

# Why Limiting Police Raids Decreased Criminal Violence in Rio de Janeiro

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## Research Question

What impact does a restriction on aggressive policing tactics have on violence, and why?

## Motivation

The relationship between aggressive policing and violence is unclear:

- Classic theories of deterrence suggest that more policing decreases violence,
- Yet there is mounting evidence that *mano dura* policies in Latin America have backfired.

This paper looks at how changes in police violence disrupt the criminal violence equilibrium.

## Theory

I argue that violent police raids **accelerate** the rate of territorial conquest between criminal groups.

→ The absence of police raids *slows* the rate of criminal conflict and *reduces* violent crime.

## Research Design

The Supreme Court of Brazil temporarily banned militant *police raids* in Rio de Janeiro after:

- The police assassination of a child
- Subsequent protests against police brutality

The drop in police raids (*operations*) was instant:

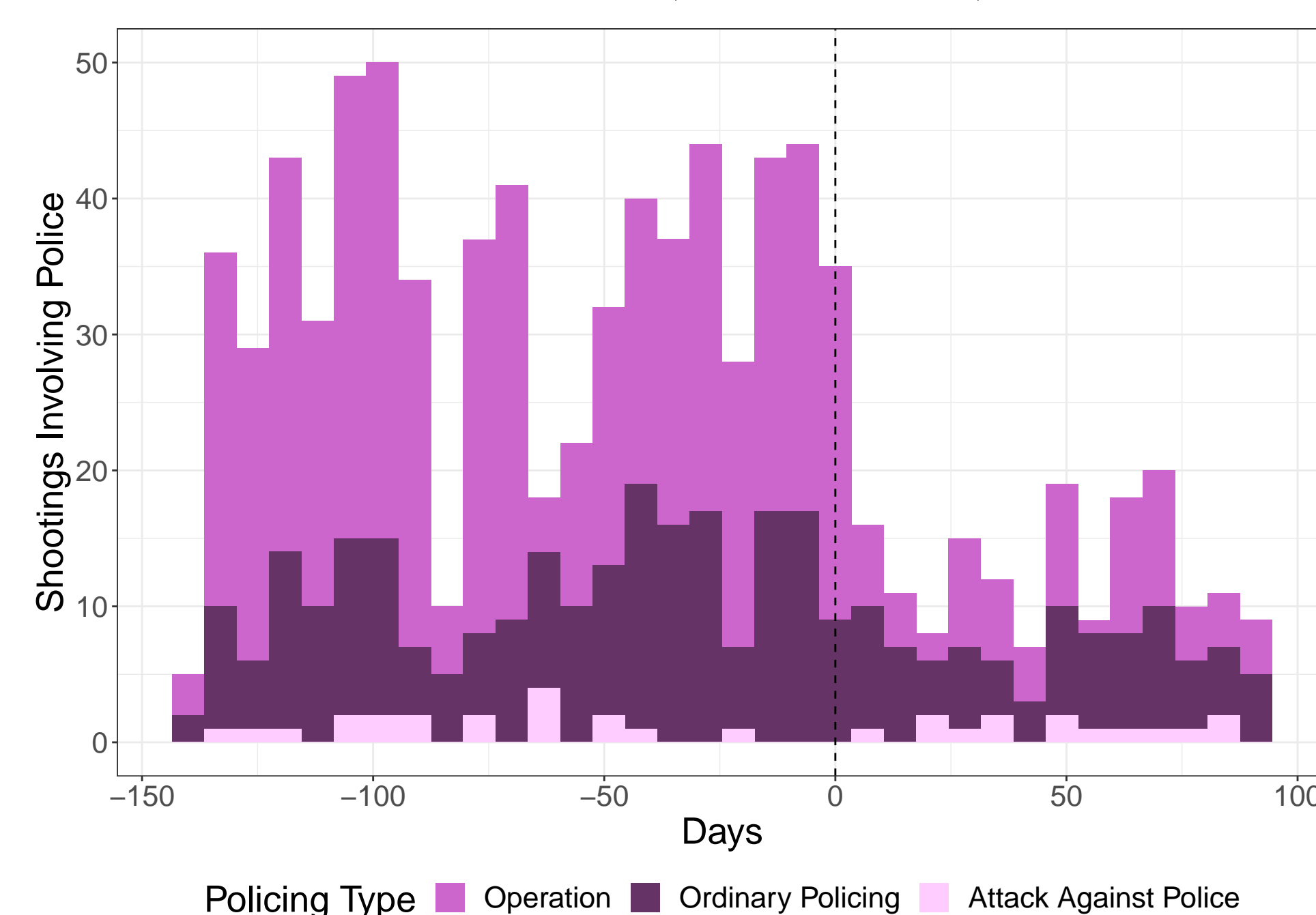
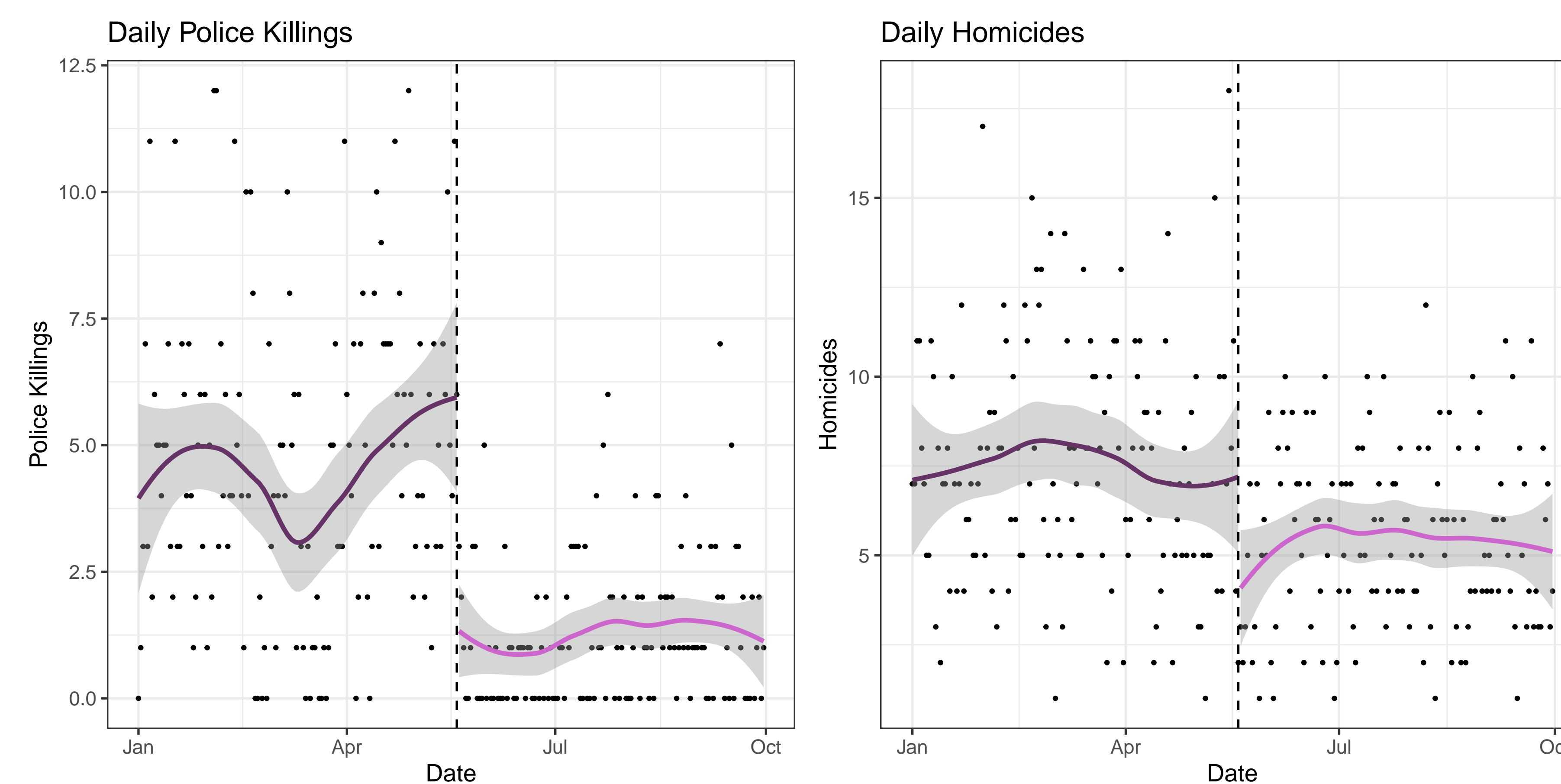


