

ONLINE APPENDIX:
SUPPLEMENTARY ANALYSES AND ADDITIONAL ESTIMATES FOR
DOES ACCESS TO FAMILY PLANNING INCREASE CHILDREN’S OPPORTUNITIES?
EVIDENCE FROM THE WAR ON POVERTY AND THE EARLY YEARS OF TITLE X

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Online Appendix A. Evidence Supporting the Internal Validity of the Research Design

Table A1. The Relationship between the Roll-Out of Federal Family Planning Programs and 1965 Determinants of Childbearing

	(1) Population Growth a Problem	(2) Ideal Number of Children	(3) Approve of Abortion	(4) Coital Frequency	(5) Ever Used the Pill	(6) When 1st Used Pill Ever Used	(7) Surgically Sterilized	(8) Children Ever Born to Mother
<i>Mean Dependent Variable</i>	0.80	3.3	0.39	6.04	0.22	772	0.198	5.1
Year Family Planning Program Established	-0.005 [0.007]	0.010 [0.022]	-0.001 [0.005]	0.036 [0.071]	-0.004 [0.010]	0.198 [0.384]	-0.004 [0.008]	-0.054 [0.066]
Observations	3,106	3,069	3,106	2,967	3,106	742	3,106	3,101
R-squared	0.021	0.038	0.023	0.136	0.154	0.022	0.095	0.075

	(9) Married Once	(10) Age at 1st Marriage	(11) Age at 1st Pregnancy	(12) Children Ever Born	(13) Husband's Income	(14) Catholic	(15) Highest Grade	(16) 2 Parents at age 14
<i>Mean Dependent Variable</i>	0.87	20.8	22.3	2.7	7620	0.29	11.3	0.78
Year Family Planning Program Established	0.006 [0.005]	0.054 [0.059]	0.063 [0.066]	0.017 [0.031]	50.6 [157]	0.023 [0.016]	0.036 [0.104]	0.004 [0.006]
Observations	3,106	3,103	2,815	3,106	3,006	3,106	3,105	3,106
R-squared	0.040	0.111	0.160	0.141	0.170	0.061	0.092	0.016

Dependent variables are coded as follows by column: (1) Do you consider the growth of world population a serious problem? Yes=1, (2) What is the ideal number of children for average American family? (3) Index from three questions about whether the respondent approves of abortion if a woman is not married, for health concerns, or in the case of financial hardship. 1=approve in all three cases; (4) Coital frequency in the last four weeks? (5) Have you ever used the Pill? Yes=1, (6) When did you first use the Pill? (month and year, 772 = March 1964), (7) Have you or your husband had an operation making it impossible to have (another) child? 1=Yes; (8) How many children did your mother have? (9) Is this your first marriage? 1=Yes; (10-11) Age in months constructed from month and year of birth and month and year of first marriage and month and year of first pregnancy end date; (12) How many live births have you had? (13) Husband's income in nominal dollars. (14) Respondent identifies as "Roman Catholic." (15) Highest grade attained by the respondent. (16) Did you live with both parents at age 14? 1=Yes. Estimates are obtained from weighted regressions of the indicated dependent variable on the year the family planning program was established. To account for sampling design, the regressions control for size of the primary sampling unit, decade of respondent's birth, and race (1=Nonwhite). Source: 1965 NFS.

Table A2. Correlates of the Timing of Federal Family Planning Program Establishment

	(1)	(2)	(3)	(4)
	Dependent Variable: <i>Year of first federal family planning grant</i>			
1(25 to 49 percent of population in urban areas)	0.55 [0.29]	0.69 [0.32]	0.74 [0.43]	0.86 [0.46]
1(50 to 74 percent of population in urban areas)	0.78 [0.53]	0.89 [0.59]	1.1 [0.76]	0.81 [0.76]
1(75 to 100 percent of population in urban areas)	0.48 [0.70]	0.57 [0.77]	1.28 [1.00]	0.65 [1.03]
Proportion of residents				
in urban areas	-0.02 [0.01]	-0.02 [0.01]	-0.04 [0.02]	-0.03 [0.01]
in rural or farm areas	0.01 [0.01]	-0.00 [0.01]	0.00 [0.02]	0.00 [0.02]
under 5 years of age	0.06 [0.09]	-0.03 [0.07]	-0.03 [0.13]	-0.07 [0.16]
65 or older	-0.03 [0.06]	-0.07 [0.04]	-0.07 [0.12]	-0.16 [0.08]
Nonwhite	-0.01 [0.01]	-0.01 [0.01]	-0.02 [0.01]	-0.02 [0.02]
with 12 years of education	-0.00 [0.02]	0.02 [0.02]	0.02 [0.03]	0.03 [0.03]
with less than 4 years of education	-0.01 [0.02]	-0.00 [0.02]	0.02 [0.08]	0.01 [0.06]
of households with income <\$3,000	-0.02 [0.01]	-0.00 [0.01]	-0.02 [0.05]	0.01 [0.04]
of households with income >\$10,000	-0.01 [0.03]	-0.03 [0.03]	-0.00 [0.04]	0.01 [0.04]
Weighted by population of women 15 to 44			X	X
State fixed effects		X		X
Observations	666	666	666	666
R-squared	0.07	0.26	0.13	0.38

Each column reports estimates from a separate linear regression. Heteroskedasticity-robust standard errors are corrected for correlation within state and presented in brackets beneath each estimate. Sources: 1960 County and City Databooks (Haines et al. 2010). Information on family planning programs is from Bailey (2012).

