

# “This is my Rifle” - On US Police Militarisation and Crime

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Econometric Society World Congress

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# Why does the Minneapolis police department look like a military unit?

## George Floyd death: Seven solutions to US police problems

The history of how local police departments got so much military-  
By Robin Levinson-King  
BBC News



9 June 2020

George Floyd death

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**Militarization has fostered a policing culture that sets up protesters as 'the enemy'**

June 3, 2020 · 17 min read

## Floyd protests renew debate about police use of armored vehicles, other military gear

NBC News has found at least 29 instances via social media and news accounts where armored vehicles were deployed in response to George Floyd protests.

Police use military vehicles at protests across U.S.

JUNE 17, 2020 / 04:00



# Outline

My study focuses on the **effect of an extensive military equipment supply programme** on the performance of local police agencies.

I document that much of the **existing work on this issue relies on inconsistent equipment supply data**.

The results highlight an important dimension of heterogeneity in the form of a **rural-urban divide**.

**For rural counties in particular, military equipment does not appear to increase police performance** in terms of violent crime reduction - if anything it renders agencies less productive.

# Some Background on US Police Militarisation

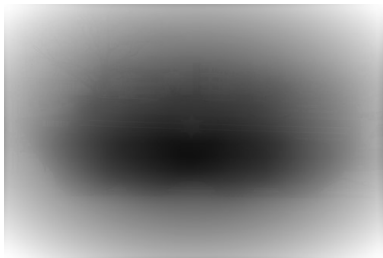
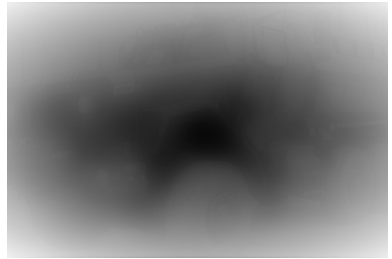
The militarisation of US police forces has been going on for many decades, but there is a particular cause for an increasing relevance of the issue today:

**1033-programme:** Section 1033 of the National Defense Authorisation Act (NDAA) of 1997 → *permanent legal basis for the provision of 'suitable' equipment to law enforcement virtually free of charge*

- Material inflow through the programme has risen sharply after the peaks of the Afghanistan and Iraq campaigns.
- The scheme has disbursed equipment worth billions of US-\$ since its inception.

# Some Background on US Police Militarisation II

Now, what does '*suitable equipment*' mean in practice?



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Now, what does *'suitable equipment'* mean in practice?





## Existing literature (selection)

Many anecdotal and qualitative studies on negative impact of military culture in law enforcement in criminology literature (Kraska 2007, Balko 2013).

**Well documented deterrence effects of higher police presence**, but focussing on manpower, not equipment (Chalfin and McCrary 2017).

**Two highly publicised studies find negative effect on crime rates**, without any indications of other negative outcomes such as citizen complaints or police shootings (Bove and Gavrilova 2017, Harris et al. 2017).

Other work supports findings on crime rates (Masera 2019), but attests negative impacts on deadly police violence. Mummolo (2018) finds no crime reduction.

# Identification

IV-approach based on **exogenous cost shifters related to the distance to the nearest Defense Logistics Agency (DLA) distribution sites**, similar to Harris et al. (2017). Agencies located closer to DLA distribution site face lower acquisition costs:

- any equipment is distributed **free of charge**, but **recipients have to cover the cost of transportation**
- once a certain item is declared military surplus, the **time frame for local law enforcement agencies to act is just 14 days**

Supplementary IV-approach follows Bove and Gavrilova (2017) and relies on an interaction between US military expenditure (exog. to local crime) with a county-specific propensity to take up equipment, similar to Nunn and Qian (2014). [Details](#)

# Identification

## Second stage:

$$Y_{c,t} = \eta_0 + \gamma \ln(\hat{Equip}_{c,t-1}) + X'_{c,t}\beta + \eta_c + \eta_t + \epsilon_{c,t}, \quad (1)$$

$\ln(\hat{Equip}_{c,t-1})$  = instrumented lagged stock of military grade equipment of county  $c$ , log of total value;  $\eta_c$  and  $\eta_t$  = county/time fixed effects;  $Y$  = outcome of interest;  $X_{c,t}$  = vector of county economic and demographic controls,  $\epsilon_{c,t}$  = error term.

## First stage:

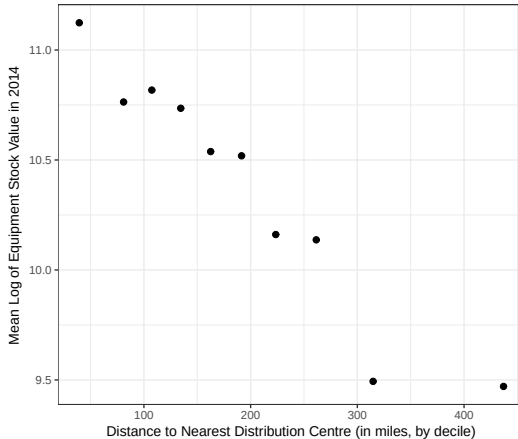
$$\ln(Equip_{c,t-1}) = \kappa_0 + \delta Instrument_{c,t-1} + X'_{c,t}\xi + \kappa_c + \kappa_t + u_{c,t}. \quad (2)$$

**Instrument:** first principal component of the street distances to the 10 closest DLA distribution sites  $j = 1, \dots, 10$  for every county:

$$(i) \sum_{j=1}^{10} \omega_{j,PC1} * \ln(TotEquipValue_t) * Dist_{c,j}.$$

# Identification

There is a visible response in equipment demand depending on the distance:



# Data Sources

Militarisation data is available from the Defense Logistics Agency (DLA).

Crime data is available from the FBI uniform crime reporting database (county aggregates accessible through ICSPR).

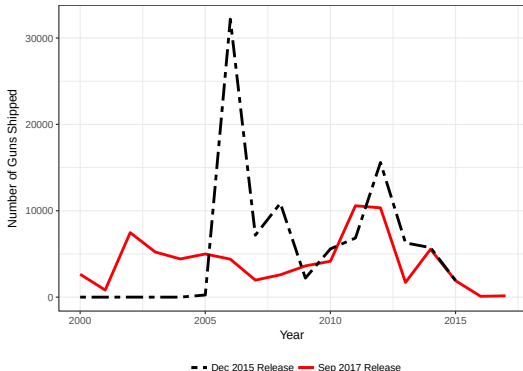
Additional controls are available from the Census Bureau, the Bureau of Veteran Affairs, and Bureau of Labor Statistics.

Data on fatal encounters between police and civilians are sourced from *fatalencounters.org*.

