(Forthcoming: *Journal of Economic Literature*)

# Racial Isolation and Marginalization of Economic Research on Race and Crime

Patrick Mason<sup>1</sup>, Samuel L. Myers, Jr.<sup>2</sup> and Margaret Simms<sup>3</sup>

August 9, 2021

#### **Abstract**

This essay examines the extent to which research on the economics of race and crime produced by Black economists and/or published in the flagship journal of the organization of Black economists, *The Review of Black Political Economy*, is undervalued by mainstream economics. We use modern bibliometric methods to test for citation biases in the economics of crime literature. We find evidence that Blacks publishing on race and crime in top economics journals are less likely to be cited than non-Blacks and that articles published in the RBPE are less likely to be cited than articles published in other journals. We also identify the contributions of Black economists to three streams of research overlooked in the mainstream literature: identity, police use of force, and mass incarceration. A review of some under-cited articles reveals that themes related to identity, police use of force, and mass incarceration hold valuable insights for policymakers and those seeking solutions to problems of persistent racial disparities in the criminal legal system.

## Introduction

There is growing interest from economists in the issues of criminal justice, policing, and the intersection of criminal justice and race, both in scholarly research and in policy development. These research areas do not fully benefit from the intellectual contributions of economists publishing in specialized economic journals that self-consciously examine race and inequality. In this review, we establish that research on the economics of race and crime has systematically isolated and marginalized particular points of view and specific approaches and that the works of certain subgroups of economists and papers published in certain outlets have been ignored. Although Black people are overrepresented in the criminal legal system,<sup>4</sup>

<sup>&</sup>lt;sup>1</sup> Florida State University

<sup>&</sup>lt;sup>2</sup> University of Minnesota

<sup>&</sup>lt;sup>3</sup> Urban Institute

 $<sup>^4</sup>$  . The language used to refer to the system around crime and punishment and people who become involved in it is evolving. For example, the term "criminal justice system" suggests that "justice" is a critical element of the

economists' research often overlooks Black researchers' contributions. As a result, it marginalizes research about racism and racial discrimination that could lead to a better understanding of the issues and, potentially, help produce policies to remedy the overrepresentation of African Americans and Latinx in the criminal legal system. Put differently, if economists do not explore how racism or racial discrimination affect the operation of and outcomes within the criminal legal system, then they are unlikely to discover appropriate solutions to the problems of wide racial disparities within the system. If we do not ask these questions, we will not find meaningful answers.

African Americans and Latinx are about 14.5 percent and 18 percent, respectively, of the US population. Each group represents a disproportionate number of arrests. African Americans are 40.1 percent of all persons arrested for violent crimes (murder and nonnegligent manslaughter, rape, robbery, and aggravated assault) and 30.8 percent of all persons arrested for property crimes (burglary, larceny-theft, motor vehicle theft, and arson). Latinx are 26.5 of persons arrested for violent crimes and 17.4 percent of persons arrested for property crimes. There are also large disparities between the representation of Native Americans in the criminal legal system relative to their representation in the overall population (Braun, 2020).

A sizeable professional literature has sought to explain these racial and ethnic disparities and their implications for racial and ethnic differences in socioeconomic status. In addition to the fact that the dominant economics literature has not sufficiently incorporated research by

such language.

system. But there is evidence that not all who become involved in the system are treated justly. For a discussion of this and our reason for using the term "criminal legal system" in this article, see https://www.thepraxisproject.org/sdoh/criminal-legal-system . Similarly, people involved with the system should not be fully defined by that engagement. So, rather than be termed "felons" or "criminals", the language is moving toward referring to them as "people involved in the system" and similar terms. https://www.urban.org/urban-wire/restoring-humanity-changing-way-we-talk-about-people-touched-criminal-justice-system. In this article, we have sometimes used the new terminology and sometimes used the wording that appears in the article being summarized. Use of the latter should not be interpreted as an endorsement of