Table A3. General Fertility Rate Before and After Family Planning Programs Began

	(1)	(2)	(3)	(4)	(5)
	Dependent Variable: General Fertility Rate				
<i>A. 1970 Census: Mean DV</i>			96.83		
-6	-0.629 [1.618]	0.436 [1.654]	0.434 [1.653]	-0.144 [1.649]	0.508 [1.784]
-5	-0.302 [1.529]	0.520 [1.481]	0.510 [1.478]	-0.039 [1.485]	0.617 [1.585]
-4	-1.164 [1.328]	-0.033 [1.345]	-0.052 [1.333]	-0.556 [1.325]	-0.066 [1.438]
-3	-1.307 [1.188]	0.065 [1.150]	0.011 [1.135]	-0.423 [1.109]	0.089 [1.218]
-2	0.067 [1.075]	1.156 [1.117]	1.077 [1.105]	0.805 [1.101]	1.585 [1.203]
-1	-1.085 [1.046]	-0.815 [1.034]	-0.908 [1.027]	-1.008 [1.031]	-1.016 [1.121]
<i>Event year zero omitted (Year family planning program began)</i>					
County by birth year cells	7324	7324	7324	7324	7324
R-squared	0.336	0.394	0.397	0.418	0.394
<i>B. 1980 Census: Mean DV</i>			85.99		
-2	0.528 [0.918]	0.677 [0.960]	0.496 [0.957]	0.184 [0.954]	0.817 [0.934]
-1	-0.747 [0.927]	-1.080 [0.937]	-1.179 [0.940]	-1.335 [0.935]	-1.199 [0.925]
<i>Event year zero omitted (Year family planning program began)</i>					
1	-1.615 [0.805]	-1.689 [0.834]	-1.577 [0.836]	-1.445 [0.833]	-1.837 [0.878]
2	-1.709 [0.817]	-2.268 [0.901]	-2.187 [0.900]	-1.878 [0.897]	-2.499 [0.912]
3	-2.818 [0.968]	-3.187 [1.020]	-3.122 [1.004]	-2.702 [1.002]	-3.612 [0.963]
4	-1.890 [1.054]	-2.237 [1.081]	-2.198 [1.063]	-1.663 [1.063]	-2.426 [0.986]
5	-1.917 [1.218]	-2.799 [1.272]	-2.864 [1.250]	-2.213 [1.253]	-3.132 [1.053]
6	-2.568 [1.312]	-3.058 [1.351]	-3.215 [1.312]	-2.473 [1.302]	-3.497 [1.075]
County by birth year cells	11313	11313	11313	11313	11313
R-squared	0.223	0.300	0.304	0.313	0.300
Model	1	2	3	4	2M
Covariates	C, Y	C, Y, S-Y	C, Y, S-Y, R, A	C, Y, S-Y, R, A, Ctrend	C, Y, S-Y, mobility adjusted
Counties	666	666	666	666	666

See Table 2 and Figure 2 notes in main paper. The table presents point estimates of τ in equation 1. The Ctrend in column 4 represents 1960 Census county characteristics interacted with linear time trends. The dependent variable is the general fertility rate (GFR) calculated using the 1970 or 1980 Censuses.

Online Appendix B. Corrections for Mobility Bias

An important challenge to our analysis is that the Censuses only contain information on a child's residence in (or five years before) the Census year, not at the time of the child's birth. This implies that we may misclassify mothers' access to federal family planning around the time of conception if mothers subsequently move to a different county.

We diagnose the severity of mobility bias by comparing estimates of equation (1) for the Vital Statistics birth rates (which contain county of birth) and 1980 Census (which uses county of residence in 1980). We find that mobility bias is large enough so as to completely obscure the fertility effects of family planning programs in the Census (Appendix Figure A1, panel A). Whereas Vital Statistics (using county of mother's residence at birth) show a large and precisely estimated 2 percent reduction in fertility rates following the introduction of family planning programs (Bailey 2012), the Census yields imprecise zeros for the same specification and cohort sample. We also find substantial attenuation in estimates of the income of the average child (Appendix Figure A2).

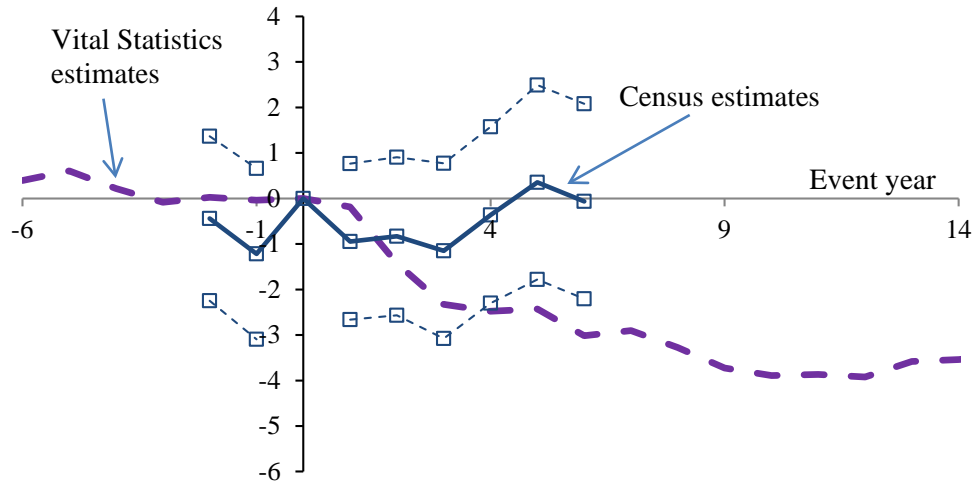
We use several strategies to limit the impact of this mobility bias. First, we use county of residence five years before the Census, because 1975 is more temporally proximate to the year of birth for cohorts of children identifying our parameters of interest (and, therefore, more strongly correlated with mother's exposure to family planning) than 1980. We use 1965 for the 1970 Census for consistency. Second, we exclude unfunded areas from our estimation sample, because of their differential mobility relative to funded areas after family planning programs started. Finally, we follow Card and Krueger (1992) to adjust for mobility using a post-estimation correction as described in the main paper. When we do this, we find that the fertility estimates in the Census correspond closely to those in Vital Statistics (Appendix Figure A1, panel B).

Differential mobility in areas with family planning programs and mobility that differentially increases after the programs begin is consistent with theoretical predictions. Evidence of an income effect of family planning programs suggests that they may allow women to make different location choices,

