**Appendix**

**Table A1. Robustness of results to changes in the lag**

|  |
| --- |
|  |
|  | **No Lag** | **1 Year Lag** | **2 Year Lag** | **3 Year** **Lag** | **4 Year** **Lag** |
|  |  |  |  |  |  |
| **Benin** |  |  |  |  |  |
|  |  |  |  |  |  |
| Education | -0.075\*\* | -0.026 | -0.015 | 0.101\* | 0.060 |
|  | (0.034) | (0.055) | (0.090) | (0.061) | (0.083) |
| Water | -0.086 | -0.086 | -0.086 | -0.086 | -0.086 |
|  | (0.103) | (0.103) | (0.103) | (0.103) | (0.103) |
| Electricity | 0.015 | 0.015 | 0.015 | 0.015 | 0.015 |
|  | (0.030) | (0.030) | (0.030) | (0.030) | (0.030) |
| Infant Survival | 0.050 | 0.058 | 0.105\*\*\* | 0.063\*\* | 0.004 |
|  | (0.031) | (0.041) | (0.035) | (0.025) | (0.035) |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
| **Kenya** |  |  |  |  |  |
|  |  |  |  |  |  |
| Education | 0.283\*\*\* | 0.287\*\*\* | 0.286\*\*\* | 0.171\* | 0.127 |
|  | (0.070) | (0.066) | (0.084) | (0.090) | (0.106) |
| Water | -0.017 | -0.005 | -0.005 | -0.005 | -0.005 |
|  | (0.041) | (0.063) | (0.063) | (0.063) | (0.063) |
| Electricity | 0.133 | -0.065 | -0.065 | -0.065 | -0.065 |
|  | (0.263) | (0.245) | (0.245) | (0.245) | (0.245) |
| Infant Survival | -0.260\*\* | -0.220 | -0.179 | -0.162 | -0.164 |
|  | (0.127) | (0.141) | (0.169) | (0.176) | (0.160) |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
| **Malawi** |  |  |  |  |  |
|  |  |  |  |  |  |
| Education | 0.049 | 0.027 | 0.069\*\*\* | 0.052\* | 0.082\*\*\* |
|  | (0.035) | (0.053) | (0.018) | (0.030) | (0.022) |
| Water | 0.023 | 0.023 | 0.023 | 0.023 | 0.023 |
|  | (0.028) | (0.028) | (0.028) | (0.028) | (0.028) |
| Electricity | -0.054 | -0.075\*\*\* | -0.075\*\*\* | -0.075\*\*\* | -0.075\*\*\* |
|  | (0.039) | (0.021) | (0.021) | (0.021) | (0.021) |
| Infant Survival | 0.041\*\* | 0.029\*\*\* | 0.020\*\* | 0.002 | 0.027 |
|  | (0.018) | (0.008) | (0.008) | (0.011) | (0.018) |
|  |  |  |  |  |  |
| **Mali** |  |  |  |  |  |
|  |  |  |  |  |  |
| Education | -0.234\*\*\* | -0.196\*\*\* | -0.195\*\*\* | -0.186\*\*\* | -0.110\*\* |
|  | (0.047) | (0.031) | (0.022) | (0.036) | (0.049) |
| Water | 0.001 | 0.001 | 0.001 | 0.001 | 0.055 |
|  | (0.013) | (0.013) | (0.013) | (0.013) | (0.048) |
| Electricity | -0.051\*\* | -0.051\*\* | -0.051\*\* | -0.051\*\* | -0.028 |
|  | (0.025) | (0.025) | (0.025) | (0.025) | (0.065) |
| Infant Survival | 0.046 | -0.001 | 0.006 | 0.001 | 0.001 |
|  | (0.028) | (0.032) | (0.021) | (0.028) | (0.028) |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
| **Senegal** |  |  |  |  |  |
|  |  |  |  |  |  |
| Education | -0.092\*\* | -0.106\*\* | -0.229\*\*\* | -0.329\*\*\* | -0.208\*\*\* |
|  | (0.043) | (0.045) | (0.074) | (0.083) | (0.060) |
| Water | 0.006 | 0.006 | 0.006 | 0.006 | 0.006 |
|  | (0.007) | (0.007) | (0.007) | (0.007) | (0.007) |
| Electricity | 0.079\* | 0.079\* | 0.079\* | 0.079\* | 0.079\* |
|  | (0.046) | (0.046) | (0.046) | (0.046) | (0.046) |
| Infant Survival | 0.054 | -0.020 | -0.065 | -0.061 | -0.066 |
|  | (0.057) | (0.044) | (0.051) | (0.062) | (0.061) |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
| **Zambia** |  |  |  |  |  |
|  |  |  |  |  |  |
| Education | -0.114\* | -0.079 | -0.052 | -0.037 | -0.047 |
|  | (0.060) | (0.056) | (0.064) | (0.067) | (0.050) |
| Water | 0.173\*\*\* | 0.132\*\*\* | 0.132\*\*\* | 0.132\*\*\* | 0.132\*\*\* |
|  | (0.030) | (0.007) | (0.007) | (0.007) | (0.007) |
| Electricity | 0.129 | 0.300\*\*\* | 0.300\*\*\* | 0.300\*\*\* | 0.300\*\*\* |
|  | (0.093) | (0.047) | (0.047) | (0.047) | (0.047) |
| Infant Survival | -0.058 | -0.023 | -0.017 | -0.019 | 0.101\*\*\* |
|  | (0.064) | (0.079) | (0.065) | (0.054) | (0.036) |
|  |  |  |  |  |  |