African American economists, it is excessively reliant on the rational choice model of crime. Moreover, it excludes important insights from studies published in economic journals outside of the top five and major field journals. In particular, it ignores studies published in the *Review of Black Political Economy*, a pioneer in publishing economists' research on issues of race and crime. Finally, the dominant economics literature fails to give sufficient attention to empirical research from fields other than economics, even though researchers in these fields often employ the same statistical methodologies as economists<sup>5</sup>. This article highlights some of the consequences of these actions or inactions by examining differences in citations for articles on criminal justice by the race of author and journal of publication and by identifying some important articles that are not sufficiently incorporated into the dominant economics literature. We hope thereby to draw attention to new or underappreciated insights on critical criminal justice issues that are important for the advancement of the field and the information conveyed to policy makers and decision-makers who rely on the evidence produced by economists studying race and crime.

The essay proceeds as follows: First, we detail the nature of the economics of crime literature and its focus on the rational offender. The mainstream textbook approach to the economics of race and crime views race as an exogenous factor and largely ignores the systemic and structural determinants of race in America. Second, we demonstrate using bibliometric methods that there is a bias in citations of the publications by race and by journal. Then, we examine three different streams of research overlooked by the mainstream economics of crime

-

<sup>&</sup>lt;sup>5</sup> One notorious example was the recent work on naloxone, where economists ignored contrary evidence widely available outside of the economics literature. Coverage of the controversy is here: https://www.vice.com/en/article/gy7ke9/brookings-institution-suggested-that-harm-reduction-doesnt-work and the most pressing note below:

literature: the role of identity, the alternative modeling of police use of force, and the causes and consequences of mass incarceration. These illustrations confirm that one distinctive feature of the economics literature is the apparent dominance of models and results that discount the role of racial discrimination or systemic racism. We conclude by acknowledging the fact that there are alternative mechanisms that could produce the results we obtain. These mechanisms relate to the types of data researchers have available, the nature of citation engines, and the availability of older publications by Black scholars. We conclude, however, that whatever the mechanism is that produces the undervaluation of these works produced on race and crime, the result is the same: a significant loss to the profession and to policy makers seeking to remedy inequality.

## The Context: Economics of Race and Crime

Empirical research on race and crime frequently focuses on the relationship between arrests and crime, since the supply of criminal offenses is often only partially observable. This research tends to find that race is a statistically significant explanatory variable (Cox, 2010; Cornwell and Trumbull, 1994; Gyimah-Brempong, 1986; Myers, 1980; Myers and Sabol, 1987). The empirical methods used to examine racial disparities in arrests are similar to the methods and techniques adopted to analyze racial differences in labor market outcomes. There are also similar explanatory variables for both the labor market and crime equations, e.g., age, education, region, and marital status.

The standard response to the finding of a race effect in both crime models and labor market equations is that the measured race effect should not be interpreted as "racism" or "racial discrimination." Instead, the conventional wisdom posits, there are unobserved factors differentially distributed across race. From this perspective, race is a proxy variable for interracial differences in criminogenic factors (neighborhoods, peers, schools, culture); and, race

is no longer a substantively important explanatory variable when one properly accounts for racial differences in criminogenic factors. In much of the labor econometrics literature on racial disparities in outcomes, as is the case in the economics of crime literature, the standing assumption is that there is no racism and no racial disparities, only measurement error.

Economic historians and analysts of the legacy of racial separation and subordination in American life recognize that this underlying assumption of no racism or no historical underpinning for systemic inequalities based on race is inaccurate. Instead, the standing assumption ought to be that there *is* a race effect until or unless countervailing influences – such as corrective or remedial efforts designed to reduce racial disparities – are accounted for. This is not just a difference of opinion between researchers. Instead, this is a difference in fundamental understandings of history and experiences and backgrounds among scholars and researchers. For many Black researchers, race is a statistically significant, substantively large, and causal explanatory variable *because* of racial differences in treatment by police, prosecutors, courts, probation officers, and parole officers, according to this view. This is so not just because of conjecture or speculation. Rather this is so because of lived experiences and intergenerational transferal of knowledge that in many ways has been sequestered by the marginalization of this scholarly knowledge and insights within the dominant paradigms of economics.