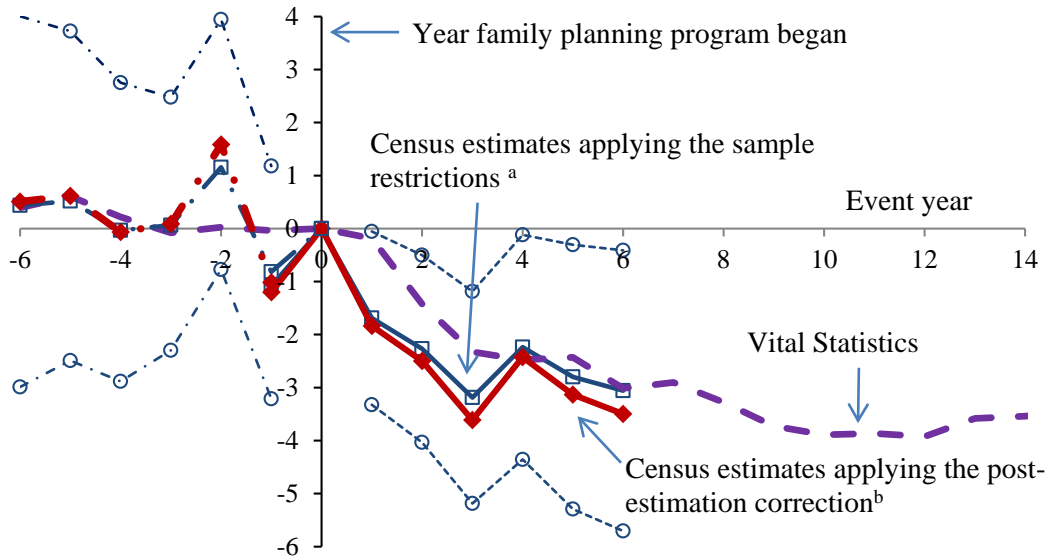
perhaps because they are less constrained by the birth of a child. Without an ill-timed birth, women should be more likely to move to attend school, pursue a better job, or follow a partner. They would also be less geographically constrained by the location of grandparents, who may help provide childcare. These predictions are borne out empirically: Appendix Figure A3 (results for a sample of all counties) shows that children born after family planning programs began were significantly more likely to live with a parent who moved between 1975 and 1980 to a county with a different treatment status (i.e. from a funded to an unfunded or an unfunded to funded county).

Figure A1. The Effect of Family Planning Programs on General Fertility Rates with and without Corrections for Mobility

A. Comparison of Vital Statistics and Census Estimates before Mobility Bias Adjustment

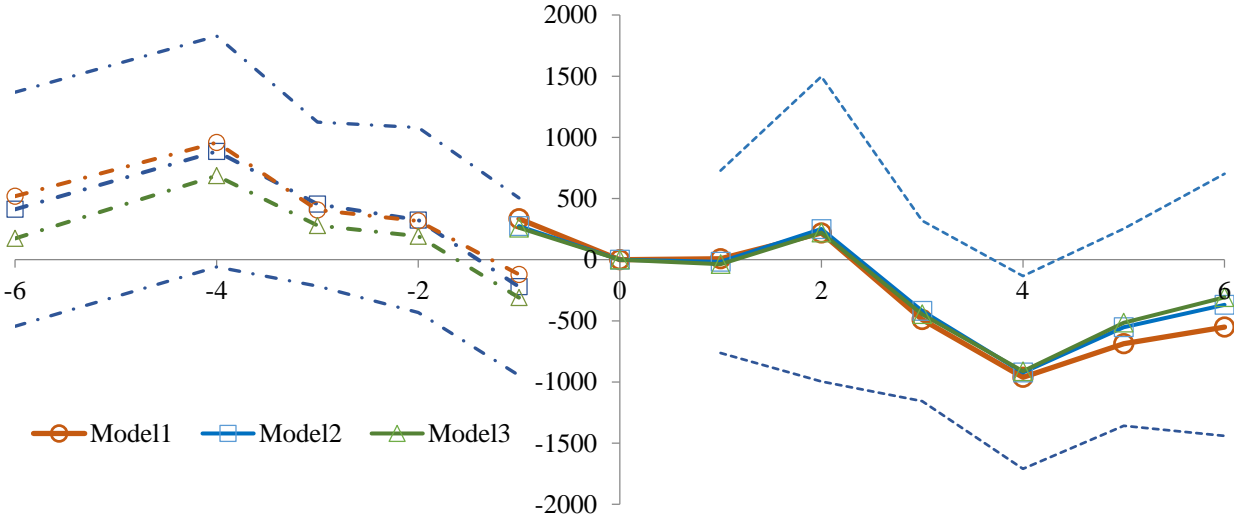


B. Comparison of Vital Statistics and Census Estimates after Mobility Bias Adjustment



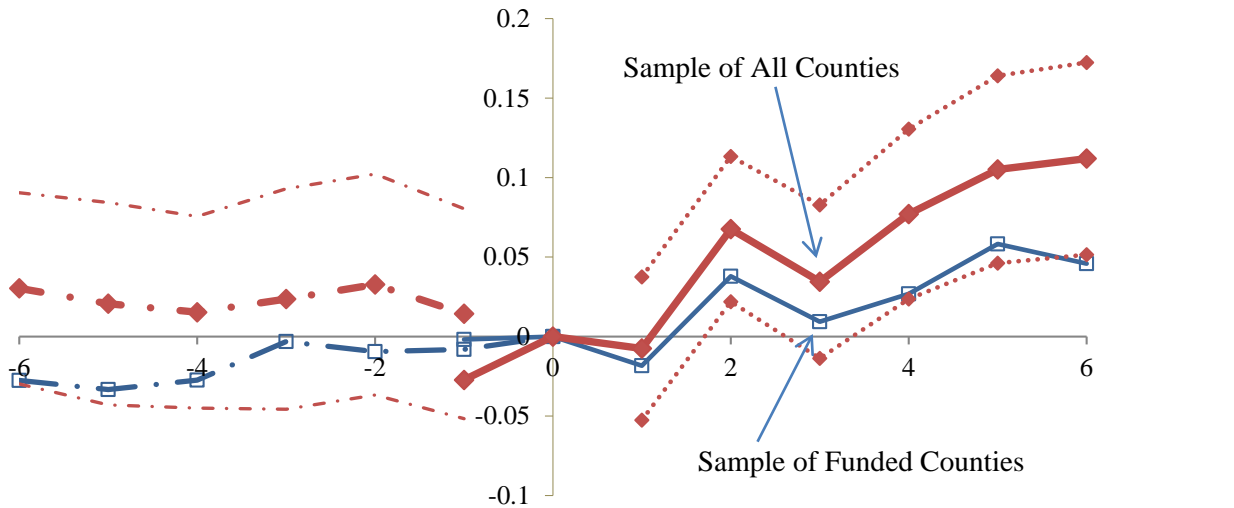
Series plot estimates of τ from our baseline model of equation 1 (col. 2 in Table 2). The x-axis plots the event year, equal to year of birth minus year of first family planning grant. The dependent variable is the general fertility rate (GFR) calculated using either Vital Statistics or the 1970 and 1980 Censuses (estimates in Online Appendix B). The Vital Statistics county represents county of mother's residence at the time of the birth as reported on the birth certificate. The Census estimates in both panels use the GFR implied by the county of residence in 1965/1975 and age of the child in the Census. Census estimates in panel A include both funded and unfunded counties. ^a Estimates adjusting for mobility by using the baseline model for county of residence 5 years before the Census, and a sample of only funded counties. Covariates include county, birth year, and state by birth year fixed effects (model 2). ^b Estimates using baseline model with Card and Krueger's (1992) post-estimation correction for mobility bias. Sources: 1970 and 1980 restricted long-form Census samples for both numerator and denominator estimates. Vital Statistics estimates use, for GFR numerators, hand-entered, county-level birth aggregates published in Vital Statistics from 1959 to 1967 and the Natality Detail Files from 1968 to 1988 (U.S. Department of Health and Human Services and National Center for Health Statistics 1996). For GFR denominators, SEER county-level estimates of women ages 15 to 44 from 1969-1988 are augmented with interpolated, county-level estimates of the same population between the 1960 Census and the 1969 SEER.

