Appendix for Online Publication

1. Additional Figures & Tables

.05

Figure A1: Child care coverage in selected counties over time

Notes: The figure shows child care coverage over time for individual, selected counties. Each panel depicts a single county.

Figure A2: Changes in child care coverage in selected counties over time



Notes: The figure shows changes in child care coverage over time relative to the previous observation for individual, selected counties. Each panel depicts a single county.

| Variable | Ν | Mean | S.D. | Min | Max |
|--|-------|----------|---------|----------|----------|
| Basic dependent variables | | | | | |
| Birth rate of women 15-44 (t) | 1,950 | 44.150 | 4.409 | 27.942 | 63.944 |
| Birth rate of women $15-44$ (t+1) | 1,950 | 44.106 | 3.984 | 29.860 | 65.440 |
| Control variables | , | | | | |
| Population density | 1,950 | 565.614 | 690.240 | 40.720 | 4286.211 |
| Employment rate (m) | 1,950 | 0.604 | 0.059 | 0.406 | 0.737 |
| GDP per capita (in 1,000) | 1,950 | 28.040 | 10.812 | 11.238 | 86.079 |
| Conservative vote share | 1,950 | 0.392 | 0.093 | 0.195 | 0.750 |
| Female high education share | 1,950 | 0.154 | 0.062 | 0.028 | 0.407 |
| Gov revenue | 1,610 | 383.213 | 452.072 | 56.630 | 5775.025 |
| Gov debt | 1,932 | 0.214 | 0.279 | 0.000 | 3.335 |
| New dwellings | 1,950 | 0.583 | 0.639 | 0.008 | 14.536 |
| Detailed population structure ¹ | , | | | | |
| Other dependent variables | | | | | |
| First births rate, (t) | 1,950 | 15.137 | 2.437 | 7.617 | 23.909 |
| First births rate, $(t+1)$ | 1,950 | 14.969 | 2.159 | 7.617 | 22.162 |
| Second births rate, (t) | 1,950 | 12.960 | 2.343 | 6.911 | 20.843 |
| Second births rate, $(t+1)$ | 1,950 | 12.766 | 2.214 | 6.682 | 21.202 |
| Third births rate, (t) | 1,950 | 4.273 | 1.017 | 2.113 | 10.042 |
| Third births rate, $(t+1)$ | 1,950 | 4.193 | 0.959 | 2.162 | 10.763 |
| Fourth births rate, (t) | 1,950 | 1.141 | 0.364 | 0.135 | 2.911 |
| Fourth births rate, $(t+1)$ | 1,950 | 1.118 | 0.351 | 0.226 | 3.066 |
| Birth length, (t) | 1,944 | 51.188 | 0.350 | 49.835 | 52.446 |
| Birth length, $(t+1)$ | 1,945 | 51.170 | 0.343 | 49.709 | 52.395 |
| Birth weight, (t) | 1,944 | 3335.440 | 43.238 | 3161.403 | 3478.582 |
| Birth weight, $(t+1)$ | 1,945 | 3331.848 | 42.947 | 3161.403 | 3492.907 |
| Low birth weight, (t) | 1,944 | 0.068 | 0.011 | 0.035 | 0.118 |
| Low birth weight, $(t+1)$ | 1,945 | 0.069 | 0.011 | 0.035 | 0.119 |
| Low Ponderal index, (t) | 1,944 | 0.105 | 0.032 | 0.025 | 0.268 |
| Low Ponderal index, (t+1) | 1,945 | 0.105 | 0.032 | 0.025 | 0.233 |
| High Ponderal index, (t) | 1,944 | 0.086 | 0.031 | 0.023 | 0.280 |
| High Ponderal index, (t+1) | 1,945 | 0.086 | 0.031 | 0.023 | 0.294 |
| Age at first birth, (t) | 1,950 | 28.987 | 0.849 | 26.110 | 31.560 |
| Age at first birth, $(t+1)$ | 1,950 | 29.109 | 0.832 | 26.334 | 31.560 |
| Age at second birth, (t) | 1,950 | 30.740 | 0.840 | 28.100 | 33.898 |
| Age at second birth, $(t+1)$ | 1,950 | 30.848 | 0.836 | 27.780 | 33.898 |
| Age at third birth, (t) | 1,950 | 32.220 | 0.905 | 28.173 | 35.102 |
| Age at third birth, $(t+1)$ | 1,950 | 32.327 | 0.905 | 28.917 | 35.420 |
| Age at fourth birth, (t) | 1,950 | 33.829 | 1.084 | 28.667 | 37.909 |
| Age at fourth birth, $(t+1)$ | 1,950 | 33.912 | 1.059 | 28.667 | 38.143 |
| continued in next table | | | | | |

