**Supplementary Online Appendix**

How Do Violent Politicians Govern? The Case of Paramilitary-Tied Mayors in Colombia

Intended for Online Publication Only

**Contents**

|  |  |  |
| --- | --- | --- |
| 1 | Validity of the RD design |  |
|  |  Figure A.1. McCrary Test: Paramilitary-Mayor Margin of Victory | 2 |
|  |  Table A.1. Continuity Tests Lagged Outcomes | 3 |
|  |  Table A.2. Continuity Tests Pre-Treatment Covariates | 3  |
| 2 | Robustness Checks |  |
|  |  Tables A.3 and A.4. Placebo Tests | 4 |
|  |  Table A.5. Excluding Municipalities with Electoral Risk | 5 |
|  |  Tables A.6 and A.7. RD Estimates, Covariate-Adjusted | 5 |
|  |  Table A.8. RD Estimates on Fiscal Performance | 6 |
|  |  Tables A.9 and A.10. RD Conventional Estimates | 6-7 |
|  |  Table A.11. RD Estimates, Epanechnikov Kernel  | 7 |
|  |  Table A.12. RD Estimates of Security Outcomes, Alternative Measures | 8 |
| 3 | Generalizability | 9 |
|  |  Table A.13. Comparison of Municipalities with Contested and Non-Contested  Elections |  |
| 4 | Validity of Colombian National Police Data | 10 |
|  |  Table A.14. Correlations Between Crime Data Sources  | 13 |
| 5 | Data Sources: Outcomes and Explanatory Variables | 14 |
|  |  Table A.15. Sources of Data |  |
| 6 | Party Affiliation of Paramilitary and Non-paramilitary Mayors | 15 |
|  |  Figure A.2. Party Affiliations  |  |
| 7 | Colombia’s History of Violence | 16 |
| 8 | Diversion of Funds  Table A.16. Examples of Social Welfare to Security Force Transfers | 18 |



Figure A.1. McCrary Test, DC Density Plot: Paramilitary-Mayor Margin of Victory

Figure A.1 shows the graphical results of the McCrary test, which analyzes possible anomalous jumps in the distribution of the running variable: parapolítica margin of victory (bandwidth 0.1). The jump at the threshold is not statistically significant (the p-value of the log difference in heights is higher than 0.1), suggesting that it is a normal jump that also exists at different values of the distribution. This indicates that candidates could not precisely influence close elections and that mayors’ administrations on either side of the cutoff may be comparable (McCrary 2008).

In Table A.1, I estimate the RD model using one-period lagged outcomes as the dependent variable to check whether there is a significant effect of having a paramilitary mayor on pre-treatment outcomes. None of the RD estimates are significant, suggesting that there is not a pre-trend on the outcomes that may explain the treatment effects. In the placebo tests, there exist no discontinuities, further validating the RD design and suggesting, in particular, that places with paramilitary and non-paramilitary mayors did not differ in their pre-treatment levels of insecurity and public goods provision.

Table A.1. Continuity Tests Lagged Outcomes

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | (1) | (2) | (3) | (4) | (5) | (6) |
| Outcomes | Education | Infant | Education | Thefts | Robberies | Bodily Harm |
|  |  | mortality | spending |  |  |  |
| Paramilitary- | 6.48 | -0.81 | -0.65 | -0.85 | -1.19 | -1.25 |
|  mayor | (9.75) | (8.34) | (0.65) | (1.42) | (1.27) | (1.23) |
| Obs. | 199 | 62 | 100 | 48 | 49 | 48 |

Standard errors in parentheses. The models use a triangular kernel and the optimal bandwidth calculated with the package “rdrobust”, which uses the algorithm developed by Calonico et al. (2017). Robust point estimates and robust standard errors are estimated with a local polynomial regression-discontinuity. \*\*\* p<0.01, \*\* p<0.05, \* p<0.1.

In Table A.2, I show the results of the RD models on pre-treatment outcomes and an additional set of covariates – population, log of GDP per person, and log of urban population. None of these estimates is statistically significant, suggesting that there are no systematic baseline differences among municipalities that barely elected a paramilitary mayor and those that did not. Models 5 and 6 further show no significant difference in rates of attacks from the illegal armed groups.

Table A.2. Continuity Tests Pre-Treatment Covariates

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | (1) | (2) | (3) | (5) | (6) |
| Outcomes | Population | Log GDP  | Urban | Attacks FARC | Attacks AUC |
|  |  |  |  |  |  |
| Paramilitary- | -0.19 | -1.48 | -0.52 | 1.07 | -0.55 |
|  mayor | (0.34) | (1.58) | (0.41) | (1.0) | (1.03) |
| Obs. | 199 | 36 | 207 | 29 | 23 |

Standard errors in parentheses. The models use a triangular kernel and the optimal bandwidth calculated with the package “rdrobust”, which uses the algorithm developed by Calonico et al. (2017). Robust point estimates and robust standard errors are estimated with a local polynomial regression-discontinuity. \*\*\* p<0.01, \*\* p<0.05, \* p<0.1.