Figure A2. The Effect of Family Planning Programs on the Household Income of the Average Child without Corrections for Mobility



Series plot estimates of τ from three specifications of our model using household income as the dependent variable before we make adjustments for mobility bias, but use county of residence in 1965/1975. The x-axis plots the event year, equal to birth year minus year of first family planning grant. Series plot estimates of τ from equation 1 for models 1, 2, and 3 (see notes for Table 2). Model 1 includes county and birth-year fixed effects. Model 2 adds state-by-birth year fixed effects (baseline model). Model 3 adds REIS variables and abortion access controls. The estimates include both funded and unfunded counties. Standard errors have been clustered by county and used to construct 95-percent, point-wise confidence intervals for model 2 (dashed lines). Source: Authors’ calculations using restricted-use 1970 (dashed lines) and 1980 (solid lines) Census data.

Figure A3. The Effect of Family Planning Programs on the Mobility of Parents



Series plot estimates of τ from our baseline model of equation 1 (model 2) for a sample of all counties (red diamonds) and a sample of only funded counties (blue squares). The x-axis plots the event year, equal to birth year minus year of first family planning grant. The dependent variable is the share of children whose parents have moved in a way that changed their treatment status between 1975 and 1980 (between 1965 and 1970 when using the 1970 Census). These estimates are unweighted. Heteroskedasticity-robust standard errors clustered by county are used to construct 95-percent confidence intervals for a sample of all counties and are presented as dashed lines. Estimates for the sample of funded counties are not statistically different from zero. Source: Authors’ calculations using restricted-use 1970 (dashed lines) and 1980 (solid lines) Census data.

Online Appendix C. Complete Tables for 1970 and 1980 Censuses with Sensitivity Checks

Table A4. Average Log Household Income for Children Born Before Family Planning Programs Began

	(1)	(2)	(3)	(4)	(5)
	Dependent Variable: Household Income				
<i>A. 1970 Census: Mean DV</i>	<i>10.79</i>				
-6	-0.009 [0.010]	-0.005 [0.010]	-0.007 [0.011]	-0.007 [0.011]	-0.006 [0.011]
-5	0.015 [0.010]	0.020 [0.010]	0.019 [0.011]	0.019 [0.011]	0.019 [0.010]
-4	0.000 [0.009]	0.004 [0.010]	0.002 [0.010]	0.002 [0.010]	0.002 [0.010]
-3	-0.004 [0.008]	-0.001 [0.009]	-0.003 [0.010]	-0.003 [0.010]	-0.004 [0.009]
-2	-0.001 [0.008]	0.003 [0.008]	0.002 [0.008]	0.002 [0.008]	0.001 [0.008]
-1	-0.007 [0.008]	-0.008 [0.008]	-0.010 [0.008]	-0.010 [0.008]	-0.010 [0.008]
<i>Event year zero omitted (Year family planning program began)</i>					
County by birth year cells	7324	7324	7324	7324	7324
R-squared	0.23	0.283	0.286	0.286	0.298
Covariates	C, Y	C, Y, S-Y	C, Y, S-Y, R	C, Y, S-Y, R, A	C, Y, S-Y, R, Ctrend
Counties	666	666	666	666	666

See notes in Table 2 in main paper and Figure 2 and Table 2 for estimates using the 1980 Census.

Table A5. Average Household Income per Capita for Children

	(1)	(2)	(3)	(4)	(5)
Dependent Variable: Household Income per Capita					
<i>A. 1970 Census: Mean DV</i>			<i>\$10,977</i>		
-6	5.2 [108.9]	55.5 [116.5]	33.8 [116.7]	24.8 [117.3]	53.7 [114.9]
-5	388.3 [276.4]	495.0 [346.1]	473.6 [340.6]	455.0 [347.4]	607.2 [382.8]
-4	71.8 [104.8]	121.5 [107.8]	100.9 [108.0]	74.7 [108.7]	140.7 [101.7]
-3	-38.8 [93.44]	-24.7 [107.3]	-43.6 [109.0]	-72.9 [108.0]	-42.9 [106.8]
-2	-45.4 [88.91]	-20.2 [104.9]	-35.9 [105.3]	-58.7 [103.7]	-34.1 [107.1]
-1	-27.7 [81.02]	-59.6 [86.39]	-72.3 [85.79]	-81.8 [86.18]	-81.3 [90.7]
<i>Event year zero omitted (Year family planning program began)</i>					
County by birth year cells	7324	7324	7324	7324	7324
R-squared	0.007	0.065	0.066	0.072	0.065
<i>B. 1980 Census: Mean DV</i>			<i>\$13,792</i>		
-2	-32.7 [97.62]	-60.1 [112.5]	-54.3 [112.3]	-19.7 [112.4]	-58.5 [119.2]
-1	-32.7 [84.83]	-77.6 [92.67]	-77.9 [92.54]	-58.7 [92.24]	-88.2 [96.8]
<i>Event year zero omitted (Year family planning program began)</i>					
1	110.7 [97.02]	122.1 [102.8]	114.5 [103.4]	101.2 [103.8]	125.8 [107.5]
2	291.9 [115.2]	326.2 [126.8]	313.0 [127.8]	285.4 [126.9]	363.9 [133.5]
3	240.2 [113.2]	286.1 [124.1]	267.9 [125.7]	227.5 [124.5]	304.9 [129.4]
4	343.9 [129.5]	367.5 [141.8]	345.8 [144.5]	295.9 [142.2]	394.5 [149.5]
5	472.2 [145.0]	483.7 [158.5]	455.1 [163.6]	398.0 [160.2]	530.8 [169.7]
6	563.8 [175.4]	589.6 [185.9]	558.5 [190.5]	494.8 [185.2]	659.4 [202.9]
County by birth year cells	11313	11313	11313	11313	11313
R-squared	0.218	0.285	0.287	0.303	0.285
Model	1	2	3	4	2M
Covariates	C, Y	C, Y, S-Y	C, Y, S-Y, R, A	C, Y, S-Y, R, A, Ctrend	C, Y, S-Y, mobility adjusted
Counties	666	666	666	666	666

See notes in Table 2 of main paper.