Presidential ethnic match coefficients, standard errors in parentheses

Robust standard errors in parentheses; \*\*\* p<0.01, \*\* p<0.05, \* p<0.1.

Note: Because of the timing of the surveys and the timing of presidential turnovers, there are some instances where the coding on the water and electricity matches are not affected by changing the lags.

**Table A2. Does the president favor his coethnics in Benin? Evidence across multiple outcomes**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | (1) | (2) | (3) | (4) |
|  | Primary Education | ImprovedWater Source | Electricity | Infant Survival |
|  |  |  |  |  |
| Presidential Ethnic Match | -0.0147 | -0.0862 | 0.0149 | 0.105\*\*\* |
|  | (0.0902) | (0.103) | (0.0304) | (0.0353) |
| Betamaribe | -0.487\*\* | -0.404\*\* | -1.410\*\*\* | -0.735\*\*\* |
|  | (0.213) | (0.137) | (0.0757) | (0.100) |
| Fon | 1.463\*\*\* | 0.268\*\*\* | 0.760\*\*\* | 0.272\*\*\* |
|  | (0.0995) | (0.0369) | (0.0228) | (0.0285) |
| Yoruba | 0.823\*\*\* | 0.370\*\*\* | 0.524\*\*\* | -0.00949 |
|  | (0.104) | (0.0524) | (0.0516) | (0.0165) |
| Rural | -1.503\*\*\* | -0.694\*\*\* | -2.767\*\*\* | -0.238\*\*\* |
|  | (0.129) | (0.0598) | (0.0822) | (0.0286) |
| Male | 1.232\*\*\* |  |  |  |
|  | (0.0486) |  |  |  |
| Constant | -7.357\*\*\* | 2.936\*\*\* | -0.278\*\*\* | -0.685\*\*\* |
|  | (1.700) | (0.0941) | (0.0198) | (0.195) |
|  |  |  |  |  |
| Observations | 32,382 | 29,504 | 11,710 | 94,616 |
| R-squared | n/a | 0.137 | n/a | n/a |

Robust standard errors in parentheses; \*\*\* p<0.01, \*\* p<0.05, \* p<0.1.

The electricity variable in the 2006 data contains no data; hence the drop in sample size in column 3. Infant survival models also include birth-specific controls for infant gender, the infant’s birth order relative to other siblings (and its square), whether the infant is a multiple (a twin, triplet, and so on), the mother’s age (and its square), and a dummy indicating whether the infant is born less that 24 months after a sibling.

**Table A3. Does the president favor his coethnics in Kenya? Evidence across multiple outcomes**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | (1) | (2) | (3) | (4) |
|  | Primary Education | Improved Water Source | Electricity | Infant Survival |
|  |  |  |  |  |
| Presidential Ethnic Match | 0.242\*\* | -0.005 | -0.065 | -0.179 |
|  | (0.110) | (0.063) | (0.245) | (0.169) |
| Kalenjin | 0.032 | -0.311\*\*\* | -0.008 | 0.713\*\* |
|  | (0.109) | (0.076) | (0.366) | (0.316) |
| Kamba | 0.700\*\*\* | -0.240\*\*\* | 0.018 | 0.257\* |
|  | (0.129) | (0.016) | (0.103) | (0.153) |
| Kikuyu | 0.720\*\*\* | 0.151\*\*\* | 0.677\*\*\* | 1.247\*\*\* |
|  | (0.231) | (0.018) | (0.109) | (0.421) |
| Luhya | 0.666\*\*\* | -0.228\*\*\* | -0.266\*\* | 0.349\*\*\* |
|  | (0.089) | (0.065) | (0.103) | (0.126) |
| Luo | 0.027 | -0.257\*\*\* | -0.191 | -0.286\*\* |
|  | (0.150) | (0.011) | (0.118) | (0.124) |
| Childhood in Rural Area | -0.646\*\*\* |  |  |  |
|  | (0.042) |  |  |  |
| Rural |  | -1.508\*\*\* | -3.255\*\*\* | -0.214\* |
|  |  | (0.082) | (0.203) | (0.114) |
| Male | 0.621\*\*\* |  |  |  |
|  | (0.101) |  |  |  |
| Constant | -0.919\*\*\* | 3.687\*\*\* | 0.506\*\*\* | -0.540 |
|  | (0.161) | (0.063) | (0.150) | (0.377) |
|  |  |  |  |  |
| Observations | 50,067 | 39,210 | 39,210 | 116,112 |
| R-squared | n/a | 0.268 | n/a | n/a |