These scholars, however, often embrace the key tools of the profession but challenge the central assumptions about the exogeneity of race. These scholars argue that beyond putative unobserved criminogenic differences that explain the relationship between crime and race are factors that contribute to the endogeneity of race itself. Such factors include data problems associated with both race and crime; the relationship between race and police actions; the

\_

<sup>&</sup>lt;sup>6</sup> See for example, Hinton (2106) and Flowe (2020).

relationship between courts and race; the history of race and crime, viz., prisons are not exogenous (institutions matter); and, the criminalization of race. African American economists and economists publishing in the *Review of Black Political Economy*, among others, argue that these simultaneity problems make race endogenous and therefore render untenable the core assumptions of both the economic theory on race and crime and the empirical tests of the effects of race on crime.

Of the dozen or so textbooks published over the past 30 years on the economics of crime, perhaps the leading textbook, now in its second edition, is Harold Winter's *The Economics of Crime: An Introduction to Rational Crime Analysis* (2020). Published at a time of widening concerns in academia as well as in the political sphere after national protests against racial disparities in police use of force, the most recent edition of the textbook aptly includes a chapter on "Racial bias and the criminal justice system" along with the standard fare on rational choice models of deterrence. What is surprising about this chapter is that out of the extensive list of references examining alleged racial bias in arrests, sentencing, bail, jury selection and traffic stops, only *one* of the 21 references cited with 38 author/co-authors has a co-author who is African American and none of the papers were published by the *Review of Black Political Economy*. Indeed, *nowhere* in the textbook does Winter cite *any* Black researcher with a Ph.D. in economics or mention any article published in the *Review of Black Political Economy*.

In a familiar refrain adopted by many conventional economists, Winter notes in the chapter on racial bias in the criminal legal system that disparities alone do not prove there is bias. He writes:

The fact that different groups are treated differently by the system tells us little about

<sup>&</sup>lt;sup>7</sup> The exception is Holzer, H.J., Raphael, S., and Stoll, M.A. (2006) "Perceived Criminality, Criminal Background Checks, and the Racial Hiring Practices of Employers," *Journal of Law and Economics*, 49: 451–480.

<sup>&</sup>lt;sup>8</sup> To be clear, the black co-author Stoll received his Ph.D. from MIT from the Urban Planning Department.

the existence of bias. If one group, on average, is more likely to commit crime, or has a deeper criminal history, or commits harsher crimes than another group, an efficient criminal justice system necessarily will treat these groups differently. In short, it is no small task to identify bias in the criminal justice system. There are numerous confounding factors that account for differences in how defendants are treated at every stage of the system. To truly identify bias, then, great care must be taken in designing appropriate empirical studies. Economists have devoted a substantial amount of research in examining potential bias at every level of the criminal justice system. As usual, mixed results are found. But regardless of what results are found, the important aspect of every study reviewed in this chapter is that an attempt is made to carefully distinguish bias, be it racial or gender, from other factors that may explain differences in how various groups are treated. (Winter, 2020: 68)

If one of Winter's objectives is to examine racial bias, what might explain the glaring absence of citations of works by Black economists in the subfield of the economics of law enforcement and crime? Could it be the relative underrepresentation of Black economists publishing in this area? Could it be the topics or approaches Black economists have embraced? Could it be that a disparity in what studies are included disappears once one controls for relevant determinants of citations? What might explain the glaring absence of citations of works published in the specialized economics journal devoted to Blacks and economics? Could it be that there are no articles on race and crime published in the *Review of Black Political Economy?* Could it be that any observed disparity can be explained by such relevant factors as timing of publications or inclusion of the *RBPE* in the archives of major citation platforms?