Table A1: Descriptive statistics I

Notes: The table shows descriptive statistics (number of observations, mean, standard deviation, minimum, and maximum) on the county level aggregated over all waves used in the estimations. Birth rates are births per 1,000 women in the respective age. The figures show aggregated values over the years 1998, 2002, 2006, 2007, 2008, and 2009. Accordingly, all variables measured in (t+1) are aggregated over the years 1999, 2003, 2007, 2008, 2009, and 2010. Debt and revenue of municipalities are not reported for the federal city states Hamburg and Bremen (including Bremerhaven). Revenue information is missing in 2001 from all 15 Schleswig-Holstein counties. Revenue information in 2009 is not included due to fragmentary raw data. Revenue and debt figures are divided by 1,000,000 EUR and the number of new dwellings is divided by 1,000. ¹ Tables of descriptive statistics for share of females and the population by years of age as used as control variables can be found in separate tables.

Table A2: Descriptive statistics II

| Variable | Ν | Mean | S.D. | Min | Maz |
|--------------------------------------|-------|---------|--------|--------|--------|
| Other dependent variables: continued | | | | | |
| In-migrants 18-29, fem., (t) | 1,625 | 0.009 | 0.005 | 0.003 | 0.058 |
| In-migrants 18-29, fem., (t+1) | 1,625 | 0.009 | 0.005 | 0.003 | 0.049 |
| In-migrants 30-49, fem., (t) | 1,625 | 0.006 | 0.002 | 0.002 | 0.058 |
| In-migrants 30-49, fem., (t+1) | 1,625 | 0.006 | 0.002 | 0.002 | 0.04' |
| In-migrants 18-49, fem., (t) | 1,625 | 0.014 | 0.007 | 0.006 | 0.11 |
| In-migrants 18-49, fem., (t+1) | 1,625 | 0.014 | 0.007 | 0.006 | 0.09 |
| Out-migrants 18-29, fem., (t) | 1,625 | 0.008 | 0.003 | 0.004 | 0.05 |
| Out-migrants 18-29, fem., $(t+1)$ | 1,625 | 0.008 | 0.003 | 0.004 | 0.04 |
| Out-migrants 30-49, fem., (t) | 1,625 | 0.006 | 0.002 | 0.002 | 0.06 |
| Out-migrants $30-49$, fem., $(t+1)$ | 1,625 | 0.006 | 0.002 | 0.002 | 0.04 |
| Out-migrants 18-49, fem., (t) | 1,625 | 0.014 | 0.006 | 0.007 | 0.11 |
| Out-migrants $18-49$, fem., $(t+1)$ | 1,625 | 0.014 | 0.005 | 0.006 | 0.09 |
| Birth rate married, (t) | 1,950 | 34.119 | 5.533 | 18.947 | 58.45 |
| Birth rate non-married, (t) | 1,950 | 10.031 | 2.538 | 3.751 | 21.27 |
| Birth rate married, $(t+1)$ | 1,950 | 33.639 | 4.979 | 18.947 | 59.11 |
| Birth rate non-married, $(t+1)$ | 1,950 | 10.467 | 2.566 | 4.110 | 23.07 |
| Birth rate religious, (t) | 1,950 | 36.906 | 5.651 | 12.793 | 58.39 |
| Birth rate non-religious, (t) | 1,950 | 6.222 | 3.442 | 0.102 | 24.91 |
| Birth rate religious, $(t+1)$ | 1,950 | 36.431 | 5.506 | 10.376 | 57.87 |
| Birth rate non-religious, (t+1) | 1,950 | 6.524 | 3.669 | 0.049 | 24.91 |