Table A6. Share of Children Living Below 100 Percent of Poverty Line

	(1)	(2)	(3)	(4)	(5)
Dependent Variable: Share Below 100% Poverty Line					
<i>A. 1970 Census: Mean DV</i>			<i>21.73</i>		
-6	1.006 [0.602]	0.540 [0.632]	0.550 [0.639]	0.467 [0.640]	0.668 [0.679]
-5	0.230 [0.569]	-0.223 [0.617]	-0.208 [0.614]	-0.250 [0.617]	-0.281 [0.662]
-4	0.212 [0.499]	-0.224 [0.552]	-0.204 [0.551]	-0.210 [0.550]	-0.291 [0.590]
-3	0.268 [0.480]	-0.006 [0.490]	0.027 [0.489]	0.048 [0.491]	-0.015 [0.521]
-2	-0.094 [0.449]	-0.437 [0.471]	-0.398 [0.471]	-0.382 [0.473]	-0.585 [0.508]
-1	0.851 [0.434]	0.775 [0.474]	0.822 [0.472]	0.815 [0.475]	1.039 [0.520]
<i>Event year zero omitted (Year family planning program began)</i>					
County by birth year cells	7324	7324	7324	7324	7324
R-squared	0.017	0.105	0.107	0.130	0.105
<i>B. 1980 Census: Mean DV</i>			<i>18.89</i>		
-2	0.547 [0.383]	0.737 [0.414]	0.720 [0.426]	0.664 [0.417]	0.819 [0.412]
-1	0.358 [0.338]	0.459 [0.370]	0.455 [0.364]	0.423 [0.362]	0.526 [0.351]
<i>Event year zero omitted (Year family planning program began)</i>					
1	-0.368 [0.303]	-0.522 [0.344]	-0.543 [0.344]	-0.520 [0.345]	-0.576 [0.331]
2	-0.707 [0.297]	-0.903 [0.351]	-0.937 [0.341]	-0.895 [0.343]	-1.012 [0.333]
3	-0.681 [0.384]	-0.961 [0.452]	-0.994 [0.451]	-0.934 [0.448]	-1.065 [0.429]
4	-0.696 [0.461]	-0.773 [0.459]	-0.845 [0.446]	-0.771 [0.438]	-0.812 [0.421]
5	-1.280 [0.466]	-1.401 [0.519]	-1.507 [0.522]	-1.426 [0.512]	-1.594 [0.488]
6	-1.253 [0.579]	-1.353 [0.579]	-1.485 [0.584]	-1.396 [0.562]	-1.540 [0.529]
County by birth year cells	11313	11313	11313	11313	11313
R-squared	0.021	0.092	0.095	0.100	0.092
Model	1	2	3	4	2M
Covariates	C, Y	C, Y, S- Y	C, Y, S- Y, R, A	C, Y, S- Y, R, A, Ctrend	C, Y, S-Y, mobility adjusted
Counties	666	666	666	666	666

See notes in Table 2 of main paper.

Table A7. Share of Children Living Below 150 Percent of Poverty Line

	(1)	(2)	(3)	(4)	(5)
Dependent Variable: Share Below 150% Poverty Line					
<i>A. 1970 Census: Mean DV</i>			37.17		
-6	0.942 [0.561]	0.780 [0.564]	0.822 [0.569]	0.783 [0.592]	0.946 [0.603]
-5	0.084 [0.535]	-0.180 [0.553]	-0.136 [0.548]	-0.123 [0.557]	-0.252 [0.588]
-4	0.319 [0.519]	0.181 [0.566]	0.227 [0.565]	0.283 [0.579]	0.202 [0.607]
-3	0.130 [0.519]	0.065 [0.534]	0.117 [0.528]	0.197 [0.536]	0.050 [0.574]
-2	0.111 [0.484]	-0.050 [0.507]	0.000 [0.506]	0.065 [0.507]	-0.095 [0.550]
-1	0.627 [0.459]	0.712 [0.474]	0.762 [0.474]	0.785 [0.477]	0.929 [0.516]
<i>Event year zero omitted (Year family planning program began)</i>					
County by birth year cells	7324	7324	7324	7324	7324
R-squared	0.017	0.094	0.097	0.113	0.094
<i>B. 1980 Census: Mean DV</i>			30.77		
-2	0.018 [0.347]	0.175 [0.383]	0.168 [0.385]	0.128 [0.382]	0.207 [0.372]
-1	-0.068 [0.369]	0.067 [0.400]	0.065 [0.390]	0.038 [0.388]	0.103 [0.375]
<i>Event year zero omitted (Year family planning program began)</i>					
1	-0.815 [0.357]	-0.786 [0.408]	-0.804 [0.391]	-0.792 [0.393]	-0.853 [0.378]
2	-1.191 [0.404]	-1.182 [0.437]	-1.209 [0.433]	-1.194 [0.432]	-1.309 [0.415]
3	-0.881 [0.436]	-1.003 [0.491]	-1.031 [0.494]	-0.998 [0.484]	-1.062 [0.473]
4	-1.353 [0.505]	-1.460 [0.571]	-1.512 [0.542]	-1.473 [0.522]	-1.595 [0.511]
5	-1.782 [0.523]	-1.979 [0.652]	-2.052 [0.625]	-2.018 [0.594]	-2.231 [0.580]
6	-1.469 [0.671]	-1.672 [0.738]	-1.761 [0.722]	-1.723 [0.690]	-1.824 [0.650]
County by birth year cells	11313	11313	11313	11313	11313
R-squared	0.053	0.130	0.131	0.140	0.130
Model	1	2	3	4	2M
Covariates	C, Y	C, Y, S-Y	C, Y, S- Y, R, A	C, Y, S-Y, R, A, Ctrend	C, Y, S-Y, mobility adjusted
Counties	666	666	666	666	666

See notes in Table 2 of main paper.