Tables A.3 and A.4 report results of the main outcomes using placebo cutoffs of the running variable at the median values of the paramilitary-mayor vote share for untreated and treated observations, (41.12% and 61.08%, respectively). Only one specification out of ten is statistically significant at p<0.1, which is consistent with random chance.

Table A.3. Placebo Test

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | (1) | (2) | (3) | (4) | (5) |
| Outcomes | Thefts | Robberies | Bodily Harm | Education | Infant |
| Paramilitary mayor | 2.54 | 2.91 | 1.07 | 17.89 | 0.13 |
|  | (1.97) | (2.12) | (1.48) | (14.59) | (4.49) |
| Observations | 23 | 16 | 32 | 116 | 41 |

Standard errors in parentheses. The models use a triangular kernel and the optimal bandwidth calculated with the package “rdrobust”, which uses the algorithm developed by Calonico et al. (2017). Robust point estimates and robust standard errors are estimated with a local polynomial regression-discontinuity. \*\*\* p<0.01, \*\* p<0.05, \* p<0.1.

Table A.4. Placebo Test

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | (1) | (2) | (3) | (4) | (5) |
| Outcomes | Thefts | Robberies | Bodily Harm | Education | Infant |
| Paramilitary mayor | -0.86 | -1.13\* | -0.55 | 3.27 | 4.95 |
|  | (0.58) | (0.67) | (0.60) | (5.74) | (3.89) |
| Observations | 121 | 104 | 140 | 290 | 117 |

Standard errors in parentheses. The models use a triangular kernel and the optimal bandwidth calculated with the package “rdrobust”, which uses the algorithm developed by Calonico et al. (2017). Robust point estimates and robust standard errors are estimated with a local polynomial regression-discontinuity. \*\*\* p<0.01, \*\* p<0.05, \* p<0.1.

Table A.5 conducts the main analysis, excluding places with electoral risk, according to MOE data. I find that the results hold.

Table A.5. RD Estimates, Excluding Municipalities with Electoral Risk

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Outcomes | Thefts | Robberies | Bodily harm | Education | Infant mortality |
|  | (1) | (2) | (3) | (4) | (5) |
| Paramilitary- | -1.90\* | -2.62\*\*\* | -1.82\*\* | -17.36\*\* | 4.50 |
|  mayor | (1.10) | (0.99) | (0.86) | (7.38) | (4.48) |
| Obs. | 100 | 79 | 107 | 179 | 142 |

Standard errors in parentheses. The models use a triangular kernel and the optimal bandwidth calculated with the package “rdrobust”, which uses the algorithm developed by Calonico et al. (2017). Robust point estimates and robust standard errors are estimated with a local polynomial regression-discontinuity. \*\*\* p<0.01, \*\* p<0.05, \* p<0.1.

I further undertake the analyses with the inclusion of covariates, using Calónico et al. 2018’s covariate-adjusted RD (Tables A.6 and A.7). I use only population variables for these covariate-adjusted models as these variables have sufficient observations to estimate local effects.

Table A.6. RD Estimates of Security Outcomes, Covariate-Adjusted

|  |  |  |  |
| --- | --- | --- | --- |
| Outcomes | Thefts | Robberies (of people) | Bodily Harm |
|  | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) |
| Paramilitary- | -1.70 | -1.38\*\* | -1.56 | -2.30\*\* | -1.78\*\*\* | -2.02\*\* | -1.65\* | -1.18\*\* | -1.50\* |
|  mayor | (1.16) | (0.69) | (1.03) | (1.01) | (0.64) | (0.97) | (0.87) | (0.57) | (0.86) |
| Band. | Opt. | 0.1 | 0.05 | Opt. | 0.1 | 0.05 | Opt. | 0.1 | 0.05 |
| Obs. | 98 | 113 | 64 | 77 | 99 | 57 | 102 | 118 | 68 |

Standard errors in parentheses. Columns 1, 4 and 7 use the package “rdrobust” developed by Calonico et al. (2017), the computed optimal bandwidth and a triangular kernel; these columns report robust point estimates and standard errors. The other models use a local linear regression with robust standard errors. \*\*\* p<0.01, \*\* p<0.05, \* p<0.1.

Table A.7. RD Estimates of Public Goods Outcomes, Covariate-Adjusted

|  |  |  |
| --- | --- | --- |
| Outcomes | Education | Infant Mortality Rates |
|  | (1) | (2) | (3) | (4) | (5) | (6) |
| Paramilitary- | -13.77\* | -6.68 | -14.90\* | 3.39 | 2.91 | 4.47 |
|  mayor | (7.40) | (6.06) | (7.63) | (5.07) | (3.39) | (4.67) |
| Band. | Opt. | 0.1 | 0.05 | Opt. | 0.1 | 0.05 |
| Obs. | 187 | 177 | 102 | 126 | 119 | 68 |

Standard errors in parentheses. Columns 1 and 4 use the package “rdrobust” developed by Calonico et al. (2017), the computed optimal bandwidth and a triangular kernel; these columns report robust point estimates and standard errors. The other models use a local linear regression with robust standard errors. \*\*\* p<0.01, \*\* p<0.05, \* p<0.1.