Robust standard errors in parentheses; \*\*\* p<0.01, \*\* p<0.05, \* p<0.1.

Infant survival models also include birth-specific controls for infant gender, the infant’s birth order relative to other siblings (and its square), whether the infant is a multiple (a twin, triplet, and so on), the mother’s age (and its square), and a dummy indicating whether the infant is born less that 24 months after a sibling.

**Table A4. Does the President Favor his Coethnics in Malawi? Evidence Across Multiple Outcomes**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | (1) | (2) | (3) | (4) |
|  | Primary Education | Improved Water Source | Electricity | Infant Survival |
|  |  |  |  |  |
| Presidential Ethnic Match | 0.069\*\*\* | 0.023 | -0.054 | 0.020\*\* |
|  | (0.018) | (0.028) | (0.039) | (0.008) |
| Chewa | -0.398\*\*\* | -0.120\*\*\* | -0.107\*\*\* | -0.183\*\*\* |
|  | (0.046) | (0.019) | (0.019) | (0.018) |
| Lomwe | -0.574\*\*\* | 0.100\*\*\* | 0.136\*\*\* | 0.004 |
|  | (0.094) | (0.027) | (0.030) | (0.012) |
| Tumbuka | 1.007\*\*\* | 0.015 | 0.503\*\*\* | 0.134 |
|  | (0.132) | (0.024) | (0.061) | (0.096) |
| Yao | -0.880\*\*\* | 0.030 | -0.072\* | -0.456\*\*\* |
|  | (0.045) | (0.036) | (0.042) | (0.021) |
| Rural | -1.454\*\*\* | -0.960\*\*\* | -3.013\*\*\* | -0.359\*\*\* |
|  | (0.042) | (0.045) | (0.086) | (0.033) |
| Male | 0.649\*\*\* |  |  |  |
|  | (0.104) |  |  |  |
| Constant | -0.942\*\*\* | 3.588\*\*\* | -0.593\*\*\* | -2.032\*\*\* |
|  | (0.040) | (0.054) | (0.048) | (0.455) |
|  |  |  |  |  |
| Observations | 59,846 | 47,938 | 47,938 | 148,594 |
| R-squared | n/a | 0.174 | n/a | n/a |

Robust standard errors in parentheses; \*\*\* p<0.01, \*\* p<0.05, \* p<0.1.

Infant survival models also include birth-specific controls for infant gender, the infant’s birth order relative to other siblings (and its square), whether the infant is a multiple (a twin, triplet, and so on), the mother’s age (and its square), and a dummy indicating whether the infant is born less that 24 months after a sibling.

**Table A5. Does the president favor his coethnics in Mali? Evidence across multiple outcomes**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | (1) | (2) | (3) | (4) |
|  | Primary Education | Improved Water Source | Electricity | Infant Survival |
|  |  |  |  |  |
| Presidential Ethnic Match | -0.195\*\*\* | 0.001 | -0.051\*\* | 0.006 |
|  | (0.022) | (0.013) | (0.025) | (0.021) |
| Bambara | 0.365\*\*\* | 0.101\*\*\* | 0.202\*\*\* | 0.119\*\*\* |
|  | (0.025) | (0.013) | (0.024) | (0.044) |
| Mandinka | 1.005\*\*\* | 0.127\*\*\* | 0.426\*\*\* | -0.081 |
|  | (0.059) | (0.015) | (0.027) | (0.062) |
| Peul (Fula) | 0.313\*\*\* | 0.026 | 0.119\*\* | 0.170\*\* |
|  | (0.039) | (0.030) | (0.057) | (0.083) |
| Rural | -2.245\*\*\* | -0.955\*\*\* | -3.390\*\*\* | -0.384\*\*\* |
|  | (0.136) | (0.052) | (0.204) | (0.025) |
| Male | 1.022\*\*\* |  |  |  |
|  | (0.043) |  |  |  |
| Constant | -2.252\*\*\* | 3.333\*\*\* | -0.137\*\* | -1.090\*\*\* |
|  | (0.366) | (0.040) | (0.062) | (0.273) |
|  |  |  |  |  |
| Observations | 46,004 | 40,336 | 40,336 | 150,458 |
| R-squared | n/a | 0.255 | n/a | n/a |

Robust standard errors in parentheses; \*\*\* p<0.01, \*\* p<0.05, \* p<0.1.