Descriptives

# Data Issues - The Timing 'Glitch'

The difference between currently available data and earlier data used by the most prominent studies is non-negligible:



Additionally, **not all equipment is traced with the same reliability** - non-controlled items such as furniture etc. are dropped fairly quickly from captured inventories.

# Results - OLS baseline - Urban vs. Rural

| Model                                                   | Violent             | Property             | Murder              | Aggr. Assault       | Robbery             |
|---------------------------------------------------------|---------------------|----------------------|---------------------|---------------------|---------------------|
| <b>Mid./high dens. subsample (pop. density &gt; 50)</b> |                     |                      |                     |                     |                     |
| <b>Pooled OLS</b>                                       |                     |                      |                     |                     |                     |
| ln(value of equip. stock)                               | 7.598***<br>(1.394) | 65.509***<br>(7.157) | 0.075***<br>(0.018) | 3.728***<br>(1.124) | 3.391***<br>(0.373) |
| Observations                                            | 12528               | 12528                | 12528               | 12528               | 12528               |
| <b>County FE (static)</b>                               |                     |                      |                     |                     |                     |
| ln(value of equip. stock)                               | -0.291<br>(0.717)   | 9.718***<br>(2.971)  | -0.013<br>(0.016)   | -0.738<br>(0.634)   | 0.381**<br>(0.152)  |
| Observations                                            | 12527               | 12527                | 12527               | 12527               | 12527               |
| <b>Low density subsample (pop. density ≤ 50)</b>        |                     |                      |                     |                     |                     |
| <b>Pooled OLS</b>                                       |                     |                      |                     |                     |                     |
| ln(value of equip. stock)                               | 1.504<br>(1.057)    | 25.239***<br>(6.624) | 0.005<br>(0.019)    | 0.946<br>(0.937)    | 0.212<br>(0.129)    |
| Observations                                            | 10425               | 10425                | 10425               | 10425               | 10425               |
| <b>County FE (static)</b>                               |                     |                      |                     |                     |                     |
| ln(value of equip. stock)                               | -0.164<br>(0.748)   | 8.154**<br>(3.717)   | 0.009<br>(0.030)    | 0.051<br>(0.668)    | -0.125<br>(0.086)   |
| Observations                                            | 10415               | 10415                | 10415               | 10415               | 10415               |
| Econ. & demogr. controls                                | Yes                 | Yes                  | Yes                 | Yes                 | Yes                 |
| Year fixed effects                                      | Yes                 | Yes                  | Yes                 | Yes                 | Yes                 |

\*\*\* $p < 0.01$ , \*\* $p < 0.05$ , \* $p < 0.1$ . Standard errors (clustered at the county level) in parentheses. Dependent variable is measured as reported crimes per 100,000 population. All specifications include demographic (black and veteran population, total population, and pop. density) and economic (poverty and median HH income) controls. For the "Distance" instrument, the log of the equipment stock value was instrumented by interacting the first principal component of the distances to the 10 closest distribution sites with the log of the sum of equipment issued until year  $t - 1$ .

## IV - Crime - Urban vs. Rural

| Model                                                   | Agg. Ass.                | Murder                    | Robbery                  |
|---------------------------------------------------------|--------------------------|---------------------------|--------------------------|
| <b>Mid./high dens. subsample (pop. density &gt; 50)</b> |                          |                           |                          |
| ln(value of equip. stock)                               | <b>8.273</b><br>(12.241) | <b>-0.166</b><br>(0.309)  | <b>-6.992</b><br>(5.321) |
| Observations                                            | 12527                    | 12526                     | 12527                    |
| Kleibergen-Paap F-Statistic                             | 3.694                    | 3.683                     | 3.694                    |
| <b>Low density subsample (pop. density ≤ 50)</b>        |                          |                           |                          |
| ln(value of equip. stock)                               | <b>1.280</b><br>(3.184)  | <b>-0.217*</b><br>(0.127) | <b>-0.347</b><br>(0.374) |
| Observations                                            | 10415                    | 10415                     | 10415                    |
| Kleibergen-Paap F-Statistic                             | 86.076                   | 86.076                    | 86.076                   |
| Instrument                                              | Distance                 | Distance                  | Distance                 |
| Econ. & demogr. controls                                | Yes                      | Yes                       | Yes                      |
| County fixed effects                                    | Yes                      | Yes                       | Yes                      |
| Year fixed effects                                      | Yes                      | Yes                       | Yes                      |

\*\*\* $p < 0.01$ , \*\* $p < 0.05$ , \* $p < 0.1$ . Standard errors (clustered at the county level) in parentheses. Dependent variable is measured as reported crimes per 100,000 population. All specifications include demographic (black and veteran population, total population, and pop. density) and economic (poverty and median HH income) controls. For the "Distance" instrument, the log of the equipment stock value was instrumented by interacting the first principal component of the distances to the 10 closest distribution sites with the log of the sum of equipment issued until year  $t - 1$ .



## IV - Arrests - Rural

| Arrest rate for             | Agg. Ass.           | Murder               | Robbery              |
|-----------------------------|---------------------|----------------------|----------------------|
| ln(value of equip. stock)   | -3.600**<br>(1.643) | -0.485***<br>(0.115) | -1.578***<br>(0.309) |
| County fixed effects        | Yes                 | Yes                  | Yes                  |
| Year fixed effects          | Yes                 | Yes                  | Yes                  |
| Observations                | 15208               | 15208                | 15208                |
| Kleibergen-Paap F-Statistic | 93.893              | 93.893               | 93.893               |

\*\*\* $p < 0.01$ , \*\* $p < 0.05$ , \* $p < 0.1$ . Standard errors (clustered at the county level) in parentheses. Dependent variable is measured as the number of arrests per 100,000 inhabitants. Controls include demographic (black and veteran population, total population, and pop. density) and economic (poverty and median HH income) variables. The log of the equipment stock value was instrumented by interacting the first principal component of the distances to the 10 closest distribution sites with the log of the sum of equipment issued until year  $t - 1$ .