I use an index of fiscal performance ranging from 0 to 100 from CEDE, which measures whether the local government has a) self-financing of its operating expenses; b) back-up of debt service; c) dependency on national transfers and royalties; d) generation of its own revenues; e) savings capacity; and e) sizeable investments. There is no difference between barely elected paramilitary mayors and barely elected non-paramilitary mayors on fiscal performance (Table A.8).

Table A.8. RD Estimates on Fiscal Performance

|  |  |
| --- | --- |
| Outcomes | Fiscal Performance |
|  | (1) | (2) | (3) |
| Parapolítica | -3.33 | -1.91 | -3.32 |
|  | (3.71) | (2.76) | (3.71) |
| Band | Opt. | 0.1 | 0.05 |
| Obs. | 177 | 177 | 105 |

Standard errors in parentheses. Column 1 uses the package “rdrobust” developed by Calonico et al. (2017), the computed optimal bandwidth and a triangular kernel; these columns report robust point estimates and standard errors. The other models use a local linear regression with robust standard errors. \*\*\* p<0.01, \*\* p<0.05, \* p<0.1.

Tables A.9 and A.10 report results of the main outcomes with conventional estimates and robust standard errors including triangular kernel weights for the Calonico et al. (2017) optimal bandwidth and the 0.05 and 0.1 bandwidths. The results are substantively unchanged though estimated more noisily in some specifications.

Table A.9. RD Estimates of Security Outcomes, Covariate-Adjusted

|  |  |  |  |
| --- | --- | --- | --- |
| Outcomes | Thefts | Robberies (of people) | Bodily Harm |
|  | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) |
| Paramilitary- | -1.75 | -1.60 | -1.77 | -2.40\*\*\* | -2.06\*\* | -2.46\*\* | -1.63\* | -1.47 | -1.55 |
|  mayor | (1.10) | (1.18) | (1.45) | (0.99) | (1.01) | (1.19) | (0.86) | (0.93) | (1.01) |
| Band. | Opt. | 0.1 | 0.05 | Opt. | 0.1 | 0.05 | Opt. | 0.1 | 0.05 |
| Obs. | 100 | 115 | 66 | 79 | 101 | 59 | 107 | 120 | 70 |

\*\*\* p<0.01, \*\* p<0.05, \* p<0.1

Table A.10. RD Estimates of Public Goods Outcomes, Covariate-Adjusted

|  |  |  |
| --- | --- | --- |
| Outcomes | Education | Infant Mortality Rates |
|  | (1) | (2) | (3) | (4) | (5) | (6) |
| Paramilitary- | -14.90\*\* | -13.14\* | -18.10\*\* | 4.66 | 4.51 | 2.17 |
|  mayor | (7.38) | (7.85) | (8.77) | (4.48) | (5.57) | (7.13) |
| Band. | Opt. | 0.1 | 0.05 | Opt. | 0.1 | 0.05 |
| Obs. | 179 | 198 | 113 | 142 | 121 | 70 |

\*\*\* p<0.01, \*\* p<0.05, \* p<0.1

Table A.11 reports results of the main outcomes with conventional estimates and robust standard errors using the Epanechnikov kernel and the Calonico et al. (2017) optimal bandwidth. The results are substantively unchanged.

Table A.11. Epanechnikov Kernel

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | (1) | (2) | (3) | (4) | (5) |
| Outcomes | Thefts | Robberies | Bodily Harm | Education | Infant |
| Paramilitary mayor | -1.84 | -2.37\*\*\* | -1.75\*\* | -14.57\* | 4.80 |
|  | (1.13) | (1.03) | (0.90) | (7.71) | (4.49) |
| Observations | 91 | 73 | 97 | 169 | 128 |

\*\*\* p<0.01, \*\* p<0.05, \* p<0.1

*Alternative Security Indicators*

Table A.12 analyzes alternative indicators of security: car thefts, threats, and terrorism, averaged over the mayors’ administrations. The results hold across most of these different outcomes.

Table A.12. RD Estimates: Other Security Outcomes

|  |  |  |  |
| --- | --- | --- | --- |
| Outcomes | Car Theftsa | Threatsb | Terrorismc |
|  | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) |
| Paramilitary- | -1.39\*\* | -0.89\*\* | -1.47\*\* | -13.66\*\*\* | -13.21 | -14.61 | -0.34 | -0.29\* | -0.36\* |
|  mayors | (0.59) | (0.44) | (0.57) | (6.28) | (8.36) | (9.00) | (0.24) | (0.16) | (0.19) |
| Band | Opt (0.08) | 0.1 | 0.05 | Opt (0.073) | 0.1 | 0.05 | Opt(0.064) | 0.1 | 0.05 |
| Observations | 100 | 128 | 74 | 80 | 104 | 58 | 71 | 104 | 58 |

Standard errors in parentheses. Columns 1, 4 and 7 use the package “rdrobust” developed by Calonico et al. (2017), the computed optimal bandwidth and a triangular kernel; these columns report robust point estimates and standard errors. The other models use a local linear regression with robust standard errors. \*\*\* p<0.01, \*\* p<0.05, \* p<0.1.

a *Source*: Policia Nacional; b *Source*: Registro Único de Víctimas; c *Source*: Ministerio de Defensa

**Generalizability**

The empirical strategy focuses on the comparison among municipalities where paramilitary-politicians barely won or barely lost. Here, I consider how these municipalities may differ from the rest. Table A.13 reveals no significant difference between municipalities where elections were very contested (the RD sample) with those where elections were not highly contested.