Infant survival models also include birth-specific controls for infant gender, the infant’s birth order relative to other siblings (and its square), whether the infant is a multiple (a twin, triplet, and so on), the mother’s age (and its square), and a dummy indicating whether the infant is born less that 24 months after a sibling.

**Table A6. Does the president favor his coethnics in Senegal? Evidence across multiple outcomes**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | (1) | (2) | (3) | (4) |
|  | Primary Education | ImprovedWater Source | Electricity | Infant Survival |
|  |  |  |  |  |
| Presidential Ethnic Match | -0.229\*\*\* | 0.006 | 0.079\* | -0.061\*\* |
|  | (0.074) | (0.007) | (0.046) | (0.026) |
| Poular | -1.034\*\*\* | 0.144\*\*\* | -0.278\*\*\* | 0.248\*\*\* |
|  | (0.211) | (0.015) | (0.035) | (0.087) |
| Serer | 0.093 | 0.352\*\*\* | -0.012 | 0.324\*\*\* |
|  | (0.108) | (0.020) | (0.065) | (0.072) |
| Wolof | 0.696\*\*\* | 0.563\*\*\* | 0.730\*\*\* | 0.336\*\*\* |
|  | (0.109) | (0.017) | (0.042) | (0.046) |
| Rural | -1.866\*\*\* | -0.887\*\*\* | -2.662\*\*\* | -0.415\*\*\* |
|  | (0.139) | (0.024) | (0.155) | (0.043) |
| Male | 1.011\*\*\* |  |  |  |
|  | (0.078) |  |  |  |
| Constant | -2.782\*\*\* | 3.243\*\*\* | 1.317\*\*\* | -12.219\*\*\* |
|  | (0.398) | (0.056) | (0.196) | (2.646) |
|  |  |  |  |  |
| Observations | 62,352 | 55,601 | 55,601 | 155,780 |
| R-squared | n/a | 0.279 | n/a | n/a |

Robust standard errors in parentheses; \*\*\* p<0.01, \*\* p<0.05, \* p<0.1.

Infant survival models also include birth-specific controls for infant gender, the infant’s birth order relative to other siblings (and its square), whether the infant is a multiple (a twin, triplet, and so on), the mother’s age (and its square), and a dummy indicating whether the infant is born less that 24 months after a sibling.

**Table A7. Does the president favor his coethnics in Zambia? Evidence across multiple outcomes**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | (1) | (2) | (3) | (4) |
|  | Primary Education | Improved Water Source | Electricity | Infant Survival |
|  |  |  |  |  |
| Presidential Ethnic Match | -0.0522 | 0.132\*\*\* | 0.300\*\*\* | -0.0171 |
|  | (0.0636) | (0.00737) | (0.0473) | (0.0646) |
| Bemba | -0.314 | -0.164\*\*\* | -0.127 | 0.303\*\* |
|  | (0.246) | (0.0196) | (0.0836) | (0.137) |
| Lozi | 0.565\*\*\* | 0.0987 | 0.0677 | -0.149\*\*\* |
|  | (0.0946) | (0.0715) | (0.113) | (0.0487) |
| Nyanja | -0.0445 | 0.171\*\*\* | 0.0825 | -0.135 |
|  | (0.247) | (0.0184) | (0.0733) | (0.218) |
| Tonga | 0.720\*\*\* | 0.0961\*\*\* | 0.346\*\*\* | 0.427\*\*\* |
|  | (0.220) | (0.0181) | (0.0884) | (0.108) |
| Rural | -1.705\*\*\* | -1.485\*\*\* | -3.211\*\*\* | -0.306\*\*\* |
|  | (0.0238) | (0.0207) | (0.0941) | (0.0569) |
| Male | 0.775\*\*\* |  |  |  |
|  | (0.0964) |  |  |  |
| Constant | 0.420 | 3.405\*\*\* | -0.294\*\*\* | 0.0692 |
|  | (0.300) | (0.0287) | (0.0758) | (0.441) |
|  |  |  |  |  |
| Observations | 31,516 | 22,825 | 22,825 | 69,873 |
| R-squared | n/a | 0.403 | n/a | n/a |

Robust standard errors in parentheses; \*\*\* p<0.01, \*\* p<0.05, \* p<0.1.

Infant survival models also include birth-specific controls for infant gender, the infant’s birth order relative to other siblings (and its square), whether the infant is a multiple (a twin, triplet, and so on), the mother’s age (and its square), and a dummy indicating whether the infant is born less that 24 months after a sibling.