## IV - Officer and Citizen Safety - Rural

| Dep. Var.       | Off. Killed       | Off. Ass.            | Empl. Rate          | Fatal Police Shootings |                  |                   |
|-----------------|-------------------|----------------------|---------------------|------------------------|------------------|-------------------|
| ln(Equip.)      | -0.010<br>(0.008) | -2.625***<br>(0.722) | 0.071***<br>(0.027) | -0.018<br>(0.012)      | 0.011<br>(0.008) | 0.015*<br>(0.008) |
| County FE       | Yes               | Yes                  | Yes                 | Yes                    | Yes              | Yes               |
| Year FE         | Yes               | Yes                  | Yes                 | Yes                    | Yes              | Yes               |
| Sample          | P. Dens.<br><100  | P. Dens.<br><100     | P. Dens.<br><100    | P. Dens.<br><100       | Pop.<br><30,000  | Pop.<br><30,000   |
| Extended Period | No                | No                   | No                  | No                     | No               | Yes               |
| Observations    | 7559              | 7559                 | 7559                | 15208                  | 10447            | 12466             |
| KP F-Stat.      | 30.795            | 30.795               | 30.795              | 93.893                 | 44.063           | 42.923            |

\*\*\* $p < 0.01$ , \*\* $p < 0.05$ , \* $p < 0.1$ . Standard errors (clustered at the county level) in parentheses. Employee and officer rates are measured as number of employees/officers per 1000 population. Officers killed or assaulted are measured relative to the total number of officers, scaled to lie between 0 and 100. Fatal police shootings are measured in the absolute number of incidents in a county. Controls include year fixed effects, demographic (black and veteran population, total population, and pop. density) and economic (poverty and median income) variables. The log of the equipment stock value was instrumented by interacting the first principal component of the distances to the 10 closest distribution sites with the log of the sum of equipment issued until year  $t - 1$ . The extended period sample covers the years 2000-2014, while the rest is restricted to 2005-2014. All estimates are based on a static fixed effects specification.

# Robustness

The **absence of clear crime reducing effects of military equipment for rural counties persists** across a wide variety of specifications, including:

- an alternative IV approach - table
- using per capita militarization - table
- using the number of items instead of the value - table
- using simple distance instruments instead of principal component - table
- dynamic panel specifications - table

Robustness of other outcomes: Arrests - diff. instr., Arrests/offence - Sys-GMM,  
Officer/citizen safety - diff. instr., Officer/citizen safety - simple instr.,  
Officer/citizen safety - per capita militarisation, Officer/citizen safety - number of guns

# Conclusions

This **rural-urban divide**, along with data-related matters, may explain why existing studies diverge on the merits of police militarization through the 1033-programme.

For small town **rural counties** - a majority of counties in the US - I find **little evidence of any benefits of the programme**.

If anything, police departments appear to get less productive in terms of arrests and violent crime deterrence.

**Police militarization extends beyond equipment** (and the 1033-programme) - future work should try to address this measurement challenge.

Thank you

# References

- Balko, R. (2013). "Rise of the warrior cop: The militarization of America's police forces." PublicAffairs.
- Bove, V. and E. Gavrilova (2017): "Police Officer on the Frontline or a Soldier? The Effect of Police Militarization on Crime," *American Economic Journal: Economic Policy*, 9, 1–18.
- Chalfin, A. and J. McCrary (2017): "Criminal Deterrence: A Review of the Literature," *Journal of Economic Literature*, 55, 5–48.
- Harris, M. C., J. Park, D. J. Bruce, and M. N. Murray (2017): "Peacekeeping Force: Effects of Providing Tactical Equipment to Local Law Enforcement," *American Economic Journal: Economic Policy*, 9, 291–313.
- Kraska, P. B. (2007): "Militarization and Policing – Its Relevance to 21st Century Police," *Policing*, 1, 501–513.
- Masera, F. (2019): "Violent Crime and the Overmilitarization of US Policing," *Working Paper*.
- Mummolo, J. (2018): "Militarization Fails to Enhance Police Safety or Reduce Crime but May Harm Police Reputation." *Proceedings of the National Academy of Sciences*, 115(37), 9181-9186.
- Nunn, N., and Qian, N. (2014): "US food aid and civil conflict". *American Economic Review*, 104(6), 1630-66.

# Appendix

# Alternative IV Strategy - Bove and Gavrilova

## Instrument

The (log) equipment stock value is instrumented by interacting the total (lagged) US military expenditure in a given year with the relative frequency of equipment take-up in the 2006-2014 period:

**First stage:**

$$\ln(Equip\_stock_{c,t-1}) = \kappa_0 + \delta Instrument_{c,t-1} + X'_{c,t} \xi + \kappa_c + \kappa_{state,t} + u_{c,t}.$$

**Instrument:** US military expenditures (in mio. US-\$) in the previous year interacted with a measure of how often a county received military equipment (the share of years) in the sample:

$$Instrument_{c,t} = \sum_{j=2006}^{2014} \mathbb{1}(equip_{c,t=j} > 0) * US\_military\_exp_{t-1}$$

In addition to county fixed effects, a set of state-year fixed effects is also included in the estimation.



# Summary Statistics

| Variable                                | N     | Mean     | Std. Dev. | Min   | Max      | Median  |
|-----------------------------------------|-------|----------|-----------|-------|----------|---------|
| <i>Crime rates (crimes/100,000 pop)</i> |       |          |           |       |          |         |
| Serious (part 1) offences, total        | 22964 | 2490.68  | 1443.98   | 0     | 11380.97 | 2284.48 |
| Violent crime, total                    | 22964 | 264.62   | 222.55    | 0     | 2584.46  | 207.2   |
| Property crime, total                   | 22964 | 2226.06  | 1281.43   | 0     | 9925.06  | 2054.83 |
| Murder                                  | 22964 | 3.25     | 5.32      | 0     | 97.62    | 1.32    |
| Robbery                                 | 22964 | 41.9     | 64.25     | 0     | 785.24   | 18.75   |
| Aggravated assault                      | 22964 | 193.12   | 173.41    | 0     | 2086.25  | 148.2   |
| <i>Arrest rates, arr./100,000 pop.</i>  |       |          |           |       |          |         |
| Total arrests, serious offences         | 22964 | 529.57   | 357.39    | 0     | 3400.18  | 489.03  |
| Total arrests, violent crime            | 22964 | 122.88   | 106.34    | 0     | 1342.1   | 99.36   |
| Total arrests, property crime           | 22964 | 406.63   | 286.43    | 0     | 2838.39  | 369.59  |
| Arrests, murder                         | 22964 | 2.87     | 5.69      | 0     | 161.81   | 0       |
| Arrests, robbery                        | 22964 | 15.57    | 21.32     | 0     | 639.34   | 8.55    |
| Arrests, aggravated assault             | 22964 | 97.68    | 90.54     | 0     | 1178.32  | 76.16   |
| <i>Economic/demographic controls</i>    |       |          |           |       |          |         |
| Unemployment rate, percent              | 22954 | 7.11     | 2.93      | 1.1   | 25.5     | 6.6     |
| Population, in 100,000                  | 22964 | 1.21     | 3.54      | .01   | 100.67   | .35     |
| Pop. density, pop./sq. mile             | 22964 | 248.49   | 848.09    | .25   | 18144.31 | 57.84   |
| Veteran population, percent             | 22963 | 8.82     | 2.2       | 1.29  | 24.46    | 8.6     |
| Black population, percent               | 22964 | 9        | 13.49     | 0     | 96.07    | 3.41    |
| Median household income, \$             | 22964 | 44232.69 | 11590.74  | 17843 | 125635   | 42076.5 |
| Poverty rate, percent                   | 22964 | 16.07    | 6.1       | 2.4   | 62       | 15.3    |
| Land area, sq. miles                    | 22964 | 977.6    | 1397.24   | 2     | 20056.94 | 608.86  |
| <i>Military equipment stocks (t-1)</i>  |       |          |           |       |          |         |
| ln(total value)                         | 22964 | 7.67     | 3.86      | 0     | 16.44    | 8.31    |
| ln(total value)/100,000 pop.            | 22964 | 8.37     | 4.02      | 0     | 16.46    | 9.38    |
| ln(value of guns)                       | 22964 | 6.48     | 3.49      | 0     | 13.48    | 7.65    |
| ln(value of vehicles)                   | 22964 | 2.51     | 4.83      | 0     | 15.97    | 0       |