We explore this issue formally below. First, we provide a bibliometric analysis of citation biases in the economics of crime literature. Then, review and summarize selected articles – often omitted from mainstream economics of crime literature -- that address race or racism in crime or criminal justice. Following that analysis, we summarize findings from a number of studies that focus on key issues in racial differences in police engagement and use of force, followed by a discussion of the impact of mass incarceration on African American families. Then, we focus

on studies by Black economists authors: how their work could inform the field if more widely cited and how this better understanding of race and crime would make for better policy. We conclude with a brief discussion of what researchers and policy makers might lose as a result of the lack of visibility of some key work in this field.

## Bibliometric Analysis of Citation Biases in the Economics of Crime Literature

To answer the question of whether there are racial citation biases in the economics of crime literature, we adopt bibliometric methods that explore patterns related to the race of researcher and journal of publication. Bibliometric methods are used to measure research productivity and modern methods employ a wide range of indicators to do that. These measures capture information about publications themselves or about the publications of authors and coauthors. N. Donthu et al. (2021) summarize the more than a dozen bibliometric performance measures used in different disciplines. Numbers of publications historically have been used in various fields to measure faculty research productivity. In a world long past with a limited number of possible publication outlets, total publications were an obvious metric of the *quantity* of research output, but not necessarily the *quality or impact* of output. Total citations of an author's work increasingly are provided in portfolios assembled for promotion and tenure along with other measures of merit and productivity to capture the quality of output.

There are potential gender and racial biases in these metrics (Huang, et al, 2019; Dion et al. 2018; Delgado, 1984; Chakravartty, et al. 2018) either because of biases in citation practices or because of unintended biases in the derivation of the indices themselves. Importantly, researchers often fail to distinguish between the gendered or racially disparate impacts of using conventional citation indices as opposed to using evidence of disparities in the indices to document gender or racial bias in citation practices.

If there are biases in citations, conventional citation indices might be flawed measures of research quality with adverse impacts on merit pay, promotion, tenure, award of grants and other valued academic benefits. Biased citations may arise from co-authored papers that send differential signals to tenure and promotion committees about unobserved effort (Sarsons, 2017).

Moreover, journals are often ranked based on the impact factors that depend on citations. Some specialized journals may be less well-ranked because of their subject matter. Some articles may be less likely to be cited simply because of journal ranking. Thus, analysis of publications and citations may entail different layers of potential biases: papers in some journals may be less well-cited because of the journal itself; because of the subject matter of the journal; or because of the characteristics of the author (s). In turn, the journal might be less likely to be cited because of the impact factor.

We use citations of articles to estimate models of potential bias within one very specific area of economic research: research on the economics of race and crime.<sup>9</sup>

The African American co-authors of the present paper have experienced instances where even when papers are published in top-five journals, citations are not prevalent. Could this be

\_

<sup>&</sup>lt;sup>9</sup> This focus on the narrow area of the economics of race and crime is partially motivated by the following anecdote. One of the co-authors – an African American -- submitted a paper to a leading law and economics journal in the early 1980s on the economics of bail jumping. The data showed clear racial disparities in the size of the bail set for Black defendants and the probability that Black defendants posted bail. These differences did not disappear after controlling for a host of relevant economic and legal factors. The author argued in the initial version of the paper that there was racial discrimination in bail setting. The submission was provisionally accepted by the journal editor with the condition that the section on "alleged racial discrimination in bail setting" be removed. Although the published tables with the analysis itself show lower probabilities that non-whites were released from jail, few authors cited the otherwise unremarkable finding that bail jumping was inversely related to the amount of bail set. Years later, an avalanche of papers appeared in top economics journals examining exactly this historic problem of racial disparities in bail. But, there is literally no citation of this earlier paper. There are many possible explanations for the outcome related in this anecdote. One is that the specialized journal itself is not one of the "top-five" economics journals considered the most prestigious in the field. Another possibility is that these older articles are not readily available online or searchable without access to the original hard copy.

