**Appendix. Winning the Peace Locally: UN Peacekeeping and Local Conflict**

The following missions are included in our analysis: The United Nations Observer Mission in Angola (MONUA), the United Nations Observer Mission in Liberia (UNOMIL), the United Nations Mission in Liberia (UNMIL), United Nations Operation in Burundi (ONUB), the United Nations Observer Mission in Sierra Leone (UNOMSIL), the United National Mission in Sierra Leone (UNAMSIL), the United Nations Organization Mission in the Democratic Republic of the Congo (MONUC), United Nations Mission in the Sudan (UNMIS), United Nations Operation in Côte d’Ivoire (UNOCI), and United Nations Mission in the Central African Republic (MINURCA). In several cases, like Angola, Liberia, and Sierra Leone, there is more than one peacekeeping mission with notable temporal and spatial variation. For instance, the analysis for Liberia includes both the United Nations Observer Mission in Liberia (UNOMIL, 1993–1997) and the United Nations Mission in Liberia (UNMIL, 2003–2006). The PKO missions in the sample vary with respect to their mandates, deployment sizes, and duration.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Table A: Sample Variation | | | | |
|  | Pre Matched | | After Matched | |
| COUNTRY | Frequency | Percent | Frequency | Percent |
|  |  |  |  |  |
| Angola | 4,781 | 33.80 | 557 | 34.23 |
| Burundi | 33 | 0.23 | 6 | 0.37 |
| Central African Republic | 606 | 4.28 | 51 | 3.13 |
| Democratic Republic of Congo | 6,104 | 43.15 | 464 | 28.52 |
| Ivory Coast | 339 | 2.40 | 75 | 4.61 |
| Liberia | 333 | 2.35 | 216 | 13.28 |
| Sierra Leone | 270 | 1.91 | 198 | 12.17 |
| Sudan | 1,68 | 11.88 | 60 | 3.69 |
| Total | 14,146 | 100.00 | 1,627 | 100.00 |

Table B: Summary Statistics

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | |  |  |  |  |
|  | Obs | Mean | Std. Dev. | Min | Max |
|  |  | Pre Matched | |  |  |
| Grid conflict | 14146 | .4583628 | .4982809 | 0 | 1 |
| PKO Presence | 14146 | .0520288 | .2220931 | 0 | 1 |
| Distance to borders | 14146 | 1.944.199 | 1.510.097 | 0 | 6.035.923 |
| Distance to capital | 14146 | 8.072.758 | 4.351.328 | 8.242.229 | 1.910.548 |
| Average traveling time | 14146 | 6.176.891 | 3.856.044 | 1.821.053 | 3980.15 |
| Infant mortality | 13770 | 1.314.609 | 2.661.298 | 41.1 | 185.8 |
| Population | 14143 | 199927.7 | 341120.7 | 143.173 | 5121021 |
| Mountains | 14146 | .1072106 | .2155182 | 0 | .9958 |
| Precipitation | 14143 | 1.371.192 | 6.120.504 | 4.4 | 4124.8 |
|  |  | After Matched | |  |  |
| Grid conflict | 1627 | .4665028 | .4990301 | 0 | 1 |
| PKO presence | 1627 | .3822987 | .4860984 | 0 | 1 |
| Distance to borders | 1627 | 1.556.742 | 1.506.926 | 0 | 6.017.021 |
| Distance to capital | 1627 | 6.498.962 | 4.916.215 | 8.242.229 | 1.864.781 |
| Average traveling time | 1627 | 4.047.643 | 2.872.645 | 4.536.759 | 1.416.829 |
| Infant mortality | 1571 | 1.457.604 | 1.923.366 | 75.5 | 185.8 |
| Population | 1627 | 351378.4 | 397438.5 | 3079.51 | 2548798 |
| Mountains | 1627 | .1419638 | .2536423 | 0 | .9558 |
| Precipitation | 1627 | 1.716.026 | 8.748.818 | 398.1 | 4124.8 |