Table: Summary Statistics

# Results - Crime - Alternative Instrument

| Model                                                   | Agg. Ass.                | Murder                   | Robbery                     |
|---------------------------------------------------------|--------------------------|--------------------------|-----------------------------|
| <b>Mid./high dens. subsample (pop. density &gt; 50)</b> |                          |                          |                             |
| ln(value of equip. stock)                               | <b>-1.654</b><br>(5.448) | <b>-0.076</b><br>(0.131) | <b>-4.625***</b><br>(1.772) |
| Observations                                            | 12527                    | 12527                    | 12527                       |
| Kleibergen-Paap F-Statistic                             | 89.578                   | 89.578                   | 89.578                      |
| <b>Low density subsample (pop. density ≤ 50)</b>        |                          |                          |                             |
| ln(value of equip. stock)                               | <b>-3.613</b><br>(4.151) | <b>0.099</b><br>(0.162)  | <b>0.096</b><br>(0.561)     |
| Observations                                            | 10415                    | 10415                    | 10415                       |
| Kleibergen-Paap F-Statistic                             | 111.366                  | 111.366                  | 111.366                     |
| Instrument                                              | Mil. exp.                | Mil. exp.                | Mil. exp.                   |
| Econ. & demogr. controls                                | Yes                      | Yes                      | Yes                         |
| County fixed effects                                    | Yes                      | Yes                      | Yes                         |
| State*year fixed effects                                | Yes                      | Yes                      | Yes                         |

\*\*\* $p < 0.01$ , \*\* $p < 0.05$ , \* $p < 0.1$ . Standard errors (clustered at the county level) in parentheses. Dependent variable is measured as reported crimes per 100,000 population. For the "Mil. exp." instrument, the log of the equipment stock value was instrumented by interacting the total (lagged) US military expenditure in a given year with the relative frequency of equipment take-up in the 2006-2014 period.

# Results - Robberies - Dynamic Specifications

| Model                       | (1)               | (2)               | (3)               | (4)               | (5)               |
|-----------------------------|-------------------|-------------------|-------------------|-------------------|-------------------|
| ln(value of equip. stock)   | -0.151<br>(0.291) | -0.151<br>(0.287) | -0.150<br>(0.283) | -0.107<br>(0.268) | 0.013<br>(0.256)  |
| Population (1,000)          | -0.156<br>(0.216) | -0.147<br>(0.213) | -0.138<br>(0.210) | -0.102<br>(0.200) | -0.021<br>(0.190) |
| Population density          | -0.414<br>(0.457) | -0.413<br>(0.450) | -0.412<br>(0.444) | -0.416<br>(0.429) | -0.432<br>(0.418) |
| Median HH income            | 0.000<br>(0.000)  | 0.000<br>(0.000)  | 0.000<br>(0.000)  | 0.000<br>(0.000)  | 0.000<br>(0.000)  |
| Prop. black                 | 0.036<br>(0.028)  | 0.036<br>(0.028)  | 0.035<br>(0.027)  | 0.034<br>(0.027)  | 0.034<br>(0.027)  |
| Prop. veterans              | 0.085<br>(0.299)  | 0.080<br>(0.295)  | 0.076<br>(0.292)  | 0.097<br>(0.280)  | 0.131<br>(0.272)  |
| Poverty rate                | -0.203<br>(0.147) | -0.207<br>(0.147) | -0.212<br>(0.147) | -0.205<br>(0.147) | -0.188<br>(0.158) |
| Unemployment                | -0.056<br>(0.152) | -0.060<br>(0.149) | -0.064<br>(0.147) | -0.080<br>(0.146) | -0.131<br>(0.158) |
| County & Time Fixed Effects | Yes               | Yes               | Yes               | Yes               | Yes               |
| Observations                | 10415             | 10415             | 10415             | 10415             | 10415             |
| Kleibergen-Paap F-Statistic | 86.076            | 86.076            | 86.076            | 86.076            | 86.076            |
| Imposed AR(1) coefficient   | 0.3               | 0.3               | 0.3               | 0.4               | 0.6               |
| Imposed AR(2) coefficient   | 0.1               | 0.15              | 0.2               | 0.2               | 0.25              |
| Imposed AR(3) coefficient   | 0                 | 0.05              | 0.1               | 0.1               | 0.1               |

\*\*\* $p < 0.01$ , \*\* $p < 0.05$ , \* $p < 0.1$ . Standard errors (clustered at the county level) in parentheses. Dependent variable is measured as reported crimes per 100,000 population. The log of the equipment stock value was instrumented by interacting the first principal component of the distances to the 10 closest distribution sites with the log of the sum of equipment issued until year  $t - 1$ .

**Table:** Sensitivity of the Effect on Robberies to Different AR-Parameters – Entire Specification for Subsample Where Pop. Density  $\geq 50$  p./sq. mi.