| Birth rate German, (t) | 1,948 | 41.741 | 4.333 | 26.633 | 62.47 |
| Birth rate non-German, (t) | 1,948 | 61.748 | 12.551 | 22.222 | 121.75 |
| Birth rate German, $(t+1)$ | 1,950 | 41.842 | 3.895 | 28.147 | 63.31 |
| Birth rate non-German, $(t+1)$ | 1,950 | 60.390 | 11.930 | 22.222 | 116.98 |
| Birth rate age 18 , $(t+1)$ | 1,950 | 13.354 | 7.180 | 0.000 | 56.68 |
| Birth rate age 19, $(t+1)$ | 1,950 | 22.473 | 9.776 | 0.000 | 84.29 |
| Birth rate age 20, $(t+1)$ | 1,950 | 29.851 | 11.789 | 4.087 | 89.36 |
| Birth rate age 21 , $(t+1)$ | 1,950 | 37.990 | 14.139 | 5.556 | 105.31 |
| Birth rate age 22, $(t+1)$ | 1,950 | 46.104 | 15.690 | 7.843 | 114.15 |
| Birth rate age 23, $(t+1)$ | 1,950 | 53.594 | 15.916 | 11.007 | 140.22 |
| Birth rate age 24, $(t+1)$ | 1,950 | 63.443 | 17.142 | 13.434 | 152.70 |
| Birth rate age 25, $(t+1)$ | 1,950 | 73.760 | 17.871 | 17.115 | 132.90 |
| Birth rate age 26, $(t+1)$ | 1,950 | 84.231 | 18.821 | 16.777 | 144.44 |
| Birth rate age 27, $(t+1)$ | 1,950 | 91.870 | 19.085 | 26.087 | 156.89 |
| Birth rate age 28 , $(t+1)$ | 1,950 | 97.118 | 18.337 | 35.270 | 153.20 |
| Birth rate age 29, $(t+1)$ | 1,950 | 101.590 | 18.048 | 48.574 | 166.66 |
| Birth rate age $30, (t+1)$ | 1,950 | 102.173 | 17.024 | 46.875 | 182.74 |
| Birth rate age 31 , $(t+1)$ | 1,950 | 98.786 | 16.205 | 43.384 | 163.35 |
| Birth rate age 32 , $(t+1)$ | 1,950 | 91.750 | 15.861 | 26.022 | 159.09 |
| Birth rate age 33 , $(t+1)$ | 1,950 | 82.379 | 14.931 | 30.973 | 133.76 |
| Birth rate age 34, $(t+1)$ | 1,950 | 72.818 | 14.774 | 19.157 | 123.07 |
| Birth rate age 35 , $(t+1)$ | 1,950 | 62.572 | 14.412 | 17.301 | 113.83 |
| Birth rate age 36 , $(t+1)$ | 1,950 | 50.552 | 13.418 | 18.519 | 113.36 |
| Birth rate age 37 , $(t+1)$ | 1,950 | 39.479 | 11.511 | 4.934 | 91.25 |
| Birth rate age 38 , $(t+1)$ | 1,950 | 29.553 | 9.661 | 2.852 | 71.01 |
| Birth rate age 39 , $(t+1)$ | 1,950 | 21.749 | 7.776 | 2.443 | 55.76 |
| Birth rate age $40, (t+1)$ | 1,950 | 14.824 | 6.032 | 0.000 | 42.81 |
| Birth rate age 41 , $(t+1)$ | 1,950 | 9.208 | 4.116 | 0.000 | 24.70 |
| Birth rate age 42 , $(t+1)$ | 1,950 | 5.307 | 2.842 | 0.000 | 18.64 |
| Birth rate age 43 , $(t+1)$ | 1,950 | 2.801 | 1.886 | 0.000 | 13.29 |
| Birth rate age 44, $(t+1)$ | 1.950 | 1.469 | 1.271 | 0.000 | 8.59 |

Notes: The table shows descriptive statistics (number of observations, mean, standard deviation, minimum, and maximum) on the county level aggregated over all waves used in the estimations. Birth rates are births per 1,000 women in the respective age. The figures show aggregated values over the years 1998, 2002, 2006, 2007, 2008, and 2009. Accordingly, all variables measured in (t+1) are aggregated over the years 1999, 2003, 2007, 2008, 2009, and 2010.