TABLES C with Alternative Matching Methods





TABLES D

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| *Logit Regressions with Matched Samples and Countries Dummies* | | | | |
|  |  |  |  |  |
|  | Onset | Continuation | Onset | Continuation |
|  |  |  |  |  |
|  |  |  |  |  |
| UN PKO | -1.884\*\*\* | -2.217\*\*\* |  |  |
|  | (0.447) | (0.243) |  |  |
| UN pko size |  |  | -0.506\*\*\* | -0.386\*\*\* |
|  |  |  | (0.113) | (0.040) |
| Border distance | -0.003\* | 0.001 | -0.003\* | 0.001 |
|  | (0.001) | (0.001) | (0.001) | (0.001) |
| Capital distance | 0.001 | 0.000 | 0.002\*\* | 0.000 |
|  | (0.001) | (0.000) | (0.001) | (0.000) |
| Traveling time | -0.001 | -0.001 | -0.001 | -0.000 |
|  | (0.001) | (0.001) | (0.001) | (0.001) |
| IMR | 0.007 | -0.008 | 0.016 | -0.004 |
|  | (0.016) | (0.011) | (0.016) | (0.011) |
| Population | 0.000 | 0.000 | 0.000\*\* | -0.000 |
|  | (0.000) | (0.000) | (0.000) | (0.000) |
| Mountains | 1.879\*\* | -0.017 | 2.913\*\*\* | 0.088 |
|  | (0.896) | (0.512) | (0.859) | (0.519) |
| Rain precipitation | 0.000 | -0.000 | 0.001 | -0.000 |
|  | (0.001) | (0.000) | (0.001) | (0.000) |
|  |  |  |  |  |
| Observations | 343 | 653 | 343 | 653 |
| LL | -118.7 | -290.7 | -118.7 | -290.7 |
| χ 2 | 79.29 | 107.7 | 58.77 | 121.0 |
| Country Dummies | YES | YES | YES | YES |
| Robust standard errors in parentheses | | |  |  |
| \*\*\* p<0.01, \*\* p<0.05, \* p<0.1 | |  |  |  |



|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Table E: Peacekeeping and Conflict Onset and Duration using the UCDP-GED Conflict Data, Matched Data, Rare-Event Logit Regression | | | | |
|  | (1) | (2) | (3) | (4) |
|  | Onset | Onset | Continuation | Continuation |
|  |  |  |  |  |
| Pko presence | -1.966 |  | -1.077\*\* |  |
|  | (1.664) |  | (0.434) |  |
| Pko size |  | -0.460 |  | -0.254\*\*\* |
|  |  | (0.326) |  | (0.075) |
| Border distance | 0.005 | 0.005 | -0.001 | -0.001 |
|  | (0.003) | (0.003) | (0.001) | (0.001) |
| Capital distance | -0.000 | -0.000 | -0.000 | -0.000 |
|  | (0.002) | (0.002) | (0.000) | (0.000) |
| Traveling time | 0.002 | 0.002 | -0.001 | -0.001 |
|  | (0.001) | (0.001) | (0.001) | (0.001) |
| Infant mortality rate | 0.020 | 0.019 | 0.061\*\*\* | 0.062\*\*\* |
|  | (0.024) | (0.024) | (0.007) | (0.007) |
| Population | 0.000\*\* | 0.000\*\* | 0.000 | 0.000 |
|  | (0.000) | (0.000) | (0.000) | (0.000) |
| Mountains | 3.479\*\*\* | 3.551\*\*\* | 1.477\*\*\* | 1.504\*\*\* |
|  | (1.117) | (1.132) | (0.482) | (0.489) |
|  |  |  |  |  |
| Robust standard errors in parentheses; \*\*\* p<0.01, \*\* p<0.05, \* p<0.1 | | | | |

Stable unit treatment value assumption (SUTVA) assumes: 1) the treatment status of any unit does not affect the potential outcomes of the other units (non-interference) and 2) the treatments for all units are comparable (no variation in treatment). In Table F in Supporting Information, we provide models where we control for the spatial lag of both UN deployment and size of UN Deployment. We created a row-normalized spatial lag based on a Queen contiguity matrix. Although it is not possible to exclude the non-interference problem, we do model it. Results remain the same. In Table G in Supporting Information we provide further robustness test for possible problems caused by variation of the treatment. We create several new treatment thresholds, not just of the dichotomy presence/absence of peacekeepers in a grid, but if the number of peacekeepers is above the 1st, 5th, 10th, or 25th percentiles then we rematch our sample and run our models, obtaining similar results.