Table A8. Share of Children below 200 Percent of Poverty Line

	(1)	(2)	(3)	(4)	(5)
Dependent Variable: Share Below 200% Poverty Line					
<i>A. 1970 Census: Mean DV</i>			53.58		
-6	0.224 [0.586]	0.173 [0.616]	0.272 [0.608]	0.281 [0.649]	0.229 [0.660]
-5	-0.169 [0.543]	-0.548 [0.604]	-0.448 [0.596]	-0.390 [0.618]	-0.674 [0.646]
-4	0.141 [0.552]	-0.105 [0.568]	-0.007 [0.561]	0.092 [0.591]	-0.124 [0.608]
-3	-0.222 [0.509]	-0.411 [0.532]	-0.314 [0.524]	-0.198 [0.538]	-0.534 [0.572]
-2	0.179 [0.455]	0.083 [0.490]	0.169 [0.489]	0.263 [0.491]	0.113 [0.531]
-1	0.488 [0.440]	0.483 [0.446]	0.561 [0.446]	0.601 [0.450]	0.639 [0.485]
<i>Event year zero omitted (Year family planning program began)</i>					
County by birth year cells	7324	7324	7324	7324	7324
R-squared	0.010	0.078	0.084	0.100	0.078
<i>B. 1980 Census: Mean DV</i>			43.16		
-2	0.174 [0.378]	0.139 [0.415]	0.163 [0.406]	0.118 [0.404]	0.149 [0.393]
-1	0.300 [0.395]	0.381 [0.404]	0.397 [0.404]	0.368 [0.402]	0.453 [0.391]
<i>Event year zero omitted (Year family planning program began)</i>					
1	-0.699 [0.397]	-0.523 [0.438]	-0.549 [0.436]	-0.525 [0.432]	-0.570 [0.423]
2	-1.045 [0.393]	-0.918 [0.440]	-0.946 [0.434]	-0.924 [0.427]	-1.027 [0.422]
3	-0.725 [0.472]	-0.651 [0.525]	-0.679 [0.559]	-0.640 [0.545]	-0.678 [0.532]
4	-0.898 [0.575]	-0.755 [0.593]	-0.797 [0.606]	-0.753 [0.579]	-0.769 [0.570]
5	-2.112 [0.585]	-1.860 [0.677]	-1.902 [0.674]	-1.867 [0.642]	-2.145 [0.622]
6	-1.383 [0.681]	-1.124 [0.768]	-1.164 [0.744]	-1.134 [0.703]	-1.189 [0.673]
County by birth year cells	11313	11313	11313	11313	11313
R-squared	0.111	0.191	0.192	0.200	0.191
Model	1	2	3	4	2M
Covariates	C, Y	C, Y, S-Y	C, Y, S- Y, R, A	C, Y, S- Y, R, A, Ctrend	C, Y, S-Y, mobility adjusted
Counties	666	666	666	666	666

See notes in Table 2 of main paper.

Table A9. Share of Children Living in Households Receiving Any Public Assistance

	(1)	(2)	(3)	(4)	(5)
Dependent Variable: Share Receiving any Welfare					
<i>A. 1970 Census: Mean DV</i>			<i>7.56</i>		
-6	-0.148 [0.330]	-0.299 [0.352]	-0.367 [0.374]	-0.312 [0.374]	-0.347 [0.376]
-5	-0.112 [0.341]	-0.301 [0.357]	-0.360 [0.378]	-0.288 [0.376]	-0.349 [0.381]
-4	-0.031 [0.320]	-0.100 [0.350]	-0.150 [0.367]	-0.065 [0.367]	-0.096 [0.375]
-3	-0.148 [0.307]	-0.362 [0.341]	-0.388 [0.349]	-0.297 [0.348]	-0.440 [0.368]
-2	0.013 [0.248]	-0.074 [0.294]	-0.077 [0.298]	-0.003 [0.293]	-0.062 [0.316]
-1	0.034 [0.299]	-0.124 [0.312]	-0.106 [0.314]	-0.068 [0.315]	-0.133 [0.342]
<i>Event year zero omitted (Year family planning program began)</i>					
County by birth year cells	7324	7324	7324	7324	7324
R-squared	0.005	0.079	0.083	0.097	0.079
<i>B. 1980 Census: Mean DV</i>			<i>11.40</i>		
-2	-0.022 [0.266]	-0.052 [0.299]	-0.069 [0.288]	-0.159 [0.292]	-0.056 [0.274]
-1	-0.136 [0.265]	-0.180 [0.282]	-0.187 [0.268]	-0.234 [0.271]	-0.189 [0.259]
<i>Event year zero omitted (Year family planning program began)</i>					
1	-0.636 [0.255]	-0.638 [0.265]	-0.644 [0.274]	-0.604 [0.273]	-0.687 [0.266]
2	-0.957 [0.252]	-0.862 [0.294]	-0.878 [0.289]	-0.797 [0.287]	-0.938 [0.280]
3	-1.177 [0.331]	-1.206 [0.332]	-1.224 [0.341]	-1.111 [0.339]	-1.342 [0.325]
4	-1.269 [0.440]	-1.180 [0.429]	-1.221 [0.443]	-1.079 [0.445]	-1.294 [0.414]
5	-1.516 [0.441]	-1.338 [0.464]	-1.403 [0.457]	-1.238 [0.451]	-1.481 [0.422]
6	-1.623 [0.500]	-1.467 [0.507]	-1.553 [0.488]	-1.369 [0.481]	-1.642 [0.440]
County by birth year cells	11313	11313	11313	11313	11313
R-squared	0.010	0.102	0.103	0.114	0.102
Model	1	2	3	4	2M
Covariates	C, Y	C, Y, S-Y	C, Y, S- Y, R, A	C, Y, S- Y, R, A, Ctrend	C, Y, S-Y, mobility adjusted
Counties	666	666	666	666	666

See notes in Table 2 of main paper.

