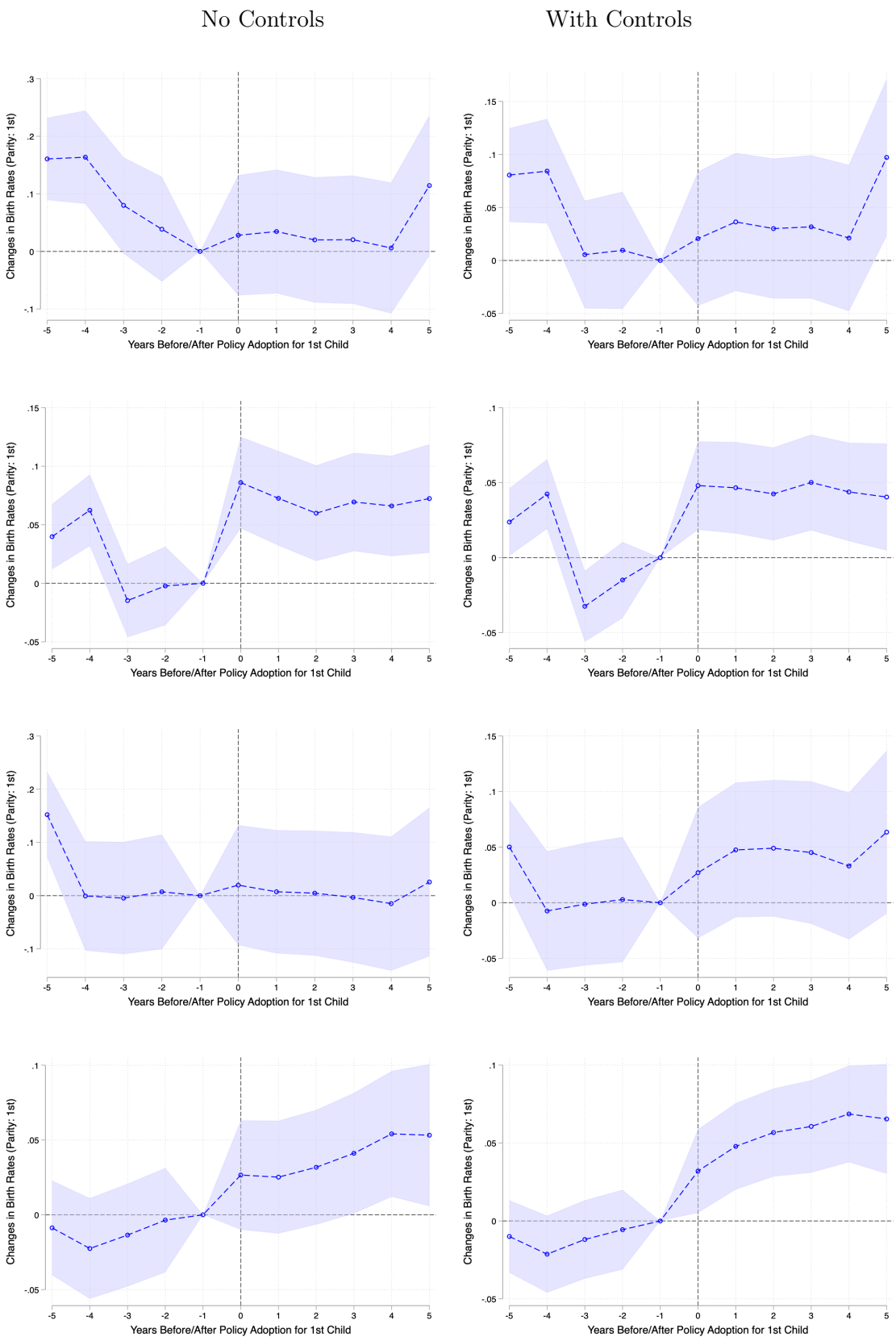

Figure A.5: Event Study Results for 1st Child Birth Rates

Notes: This figure presents a set of results estimating Eq. 3 for the 1st child without any control variables (i.e., district-level time vary characteristics) in the left panels and with the district-level control variables in the right panels. The top panels plot the estimation results without any fixed effects; the second top panels include district fixed effects; the panels second from the bottom includes city-by-year fixed effects; the bottom panels include the set of both fixed effects.