| | Ν | Mean | S.D. | Min | Max |
|------------|--------|---------|----------|----------|-------|
| Female | shares | per fem | ales age | ed 15-44 | |
| $by \ age$ | | | | | |
| 15 | 1950 | 0.028 | 0.004 | 0.014 | 0.040 |
| 16 | 1950 | 0.029 | 0.005 | 0.014 | 0.040 |
| 17 | 1950 | 0.029 | 0.005 | 0.015 | 0.041 |
| 18 | 1950 | 0.029 | 0.004 | 0.015 | 0.041 |
| 19 | 1950 | 0.029 | 0.004 | 0.020 | 0.038 |
| 20 | 1950 | 0.029 | 0.003 | 0.020 | 0.050 |
| 21 | 1950 | 0.029 | 0.004 | 0.020 | 0.058 |
| 22 | 1950 | 0.029 | 0.004 | 0.020 | 0.060 |
| 23 | 1950 | 0.028 | 0.005 | 0.020 | 0.060 |
| 24 | 1950 | 0.028 | 0.005 | 0.020 | 0.057 |
| 25 | 1950 | 0.029 | 0.004 | 0.021 | 0.052 |
| 26 | 1950 | 0.029 | 0.004 | 0.022 | 0.048 |
| 27 | 1950 | 0.030 | 0.004 | 0.022 | 0.046 |
| 28 | 1950 | 0.030 | 0.004 | 0.022 | 0.045 |
| 29 | 1950 | 0.030 | 0.005 | 0.023 | 0.045 |
| 30 | 1950 | 0.031 | 0.005 | 0.023 | 0.046 |
| 31 | 1950 | 0.032 | 0.005 | 0.021 | 0.048 |
| 32 | 1950 | 0.032 | 0.005 | 0.020 | 0.049 |
| 33 | 1950 | 0.033 | 0.006 | 0.020 | 0.047 |
| 34 | 1950 | 0.034 | 0.006 | 0.020 | 0.066 |
| 35 | 1950 | 0.035 | 0.005 | 0.020 | 0.051 |
| 36 | 1950 | 0.037 | 0.005 | 0.020 | 0.053 |
| 37 | 1950 | 0.038 | 0.004 | 0.020 | 0.050 |
| 38 | 1950 | 0.040 | 0.004 | 0.022 | 0.052 |
| 39 | 1950 | 0.041 | 0.004 | 0.023 | 0.053 |
| 40 | 1950 | 0.042 | 0.004 | 0.025 | 0.056 |
| 41 | 1950 | 0.042 | 0.005 | 0.028 | 0.057 |
| 42 | 1950 | 0.042 | 0.005 | 0.027 | 0.059 |
| 43 | 1950 | 0.042 | 0.006 | 0.025 | 0.060 |
| 44 | 1950 | 0.042 | 0.006 | 0.026 | 0.056 |

Table A3: Descriptive statistics of age structure controls I

Notes: The table shows descriptive statistics of byage-shares in the female population aged 15 to 44 years (number of observations, mean, standard deviation, minimum, and maximum) on the county level aggregated over all waves used in the estimations. The figures show aggregated values over the years 1998, 2002, 2006, 2007, 2008, and 2009.

| | Ν | Mean | S.D. | Min | Max |
|--------|----------|----------|---------|----------|-------|
| Popula | tion she | ares per | whole p | opulatio | n |
| by age | | | | | |
| 45 | 1950 | 0.016 | 0.002 | 0.011 | 0.021 |
| 46 | 1950 | 0.016 | 0.002 | 0.011 | 0.021 |
| 47 | 1950 | 0.016 | 0.002 | 0.011 | 0.019 |
| 48 | 1950 | 0.015 | 0.002 | 0.011 | 0.019 |
| 49 | 1950 | 0.015 | 0.001 | 0.011 | 0.019 |
| 50 | 1950 | 0.014 | 0.001 | 0.010 | 0.018 |
| 51 | 1950 | 0.014 | 0.001 | 0.009 | 0.018 |
| 52 | 1950 | 0.013 | 0.002 | 0.008 | 0.018 |
| 53 | 1950 | 0.013 | 0.002 | 0.006 | 0.017 |
| 54 | 1950 | 0.013 | 0.001 | 0.007 | 0.017 |
| 55 | 1950 | 0.013 | 0.001 | 0.008 | 0.017 |
| 56 | 1950 | 0.012 | 0.001 | 0.008 | 0.017 |
| 57 | 1950 | 0.012 | 0.002 | 0.006 | 0.019 |
| 58 | 1950 | 0.013 | 0.002 | 0.007 | 0.019 |
| 59 | 1950 | 0.012 | 0.002 | 0.008 | 0.018 |
| 60 | 1950 | 0.012 | 0.002 | 0.007 | 0.017 |
| 61 | 1950 | 0.011 | 0.002 | 0.005 | 0.017 |
| 62 | 1950 | 0.011 | 0.002 | 0.005 | 0.018 |
| 63 | 1950 | 0.011 | 0.002 | 0.005 | 0.017 |
| 64 | 1950 | 0.011 | 0.002 | 0.005 | 0.016 |
| 65 | 1950 | 0.011 | 0.002 | 0.007 | 0.017 |
| 66 | 1950 | 0.012 | 0.002 | 0.007 | 0.018 |
| 67 | 1950 | 0.012 | 0.002 | 0.007 | 0.017 |
| 68 | 1950 | 0.012 | 0.002 | 0.007 | 0.017 |
| 69 | 1950 | 0.012 | 0.002 | 0.006 | 0.017 |
| 70 | 1950 | 0.011 | 0.002 | 0.006 | 0.017 |
| 71 | 1950 | 0.010 | 0.002 | 0.006 | 0.016 |
| 72 | 1950 | 0.010 | 0.001 | 0.006 | 0.014 |
| 73 | 1950 | 0.009 | 0.001 | 0.006 | 0.014 |
| 74 | 1950 | 0.009 | 0.001 | 0.005 | 0.013 |
| 75 + | 1950 | 0.082 | 0.014 | 0.040 | 0.127 |