Table A.13. Comparison of Municipalities with Contested and Non-contested elections

|  |  |  |  |
| --- | --- | --- | --- |
|   | (1) | (2) | (3) |
| Variable | RD sample | Out of RD sample | Difference |
| Log population | 10.1 | 10.0 | -0.2 |
|   | (1.1) | (1.0) | (0.1) |
| Log per capita GDP | 1.8 | 1.9 | 0.1 |
|   | (1.5) | (1.8) | (0.4) |
| Log urban population | 9.6 | 9.4 | -0.1 |
|  | (1.6) | (1.3) | (0.2) |
| Log FARC attacks pp | -9.7 | -9.8 | -0.1 |
|   | (1.5) | (1.2) | (0.4) |
| Log AUC attacks pp | -10.0 | -9.6 | 0.4 |
|   | (1.6) | (0.8) | (0.4) |
| Log FARC control | 0.2 | 0.1 | -0.0 |
|  | (0.4) | (0.4) | (0.0) |
| Log AUC control | 0.2 | 0.3 | 0.1 |
|  | (0.4) | (0.5) | (0.0) |
|  |  |  |  |

Standard errors in parentheses. \* p-value < 0.1, \*\* < 0.05, \*\*\* < 0.01.

**Validity of Colombian National Police Data**

This appendix addresses questions of bias in the police data, and probes an alternative mechanism by which paramilitary mayors may influence local-level security: not by solving security problems, but by cooking the books on security data. If this were the case, the findings may reflect the manipulation of how data is recorded for thefts, victimization, and injuries rather than any causal effect of paramilitary mayors on real security outcomes. I address this issue of data reliability conceptually and then do so with both qualitative and quantitative data.

*Police Crime Reporting Methodology*

In the 1990s, the Colombian police institution underwent extensive reforms focused on “strengthening internal discipline and internal control mechanisms over police malfeasance.” As a result, during the article’s period of examination, the National Police were highly centralized and increasingly professionalized. Reflective of this, trust in police increased from 20% in 1993 to between 50-60% in the 2000s (Esparza 2015).

I first look for evidence of bias in how security statistics are collected. I consult the Colombian National Police’s “Methodological Document of the Statistical Operation ‘Police Conduct and Services in Colombia,’” which describes the way in which the police record crime data through their criminal statistical information system (SIEDCO) designed for “systematizing the procedures.” In Colombia, police stations report the statistics directly to the national police headquarters in Bogotá where they are registered in the national-level system; the crime reporting and statistics therefore do not pass through the majors’ offices[[1]](#footnote-1) (in 1962, local politicians lost their patrimonial control over the police) (Esparza 2015). The National Police gathers the crime data directly, through the following procedures, which are identical for places in which paramilitary-mayors narrowly won as for those where instead non-paramilitary candidates narrowly won:

When the public discloses a fact through the telephone line for emergency assistance, a surveillance patrol is assigned to verify and attend to the case. This patrol submits a report to the Automatic Dispatch Center (CAD), disclosing the nature of the criminality and operational activity. Meanwhile, the CAD consolidates a document called the Police Information Bulletin that, together with the polygrams, reports and other sources of information, are sent to the country GICRI officials … cases are immediately inserted in the SIEDCO database.…[A]fter being validated by a complaint manager, [they] become criminal news and are registered in the SIEDCO database…Criminal news received in the complaint rooms of the Office of the Attorney General of the Nation [an alternative source of crime statistics] … are [also] migrated to the SIEDCO database of the National Police.…[E]ach official signs a DECLARATION OF CONFIDENTIALITY AND COMMITMENT TO THE SECURITY OF INFORMATION - PUBLIC SERVANT; the acceptance of terms is recorded in one of the audit tables of the PSI application - Internal Service Portal, of the National Police, individualizing the report signed by each police officer.…SIEDCO databases are backed up by a full Backup every eight (8) days and incremental backups are executed at intervals of three (3) hours. Likewise, the backed up information is taken to disk Backup (VTL) and later to tapes (LTO5) (Policía Nacional de Colombia 2021).

According to experts on Colombia’s National Police, there is a “long, long history of the police doing statistics through its criminality publication (Revista de Criminalidad) [which began circulation in the 1950s]. They have always been judicious.”[[2]](#footnote-2) This reporting and systematizing process casts doubt on whether the mayors were able to alter data on security-related matters and whether there is systematic manipulation of police data.