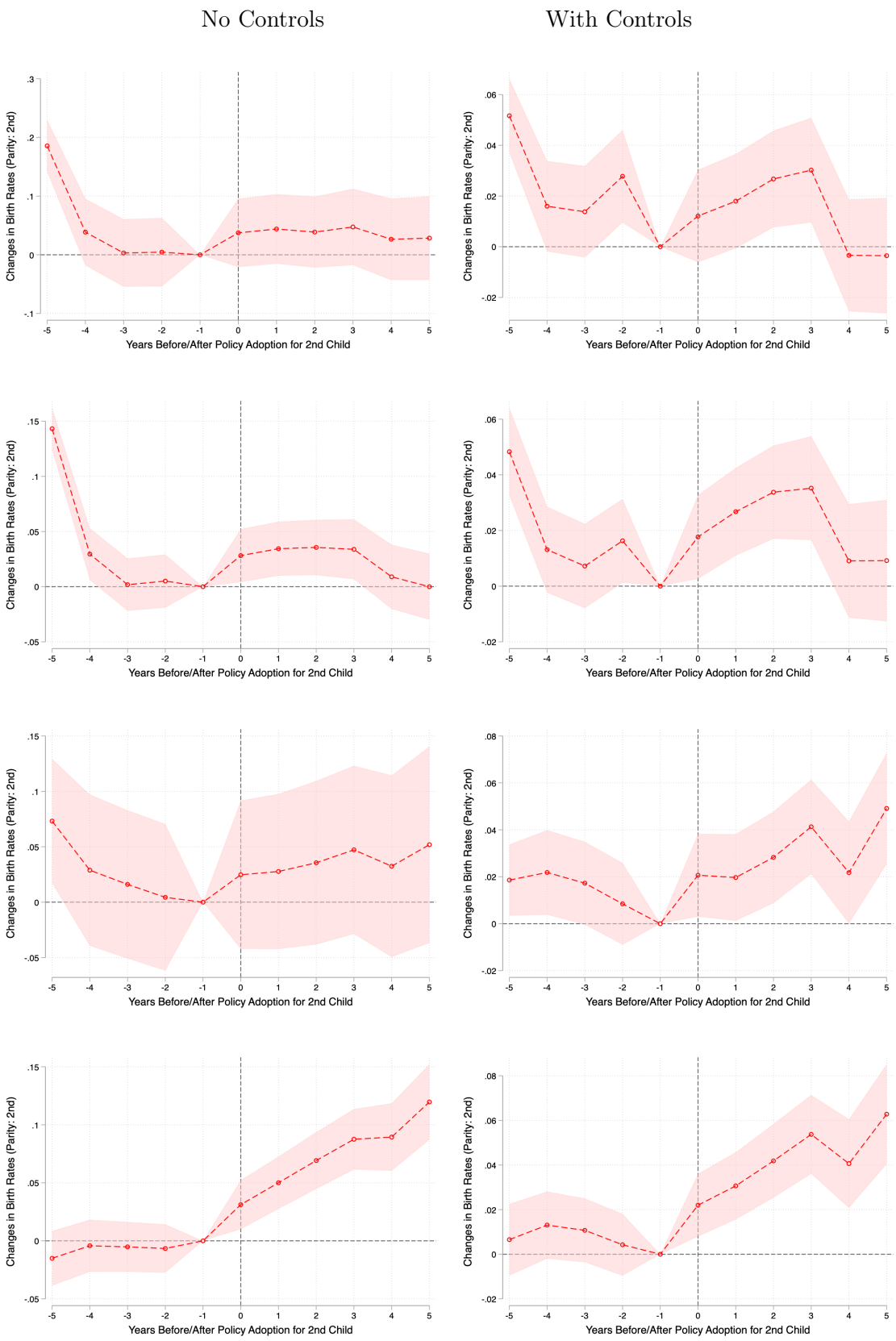

Figure A.6: Event Study Results for 2nd Child Birth Rates

Notes: This figure presents a set of results estimating Eq. 3 for the 2nd child without any control variables (i.e., district-level time vary characteristics) in the left panels and with the district-level control variables in the right panels. The top panels plot the estimation results without any fixed effects; the second panels include district fixed effects; the panels second from the bottom includes city-by-year fixed effects; the bottom panels include the set of both fixed effects.