# Robberies - Number of Items Instead of Value

| Model                       | (1)     | (2)     | (3)     | (4)     | (5)      | Static   |
|-----------------------------|---------|---------|---------|---------|----------|----------|
| ln(No. of items)            | -2.622* | -2.537* | -2.451  | -2.093  | -1.200   | -4.053** |
|                             | (1.553) | (1.528) | (1.506) | (1.439) | (1.401)  | (1.942)  |
| Population (1,000)          | -0.172* | -0.165* | -0.158* | -0.135  | -0.077   | -0.263** |
|                             | (0.099) | (0.097) | (0.095) | (0.087) | (0.071)  | (0.129)  |
| Population density          | -0.206  | -0.207  | -0.208  | -0.193  | -0.164   | -0.250   |
|                             | (0.187) | (0.184) | (0.181) | (0.169) | (0.149)  | (0.241)  |
| Median HH income            | 0.000   | 0.000   | 0.000   | 0.000   | 0.000    | 0.000    |
|                             | (0.000) | (0.000) | (0.000) | (0.000) | (0.000)  | (0.000)  |
| Prop. black                 | 0.062** | 0.061** | 0.061** | 0.059** | 0.060*** | 0.059**  |
|                             | (0.025) | (0.024) | (0.024) | (0.023) | (0.023)  | (0.029)  |
| Prop. veterans              | 0.106   | 0.094   | 0.082   | 0.097   | 0.117    | 0.080    |
|                             | (0.271) | (0.267) | (0.263) | (0.254) | (0.251)  | (0.327)  |
| Poverty rate                | -0.223* | -0.218* | -0.212* | -0.194  | -0.155   | -0.285** |
|                             | (0.127) | (0.127) | (0.128) | (0.130) | (0.139)  | (0.135)  |
| Unemployment                | -0.064  | -0.082  | -0.100  | -0.139  | -0.242*  | 0.103    |
|                             | (0.133) | (0.131) | (0.130) | (0.126) | (0.129)  | (0.165)  |
| County & Time Fixed Effects | Yes     | Yes     | Yes     | Yes     | Yes      | Yes      |
| Observations                | 15208   | 15208   | 15208   | 15208   | 15208    | 15208    |
| Kleibergen-Paap F-Statistic | 36.692  | 36.692  | 36.692  | 36.692  | 36.692   | 36.692   |
| Imposed AR(1) coefficient   | 0.3     | 0.3     | 0.3     | 0.4     | 0.6      | 0        |
| Imposed AR(2) coefficient   | 0.1     | 0.15    | 0.2     | 0.2     | 0.25     | 0        |
| Imposed AR(3) coefficient   | 0       | 0.05    | 0.1     | 0.1     | 0.1      | 0        |

\*\*\*  $p < 0.01$ , \*\*  $p < 0.05$ , \*  $p < 0.1$ . Standard errors (clustered at the county level) in parentheses. Dependent variable is measured as reported crimes per 100,000 population. The log of the equipment stock value was instrumented by interacting the first principal component of the distances to the 10 closest distribution sites with the log of the sum of equipment issued until year  $t - 1$ .

# Robberies - Per Capita Militarisation

| Model                       | (1)                 | (2)                 | (3)                 | (4)                 | (5)                 | Static              |
|-----------------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|
| ln(No. of items)            | -0.482*<br>(0.278)  | -0.466*<br>(0.274)  | -0.451*<br>(0.270)  | -0.385<br>(0.260)   | -0.221<br>(0.256)   | -0.745**<br>(0.342) |
| Population (1,000)          | -0.183*<br>(0.102)  | -0.176*<br>(0.101)  | -0.169*<br>(0.099)  | -0.144<br>(0.091)   | -0.083<br>(0.073)   | -0.281**<br>(0.134) |
| Population density          | -0.247<br>(0.185)   | -0.246<br>(0.182)   | -0.246<br>(0.179)   | -0.226<br>(0.167)   | -0.182<br>(0.147)   | -0.313<br>(0.237)   |
| Median HH income            | 0.000<br>(0.000)    | 0.000<br>(0.000)    | 0.000<br>(0.000)    | 0.000<br>(0.000)    | 0.000<br>(0.000)    | 0.000*<br>(0.000)   |
| Prop. black                 | 0.067***<br>(0.024) | 0.066***<br>(0.024) | 0.065***<br>(0.023) | 0.063***<br>(0.022) | 0.063***<br>(0.022) | 0.067**<br>(0.028)  |
| Prop. veterans              | 0.047<br>(0.263)    | 0.038<br>(0.259)    | 0.028<br>(0.256)    | 0.050<br>(0.247)    | 0.090<br>(0.244)    | -0.010<br>(0.319)   |
| Poverty rate                | -0.218*<br>(0.127)  | -0.213*<br>(0.127)  | -0.207<br>(0.128)   | -0.190<br>(0.129)   | -0.152<br>(0.139)   | -0.278**<br>(0.134) |
| Unemployment                | -0.035<br>(0.132)   | -0.054<br>(0.130)   | -0.074<br>(0.129)   | -0.116<br>(0.125)   | -0.229*<br>(0.129)  | 0.147<br>(0.164)    |
| County & Time Fixed Effects | Yes                 | Yes                 | Yes                 | Yes                 | Yes                 | Yes                 |
| Observations                | 15208               | 15208               | 15208               | 15208               | 15208               | 15208               |
| Kleibergen-Paap F-Statistic | 87.355              | 87.355              | 87.355              | 87.355              | 87.355              | 87.355              |
| Imposed AR(1) coefficient   | 0.3                 | 0.3                 | 0.3                 | 0.4                 | 0.6                 | 0                   |
| Imposed AR(2) coefficient   | 0.1                 | 0.15                | 0.2                 | 0.2                 | 0.25                | 0                   |
| Imposed AR(3) coefficient   | 0                   | 0.05                | 0.1                 | 0.1                 | 0.1                 | 0                   |

\*\*\* $p < 0.01$ , \*\* $p < 0.05$ , \* $p < 0.1$ . Standard errors (clustered at the county level) in parentheses. Dependent variable is measured as reported crimes per 100,000 population. The log of the equipment stock value was instrumented by interacting the first principal component of the distances to the 10 closest distribution sites with the log of the sum of equipment issued until year  $t - 1$ .