Table A10. Share of Children Living with Single Parents

	(1)	(2)	(3)	(4)	(5)
Dependent Variable: Share in Single Headed Households					
<i>A. 1970 Census: Mean DV</i>			<i>12.84</i>		
-6	-0.013 [0.438]	-0.200 [0.464]	-0.225 [0.492]	-0.077 [0.488]	-0.230 [0.498]
-5	0.064 [0.422]	-0.129 [0.442]	-0.154 [0.468]	-0.022 [0.464]	-0.137 [0.471]
-4	-0.006 [0.406]	-0.207 [0.431]	-0.231 [0.452]	-0.119 [0.453]	-0.233 [0.461]
-3	0.081 [0.407]	-0.061 [0.425]	-0.080 [0.437]	0.013 [0.436]	-0.041 [0.459]
-2	-0.214 [0.362]	-0.348 [0.378]	-0.360 [0.386]	-0.296 [0.387]	-0.413 [0.409]
-1	-0.043 [0.339]	-0.154 [0.367]	-0.163 [0.369]	-0.130 [0.369]	-0.145 [0.402]
<i>Event year zero omitted (Year family planning program began)</i>					
County by birth year cells	7324	7324	7324	7324	7324
R-squared	0.007	0.062	0.062	0.068	0.062
<i>B. 1980 Census: Mean DV</i>			<i>17.40</i>		
-2	-0.399 [0.322]	-0.438 [0.335]	-0.420 [0.339]	-0.381 [0.341]	-0.497 [0.324]
-1	0.336 [0.334]	0.363 [0.349]	0.365 [0.355]	0.387 [0.358]	0.442 [0.341]
<i>Event year zero omitted (Year family planning program began)</i>					
1	0.002 [0.298]	-0.102 [0.338]	-0.143 [0.296]	-0.164 [0.294]	-0.091 [0.288]
2	-0.080 [0.290]	-0.355 [0.341]	-0.424 [0.312]	-0.449 [0.310]	-0.393 [0.308]
3	-0.086 [0.326]	-0.438 [0.387]	-0.528 [0.351]	-0.563 [0.348]	-0.486 [0.338]
4	-0.392 [0.434]	-0.785 [0.475]	-0.913 [0.460]	-0.954 [0.459]	-0.918 [0.438]
5	0.190 [0.462]	-0.279 [0.516]	-0.451 [0.480]	-0.489 [0.482]	-0.281 [0.460]
6	0.057 [0.495]	-0.483 [0.582]	-0.681 [0.524]	-0.719 [0.526]	-0.541 [0.491]
County by birth year cells	11313	11313	11313	11313	11313
R-squared	0.026	0.095	0.098	0.105	0.095
Model	1	2	3	4	2M
Covariates	C, Y	C, Y, S-Y	C, Y, S- Y, R, A	C, Y, S- Y, R, A, Ctrend	C, Y, S-Y, mobility adjusted
Counties	666	666	666	666	666

See notes in Table 2 of main paper.

Table A11. Mother's Age at the Time of Child's Birth

	(1)	(2)	(3)	(4)	(5)
Dependent Variable: Average Mother's Age at Birth					
<i>A. 1970 Census: Mean DV</i>			25.79		
-6	0.062 [0.0966]	0.029 [0.103]	0.034 [0.0990]	0.042 [0.0957]	0.033 [0.111]
-5	0.083 [0.0887]	0.044 [0.0915]	0.050 [0.0887]	0.062 [0.0869]	0.052 [0.097]
-4	0.094 [0.0797]	0.066 [0.0840]	0.072 [0.0816]	0.086 [0.0810]	0.080 [0.090]
-3	0.003 [0.0744]	-0.005 [0.0791]	0.003 [0.0764]	0.017 [0.0760]	-0.011 [0.085]
-2	0.020 [0.0750]	0.034 [0.0728]	0.043 [0.0709]	0.051 [0.0702]	0.040 [0.077]
-1	0.001 [0.0628]	0.000 [0.0694]	0.009 [0.0686]	0.008 [0.0687]	-0.006 [0.075]
<i>Event year zero omitted (Year family planning program began)</i>					
County by birth year cells	7324	7324	7324	7324	7324
R-squared	0.104	0.177	0.182	0.203	0.177
<i>B. 1980 Census: Mean DV</i>			25.04		
-2	0.028 [0.0545]	0.045 [0.0638]	0.047 [0.0599]	0.029 [0.0584]	0.047 [0.063]
-1	0.065 [0.0589]	0.078 [0.0603]	0.082 [0.0614]	0.072 [0.0609]	0.089 [0.064]
<i>Event year zero omitted (Year family planning program began)</i>					
1	-0.013 [0.0613]	-0.003 [0.0570]	0.002 [0.0642]	0.010 [0.0639]	0.005 [0.067]
2	-0.116 [0.0572]	-0.114 [0.0652]	-0.106 [0.0654]	-0.092 [0.0642]	-0.123 [0.066]
3	-0.156 [0.0623]	-0.182 [0.0700]	-0.172 [0.0680]	-0.154 [0.0664]	-0.201 [0.069]
4	-0.170 [0.0753]	-0.193 [0.0859]	-0.181 [0.0827]	-0.158 [0.0814]	-0.210 [0.087]
5	-0.269 [0.0861]	-0.303 [0.0987]	-0.284 [0.0988]	-0.260 [0.0961]	-0.346 [0.105]
6	-0.236 [0.0921]	-0.276 [0.104]	-0.254 [0.0999]	-0.228 [0.0975]	-0.311 [0.110]
County by birth year cells	11313	11313	11313	11313	11313
R-squared	0.133	0.203	0.208	0.224	0.203
Model	1	2	3	4	2M
Covariates	C, Y	C, Y, S- Y	C, Y, S- Y, R, A	C, Y, S- Y, R, A, Ctrend	C, Y, S-Y, mobility adjusted
Counties	666	666	666	666	666

See notes in Table 2 of main paper.