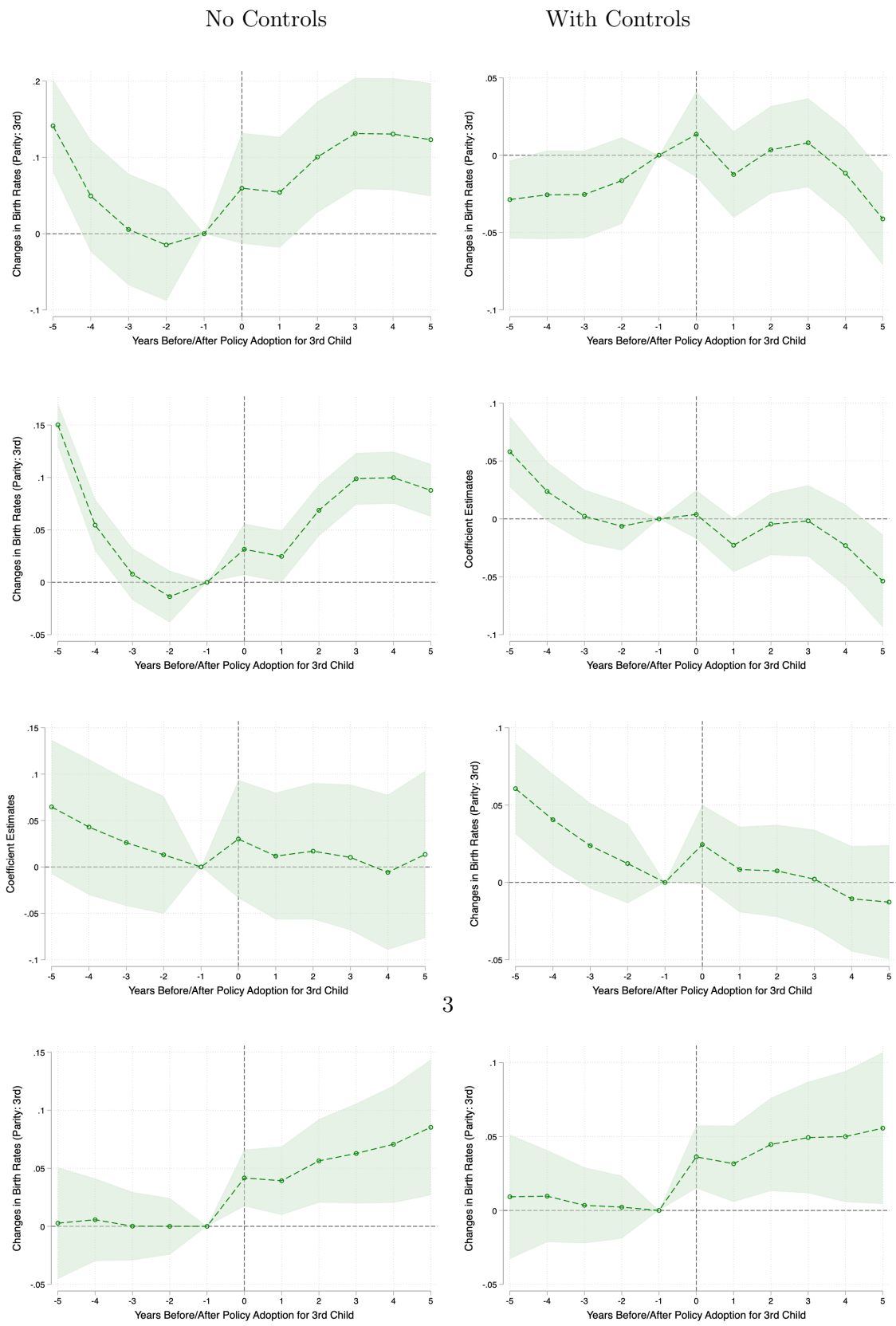

Figure A.7: Event Study Results for 3rd Child Birth Rates

Notes: This figure presents a set of results estimating Eq. 3 for the 3rd child without any control variables (i.e., district-level time vary characteristics) in the left panels and with the district-level control variables in the right panels. The top panels plot the estimation results without any fixed effects; the second top panels include district fixed effects; the panels second from the bottom includes city-by-year fixed effects; the bottom panels include the set of both fixed effects.

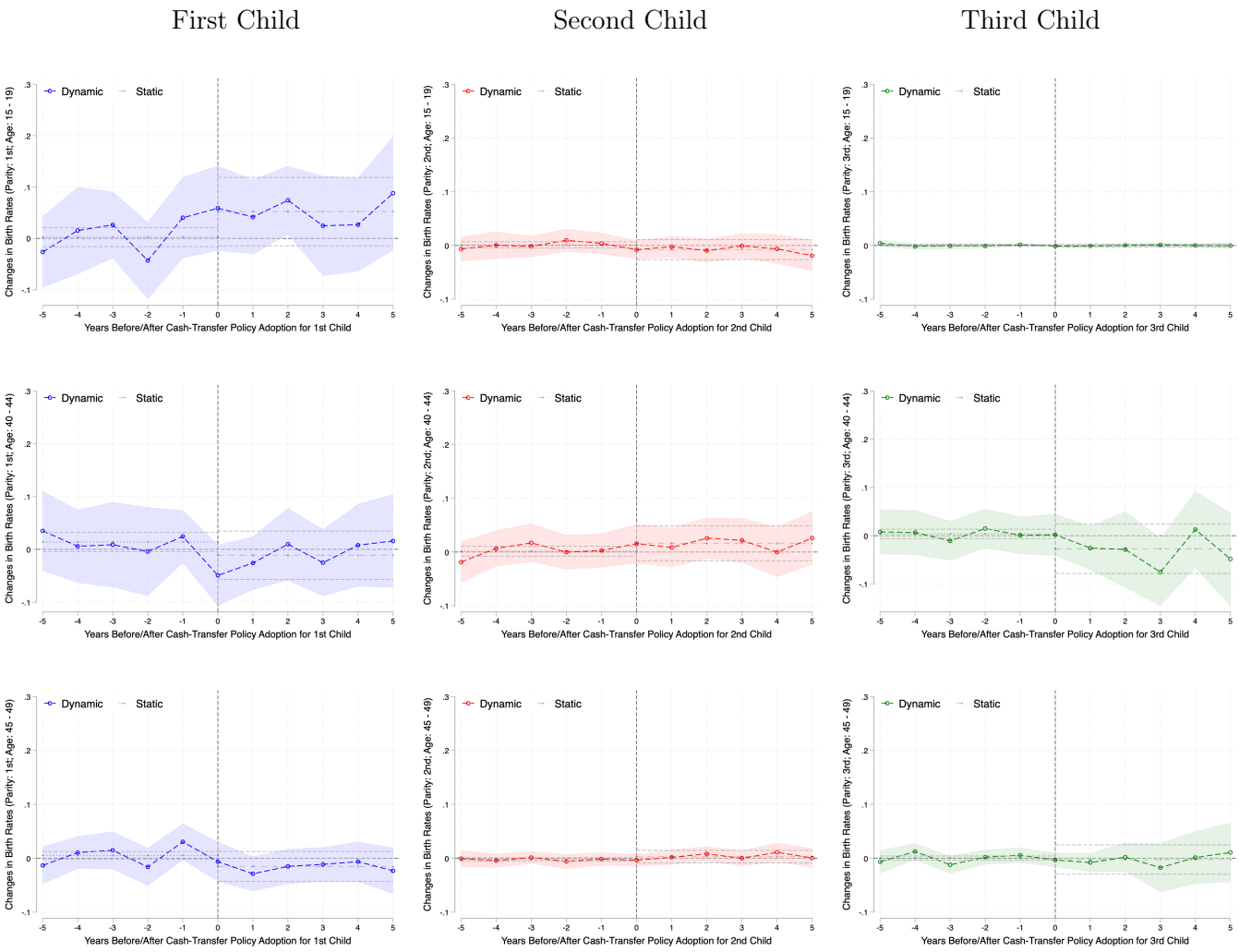

Figure A.8: Birth Rates Before and After Baby Bonus Adoption (Ages: 15-19, 40-44 and 45-49)