Table A4: Descriptive statistics of age structure controls II

Notes: The table shows descriptive statistics of byage-shares shares in the whole population (number of observations, mean, standard deviation, minimum, and maximum) on the county level aggregated over all waves used in the estimations. The figures show aggregated values over the years 1998, 2002, 2006, 2007, 2008, and 2009.

| Variable | Mean | | Mean-Diff. | T-t | test |
|-----------|--------------------------|--------------|------------|---------|---------|
| | $\operatorname{Control}$ | Treatment | (T-C) | t-stat | p-value |
| Female sh | hares per j | females aged | 15-44 | | |
| by age | | 0 | | | |
| 15 | 0.0285 | 0.0271 | -0.0014 | -3.3846 | 0.0008 |
| 16 | 0.0282 | 0.0268 | -0.0014 | -3.5367 | 0.0005 |
| 17 | 0.0269 | 0.0257 | -0.0013 | -3.4095 | 0.0007 |
| 18 | 0.0270 | 0.0258 | -0.0011 | -3.4298 | 0.0007 |
| 19 | 0.0274 | 0.0266 | -0.0009 | -3.4665 | 0.0006 |
| 20 | 0.0280 | 0.0281 | 0.0000 | 0.1686 | 0.8662 |
| 21 | 0.0282 | 0.0284 | 0.0002 | 0.5401 | 0.5895 |
| 22 | 0.0285 | 0.0288 | 0.0003 | 0.6480 | 0.5174 |
| 23 | 0.0272 | 0.0274 | 0.0002 | 0.5936 | 0.5532 |
| 24 | 0.0268 | 0.0273 | 0.0005 | 1.1295 | 0.2595 |
| 25 | 0.0269 | 0.0271 | 0.0002 | 0.3883 | 0.6980 |
| 26 | 0.0270 | 0.0272 | 0.0002 | 0.5452 | 0.5860 |
| 27 | 0.0266 | 0.0267 | 0.0001 | 0.2765 | 0.7824 |
| 28 | 0.0274 | 0.0274 | 0.0000 | 0.1304 | 0.8963 |
| 29 | 0.0279 | 0.0280 | 0.0001 | 0.4960 | 0.6202 |
| 30 | 0.0308 | 0.0307 | -0.0001 | -0.3481 | 0.7280 |
| 31 | 0.0340 | 0.0337 | -0.0003 | -1.2850 | 0.1997 |
| 32 | 0.0356 | 0.0355 | -0.0001 | -0.2687 | 0.7883 |
| 33 | 0.0386 | 0.0385 | -0.0000 | -0.1056 | 0.9160 |
| 34 | 0.0403 | 0.0406 | 0.0004 | 1.0545 | 0.2925 |
| 35 | 0.0413 | 0.0416 | 0.0004 | 1.1195 | 0.2638 |
| 36 | 0.0418 | 0.0426 | 0.0007 | 2.3557 | 0.0191 |
| 37 | 0.0417 | 0.0423 | 0.0006 | 2.1485 | 0.0324 |
| 38 | 0.0423 | 0.0432 | 0.0009 | 2.9672 | 0.0032 |
| 39 | 0.0424 | 0.0430 | 0.0005 | 1.9798 | 0.0486 |
| 40 | 0.0413 | 0.0418 | 0.0005 | 1.7971 | 0.0733 |
| 41 | 0.0409 | 0.0416 | 0.0007 | 2.2830 | 0.0231 |
| 42 | 0.0401 | 0.0404 | 0.0003 | 1.0302 | 0.3037 |
| 43 | 0.0390 | 0.0390 | -0.0000 | -0.0274 | 0.9782 |
| 44 | 0.0373 | 0.0371 | -0.0002 | -0.5453 | 0.5859 |