Figure 1: Types of Shootings Involving Police

## Main Findings

A ban on aggressive policing decreased **police killings** by 66% and **civilian homicides** by 19%.

Figure 2: Police Killings and Homicides after the Ban on Police Raids



This figure represents the daily totals for each crime type starting on January 1, 2020. Each plot has a vertical dashed line drawn on May 19, 2020. The curves are the predicted number of incidents, generated by locally weighted (LOESS) regression and without covariate adjustment.

## Estimation Strategy

### Data

- Daily crime statistics (police killings, homicides, other violent and nonviolent crimes)
- Daily shootings (officer's presence at shooting, deaths, injuries, motive)

### Interrupted time series

$$Y_{it} = \alpha + \beta Ban_t + f(days_t) + \lambda_d + \gamma_m + \pi_i + u_{it}$$

- $Y_{it}$ : Homicides, police killings, shootings
- $Ban_t$ : indicator equal to one after the assassination
- $f(days_t)$ : global polynomial
- Controls: day of week ( $\lambda_d$ ), month ( $\gamma_m$ ), police precinct ( $\pi_i$ )
- Standard errors are clustered at the precinct level

## Results

Homicides decrease by at least 19% following the ban on police raids and are robust to various specifications:

	Bandwidth		
Polynomial	30 days	60 days	90 days
Linear	-0.063***	-0.030**	-0.020*
Quadratic	-0.094***	-0.053**	-0.040**
Cubic	-0.056	-0.098***	-0.060***

I run the same models for:

- Police killings, and find a **negative** effect
- Police shootings, and find a **negative** effect
- Property crimes, and find **no** effect

The police shootings/killings models serve as a *manipulation check* on the treatment, and the property crime models indicate that property crime rates did not change in response to the ban.

## Mechanism

The *absence* of police raids lowers the rate of criminal warfare through two mechanisms:

- Slowing the territorial diffusion of conflict: police raids can lead to a “domino effect” of takeovers and turf wars between criminal groups
- Conflict becomes more predictable: the absence of surprise police raids means that criminal groups will be able to better predict their future conflicts and minimize violence

Territories more targeted by police raids experienced the greatest decreases in homicides and shootings and support with qualitative evidence:

Table 1: Effect of Ban in Heaviest Policed Areas

Variable	(Linear)	(Quadratic)	(Cubic)
Homicides	-0.099*	-0.173*	-0.097
Shootings	-0.193**	-0.209*	-0.225

## Robustness

Several robustness checks support the main results:

- DV as an indicator, logged DV
- Poisson specification
- Various bandwidths and polynomial fit

Placebo tests control for the following variables:

- **Social unrest:** I find no effect of assassination-related unrest in shootings in a comparable city.
- **Covid-19:** Homicides did not change after the initial shock of Covid-19-related and mobility is smooth around the cutpoint.

I test for model dependence by estimating two generalized difference-in-differences designs, comparing Rio de Janeiro to 1) Recife and 2) Rio de Janeiro in 2019 as control conditions.

## Contact Information

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