

Assessing Benefits, Costs, and Disparate
Racial Impacts
of Confrontational Proactive Policing
(Proceedings of the National Academy of Sciences)

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Two Key Missions of the Police in Democratic Society

- Preventing crime and keeping citizens safe
- Building community trust and confidence in the police

Swings in Focus on Public Safety and Trust Missions

- Post-Ferguson focus on trust
- Recent upswings in homicide in Chicago and elsewhere has moved focus to public safety
- Right question: How can police prevent crime and keep citizens safe without sacrificing community trust?
- Yet: “In difficult times, however, discourse often focuses on one objective with the other receding into the background. [In the recent past], the focus [has been] on citizens’ confidence in and trust of the police. At other times, especially when crime is on the rise or the threat of terrorism looms, the emphasis is on public safety. But both objectives are fundamental.” (Lum and Nagin, 2017)

Are There Trade-offs Between Crime Prevention and Trust Missions?

- Prevailing view in policing and policing scholarship is no
- But what about confrontational proactive tactics such as SQF and Broken Windows policing?
 - Examples: New York City and London
- Paper uses a formal model of optimal policing to examine the social benefits and costs of confrontational policing tactics with a specific focus on the costs to innocent targets of such tactics

Related Literatures

- Racial profiling literature
- Legal literature on 4th amendment restrictions and the Equal Protection clause
- Our focus is on the optimal use of confrontational tactics that are legal and are implemented without racial animus

Basic Features of the Model

- Focus is on proactive policing that uses confrontational tactics having social costs
- Model builds from Manski (2005, 2006) on optimal profiling
- Benefits and Costs:
 - Social value of averted crime
 - Social cost of apprehending and punishing law-breakers
 - **Social cost of enforcement actions against the innocent**

Basics of Set-Up

- One type of crime-no variation in type of crime and no spatial component in the model
- Individuals commit a single crime or not
- D_i denotes demographic group i
- w denotes background characteristics that affect the probability of crime of members of D_i in the absence of proactive policing
- $\rho(D_i, w)$ denotes the fraction of persons in group D_i who would commit a crime given w in the absence of proactive policing
- t_i measures the intensity of proactive enforcement against D_i and equals the probability that a member of D_i is a target of proactive enforcement

Basics of Set-Up (cont.)

- Model assumes proactive enforcement deters crime
 - Model in main text assumes linear deterrence
- Proactive enforcement against a person intending to commit a crime foils that crime
- **a** denotes the social cost of a completed crime
- **b** denotes the social cost of apprehending and punishing an offender whose crime is foiled
- **c** denotes the social cost of proactive enforcement against an innocent person

Social Cost Function to be Minimized for each group D_i

$$a \cdot \rho(D_i, w) \cdot (1 - t_i)^2 + b \cdot \rho(D_i, w) \cdot (1 - t_i) \cdot t_i + c \cdot [1 - \rho(D_i, w) \cdot (1 - t_i)] \cdot t_i$$

Cost of Crime

Cost of Punishment

Innocent Enforcement Cost

Solution

0, 1 or:

$$t^*(D_i, w) = \frac{(2a - b) \cdot \rho(D_i, w) + c(\rho(D_i, w) - 1)}{2(a - b + c)\rho(D_i, w)}$$

Three Important Features of the Optimum Solution

- Optimal Intensity declines with c
- Optimal Intensity increases with $\rho(D_i, w)$
- Optimal Intensity is group dependent

Policy Choice and the Cost of Proactive Enforcement on Innocents

- Tactic with low cost to innocent are preferred
- Draws attention to considering alternative policies with less noxious impacts on innocents—something that seemed to have been lost in the heated debate about SQF in NYC

Policy Choice and the Baseline Crime Rate

- Chicago & London
 - “...aggressive policing [like SQF] should target serious crime problems... Unlike zero tolerance approaches that use arrest for minor offenses indiscriminately, these tactics were specifically tailored to mitigate opportunities for firearms carrying in crime hotspots and [have been] found to have positive effects.” (Lum and Nagin, 2017)
- National & NYC Experience

The Disparate Impacts of Optimal Proactive Policing

- Optimal solution likely results in winners and losers across and among D_i
- Relative v. Attributable Risk

Figure 1

Relative Risk of Innocent Stop

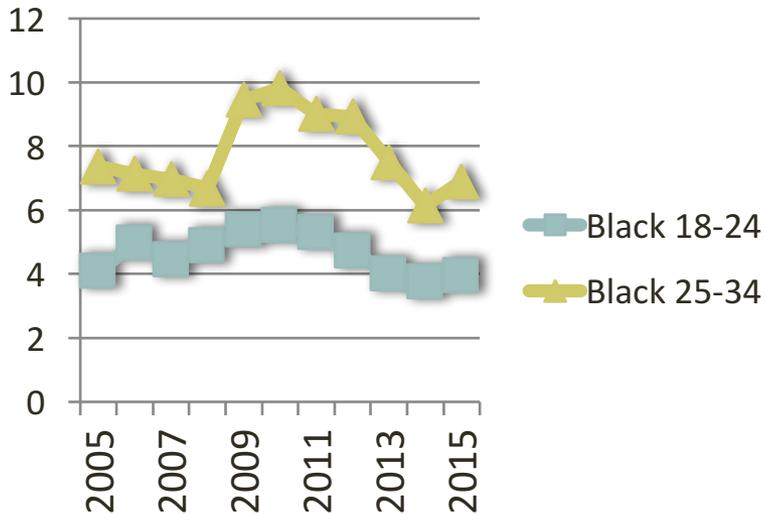
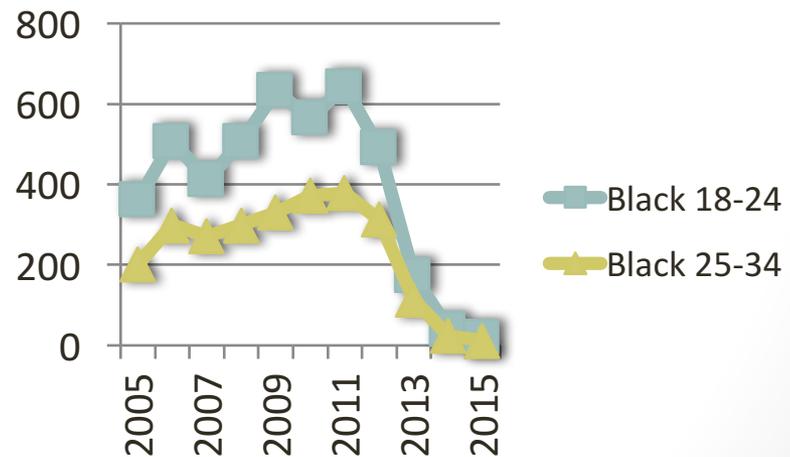


Figure 2

Attributable Risk of Innocent Stop (per 1000)



Further Development of Model

- Generalize to multiple crime types
- Add spatial dimension
- Calibrate cost parameters—**a**, **b**, and particularly **c**