|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Table G: Temporal Spatial Lags Conflict with Matched Sample | | |  |  |
|  | (11) | (12) | (13) | (14) |
|  | Onset | Duration | Onset | Duration |
| Pko presence | -0.630 | -1.529\*\*\* |  |  |
|  | (0.595) | (0.284) |  |  |
| Pko size |  |  | -0.173 | -0.276\*\*\* |
|  |  |  | (0.096) | (0.047) |
| Conflict spatial lag -t1 | 10.616\*\* | 4.107 | 10.184\*\* | 4.790\* |
|  | (3.336) | (2.486) | (3.453) | (2.172) |
| Distance to borders | -0.000 | 0.006\*\*\* | -0.000 | 0.006\*\*\* |
|  | (0.002) | (0.001) | (0.002) | (0.001) |
| Distance to capital | -0.003\*\*\* | 0.001\*\* | -0.003\*\*\* | 0.001\*\*\* |
|  | (0.001) | (0.000) | (0.001) | (0.000) |
| Average traveling time | 0.004\*\* | 0.003\*\* | 0.005\*\* | 0.002\*\* |
|  | (0.001) | 0.001 | (0.001) | (0.001) |
| Infant mortality | 0.041\*\*\* | 0.097\*\*\* | 0.042\*\*\* | 0.095\*\*\* |
|  | (0.012) | (0.014) | (0.012) | (0.014) |
| Population | 0.000 | 0.000 | 0.000\* | 0.000 |
|  | (0.000) | (0.000) | 0.000 | (0.000) |
| Mountains | 4.484\*\*\* | 0.929 | 4.851\*\*\* | 0.701 |
|  | (1.064) | (0.565) | (1.087) | (0.574) |
| Precipitation | -0.005\*\*\* | (-0.001)\*\*\* | -0.005\*\*\* | -0.001\*\*\* |
|  | (0.001) | (0.000) | (0.001) | (0.000) |
| Peace years | 15.055\*\*\* |  | 14.545\*\*\* |  |
|  | (3.032) |  | (3.123) |  |
| Peace years2 | -3.975\*\*\* |  | -3.848\*\*\* |  |
|  | (0.848) |  | (0.866) |  |
| PEACE years3 | 0.317\*\*\* |  | 0.309\*\*\* |  |
|  | (0.071) |  | (0.072) |  |
| CONFLICT years |  | -4.049\*\*\* |  | -3.791\*\*\* |
|  |  | (0.938) |  | (0.955) |
| CONFLICT years 2 |  | 1.244\*\*\* |  | 1.199\*\*\* |
|  |  | (0.291) |  | (0.294) |
| CONFLICT years 3 |  | -0.129\*\*\* |  | -0.126\*\*\* |
|  |  | (0.026) |  | (0.026) |
| Constant | -16.878\*\*\* | -12.213\*\*\* | -16.820\*\*\* | -12.973\*\*\* |
|  | (3.693) | (2.807) | (3.764) | (2.640) |
|  |  |  |  |  |
| Observations | 638 | 704 | 638 | 704 |
| Log Likelihood | -59.31 | -209.248 | -59.69 | -203.043 |
| χ2 | 96.59 | 165.16 | 101.447 | 175.196 |
| Pseudo R2 | 0.621 | 0.428 | 0.625 | 0.445 |
| BIC | 202.587 | 503.734 | 201.343 | 491.326 |
| Standard errors in parentheses | | |  |  |
| \*\*\* p<0.01, \*\* p<0.05, \* p<0.1 | | |  |  |



|  |  |  |
| --- | --- | --- |
| Table I: Conflict and Exogenous Interaction | | |
|  |  |  |
|  |  |  |
| Distance to borders | | 0.027\*\*\* |
|  |  | 0.006 |
| Distance to capital | | 0.005\*\*\* |
|  |  | 0.001 |
| PKs supply |  | 0.000 |
|  |  | 0.000 |
| Average traveling time | | 0.011\* |
|  |  | 0.004 |
| Interaction PKs supply \*traveling time | | -0.000 |
|  |  | 0.000 |
| Infant mortality | | -0.212\*\* |
|  |  | 0.066 |
| Population |  | 0.000 |
|  |  | 0.000 |
| Mountains |  | 10.572\*\*\* |
|  |  | 1.894 |
| Precipitation |  | 0.002 |
|  |  | 0.001 |
| Year Dummies | | Yes |
| Conflict Time Cubic Polynomials | | Yes |
| *N* |  | 2989 |
| Log likelihood | | -54.47 |
| Pseudo R2 |  | 0.90 |

Table L. Two stages linear probability model