Notes: This event-study figure plots the estimated changes in the age-specific birth rates before and after pro-natalist cash-transfer policy implementation for the first child (left, in blue), second child (center, in red), and third child (right, in green). The event-study coefficients are estimated based on equation 3 using the doubly robust difference-in-differences estimator (Sant'Anna and Zhao, 2020; Callaway and Sant'Anna, 2021). For each panel, the average values of the estimated coefficients in pre- and post-treatment periods are plotted in gray dash-dotted lines. Standard errors are bootstrapped and clustered at the district level. Error bars show 95% confidence intervals. Each observation corresponds to a district-year pair and is weighted by the female population of each age group. Across each panel, the same set of fixed effects (that is, district fixed effects and city-by-year fixed effects) and district-level control variables are included. The district-level control variables include the total population, the percentage of the female population, the percentage of the adult population (aged 20 to 64), the percentage of the elderly (older than 64), the net migration rate (lag), the marriage rate (lag), indicators for the gender and political-party affiliation of the local-government head, and the financial-independence rate. In addition, the estimations for the second child (resp. the third child) include the lagged number of births for the first child by mothers in the same 5-year age group (resp. the first and second child).

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
A. Birth Order: 1st							
$\sinh^{-1}$ Cash Transfer for 1st Child	-0.0433	0.193***	-0.00221	0.191***	0.162***	0.162***	0.182***
	(0.0769)	(0.0348)	(0.0737)	(0.0467)	(0.0412)	(0.0410)	(0.0371)
Observations	3,330	3,330	3,330	3,330	3,330	3,330	3,330
R-squared	0.001	0.865	0.218	0.916	0.931	0.931	0.951
B. Birth Order: 2nd							
$\sinh^{-1}$ Cash Transfer for 2nd Child	-0.0190	-0.0128	-0.00173	0.120***	0.0532***	0.0532***	0.0504***
	(0.0269)	(0.0155)	(0.0474)	(0.0245)	(0.00972)	(0.00977)	(0.00940)
Observations	3,330	3,330	3,330	3,330	3,330	3,330	3,330
R-squared	0.000	0.811	0.306	0.926	0.968	0.969	0.970
C. Birth Order: 3rd							
$\sinh^{-1}$ Cash Transfer for 3rd Child	0.134***	0.0374***	0.0774	0.0803***	0.0389***	0.0385***	0.0394***
	(0.0206)	(0.00920)	(0.0438)	(0.0135)	(0.00934)	(0.00966)	(0.00959)
Observations	3,330	3,330	3,330	3,330	3,330	3,330	3,330
R-squared	0.040	0.878	0.555	0.942	0.957	0.957	0.958
District FE		O		O	O	O	O
City-by-Year FE			O	O	O	O	O
District-level control variables:							
Demographic Characteristics					O	O	O
Local Gov't Characteristics						O	O
Marriage and Net Migration Rates							O

Table A.2: The Effect of Cash Transfer on Birth Rates

Notes: This table replicates the results reported in Table 4 for the 1st (Panel A), 2nd (Panel B), and 3rd (Panel C) child by gradually adding fixed effects and district-level control variables. In column 1, the effects of baby bonus on birth rates are estimated without any fixed effects and control variables. In Column 2, the district fixed effects are included. In Column 3, the city-by-year fixed effects are included. Column 4 reports the estimated effects while including both sets of fixed effects. Starting from Column 5 to 7, district-level time varying characteristics are gradually introduced: demographic characteristics (total population, age and gender composition, lagged number of births for the 1st child (Panel B only), lagged number of births for the 1st and 2nd child (Panel C only) in Column 5, local government characteristics (financial independence rate and indicators for the gender and political party affiliation of the local government head) in Column 6, and lagged marriage and net migration rate in Column 7. Standard errors are clustered at the district level and reported in parentheses: * Significant at the 5 percent level, ** Significant at the 1 percent level, and *** Significant at the 0.1 percent level.

	(1)	(2)	(3)	(4)	(5)	(6)
	Birth Rates (# Birth/1,000 Women)					
	First Child		Second Child		Third Child	
Cash Transfer for						
1st Child	1.582***	1.790***		-0.0583		0.0314
	(0.366)	(0.385)		(0.240)		(0.0829)
2nd Child		-0.291*	0.374***	0.371*		0.00287
		(0.137)	(0.100)	(0.156)		(0.0557)
3rd Child		0.0631		0.0142	0.0341*	0.0311
		(0.0582)		(0.0310)	(0.0138)	(0.0163)
Observations	3,330	3,330	3,330	3,330	3,330	3,330
R^2	0.976	0.976	0.976	0.976	0.957	0.957

Table A.3: The Effect of Cash Transfer on Birth Rates in Levels

Notes: This table reports the estimated effects of cash transfers on the birth rates for the first child (Columns 1–2), the second child (Columns 3–4), and the third child (Columns 5–6) based on equation 4. For each birth order, the left column includes the cash-transfer amount for the corresponding birth order only; the right column includes the cash-transfer amounts for the first, second, and third children as separate explanatory variables. Each observation corresponds to a district-year pair from 2001 to 2015 and is weighted by the female population aged 15 to 49. Across columns, the same set of fixed effects (district fixed effects and city-by-year fixed effects) and the same district-level control variables are included. The district-level control variables include the total population, the percentage of the female population, the percentage of the adult population (aged 20 to 64), the percentage of the elderly (older than 64), the net migration rate (lag), the marriage rate (lag), indicators for the gender and political-party affiliation of the local-government head, and the financial-independence rate. In addition, Columns 3–4 (resp. 5–6) include the lagged number of births for the first child (resp. the first and second children) in log units. Standard errors are clustered at the district level and reported in parentheses. * significant at the 5% level, ** significant at the 1% level, and *** significant at the 0.1% level.