Table A5: Pre-treatment descriptive statistics of age structure controls I

Notes: The table shows means, differences in means and differences-in-meanstests for the control and the treatment group in 2002, the pre-treatment period. The last two columns depict results of T-tests for equality in means for each variable as t-statistics and p-values. Variables are by-age-shares in the female population aged 15 to 44 years.

| Variable | Mean | | Mean-Diff. | T-test | | |
|-----------|--------------------------|---------------|------------|---------|---------|--|
| | $\operatorname{Control}$ | Treatment | (T-C) | t-stat | p-value | |
| Populatio | on shares p | per whole pop | pulation | | | |
| by age | | | | | | |
| 45 | 0.0148 | 0.0151 | 0.0003 | 2.9103 | 0.0039 | |
| 46 | 0.0143 | 0.0146 | 0.0002 | 2.6540 | 0.0083 | |
| 47 | 0.0138 | 0.0139 | 0.0002 | 2.2006 | 0.0285 | |
| 48 | 0.0136 | 0.0138 | 0.0002 | 1.8337 | 0.0676 | |
| 49 | 0.0131 | 0.0133 | 0.0003 | 2.9489 | 0.0034 | |
| 50 | 0.0132 | 0.0134 | 0.0002 | 2.1158 | 0.0351 | |
| 51 | 0.0129 | 0.0130 | 0.0001 | 1.2366 | 0.2171 | |
| 52 | 0.0131 | 0.0133 | 0.0002 | 2.7936 | 0.0055 | |
| 53 | 0.0129 | 0.0131 | 0.0001 | 1.4282 | 0.1542 | |
| 54 | 0.0121 | 0.0122 | 0.0001 | 1.3282 | 0.1850 | |
| 55 | 0.0113 | 0.0114 | 0.0001 | 1.0971 | 0.2734 | |
| 56 | 0.0103 | 0.0102 | -0.0002 | -1.4547 | 0.1467 | |
| 57 | 0.0085 | 0.0084 | -0.0001 | -0.6329 | 0.5272 | |
| 58 | 0.0111 | 0.0112 | 0.0001 | 0.5701 | 0.5690 | |
| 59 | 0.0113 | 0.0112 | -0.0001 | -0.4344 | 0.6643 | |
| 60 | 0.0111 | 0.0110 | -0.0002 | -1.1553 | 0.2488 | |
| 61 | 0.0135 | 0.0135 | -0.0000 | -0.0706 | 0.9437 | |
| 62 | 0.0144 | 0.0144 | 0.0000 | 0.0513 | 0.9591 | |
| 63 | 0.0142 | 0.0142 | -0.0000 | -0.0303 | 0.9759 | |
| 64 | 0.0134 | 0.0132 | -0.0002 | -1.3086 | 0.1916 | |
| 65 | 0.0125 | 0.0123 | -0.0002 | -1.6852 | 0.0929 | |
| 66 | 0.0121 | 0.0119 | -0.0002 | -1.2889 | 0.1984 | |
| 67 | 0.0115 | 0.0113 | -0.0002 | -1.6898 | 0.0920 | |
| 68 | 0.0107 | 0.0104 | -0.0003 | -2.3243 | 0.0207 | |
| 69 | 0.0087 | 0.0085 | -0.0002 | -2.2338 | 0.0262 | |
| 70 | 0.0087 | 0.0085 | -0.0002 | -2.3332 | 0.0203 | |
| 71 | 0.0087 | 0.0085 | -0.0002 | -2.2092 | 0.0279 | |
| 72 | 0.0092 | 0.0088 | -0.0003 | -2.7378 | 0.0065 | |
| 73 | 0.0088 | 0.0086 | -0.0002 | -1.8944 | 0.0591 | |
| 74 | 0.0086 | 0.0085 | -0.0002 | -1.5822 | 0.1146 | |
| 75 + | 0.0729 | 0.0694 | -0.0035 | -2.3878 | 0.0175 | |

Table A6: Pre-treatment descriptive statistics of age structure controls II

Notes: The table shows means, differences in means and differences-in-meanstests for the control and the treatment group in 2002, the pre-treatment period. The last two columns depict results of T-tests for equality in means for each variable as t-statistics and p-values. Variables are by-age-shares in the whole population.