There are other structural features of the police that further render them less vulnerable to local co-optation and interference by mayors: police personnel are not necessarily “home grown”[[3]](#footnote-3) and they rotate frequently, which can also hamper paramilitary-politicians ability to alter the statistics. It is nonetheless important to ask whether, given the institutional design, there are likely to be systematic differences in how crime-related data are communicated in localities governed by paramilitary mayors as compared with similar localities that are not governed by paramilitary mayors. Since the mid-1990s, according to experts, the National Police Central Command in Bogotá has set national security goals upon which local police commanders are evaluated and rewarded (e.g. reduce homicides by 10%). The same goals apply to localities governed by paramilitary mayors as to those of their non-paramilitary counterparts; therefore the incentive structure for manipulation would be the same across the treated and control samples.[[4]](#footnote-4)

Finally, I consult the journalistic reporting that bravely unveiled the illegal paramilitary-politician alliances. I built a dataset of articles from ten national and regional newspapers from 2002 to 2010 that documented the paramilitaries’ trajectories, including their involvement in politics. This work involved searching the few newspapers that had digital archives for this period, and also visiting Colombia’s national library and regional newspaper offices to read the physical copies of the newspapers page by page, photographing the relevant articles. I then also reviewed a random sample of paramilitary and paramilitary-politician judicial sentences. These sources revealed the multi-faceted manifestations of the parapolítica phenomenon and the extent of malfeasance. If paramilitary-mayors were systematically interfering with police reporting and seeking to influence and control crime statistics, this would likely have come across in these journalistic and judicial sources. I find little evidence that suggests this practice. This is not to say that paramilitaries did not, in certain regions, collude with the armed forces, but manipulating crime statistics through their mayoral alliances did not seem to represent a systematic practice of these groups.

*Alternative Sources of Crime Data*

I move from the conceptual and qualitative to quantitative analyses of potential bias in the crime statistics. To do so, I collect alternative data on crime, violence, and insecurity. With these data, I seek to accomplish two goals: 1) to evaluate whether these different sources of crime data correlate with the police data equally in localities in which paramilitary-mayors narrowly won as where they narrowly lost. If paramilitary mayors were dampening crime by manipulating the statistics, these numbers should diverge in paramilitary-mayor municipalities and correlate in non-paramilitary mayor municipalities; and 2) to use these indicators as alternative outcomes in the RD models.

I use three sources of data, which experts defend as highly unlikely to be contaminated by local politics in general and paramilitary politics in particular. The first is data from Instituto National de Medicina Legal (National Legal Medicine Institute), which directs and controls the Legal Medicine and Forensic Sciences system in Colombia. A national institution, it provides forensic services, and produces an annual publication, Forensis, which for the years 2004-2019, includes data, at the municipal-level, on interpersonal violence (bodily harm). Medicina Legal does not track other indicators of criminality, such as robberies and thefts, and therefore I use these data as robustness checks, rather than for the main analyses. I use machine learning to extract the visual text as data. I then engaged in hand-coding to ensure accurate translation of the text to data. With the scraped statistics, I create a new dataset of violence.

The second data source is the Colombian National Center of Historical Memory, founded to “contribute to the comprehensive reparation and right to the truth for the victims of the Colombian armed conflict as well as society in general. The Center accomplishes this by reconstructing, through the testimony of victims, the serious human rights violations that occurred in the framework of the conflict, searching for truth, justice, reparation and the construction of a sustainable and lasting peace.”[[5]](#footnote-5) The CNMH maintains a dataset of violence, which geo-codes events at the municipal level, and includes the date of the events. These data compile information from diverse sources including victim testimonies, but also from sources such as the Human Rights and Political Violence database of a left-leaning think-tank CINEP. This dataset also does not measure common crime. However, it overlaps with police data on two indicators: selective assassinations and physical damage to goods and private property.

The final source is the Victims’ Registry (Unit for the Victims Assistance and Reparation), created by Law 1448/2011 (Victims and Land Restitution Law). This law established measures to assist and repair the damages the conflict inflicted. To be eligible for reparations, victims must register with the unit. To date, 8.79 million victims have enrolled with the Victims’ Unit. The unit maintains a dataset based on their reported crimes, verified by the state. The number of reported incidents in these latter two sources is far lower than that maintained by the police.[[6]](#footnote-6) Moreover, I do not anticipate that the police data will correlate highly with these two sources given that the former is focused on criminality, the latter two only on political violence. However, I would anticipate that, if the police data are credible, the data should correlate equally well in places in which paramilitary mayors narrowly won and narrowly lost. The correlative analyses evaluate whether the police data was compromised and biased where paramilitary mayors won the local administrations.

Table A.14 displays the correlations between the police data indicators (on the left) and the alternative violence data sources (on the right). These are broken down further and show the correlations in the municipalities in which paramilitary-mayors narrowly won and in those in which they narrowly lost. Across the indicators, we can see that the data correlate equally well in the two types of municipalities and, if anything, correlate better in places in which the paramilitary mayors narrowly won.

These indicators are inferior measures than the police data as they have lower coverage, focus on political violence only, and have higher levels of missingness. They are therefore useful for evaluating bias in the police data, but less so for conducting the key analyses of interest.