**Table:** Sensitivity of the Effect on Robberies – Pop. Density | 100p./sq. mi. Subsample – Per Capita Equipment Value

# Robberies - Simple Distance Instruments

| Model                        | (1)                 | (2)                 | (3)                 | (4)                 | (5)                 | Static              |
|------------------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|
| ln(value of equip. stock)    | -0.465<br>(0.311)   | -0.448<br>(0.306)   | -0.432<br>(0.302)   | -0.356<br>(0.290)   | -0.158<br>(0.285)   | -0.769**<br>(0.384) |
| Population (1,000)           | -0.181*<br>(0.100)  | -0.174*<br>(0.098)  | -0.167*<br>(0.096)  | -0.141<br>(0.088)   | -0.077<br>(0.072)   | -0.282**<br>(0.131) |
| Population density           | -0.229<br>(0.184)   | -0.230<br>(0.181)   | -0.230<br>(0.178)   | -0.214<br>(0.166)   | -0.179<br>(0.147)   | -0.282<br>(0.235)   |
| Median HH income             | 0.000<br>(0.000)    | 0.000<br>(0.000)    | 0.000<br>(0.000)    | 0.000<br>(0.000)    | 0.000<br>(0.000)    | 0.000*<br>(0.000)   |
| Prop. black                  | 0.066***<br>(0.024) | 0.066***<br>(0.024) | 0.065***<br>(0.023) | 0.062***<br>(0.022) | 0.060***<br>(0.022) | 0.069**<br>(0.028)  |
| Prop. veterans               | 0.060<br>(0.263)    | 0.051<br>(0.259)    | 0.041<br>(0.256)    | 0.059<br>(0.247)    | 0.087<br>(0.245)    | 0.017<br>(0.318)    |
| Poverty rate                 | -0.223*<br>(0.126)  | -0.218*<br>(0.126)  | -0.213*<br>(0.127)  | -0.197<br>(0.129)   | -0.162<br>(0.139)   | -0.279**<br>(0.134) |
| Unemployment                 | -0.043<br>(0.132)   | -0.062<br>(0.130)   | -0.081<br>(0.128)   | -0.123<br>(0.124)   | -0.236*<br>(0.129)  | 0.138<br>(0.163)    |
| County & Time Fixed Effects  | Yes                 | Yes                 | Yes                 | Yes                 | Yes                 | Yes                 |
| Observations                 | 15208               | 15208               | 15208               | 15208               | 15208               | 15208               |
| Kleibergen-Paap F-Statistic  | 51.501              | 51.501              | 51.501              | 51.501              | 51.501              | 51.501              |
| Hansen J-Statistic (p-value) | 0.352               | 0.363               | 0.375               | 0.388               | 0.431               | 0.395               |
| Imposed AR(1) coefficient    | 0.3                 | 0.3                 | 0.3                 | 0.4                 | 0.6                 | 0                   |
| Imposed AR(2) coefficient    | 0.1                 | 0.15                | 0.2                 | 0.2                 | 0.25                | 0                   |
| Imposed AR(3) coefficient    | 0                   | 0.05                | 0.1                 | 0.1                 | 0.1                 | 0                   |

\*\*\* $p < 0.01$ , \*\* $p < 0.05$ , \* $p < 0.1$ . Standard errors (clustered at the county level) in parentheses. Dependent variable is measured as reported crimes per 100,000 population. The log of the equipment stock value was instrumented by interacting the distances to the 2nd and 6th closest distribution site with the log of the sum of equipment issued until year  $t - 1$  (2 instruments, other distance combinations also work).

# Results - Arrests - Alternative Instrument

| Arr. Rate for             | Agg. Ass.           | Murder            | Robbery             |
|---------------------------|---------------------|-------------------|---------------------|
| ln(value of equip. stock) | -2.032<br>(2.682)   | 0.275<br>(0.180)  | 0.300<br>(0.320)    |
| Population density        | -0.884<br>(1.674)   | 0.099<br>(0.150)  | 0.061<br>(0.379)    |
| Population                | 0.296<br>(1.217)    | -0.041<br>(0.091) | -0.012<br>(0.233)   |
| Median HH income          | 0.001***<br>(0.000) | 0.000<br>(0.000)  | -0.000*<br>(0.000)  |
| Prop. black               | -0.056<br>(0.129)   | 0.023*<br>(0.012) | 0.049**<br>(0.023)  |
| Prop. veterans            | -0.224<br>(1.775)   | -0.019<br>(0.130) | -0.077<br>(0.380)   |
| Poverty rate              | -0.412<br>(0.430)   | 0.048<br>(0.057)  | -0.219**<br>(0.093) |
| Unemployment              | -2.187**<br>(1.025) | -0.118<br>(0.098) | 0.230<br>(0.197)    |
| Pop. dens. <50            | Yes                 | Yes               | Yes                 |
| State-year FE             | Yes                 | Yes               | Yes                 |
| Observations              | 10415               | 10415             | 10415               |
| KP F-Statistic            | 111.366             | 111.366           | 111.366             |

\*\*\*  $p < 0.01$ , \*\*  $p < 0.05$ , \*  $p < 0.1$ . Standard errors (clustered at the county level) in parentheses. All specifications include county and state-year fixed effects. The log of the equipment stock value was instrumented by interacting the total (lagged) US military expenditure in a given year with the relative frequency of equipment take-up in the 2006-2014 period.

# Results - Arrests per Offence - Sys-GMM

| Arr. Rate for                | Agg. Ass.          | Murder            | Robbery             |
|------------------------------|--------------------|-------------------|---------------------|
| <i>Parameter of interest</i> |                    |                   |                     |
| ln(value of equip. stock)    | 0.024<br>(0.032)   | -0.021<br>(0.066) | -0.039*<br>(0.022)  |
| <i>Controls</i>              |                    |                   |                     |
| lag(dep. var.)               | 0.176**<br>(0.078) | -0.010<br>(0.077) | 0.155***<br>(0.046) |
| 2nd lag(dep. var.)           | 0.060<br>(0.042)   | -0.023<br>(0.043) | 0.052*<br>(0.028)   |
| 3rd lag(dep. var.)           |                    | -0.037<br>(0.028) |                     |
| Population (1,000)           | -0.000<br>(0.005)  | 0.001<br>(0.002)  | 0.001<br>(0.001)    |
| Population density           | 0.008<br>(0.008)   | -0.017<br>(0.011) | -0.002<br>(0.006)   |
| Median HH income             | 0.000<br>(0.000)   | 0.000*<br>(0.000) | 0.000<br>(0.000)    |
| Prop. black                  | 0.000<br>(0.001)   | 0.001<br>(0.002)  | 0.001<br>(0.001)    |
| Prop. veterans               | -0.001<br>(0.014)  | 0.017<br>(0.045)  | -0.005<br>(0.016)   |
| Poverty rate                 | 0.004<br>(0.005)   | -0.011<br>(0.016) | -0.006<br>(0.005)   |
| Unemployment                 | -0.018*<br>(0.009) | 0.002<br>(0.021)  | -0.009<br>(0.007)   |
| Constant                     | 0.030<br>(0.504)   | 1.008<br>(1.117)  | 0.765*<br>(0.405)   |
| Pop. dens. j100              | Yes                | Yes               | Yes                 |
| Year fixed effects           | Yes                | Yes               | Yes                 |
| Observations                 | 13702              | 1979              | 8299                |
| Number of Counties           | 1536               | 455               | 1150                |