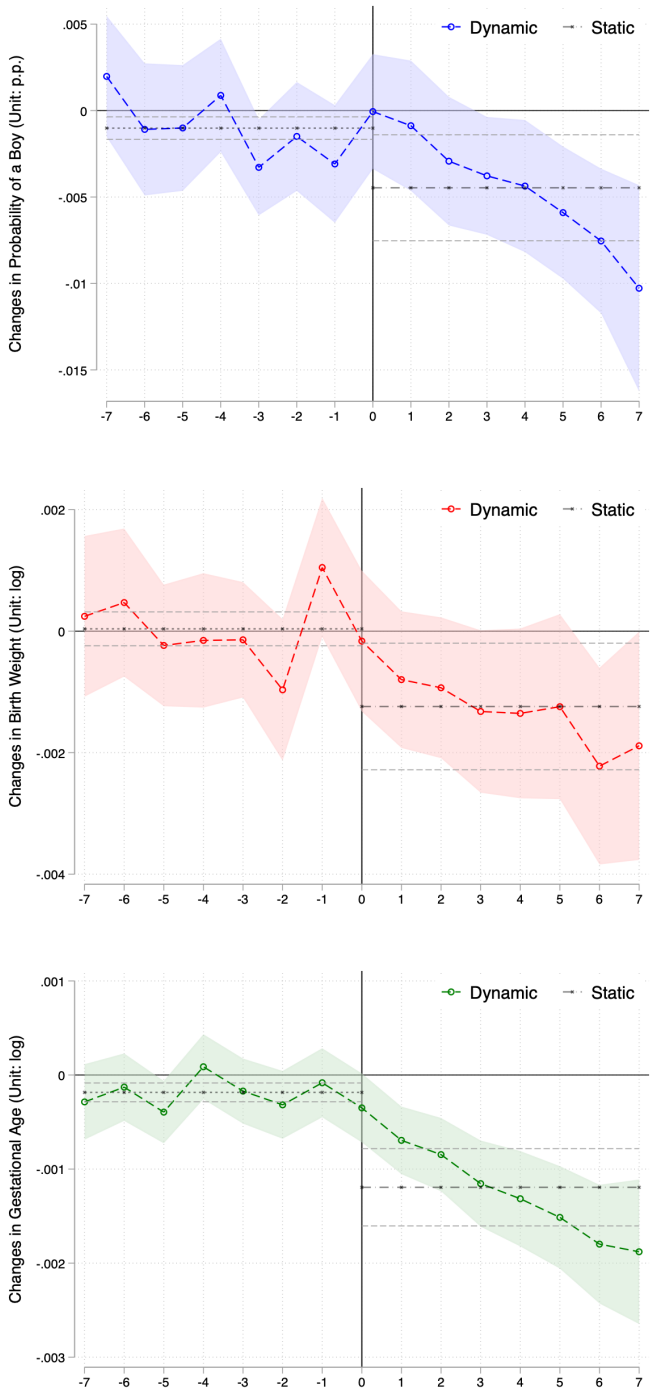

Figure A.9: Sex Ratio at Birth and Infant Health before and after Baby-Bonus Adoption (Larger Window)

Notes: This event-study figure plots the estimated changes in the probability that a newborn is a boy (top, in blue), birth weight in log kilograms (middle, in red), and gestational age in log weeks (bottom, in green) before and after pro-natalist cash-transfer policy implementation. The event-study coefficients are estimated based on equation 6 using the doubly robust difference-in-differences estimator (Sant'Anna and Zhao, 2020; Callaway and Sant'Anna, 2021). For each panel, the average values of the estimated coefficients in pre- and post-treatment periods are plotted in black dash-dotted lines. Standard errors are bootstrapped and clustered at the district level. Error bars show 95% confidence intervals. Each observation corresponds to a birth, and the total observations span the universe of births in South Korea from 2001 to 2015. Across panels, the same set of fixed effects (district fixed effects and city-by-month-year fixed effects) is included and family characteristics are controlled for: dummy variables for mother's and father's educational attainment, age, occupation (including unemployment), and marital status. The district-level control variables include the total population, the percentage of the female population, the percentage of the adult population (aged 20 to 64), the percentage of the elderly (older than 64), the net migration rate (lag), the marriage rate (lag), indicators for the gender and political-party affiliation of the local-government head, and the financial-independence rate.