| | Birth | Birth | Low birth | Ponderal | |
|---------------------|---------------|----------------|--------------|-------------|-----------|
| | length (cm) | weight (grams) | weight | below $p10$ | above p90 |
| | \mathbf{t} | \mathbf{t} | \mathbf{t} | t | t |
| | (1) | (2) | (3) | (4) | (5) |
| Child care coverage | 0.165 | -43.219 | 0.003 | 0.044 | -0.040 |
| | (0.296) | (32.711) | (0.012) | (0.032) | (0.025) |
| Regional controls | Yes | Yes | Yes | Yes | Yes |
| Year FE | Yes | Yes | Yes | Yes | Yes |
| County FE | Yes | Yes | Yes | Yes | Yes |
| Ν | 1,944 | 1,944 | 1,944 | 1,944 | 1,944 |
| Number of counties | 325 | 325 | 325 | 325 | 325 |
| F-statistic | 5.59 | 19.26 | 5.03 | 2.74 | 3.63 |

Table A7: Investigating marginal birth outcomes in t

Notes: The table shows the results of generalized difference-in-differences estimations on outcomes in period t. Outcome variables birth length and birth weight are averages over all births in a county. Low birth weight is the county average of a dummy variable equal to one for birth weights below 2,500 grams. Ponderal index measures are county averages of indicators that are equal to one if the Ponderal index is below the 10th percentile resp. above the 90th percentile of the German Ponderal index distribution from 1998 to 2010 (*Ponderal = weight(kg)/height(m)*³). Regional control variables include the county's population density, GDP per capita, the male employment rate, the interpolated conservative vote share, the share of high educated females until age 44 as well as an extensive set of age structure controls. Age structure control variables include the year-of-age share of 15 to 44 year old women over all women aged 15 to 44 and the year-of-age shares of 45 to 74 year old and 75 plus years old people over the population in each county. Outcomes are missing in 1998 through 2008 for Aachen and in 1998 for Hannover, as we cannot recover the means after the counties' borders have changed. Robust standard errors are clustered at the county level and given in parentheses. *** 1 percent significance level; ** 5 percent significance level.

| | Child care coverage | S.E. | Regional Controls, Year & county FE | Ν | Counties |
|-----------------------|------------------------|---------|--|-----|----------|
| | (1) | (2) | (3) | (4) | (5) |
| Female high education | on heterogen | eity | | | |
| Top 75%, t | 13.332*** | (4.663) | Yes | 492 | 82 |
| Bottom 25%, t | 5.707 | (4.919) | Yes | 492 | 82 |
| Top 75%, t+1 | 11.913** | (4.628) | Yes | 492 | 82 |
| Bottom 25%, t+1 | 7.946 | (5.707) | Yes | 492 | 82 |
| GDP heterogeneity | | | | | |
| Top 75%, t | 11.925** | (5.918) | Yes | 492 | 82 |
| Bottom 25%, t | 8.722* | (4.708) | Yes | 492 | 82 |
| Top 75%, t+1 | 11.093** | (4.895) | Yes | 492 | 82 |
| Bottom 25%, t+1 | 12.270*** | (4.046) | Yes | 492 | 82 |
| Conservative vote sh | are heteroge | neity | | | |
| Top 75%, t | 1.446 | (4.996) | Yes | 492 | 82 |
| Bottom 25%, t | 8.907* | (4.811) | Yes | 492 | 82 |
| Top 75%, t+1 | -0.107 | (6.834) | Yes | 492 | 82 |
| Bottom 25%, t+1 | 6.535 | (6.315) | Yes | 492 | 82 |

Table A8: Effect heterogeneity across county characteristics

Notes: The table shows the results of generalized difference-in-differences estimations. Estimates in rows are from independent regressions on samples for 75th percentile and above resp. 25th percentile and below evaluated by the variable denoted in italics. The outcome variables are denoted in rows and all are defined as fractions of the population within a county. Regional control variables include the county's population density, GDP per capita, the male employment rate, the interpolated conservative vote share, the share of high educated females until age 44 as well as an extensive set of age structure controls. Age structure control variables include the year-of-age share of 15 to 44 year old women over all women aged 15 to 44 and the year-of-age shares of 45 to 74 year old and 75 plus years old people over the population in each county. Robust standard errors are clustered at the county level and given in parentheses. *** 1 percent significance level; ** 5 percent significance level; * 10 percent significance level.