# Officer and Citizen Safety - Alternative Instrument

| Dep. Var.       | Off. Killed       | Off. Ass.            | Empl. Rate           | Fatal Police Shootings |                     |                   |
|-----------------|-------------------|----------------------|----------------------|------------------------|---------------------|-------------------|
| ln(Equip.)      | -0.005<br>(0.009) | 0.069<br>(0.556)     | 0.028<br>(0.021)     | 0.010<br>(0.010)       | 0.018***<br>(0.007) | 0.008<br>(0.006)  |
| Pop. Dens.      | 0.003<br>(0.003)  | -0.060<br>(0.137)    | -0.047***<br>(0.009) | -0.004<br>(0.006)      | 0.000<br>(0.000)    | -0.000<br>(0.000) |
| Pop.            | -0.001<br>(0.001) | -0.006<br>(0.094)    | 0.007*<br>(0.004)    | 0.008<br>(0.007)       | -0.007<br>(0.009)   | -0.002<br>(0.006) |
| Income          | 0.000<br>(0.000)  | 0.000***<br>(0.000)  | 0.000***<br>(0.000)  | -0.000<br>(0.000)      | 0.000<br>(0.000)    | 0.000<br>(0.000)  |
| Black           | -0.000<br>(0.001) | 0.017<br>(0.019)     | 0.000<br>(0.001)     | -0.000<br>(0.001)      | 0.000<br>(0.000)    | 0.000<br>(0.000)  |
| Vet. Pop.       | 0.006<br>(0.007)  | -0.818***<br>(0.285) | -0.018<br>(0.016)    | 0.005<br>(0.007)       | -0.008<br>(0.006)   | -0.005<br>(0.005) |
| Poverty         | 0.002<br>(0.002)  | -0.256***<br>(0.096) | 0.001<br>(0.005)     | 0.002<br>(0.003)       | 0.003<br>(0.002)    | 0.003<br>(0.002)  |
| Unemp.          | 0.000<br>(0.008)  | -0.095<br>(0.160)    | -0.006<br>(0.007)    | -0.002<br>(0.004)      | -0.000<br>(0.004)   | 0.001<br>(0.003)  |
| County FE       | Yes               | Yes                  | Yes                  | Yes                    | Yes                 | Yes               |
| State-Year FE   | Yes               | Yes                  | Yes                  | Yes                    | Yes                 | Yes               |
| Sample          | P. Dens.<br><100  | P. Dens.<br><100     | P. Dens.<br><100     | P. Dens.<br><100       | Pop.<br><30,000     | Pop.<br><30,000   |
| Extended Period | No                | No                   | No                   | No                     | No                  | Yes               |
| Observations    | 7559              | 7559                 | 7559                 | 15208                  | 10447               | 12466             |
| KP F-Stat.      | 66.909            | 66.909               | 66.909               | 167.701                | 127.086             | 142.003           |

\*\*\* $p < 0.01$ , \*\* $p < 0.05$ , \* $p < 0.1$ . Standard errors (clustered at the county level) in parentheses. Employee and officer rates are measured as number of employees/officers per 1000 population. Officers killed or assaulted are measured relative to the total number of officers, scaled to lie between 0 and 100. Fatal police shootings are measured in the absolute number of incidents in a county. The log of the equipment stock value was instrumented by interacting the total (lagged) US military expenditure in a given year with the relative frequency of equipment take-up in the 2006-2014 period. The extended period sample covers the years 2000-2014, while the rest is restricted to 2005-2014.

# Officer and Citizen Safety - Simple Distance Instruments

| Dep. Var.             | Off. Killed       | Off. Ass.            | Empl. Rate           | Fatal Police Shootings |                   |                    |
|-----------------------|-------------------|----------------------|----------------------|------------------------|-------------------|--------------------|
| ln(Equip.)            | -0.011<br>(0.008) | -2.386***<br>(0.660) | 0.074***<br>(0.027)  | -0.018<br>(0.013)      | 0.013<br>(0.008)  | 0.017**<br>(0.008) |
| Pop                   | 0.000<br>(0.001)  | 0.093<br>(0.102)     | 0.003<br>(0.003)     | 0.009<br>(0.007)       | -0.003<br>(0.008) | 0.000<br>(0.006)   |
| PopDens               | 0.000<br>(0.002)  | -0.257<br>(0.181)    | -0.036***<br>(0.008) | -0.003<br>(0.006)      | -0.000<br>(0.000) | -0.000<br>(0.000)  |
| Income                | 0.000<br>(0.000)  | 0.000<br>(0.000)     | 0.000***<br>(0.000)  | -0.000*<br>(0.000)     | 0.000<br>(0.000)  | 0.000<br>(0.000)   |
| Black                 | -0.000<br>(0.000) | -0.027<br>(0.022)    | 0.001<br>(0.001)     | 0.000<br>(0.000)       | 0.000<br>(0.000)  | 0.000<br>(0.000)   |
| VetPop                | 0.002<br>(0.009)  | -0.522<br>(0.330)    | -0.017<br>(0.015)    | 0.011<br>(0.007)       | -0.005<br>(0.005) | -0.003<br>(0.004)  |
| Poverty               | -0.000<br>(0.002) | -0.309***<br>(0.116) | -0.001<br>(0.005)    | 0.001<br>(0.003)       | 0.002<br>(0.002)  | 0.002<br>(0.002)   |
| Unemp.                | 0.001<br>(0.006)  | -0.142<br>(0.131)    | -0.003<br>(0.006)    | 0.001<br>(0.003)       | 0.001<br>(0.003)  | 0.001<br>(0.002)   |
| County FE             | Yes               | Yes                  | Yes                  | Yes                    | Yes               | Yes                |
| Year FE               | Yes               | Yes                  | Yes                  | Yes                    | Yes               | Yes                |
| Sample                | P. Dens.<br><100  | P. Dens.<br><100     | P. Dens.<br><100     | P. Dens.<br><100       | Pop.<br><30,000   | Pop.<br><30,000    |
| Extended Period       | No                | No                   | No                   | No                     | No                | Yes                |
| Observations          | 7559              | 7559                 | 7559                 | 15208                  | 10447             | 12466              |
| KP F-Stat.            | 19.048            | 19.048               | 19.048               | 44.264                 | 20.062            | 19.145             |
| Hansen J-Stat (p-val) | 0.382             | 0.201                | 0.977                | 0.244                  | 0.829             | 0.974              |

\*\*\*  $p < 0.01$ , \*\*  $p < 0.05$ , \*  $p < 0.1$ . Standard errors (clustered at the county level) in parentheses. Employee and officer rates are measured as number of employees/officers per 1000 population. Officers killed or assaulted are measured relative to the total number of officers, scaled to lie between 0 and 100. Fatal police shootings are measured in the absolute number of incidents in a county. The log of the equipment stock value was instrumented by interacting the distance to the 1st and 6th closest distribution sites with the log of the sum of equipment issued until year  $t - 1$  (for police shootings, the second and seventh distance was used, but results are estimates are not responsive to particular choices - only the specification tests fare worse in some cases). The extended period sample covers the years 2000-2014, while the rest is restricted to 2005-2014. All estimates are based on a static fixed effects specification.