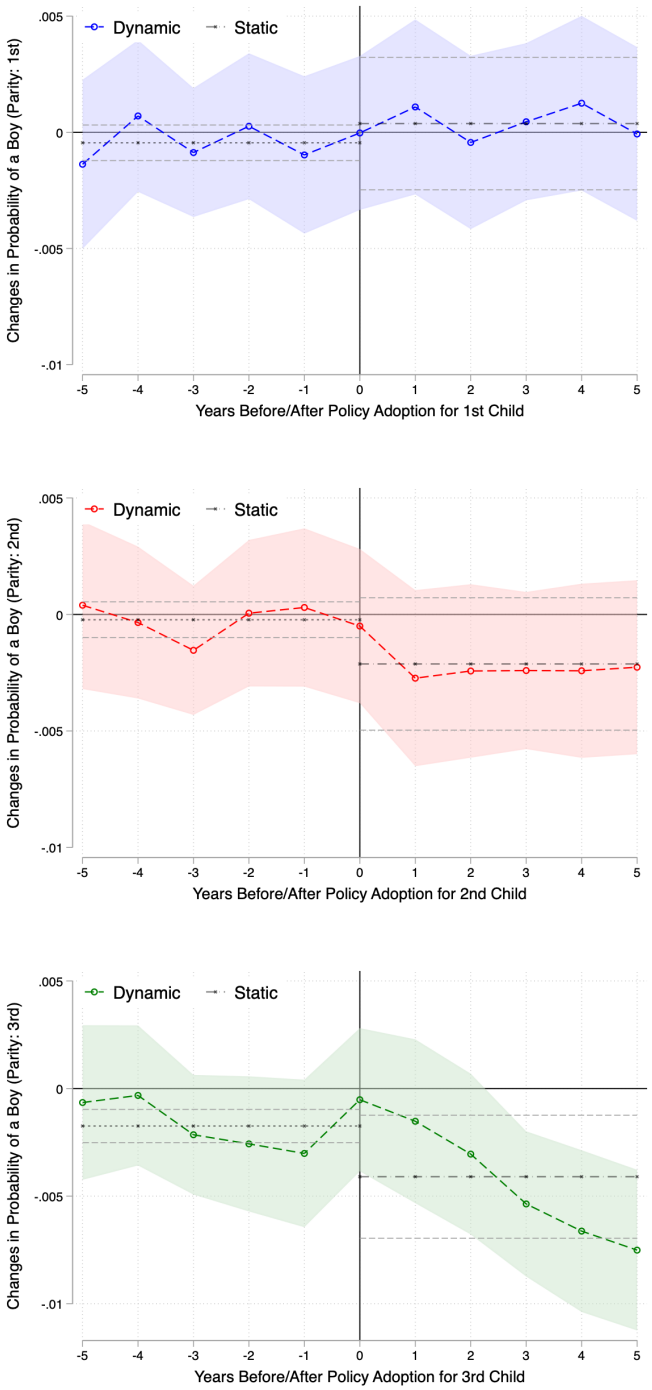

Figure A.10: Sex Ratio at Birth before and after Baby-Bonus Adoption by Parity

Notes: This event-study figure plots the estimated changes in the probability that a newborn is a boy among the first (top, in blue), second (middle, in red), and third (bottom, in green) children before and after pro-natalist cash-transfer policy implementation. The event-study coefficients are estimated based on equation 6 using the doubly robust difference-in-differences estimator (Sant'Anna and Zhao, 2020; Callaway and Sant'Anna, 2021). For each panel, the average values of the estimated coefficients in pre- and post-treatment periods are plotted in black dash-dotted lines. Standard errors are bootstrapped and clustered at the district level. Error bars show 95% confidence intervals. Each observation corresponds to a birth, and the total observations span the universe of births in South Korea from 2001 to 2015. Across panels, the same set of fixed effects (district fixed effects and city-by-month-year fixed effects) is included and family characteristics are controlled for: dummy variables for mother's and father's educational attainment, age, occupation (including unemployment), and marital status. The district-level control variables include the total population, the percentage of the female population, the percentage of the adult population (aged 20 to 64), the percentage of the elderly (older than 64), the net migration rate (lag), the marriage rate (lag), indicators for the gender and political-party affiliation of the local-government head, and the financial-independence rate.

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
$\sinh^{-1}$ Cash Transfer for								
1st Child	-0.0010	-0.0054**	-0.0022	-0.0027	-0.0026	-0.0027	-0.0027	-0.0027
	(0.0016)	(0.0020)	(0.0024)	(0.0025)	(0.0025)	(0.0025)	(0.0025)	(0.0025)
2nd Child	-0.0037***	-0.0067***	-0.0037**	-0.0041**	-0.0040**	-0.0041**	-0.0041**	-0.0041**
	(0.0010)	(0.0011)	(0.0013)	(0.0013)	(0.0013)	(0.0013)	(0.0013)	(0.0013)
3rd Child	-0.0247***	-0.0262***	-0.0245***	-0.0246***	-0.0245***	-0.0246***	-0.0246***	-0.0246***
	(0.0020)	(0.0019)	(0.0019)	(0.0019)	(0.0019)	(0.0019)	(0.0019)	(0.0019)
Observations	6,488,101	6,488,101	6,488,101	6,488,101	6,488,097	6,488,097	6,488,097	6,488,097
District FE		O	O	O	O	O	O	O
City-by-Year FE			O	O	O	O	O	O
District Characteristics				O	O	O	O	O
Parental Characteristics:								
Age					O	O	O	O
Education Attainment Level						O	O	O
Occupation							O	O
Marital Status								O

Table A.4: The Effect of Baby Bonus on Sex Ratio at Birth

Notes: This table replicates the results reported in Column 2 of Table 5 by gradually introducing fixed effects and control variables. The mean probability of a newborn being a boy among first children is 0.513%. Each observation corresponds to a birth, and the total observations span the universe of births in South Korea from 2001 to 2015. The district-level control variables include the total population, the percentage of the female population, the percentage of the adult population (aged 20 to 64), the percentage of the elderly (older than 64), the net migration rate (lag), the marriage rate (lag), indicators for the gender and political-party affiliation of the local-government head, and the financial-independence rate. Standard errors are clustered at the district level and reported in parentheses. * significant at the 5% level, ** at the 1% level, and *** at the 0.1% level.