Table A.14. Correlations Between Crime Data Sources in Paramilitary and Non-Paramilitary Administrations

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Source** |  | ***Electoral Outcome***  | **CNMH** | **CNMH** | **Victims Unit** | **Institute of Legal Medicine** |
|  |  |  | *Harm to private property* | *Selective assassin.* | *Bodily Harm* | *Bodily Harm* |
| **National Police** | *Harm to* *private goods* | Paramil. won | 0.13 |  |  |  |
| Paramil. lost | 0.06 |  |  |  |
| *Political assassination* | Paramil. won |  | 0.31 |  |  |
| Paramil. lost |  | 0.13 |  |  |
| *Bodily Harm* | Paramil. won |  |  | -0.15 | 0.12 |
| Paramil. lost |  |  | -0.12 | -0.05 |

*Additional Manipulation Checks*

Finally, I conduct several additional manipulation checks. If the paramilitary-mayors were cooking the books, the security data should show improvements immediately upon them taking office; if instead, the finding reflects a real improvement in security, there may be a lag in the improvement or it may occur more uniformly over the course of the mayors’ administrations. I check for a sudden jump/fall in crime statistics when paramilitary mayors are elected. I find no such sudden decline in crime statistics in paramilitary-mayor localities versus those in which non-paramilitary mayors narrowly won. I also compare the first two years versus the latter two years of the mayors’ terms. However, unfortunately, such an analysis is underpowered to reach conclusions.

Ultimately, while potentially, and even likely, subject to biases and corruption, this is likely a trend everywhere in Colombia, both where paramilitary mayors narrowly won and where they narrowly lost. Police statistics remain the most comprehensive data available across the country and across time, and the only statistics available on common crime. As such, it is conventional practice in the study of violence and crime in Colombia to use these data.

Table A.15. Data Sources

|  |  |
| --- | --- |
| **Variable** | **Data Source** |
| *Vote Share* | Registraduria National de Colombia; CEDE |
| *Thefts* | Policía Nacional, Ministerio de Defensa |
| *Robberies* | Policía Nacional, Ministerio de Defensa |
| *Bodily Harm* | Policía Nacional, Ministerio de Defensa |
| *Education Coverage* | Ministerio de Educación |
| *Infant Mortality Rate* | DANE, “Estadísticas Vitales” |
| *Education Spending* | CEDE, Panel de Buen Gobierno |
| *Dense Ties* | Judicial Sentences |
| *Police Reinforcements* | Cortés et al. 2012 |
| *Electoral Risk* | Misión Observatorio Electoral |
| *Population* | DANE, Censos Nacionales |
| *Urban Population* | DANE, Censos Nacionales |
| *GDP per capita* | Sánchez and España, based on DANE, Censos Nacionales |
| *Guerrilla attacks* | CEDE, ‘Panel Violencia y Conflicto,’ Policia Nacional; Alternative source: Grupo de Memoría Histórica |
| *Paramilitary attacks* | CEDE, ‘Panel Violencia y Conflicto,’ Policia Nacional; Alternative source: Grupo de Memoría Histórica |
| *Guerrilla control* | Matanock and García 2017 |
| *Paramilitary control* | Matanock and García 2017 |
| *Fiscal Performance* | CEDE, Panel de Buen Gobierno, Departamento Nacional de Planeación, “Indice de Desempeño Fiscal” |
| *Transparency* | Procuraduria, “Indice de Gobierno Abierto” |
| *Political Party* | Registraduria Nacional de Colombia |
|  |  |
| *Alternative security measures* |  |
| *Car Thefts* | Policía Nacional |
| *Threats* | Registro Único de Víctimas, Unidad de Víctimas |
| *Terrorism* | Ministerio de Defensa |
| *Bodily Harm-ML* | Instituto de Medicina Legal  |
| *Bodily Harm-Unidad* | Registro Único de Victimas, Unidad de Víctimas |
| *Selective Assassinations*  | Grupo Memoría História (CNMH) |
| *Harm to Private Property* | Grupo Memoría História (CNMH) |

**Political Ideology and Party Affiliation**



Figure A.2. Party Affiliations of Paramilitary and Non-Paramilitary Mayors

*Source*: Registraduria National in Colombia

Figure A.2 shows the party affiliation of the paramilitary versus the non-paramilitary mayors for parties that amassed greater than one percent of the mayors in the dataset. While the paramilitary mayors spread across a greater number of parties (as well established in the literature on party fragmentation in Colombia), the figure shows that, in the highly competitive districts upon which the project focuses, paramilitary and non-paramilitary mayors oftentimes occupied similar positions on the partisan spectrum.