# Officer and Citizen Safety - Per Capita Militarisation

| Dep. Var.       | Off. Killed       | Off. Ass.            | Empl. Rate           | Fatal Police Shootings |                   |                   |
|-----------------|-------------------|----------------------|----------------------|------------------------|-------------------|-------------------|
| ln(Equip.)/Cap. | -0.009<br>(0.007) | -2.354***<br>(0.659) | 0.064***<br>(0.024)  | -0.016<br>(0.011)      | 0.010<br>(0.007)  | 0.013*<br>(0.007) |
| Pop             | 0.000<br>(0.001)  | 0.074<br>(0.103)     | 0.004<br>(0.003)     | 0.009<br>(0.007)       | -0.002<br>(0.008) | 0.001<br>(0.006)  |
| PopDens         | 0.000<br>(0.002)  | -0.347*<br>(0.196)   | -0.034***<br>(0.008) | -0.004<br>(0.006)      | -0.000<br>(0.000) | -0.000<br>(0.000) |
| Income          | 0.000<br>(0.000)  | 0.000<br>(0.000)     | 0.000***<br>(0.000)  | -0.000*<br>(0.000)     | 0.000<br>(0.000)  | 0.000<br>(0.000)  |
| Black           | -0.000<br>(0.000) | -0.031<br>(0.023)    | 0.001<br>(0.001)     | 0.000<br>(0.000)       | 0.000<br>(0.000)  | 0.000<br>(0.000)  |
| VetPop          | 0.001<br>(0.009)  | -0.559<br>(0.350)    | -0.015<br>(0.015)    | 0.010<br>(0.007)       | -0.005<br>(0.005) | -0.002<br>(0.004) |
| Poverty         | -0.000<br>(0.002) | -0.316***<br>(0.120) | -0.001<br>(0.005)    | 0.001<br>(0.003)       | 0.002<br>(0.002)  | 0.002<br>(0.002)  |
| Unemp.          | 0.001<br>(0.006)  | -0.135<br>(0.135)    | -0.003<br>(0.006)    | 0.001<br>(0.003)       | 0.001<br>(0.003)  | 0.001<br>(0.002)  |
| County FE       | Yes               | Yes                  | Yes                  | Yes                    | Yes               | Yes               |
| Year FE         | Yes               | Yes                  | Yes                  | Yes                    | Yes               | Yes               |
| Sample          | P. Dens.<br><100  | P. Dens.<br><100     | P. Dens.<br><100     | P. Dens.<br><100       | Pop.<br><30,000   | Pop.<br><30,000   |
| Extended Period | No                | No                   | No                   | No                     | No                | Yes               |
| Observations    | 7559              | 7559                 | 7559                 | 15208                  | 10447             | 12466             |
| KP F-Stat.      | 27.889            | 27.889               | 27.889               | 87.355                 | 40.590            | 39.354            |

\*\*\* $p < 0.01$ , \*\* $p < 0.05$ , \* $p < 0.1$ . Standard errors (clustered at the county level) in parentheses. Employee and officer rates are measured as number of employees/officers per 1000 population. Officers killed or assaulted are measured relative to the total number of officers, scaled to lie between 0 and 100. Fatal police shootings are measured in the absolute number of incidents in a county. The log of the equipment stock value was instrumented by interacting the first principal component of the distances to the 10 closest distribution sites with the log of the sum of equipment issued until year  $t-1$ . The extended period sample covers the years 2000-2014, while the rest is restricted to 2005-2014. All estimates are based on a static fixed effects specification.

# Officer and Citizen Safety - Number of Guns as Militarisation Measure

| Dep. Var.       | Off. Killed       | Off. Ass.             | Empl. Rate           | Fatal Police Shootings |                   |                   |
|-----------------|-------------------|-----------------------|----------------------|------------------------|-------------------|-------------------|
| ln(No. guns)    | -0.061<br>(0.048) | -15.579***<br>(4.951) | 0.424**<br>(0.167)   | -0.111<br>(0.075)      | 0.068<br>(0.049)  | 0.087*<br>(0.046) |
| Pop             | -0.000<br>(0.001) | -0.016<br>(0.091)     | 0.006<br>(0.004)     | 0.009<br>(0.007)       | -0.002<br>(0.008) | 0.001<br>(0.006)  |
| PopDens         | 0.001<br>(0.002)  | -0.011<br>(0.236)     | -0.043***<br>(0.010) | -0.001<br>(0.007)      | -0.000<br>(0.000) | -0.000<br>(0.000) |
| Income          | 0.000<br>(0.000)  | 0.000<br>(0.000)      | 0.000***<br>(0.000)  | -0.000<br>(0.000)      | 0.000<br>(0.000)  | -0.000<br>(0.000) |
| Black           | -0.001<br>(0.000) | -0.087**<br>(0.038)   | 0.002<br>(0.001)     | -0.000<br>(0.000)      | 0.000<br>(0.000)  | 0.000<br>(0.000)  |
| VetPop          | 0.001<br>(0.009)  | -0.620<br>(0.400)     | -0.013<br>(0.016)    | 0.011<br>(0.007)       | -0.004<br>(0.005) | -0.002<br>(0.004) |
| Poverty         | 0.000<br>(0.002)  | -0.266**<br>(0.116)   | -0.003<br>(0.005)    | 0.000<br>(0.003)       | 0.002<br>(0.002)  | 0.001<br>(0.002)  |
| Unemp.          | 0.001<br>(0.006)  | -0.301**<br>(0.148)   | 0.001<br>(0.006)     | -0.001<br>(0.003)      | 0.002<br>(0.002)  | 0.002<br>(0.002)  |
| County FE       | Yes               | Yes                   | Yes                  | Yes                    | Yes               | Yes               |
| Year FE         | Yes               | Yes                   | Yes                  | Yes                    | Yes               | Yes               |
| Sample          | P. Dens.<br><100  | P. Dens.<br><100      | P. Dens.<br><100     | P. Dens.<br><100       | Pop.<br><30,000   | Pop.<br><30,000   |
| Extended Period | No                | No                    | No                   | No                     | No                | Yes               |
| Observations    | 7559              | 7559                  | 7559                 | 15208                  | 10447             | 12466             |
| KP F-Stat.      | 15.888            | 15.888                | 15.888               | 49.849                 | 27.593            | 27.203            |

\*\*\* $p < 0.01$ , \*\* $p < 0.05$ , \* $p < 0.1$ . Standard errors (clustered at the county level) in parentheses. Employee and officer rates are measured as number of employees/officers per 1000 population. Officers killed or assaulted are measured relative to the total number of officers, scaled to lie between 0 and 100. Fatal police shootings are measured in the absolute number of incidents in a county. The log of the equipment stock value was instrumented by interacting the first principal component of the distances to the 10 closest distribution sites with the log of the sum of equipment issued until year  $t - 1$ . The extended period sample covers the years 2000-2014, while the rest is restricted to 2005-2014. All estimates are based on a static fixed effects specification.