because of the authors' race? One of the co-authors is a former editor of the *Review of Black Political Economy*, and importantly co-edited a special edition of the *Review* specifically on the topic of the economics of race and crime. The special edition was followed by a published book with the title *The Economics of Race and Crime* that is still available on Amazon in hardback, paperback, Kindle, and used copies in its first edition. Nonetheless, papers from the book or the journal volume are rarely cited. Could it be that the original journal publisher of the papers is not widely cited?

Background on Bibliometric Methods and Citation Analysis. One of the most widely used citation indices is the h-index (Hirsch 2005). It is intended to be an improvement over simple counts of publications or summaries of number of citations. Physicist J.E. Hirsch defines the h-index as the following:

A scientist has index h if h of his or her  $N_p$  papers have at least h citations each and the other  $(N_p$  - h) papers have  $\leq$  h citations each (Hirsch, 2006: 16559)

In effect, the h-index solves the problem of large N<sub>p</sub> that nobody reads or a single article with high citations, colloquially known as "one hit wonders." Perry and Reny (2016) argue, however, that the h-index and total citation counts fail to satisfy all five desirable properties of a good index: monotonicity, independence, depth relevance, scale invariance, and directional consistency. Perry and Reny point out that the h-index violates independence, or the property that the ranking of two authors remains the same if the two authors each publish an additional paper yielding the same number of citations. Total citation counts violate the property of depth relevance, or the idea that the value of the metric weakly increases if the citations of two papers are all attributed to either author (Perry and Reny, 2016).

Other performance measures include average citation counts (per year, per year since publication, or per year during one's publication life); the g-index where g is number of publications receiving at least g<sup>2</sup> citations (capturing publication impact); and i-index (i-10, i-100, i-200) where i is the number of publications cited at least i times (e.g., i = 10, 100, 200, etc.) (N. Donthu et al. 2021, Table 2). Other problems mentioned in the literature concern rescaling and cross-field comparisons of indices. The distributions of citations vary widely across a variety of fields (Radicchi, Fortunato, and Castellano 2008). To make meaningful cross-field comparisons citation lists must be rescaled (Perry & Reny 2016). Perry and Reny propose using a Euclidean index that has the property of scale invariance when comparing research productivity across different individual researchers. Stern and Tol (2021) introduce "breadth relevance," which favors consistent achievers over one-hit wonders. They show, however, the difficulty of satisfying both depth and breadth relevance at the same time.

One use of bibliometric analysis in economics was its use to examine gender bias. Hamermesh (2018) compiled the lifetime citation histories of 1,043 economists from the top 30 universities, which permitted him to examine gender differences in citations. He concludes:

There may have been gender discrimination in citation practices in economics in the past, but this evidence suggests that it was small, and it is not apparent in the treatment of younger economists. (Hamermesh 2018)

This analysis, however, does not tell us anything about the potential biases in citations by articles vs. by authors. The three main measures of the scholarly impacts of individual articles are: a) the probability of ever being cited (P(c)); b) the total number of citations (TC) from publication date to time t; and c) the average number of citations (AC) per year since publication. Hamermesh and others recognize that younger authors are disadvantaged by the use of TC and suggest a variation of AC that accounts for the years since receipt of the doctorate. In what

follows, we detail the methodology and data sets used to compute P(c), TC and AC for our analysis and report the descriptive statistics and model estimates associated with our measures of citations in the economics of race and crime literature.