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
$\sinh^{-1}$ Cash Transfer for								
1st Child	-0.0098***	-0.0148***	-0.0002	-0.0005	0.0004	0.0001	0.0001	0.0001
	(0.0012)	(0.0018)	(0.0009)	(0.0009)	(0.0009)	(0.0009)	(0.0009)	(0.0009)
2nd Child	-0.0129***	-0.0144***	-0.0002	-0.0004	-0.0002	-0.0005	-0.0005	-0.0005
	(0.0012)	(0.0012)	(0.0006)	(0.0006)	(0.0006)	(0.0006)	(0.0006)	(0.0006)
3rd Child	-0.0104***	-0.0110***	-0.0018***	-0.0019***	-0.0020***	-0.0025***	-0.0024***	-0.0024***
	(0.0007)	(0.0007)	(0.0004)	(0.0004)	(0.0004)	(0.0004)	(0.0004)	(0.0004)
Observations	6,488,101	6,488,101	6,488,101	6,488,101	6,488,097	6,488,097	6,488,097	6,488,097
District FE		O	O	O	O	O	O	O
City-by-Year FE			O	O	O	O	O	O
District Characteristics				O	O	O	O	O
Parental Characteristics:								
Age					O	O	O	O
Education Attainment Level						O	O	O
Occupation							O	O
Marital Status								O

Table A.5: The Effect of Baby Bonus on Birth Weight

Notes: This table replicates the results reported in Column 4 of Table 5 by gradually introducing fixed effects and control variables. The mean birth weight among first children is 3.192 kilograms. Each observation corresponds to a birth, and the total observations span the universe of births in South Korea from 2001 to 2015. The district-level control variables include the total population, the percentage of the female population, the percentage of the adult population (aged 20 to 64), the percentage of the elderly (older than 64), the net migration rate (lag), the marriage rate (lag), indicators for the gender and political-party affiliation of the local-government head, and the financial-independence rate. Standard errors are clustered at the district level and reported in parentheses. * significant at the 5% level, ** at the 1% level, and *** at the 0.1% level.

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
$\sinh^{-1}$ Cash Transfer for								
1st Child	-0.0053***	-0.0106***	-0.0005	-0.0004	-0.0002	-0.0003	-0.0002	-0.0002
	(0.0008)	(0.0012)	(0.0005)	(0.0005)	(0.0005)	(0.0005)	(0.0005)	(0.0005)
2nd Child	-0.0086***	-0.0111***	-0.0015***	-0.0015***	-0.0013***	-0.0015***	-0.0015***	-0.0015***
	(0.0007)	(0.0008)	(0.0003)	(0.0003)	(0.0003)	(0.0003)	(0.0003)	(0.0003)
3rd Child	-0.0071***	-0.0078***	-0.0016***	-0.0016***	-0.0016***	-0.0017***	-0.0017***	-0.0017***
	(0.0004)	(0.0004)	(0.0002)	(0.0002)	(0.0002)	(0.0002)	(0.0002)	(0.0002)
Observations	6,488,101	6,488,101	6,488,101	6,488,101	6,488,097	6,488,097	6,488,097	6,488,097
District FE		O	O	O	O	O	O	O
City-by-Year FE			O	O	O	O	O	O
District Characteristics				O	O	O	O	O
Parental Characteristics:								
Age					O	O	O	O
Education Attainment Level						O	O	O
Occupation							O	O
Marital Status								O

Table A.6: The Effect of Baby Bonus on Gestational Age

Notes: This table replicates the results reported in Column 6 of Table 5 by gradually introducing fixed effects and control variables. The mean gestational age among first children is 39.074 weeks. Each observation corresponds to a birth, and the total observations span the universe of births in South Korea from 2001 to 2015. The district-level control variables include the total population, the percentage of the female population, the percentage of the adult population (aged 20 to 64), the percentage of the elderly (older than 64), the net migration rate (lag), the marriage rate (lag), indicators for the gender and political-party affiliation of the local-government head, and the financial-independence rate. Standard errors are clustered at the district level and reported in parentheses. * significant at the 5% level, ** at the 1% level, and *** at the 0.1% level.

	(1)	(2)	(3)	(4)	(5)	(6)
	Birth Weight $<$ 2.7kg		Birth Weight $>$ 4kg		Gestational Age $<$ 37 weeks	
$\sinh^{-1}$ Cash Transfer	0.0013**		-0.0010***		0.0003***	
	(0.0005)		(0.0004)		(0.0006)	
×1st Child		0.0022*		-0.0004		0.0003
		(0.0011)		(0.0010)		(0.0014)
×2nd Child		0.0018**		0.0007		0.0037***
		(0.0007)		(0.0006)		(0.0007)
×3rd Child		0.0009		-0.0021***		0.0035***
		(0.0005)		(0.0005)		(0.0007)
2nd Child	-0.0033***	-0.0033***	-0.0013***	-0.0015***	0.0051***	0.0050***
	(0.0003)	(0.0003)	(0.0002)	(0.0002)	(0.0003)	(0.0003)
3rd Child	-0.0035***	-0.0033***	0.0094***	0.0097***	0.0096***	0.0095***
	(0.0005)	(0.0005)	(0.0004)	(0.0004)	(0.0005)	(0.0006)
Observations	6,488,097	6,488,097	6,488,097	6,488,097	6,488,097	6,488,097