| | Effects on birth rate in $t+1$ | | | | | | | |
|--------------------------------|--------------------------------|----------|--|-----------|----------|--------|--|--|
| | Child care coverage | S.E. | Regional Controls, Year & county FE | Ν | Counties | F-stat | | |
| | (1) | (2) | (3) | (4) | (5) | (6) | | |
| Marriage status | | | | | | | | |
| Married , t | 9.996^{***} | (2.451) | Yes | $1,\!950$ | 325 | 147.4 | | |
| Married , $t{+}1$ | 12.284*** | (2.188) | Yes | $1,\!950$ | 325 | 119.4 | | |
| Not married , t | 2.119^{*} | (1.125) | Yes | $1,\!950$ | 325 | 85.20 | | |
| Not married , $\mathrm{t}{+1}$ | -0.009 | (1.249) | Yes | $1,\!950$ | 325 | 74.83 | | |
| Religious affiliation | | | | | | | | |
| Yes , t | 12.583*** | (2.940) | Yes | $1,\!950$ | 325 | 90.51 | | |
| Yes , t+1 | 13.289*** | (3.812) | Yes | $1,\!950$ | 325 | 74.46 | | |
| No , t | 6.082*** | (1.958) | Yes | 1,950 | 325 | 14.06 | | |
| No , t+1 $$ | 7.580*** | (2.217) | Yes | $1,\!950$ | 325 | 15.05 | | |
| Nationality | | | | | | | | |
| German , t | 10.923*** | (2.426) | Yes | 1,948 | 325 | 71.08 | | |
| German , $t+1$ | 10.774^{***} | (2.513) | Yes | $1,\!950$ | 325 | 47.32 | | |
| Non-German , t | 20.214* | (10.859) | Yes | 1,948 | 325 | 22.27 | | |
| Non-German , $t{+}1$ | 15.062 | (9.364) | Yes | $1,\!950$ | 325 | 48.16 | | |

Table A9: Effect heterogeneity across mother characteristics

Notes: The table shows the results of generalized difference-in-differences estimations. The outcome variable births per 1,000 women by mothers' characteristics, birth rates by nationality of mothers are per 1,000 women of German resp. non-German nationality. Estimates in rows are from independent regressions. Regional control variables include the county's population density, GDP per capita, the male employment rate, the interpolated conservative vote share, the share of high educated females until age 44 as well as an extensive set of age structure controls. Age structure control variables include the year-of-age share of 15 to 44 year old women over all women aged 15 to 44 and the year-of-age shares of 45 to 74 year old and 75 plus years old people over the population in each county. Robust standard errors are clustered at the county level and given in parentheses. *** 1 percent significance level; ** 5 percent significance level; * 10 percent significance level.

2. Data Appendix

County level data from the Statistical Offices of the German Länder (*Statistische Landesämter*) and the Federal Employment Agency is provided in per year per item files. We identify counties by official id numbers and conduct a county level panel from 1997 to 2010. During this investigation period, reforms in geographic local government competency and in data aggregation rules altered county identifiers in some instances. In order to get a fully balanced panel, we made necessary changes that produced time-stable units of observations. Hannover, Aachen and Saarbrücken are merged to city-urban regions, whereas in earlier waves each consists of two separate counties. We use the merged definition throughout all waves and add up values if necessary.

Child care slots and population figures are record date measures, reported in the first half of March (child care from 2006 onwards), resp. 31st December (population, child care until 2002). Births per 1,000 women are defined as the sum of births within the year divided by population as of 31st December. As child care from 2006 onwards is evaluated in March and population on 31st December, we divide it by one year lagged population. Child care in 1998 and 2002 is measured on 31st December; we divide it by one year lagged population nevertheless to avoid that births (the outcome) enter the denominator of the child care variable (the variable of interest).

Public child care figures are conducted from two different data collections by the Statistical Offices of the German Länder (*Statistische Landesämter*). Public child care is defined as all publicly funded or subsidized child care, including child care centers and childminders. From 2006 onwards we observe occupied child care slots, whereas in 1998 and 2002 we observe available child care slots. As there was excess demand for child care, we can credibly assume both measures to be comparable. However, there is reason to believe that in 1998 and 2002 the number of public child care slots is underestimated. In these years, children under the age of three that were enrolled in child care centers for over three year olds are not included in the supply measures and the number of childminders had to be estimated. The undervaluation of public child care coverage is believed to be of the magnitude of about one percentage point (DJI, 2008).

References

DJI (2008). Zahlenspiegel 2007 - Kinderbetreuung im Spiegel der amtlichen Statistik. Tech. rep.