Bibliometric Methodology for Analysis of Race and Crime Articles. EconLit, a service provided by the American Economic Association, terms itself as the "The essential reference tool for economics literature" and "provides the coverage most needed by scholars to make new discoveries, develop important insights, and contribute valuable research to the economics community." Article information and abstracts were obtained from EconLit through the University of Minnesota's library via ProQuest. A Boolean search was conducted of all peer-reviewed articles contained in the EconLit data base related to the intersection of race and crime following standard bibliometric procedures. The specific query included the intersection of the keywords of:

("race" or "racism" or "racial" or "Black" or "negro" or "African American" or "discrimination" or "bias")

and

("crime" or "criminal justice" or "offenses" or "bail" or "incarceration" or "imprisonment" or "sentencing" or "arrests" or "profiling" or "traffic stops" or "parole" or "probation" or "police use of force")

and

("economics analysis" or "economics" or "labor markets" or "employment" or "statistical analysis" or "econometric analysis" or "law and economics" or "workforce")

The search yielded 759 unique articles for the years 1973 to 2020 out of 1,570,783 results published in English. Included are scholarly journals and indexed working papers. Excluded are books, dissertations and theses, and reviews. The full data base is available from the stable web-address: xxxxxxx

We merged the 759 unique economics of race and crime articles from EconLit with identifiers of Black economists as authors or co-authors. The Black economist lists come from a) the Price and Sharpe list of Black Ph.Ds in economics and b) the Megan Stevenson and Margaret Shin (2020) list of Blacks publishing in the economics of law. A code was added for whether an article is in the "Top Five Economics Journals" as defined in *Journal of Economic Literature: American Economic Review, Econometrica, Journal of Political Economy, Ouarterly Journal of Economics*, and *Review of Economic Studies*. <sup>10</sup>

To obtain the total citations (TC) for each publication, each article was matched to entries in Web-of-Science (WoS), a platform that incorporates information from Arts & Humanities Citation Index, Science Citation Index Expanded, and the Social Sciences Citation Index platforms. We also included the citations reported in Google Scholar and in SCOPUS. These citation indices are counts and do not exclude self-citations. To account for the fact that citation counts tend to improve through time, we also computed an average citation (AC) equal to the TC divided by the years since publication. Not every article located through the EconLit search yielded any matches with all three citation platforms. About 18 percent of articles found from the search of EconLit could not be located on SCOPUS or WoS. Less than 2.5 percent of the articles failed to match on Google Scholar. Since the citation counts vary nontrivially across the citation platforms, we estimated each model separately for citations from WoS, SCOPUS and Google Scholar.

One underappreciated aspect of the different citation platforms is the fact that not all platforms report positive citations for articles published in the *Review of Black Political* 

-

DOI: 10.1257/jel.20191574

<sup>&</sup>lt;sup>10</sup> Heckman, James J., and Sidharth Moktan. (2020). "Publishing and Promotion in Econ of Economic Literature: The Tyranny of the Top Five." Journal of Economic Literature, 58 (2): 419-70.

Economy or for articles authored by Black authors. Table 1 shows the probability of zero citation counts in WoS, SCOPUS, and Google for Black authors vs. non-Black authors and for publications in the RBPE vs. all others. Note that 55 percent of RBPE articles from EconLit on race and crime have zero citations in WoS whereas only 16 percent of non-RBPE articles have zero citations. We note two types of zeros. On one hand, articles published in the RBPE but listed in EconLit may not appear at all in WoS. On the other hand, articles published in the RBPE may not be cited by authors publishing in journals indexed by WoS. Google Scholar and SCOPUS report much lower rates of non-citations for RBPE articles and show no statistically significant differences in non-citations between RBPE and other articles. There are also differences in the non-citation of Black authored papers in WoS vs. other authors, although the difference is not statistically significant at the five percent level. All other differences, in bold italics, are statistically significant.