Table A.7: The Effect of Baby Bonus on Low Birth Weight, Macrosomia, and Preterm Births

Notes: This table reports the estimated effects of baby bonus on the probabilities of low birth weight (Columns 1–2), macrosomia (Columns 3–4), and preterm birth (Columns 5–6). For each dependent variable, the left column reports the estimated effect of cash transfers unconditional on birth parity; in the column to the right, the cash transfers' effect is allowed to differ across birth parity. The mean incidence rates among first children are 4.57% for low birth weight, 3.17% for macrosomia, and 4.75% for preterm birth. Each observation corresponds to a birth, and the total observations span the universe of births in South Korea from 2001 to 2015. Across columns, the same set of fixed effects (district fixed effects and city-by-month-year fixed effects) is included, and family characteristics are controlled for: dummy variables for mother's and father's educational attainment, age, occupation including unemployment, and marital status. The district-level control variables include the total population, the percentage of the female population, the percentage of the adult population (aged 20 to 64), the percentage of the elderly (older than 64), the net migration rate (lag), the marriage rate (lag), indicators for the gender and political-party affiliation of the local-government head, and the financial-independence rate. Standard errors are clustered at the district level and reported in parentheses. * significant at the 5% level, ** at the 1% level, and *** at the 0.1% level.

VARIABLES	(1)	(2)	(3)	(4)
	log Birth Weight		log Gestational Age	
$\sinh^{-1}$ Cash Transfer	-0.0011**		-0.0016***	
	(0.0004)		(0.0002)	
×1st Child		0.0002		-0.0003
		(0.0009)		(0.0005)
×2nd Child		-0.0004		-0.0015***
		(0.0006)		(0.0003)
×3rd Child		-0.0017***		-0.0018***
		(0.0004)		(0.0002)
2nd Child	0.0046***	0.0046***	-0.0108***	-0.0108***
	(0.0003)	(0.0003)	(8.95e-05)	(9.54e-05)
3rd Child	0.0125***	0.0129***	-0.0102***	-0.0100***
	(0.0005)	(0.0005)	(0.000167)	(0.0002)
Indicator for Boy	0.0304***	0.0304***	-0.0033***	-0.0033***
	(0.0001)	(0.0001)	(3.71e-05)	(3.72e-05)
Observations	6,488,097	6,488,097	6,488,097	6,488,097
R-squared	0.015	0.015	0.042	0.042

Table A.8: The Effects of Baby Bonus on Birth Weight and Gestational Age Controlling for Baby's Gender

Notes: This table replicates the results reported in Columns 3-6 of Table 5 by additionally controlling for baby's gender and reports the estimated effects of cash transfers on log of birth weight (column 1-2) and log of gestational age (column 3-4). For each dependent variable, the left column reports the estimated effect of cash transfers unconditional on birth parity; in the column to the right, the cash transfers' effect is allowed to differ across birth parity. Each observation corresponds to a birth, and the total observations span the universe of births in South Korea from 2001 to 2015. Across columns, the same set of fixed effects (district fixed effects and city-by-month-year fixed effects) is included, and family characteristics are controlled for: dummy variables for mother's and father's educational attainment, age, occupation including unemployment, and marital status. The district-level control variables include the total population, the percentage of the female population, the percentage of the adult population (aged 20 to 64), the percentage of the elderly (older than 64), the net migration rate (lag), the marriage rate (lag), indicators for the gender and political-party affiliation of the local-government head, and the financial-independence rate. Standard errors are clustered at the district level and reported in parentheses. * significant at the 5% level, ** at the 1% level, and *** at the 0.1% level.

	(1)	(2)	(3)	(4)	(5)	(6)
	log Birth Rates					
	1st Child		2nd Child		3rd Child	
$\sinh^{-1}$ Cash Transfer for						
1st Child	0.182***	0.177***				
	(0.0371)	(0.0376)				
2nd Child			0.0504***	0.0577***		
			(0.0094)	(0.0097)		
3rd Child					0.0394***	0.0411***
					(0.0096)	(0.0095)
Observations	3,330	3,330	3,330	3,330	3,330	3,330
Controlling for Migration	O	X	O	X	O	X

Table A.9: The Effect of Baby Bonus on Birth Rates Allowing Migratory Responses

Notes: This table reports the estimated effects of cash transfers on the birth rates for the first child (Columns 1–2), the second child (Columns 3–4), and the third child (Columns 5–6) based on equation 4. For each birth order, the left column includes the same set of fixed effects (district fixed effects and city-by-year fixed effects) and the same district-level control variables are included. The district-level control variables include the total population, the percentage of the female population, the percentage of the adult population (aged 20 to 64), the percentage of the elderly (older than 64), the net migration rate (lag), the marriage rate (lag), indicators for the gender and political-party affiliation of the local-government head, and the financial-independence rate. In addition, Columns 3–4 (resp. 5–6) include the lagged number of births for the first child (resp. the first and second children) in log units; the right column reports the estimated effect of cash transfers while allowing migratory responses by excluding the percentage of the adult population (aged 20 to 64) and the net migration rate (lag) from the set of district-level control variables. Standard errors are clustered at the district level and reported in parentheses. * significant at the 5% level, ** significant at the 1% level, and *** significant at the 0.1% level.