 **Colombia’s Violent History**

The contemporary Colombian conflict has its roots in La Violencia, the civil war that raged from 1948-1958 between the Liberal and Conservative Parties. In the 1960s, left-wing rebel organizations including the Revolutionary Armed forces of Colombia (FARC) and the National Liberation Army (ELN) emerged. With the introduction of the drug economy to Colombia in the late 1970s and the adoption of kidnapping and extortionary financing tactics, the rebels began to pose a serious threat to the military, landowning elite, drug barons and political class. Accordingly, these diverse sectors of society formed regional paramilitary forces (Romero 2003). Over the course of the subsequent decades, both the rebels and militias extended their power over nearly the entire country (López 2010). Between 2003- 2006, thirty-seven militia factions signed peace accords and demobilized; half then remilitarized in the subsequent years. In 2016, the FARC agreed to peace and abandoned their arms. Peace negotiations remain haltingly ongoing with the ELN. The conflict has left over seven million victims (Grupo de Memoria Histórica 2013). For a timeline of the country’s violent history, see Daly 2016.

Given the article’s focus on the paramilitaries, I pause to provide additional details on these forces and place them within the larger typology of armed actors in civil wars. In Spanish, they call themselves autodefensas (self-defense forces), whereas their critics and English translators call them militias or, more commonly, paramilitaries. Although their legal status has varied over time, after 1989 these organizations became illegal.[[7]](#footnote-7) They were non-state actors. In their post-1989 manifestations, they did not fall directly under the control or direction of Colombia’s armed forces and they retained autonomy and independent agency.[[8]](#footnote-8) In that sense, their character differs from that of “para-militaries” in the traditional sense of the word. As Gutiérrez Sanín 2010 writes, “the [Colombian] paramilitaries have enjoyed a large measure of autonomy. Although they were tolerated, financed, and supported by many forces that were formally within the bounds of the law – state agencies, businesses, and also workers’ organizations and neighbors, etc. – they did not become the puppets of any.” Unlike death squads or terrorist groups, the paramilitaries were highly territorial in nature; their power was tied to the land on which they operated, and they mostly used the tactics of irregular guerrilla warfare rather than perpetrating sensational acts such as car bombings or suicide attacks.[[9]](#footnote-9) They financed themselves through illicit means, most importantly through drug-trafficking. Unlike many village patrols or vigilantes, the Colombian paramilitaries were usually staffed with full-time members; especially in rural areas, they tended to patrol dressed in camouflage, to operate heavily armed with assault weaponry, and to engage in both offensive and defensive campaigns (Jentzsch 2014). Although not highly ideological, the paramilitaries advocated a conservative, right-wing platform centered on the “natural right of legitimate self-defense,” emphasizing the state’s responsibility to defend its citizens and the right to private property. Their own historical narrative of their origins portrayed them as victims of the state’s inability to provide security against rebel (guerrilla) hostility. This explanation for their existence built on the common argument that the Colombian state historically has been weak and incapable of governing its own territory or fighting the insurgency (Waldmann 2007). The paramilitaries did not operate just as armies; rather they constituted multifaceted organizations with extensive social, economic, and political influence. They ranged over most of Colombia’s territory, and had a strong presence both in urban and in rural areas. By the start of the twenty-first century, they maintained approximately 35,000 men and women in their ranks.

Table A.16. Examples of Diversion of Funds from Social Welfare to Illegal Security Forces

|  |  |
| --- | --- |
| **Location and Date** | **Description** |
| Santa Marta, Magdalena, 2004-2007 | During Francisco “Chico” Zúñiga’s government, funds were diverted from the Health Promotion Agency (EPS) Sol Salud to finance the AUC.[[10]](#footnote-10) |
| Suan, Atlántico, 2003-2006 | Gabriel Antonio Rivera Cueto was mentioned in the declarations of “Versión Libre” to the Unidad de Justicia y Paz by paramilitaries Jhony Acosta alias “28” and Lino Torregrosa alias “Jhonnatan” as sponsor of paramilitary groups by diverting public funds to finance them between 2003-2006.[[11]](#footnote-11) |
| Coveñas, Sucre | Nilson Navajas was mentioned in the declarations of “Versión Libre” to the Unidad de Justicia y Paz by paramilitaries of the Frente Mojana (AUC) as a sponsor of paramilitary groups through the diversion of public resources.[[12]](#footnote-12)  |
| National, 1999-Early 2000s | Iván Roberto Duque, alias “Ernesto Báez”, in a 2005 interview said the leaders of AUC starting meeting with various regional and local politicians seeking collaboration to establish paramilitary operations in different areas of the country. They agreed to sponsor paramilitary groups through resources and transfer of public contracts in the regions.[[13]](#footnote-13) |
| Atlántico, Magdalena, Bolívar | The AUC Bloque Norte was financed by farmers, merchants and public officials. The computers of Edgar Ignacio Fierro Flores’ (AUC member – Bloque Norte) show irregular contracts between mayors, governors, hospitals and other health entities and social service companies as well as an infiltration of the finances of Hospital Materno Infantil de Soledad to fund the illicit security forces.[[14]](#footnote-14) |
| Córdoba, 2001 | Juan Manuel López Cabrales made an agreement with Salvatore Mancuso to finance the paramilitary political project in the department with public resources.[[15]](#footnote-15) |
| Guajira, 2004 | According to *El Tiempo*, Wilder Ríos, Riohacha mayor was detained on Sept 2, 2004 for participating in the diversion of 148 million pesos destined for healthcare to finance paramilitary groups.[[16]](#footnote-16)  |

References

Ávila, Ariel, and León Valencia Agudelo. Candidatos Cuestionados. Fundación Paz y Reconciliación.