Table A12. Average Number of Older Siblings for Cohorts

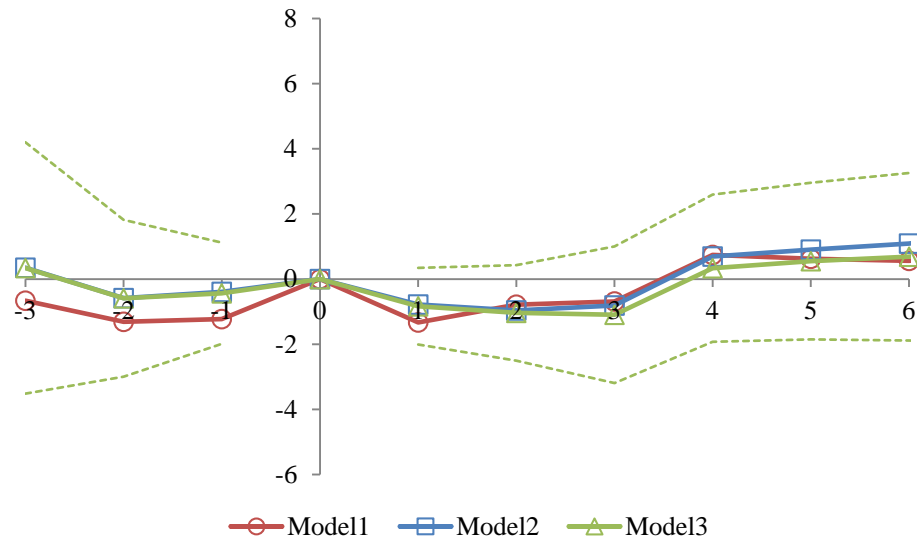
	(1)	(2)	(3)	(4)	(5)
Dependent Variable: Average Number of Older Siblings					
<i>A. 1970 Census: Mean DV</i>					
	<i>1.89</i>				
-6	0.000	-0.024	-0.024	-0.015	-0.029
	[0.0300]	[0.0315]	[0.0313]	[0.0311]	[0.033]
-5	0.022	0.001	0.001	0.011	0.001
	[0.0270]	[0.0272]	[0.0269]	[0.0268]	[0.029]
-4	-0.009	-0.024	-0.023	-0.013	-0.031
	[0.0228]	[0.0237]	[0.0235]	[0.0237]	[0.024]
-3	0.016	0.015	0.017	0.027	0.020
	[0.0268]	[0.0277]	[0.0273]	[0.0277]	[0.029]
-2	0.016	0.015	0.018	0.025	0.020
	[0.0245]	[0.0242]	[0.0241]	[0.0240]	[0.026]
-1	0.001	-0.004	-0.001	0.002	-0.006
	[0.0212]	[0.0233]	[0.0234]	[0.0235]	[0.025]
<i>Event year zero omitted (Year family planning program began)</i>					
County by birth year cells	7324	7324	7324	7324	7324
R-squared	0.234	0.295	0.297	0.313	0.295
<i>B. 1980 Census: Mean DV</i>					
	<i>1.54</i>				
-2	-0.016	-0.020	-0.018	-0.024	-0.021
	[0.0210]	[0.0226]	[0.0231]	[0.0226]	[0.024]
-1	0.008	0.013	0.016	0.013	0.019
	[0.0202]	[0.0198]	[0.0214]	[0.0215]	[0.022]
<i>Event year zero omitted (Year family planning program began)</i>					
1	-0.023	-0.017	-0.014	-0.012	-0.015
	[0.0183]	[0.0183]	[0.0197]	[0.0196]	[0.020]
2	-0.043	-0.031	-0.028	-0.025	-0.033
	[0.0176]	[0.0191]	[0.0190]	[0.0187]	[0.018]
3	-0.044	-0.038	-0.035	-0.031	-0.041
	[0.0175]	[0.0210]	[0.0204]	[0.0197]	[0.021]
4	-0.072	-0.061	-0.057	-0.051	-0.069
	[0.0229]	[0.0271]	[0.0267]	[0.0259]	[0.028]
5	-0.086	-0.069	-0.062	-0.057	-0.079
	[0.0237]	[0.0297]	[0.0305]	[0.0293]	[0.032]
6	-0.081	-0.064	-0.055	-0.050	-0.072
	[0.0270]	[0.0336]	[0.0331]	[0.0316]	[0.036]
County by birth year cells	11313	11313	11313	11313	11313
R-squared	0.492	0.541	0.543	0.557	0.541
Model	1	2	3	4	2M
Covariates	C, Y	C, Y, S-Y	C, Y, S-Y, R, A	C, Y, S-Y, R, A, Ctrend	C, Y, S-Y, mobility adjusted
Counties	666	666	666	666	666

See notes in Table 2 of main paper.

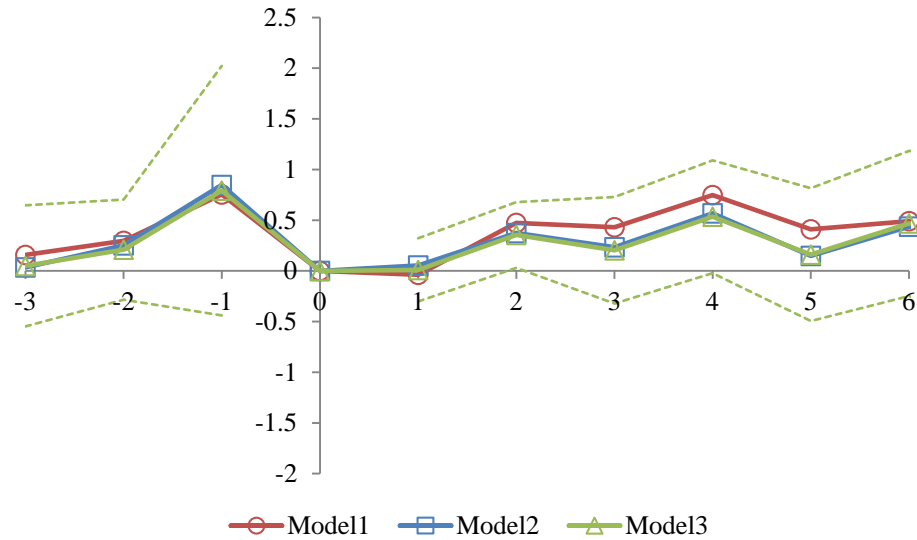
Online Appendix D. The Effect of Family Planning Programs on Marriage and Divorce

Figure A4. Effects of Federally Funded Family Planning on Marriage and Divorce

A. Marriages per 1000 Women Ages 15 to 44



B. Divorces per 1000 Women Ages 15 to 44



Series plot point estimates of τ from models 1 to 3 of equation 1. Series plot estimates of τ from equation 1 for models 1, 2, and 3 (see notes for Table 2). Model 1 includes county and birth-year fixed effects. Model 2 adds state-by-birth year fixed effects (baseline model). Model 3 adds REIS variables and abortion access controls. The dependent variable in panel A is the number of marriages per 1000 women ages 15 to 44; the dependent variable in panel B is the number of divorces per 1000 women ages 15 to 44. Sources: Numerators are hand entered from published county-level tabulations from Vital Statistics, 1962 to 1988. Denominators rely on SEER population data from 1969 forward and data interpolated between the 1960 Census and 1969 SEER data for the rest of the 1960s.