Calónico, Sebastián, Matias D Cattaneo, Max H Farrell, and Rocío Titiunik. 2018. "Regression Discontinuity Designs Using Covariates." *Review of Economics and Statistics* 101:442-451.

Corporación Nuevo Arco Íris. 2011. II Informe De La Corporación Nuevo Arco Iris Riesgos Electorales 2011. Bogotá.

Cortés, D, J. F Vargas, L Hincapié, and M. D. R Franco. 2012. "Seguridad Democrática, presencia de la Policía y conflicto en Colombia." *Desarrollo y Sociedad* 69:11-32.

Daly, Sarah Zukerman. 2016. *Organized Violence After Civil Wars: The Geography of Recruitment in Latin America*. Cambridge: Cambridge University Press.

Esparza, Diego. 2015. "Policing as a Vocation: Centralization, Professionalism, and Police Malfeasance in Latin America." PhD, UC Riverside.

Grupo de Memoria Histórica. 2013. *¡Basta ya! Colombia: memorias de guerra y de dignidad*. Bogotá: Comisión Nacional de Reparación y Reconciliación.

Gutiérrez Sanín, Francisco. 2010. "Reflexiones a propósito del libro ‘Y refundaron la patria.' " In *Y refundaron la patria ... De cómo mafiosos y politicos reconfiguraron el Estado colombiano*, edited by Claudia López. Bogotá: Debate.

Jentzsch, Corinna. 2014. "Militias and the Dynamics of Civil Wars."PhD diss., Political Science, Yale University.

López, Claudia. 2010. *Y refundaron la patria: De cómo mafiosos y políticos reconfiguraron el Estado colombiano*. Bogotá: Random House Mondadori.

McCrary, Justin. 2008. "Manipulation of the Running Variable in the Regression Discontinuity Design: A Density Test." *Journal of Econometrics* 142 (2):698-714.

Policía Nacional de Colombia. *Documento Metodológico de la Operación Estadística ‘Conductas y Servicios de Policía en Colombia”*. Bogotá: Policía Nacional de Colombia: Dirección de Investigación Criminal e INTERPOL.

Romero, Mauricio. 2003. *Paramilitares y autodefensas 1982-2003*. Bogotá: Planeta.

Tiempo, Casa. 2004. "El Mapa de la Influencia Para." *El Tiempo*, 26 September.

Tribunal Superior Del Distrito Judicial de Bogotá Sala de Justicia y Paz. 2011. Sentencia Edgar Ignacio Fierro Flores.

Valencia, León, Mauricio Romero, Laura Bonilla, Ángelica Arias, Oscar Sevillano, and Sebastián Díaz. 2007. *Los Caminos De La Alianza Entre Los Paramilitares Y Los Políticos*. Bogotá: Observatorio del Conflicto Armado.

Velasco, Juan David. 2014. *La Parapolítica Revisada: Coaliciones De Clase, Armas Y Negocios En La Provincia Colombiana (2002 – 2006)*: Universidad Nacional de Colombia.

Waldmann, Peter. 2007. "Is there a Culture of Violence in Colombia?" *International Journal of Conflict and Violence* 1:61–75.

1. Juan Diego Duque, virtual personal interview, January 2021. [↑](#footnote-ref-1)
2. María Victoria Llorente, virtual personal interview, January 2021. [↑](#footnote-ref-2)
3. Juan Albarracín, virtual personal interview, December 2020. [↑](#footnote-ref-3)
4. Jerónimo Castillo Muñoz, virtual personal interview, January 2021. [↑](#footnote-ref-4)
5. <https://www.un.org/victimsofterrorism/en/node/568>. [↑](#footnote-ref-5)
6. The mean number of incidents of bodily harm, for example, is 48 in the police data versus 1.5 in the Victims’ Unit data. [↑](#footnote-ref-6)
7. The legal status of the paramilitary groups has varied. In 1968, self-defense forces (opposing the rebels) became legal. In 1989, this law was reversed, rendering them illegal. 1994 and 1995 saw the legalization of vigilante organizations, called Convivir. These decrees were overturned in 1997, rendering these forces illegal. [↑](#footnote-ref-7)
8. Camilo Echandía, interview by author, Bogotá, July 2006. [↑](#footnote-ref-8)
9. The paramilitaries did, however, appear on the U.S. list of terrorist groups starting in 2001. [↑](#footnote-ref-9)
10. Ávila and Valencia Agudelo . [↑](#footnote-ref-10)
11. Corporación Nuevo Arco Íris 2011. [↑](#footnote-ref-11)
12. Corporación Nuevo Arco Íris 2011. [↑](#footnote-ref-12)
13. Valencia et al. 2007 [↑](#footnote-ref-13)
14. Tribunal Superior Del Distrito Judicial de Bogotá Sala de Justicia y Paz 2011 [↑](#footnote-ref-14)
15. Velasco 2014. [↑](#footnote-ref-15)
16. Tiempo 2004. [↑](#footnote-ref-16)