Table 1

Chi-Squared Test of Differences in wi	n Proportions of E ith Zero Citations		Crime Articles
	WoS	Scopus	Google Scholar
Prob Zero Citations			
Black Author	0.2973	0.2162	0.0270
Not Black Author	0.1731	0.1787	0.0152
p-value for difference	0.089	0.719	1.000
RBPE	0.5556	0.0833	0.0556
Not-RBPE	0.1604	0.1853	0.0138
p-value for difference	0.000	0.183	0.203

Abstracts and titles were manually read and coded by multiple coders according to the following broad classifications:

- 1. Racial profiling
- 2. Mass Incarceration, Imprisonment, Prisons
- 3. Violence
- 4. Gender, Family Structure, Marriage, Sex-Ratios
- 5. Arrests
- 6. Racism, Racial Discrimination
- 7. Bail, Sentencing, Parole, Probation
- 8. Labor Markets, Employment, Unemployment
- 9. Schooling, Education, Suspensions, Truancy, Youth
- 10. All Other Categories
- 11. Pertains to immigration and crime
- 12. Illegal Behavior and the Enforcement of Law, Economics of Law and Crime
- 13. Non-labor Market Discrimination, Non-labor Discrimination

All abstracts were also entered into NVivo software and searched for whether the articles were deemed to have found racism or racial discrimination. Abstracts were then entered into WordSmith Tools to code the frequency of such terms as "systemic racism" or "racial bias" in the abstracts and titles. Finally, each abstract and title was read twice and coded as to whether racism or racial discrimination were found among the conclusions or findings. When there was disagreement among the readers, a third reader reviewed the original article in entirety to break the tie.

Descriptive Results. Tables 2 and 3 provide tests of the differences in total citations and average citations by race and gender of author, RBPE, top-five journal and whether there was a finding of racial discrimination among the articles that met the criteria for selection and representation of publications on the economics of race and crime listed by EconLit. Across all three citation platforms and using both total citations and average citations (citations per year since publication), publication in the RBPE yields lower citation counts while publication in a top-five journal yields higher citation counts. In none of the descriptive results are there gender differences or findings of discrimination differences in total or in average citations across the citation engines. For all three citation platforms, total citation counts are lower for Black authors

than for other authors. When considering average citation counts, the racial differences are not statistically significant for Google Scholar or Web of Science.

Table 2

t-test for Difference in Means of Total Citations by Publication Outlet, Race,												
Gender and Finding												
	0 1 Difference t-stat											
	Not RBPE(0) vs. RBPE(1)	24.18	5.38	18.81	6.37	0.00						
	Not Top Journal(0) vs. Top Journal(1)	21.99	51.67	-29.68	-2.46	0.02						
Web of Science	Not Black(0) vs. Black Author(1)	24.16	13.23	10.93	2.45	0.02						
	No Discrimination(0) vs. Discrimination(1)	23.15	25.64	-2.49	-0.56	0.58						
	Male (0) vs. Female (1)	25.17	20.72	4.45	1.12	0.26						
	Not RBPE(0) vs. RBPE(1)	26.35	5.48	20.87	7.77	0.00						
	Not Top Journal(0) vs. Top Journal(1)	23.15	63.81	-40.66	-2.67	0.01						
Scopus	Not Black(0) vs. Black Author(1)	25.74	15.17	10.56	2.21	0.03						
	No Discrimination(0) vs. Discrimination(1)	24.47	28.01	-3.55	-0.72	0.47						
	Male (0) vs. Female (1)	27.62	20.55	7.07	1.94	0.05						
	Not RBPE(0) vs. RBPE(1)	70.28	15.53	54.75	7.83	0.00						
	Not Top Journal(0) vs. Top Journal(1)	61.65	188.92	-127.26	-3.64	0.00						
Google Scholar	Not Black(0) vs. Black Author(1)	69.13	41.31	27.82	2.26	0.03						
	No Discrimination(0) vs. Discrimination(1)	67.62	68.42	-0.81	-0.07	0.95						
	Male (0) vs. Female (1)	70.94	61.47	9.47	0.75	0.45						

Table 3

t-test of D	Difference in Mean Average Citations (	Total Cita	tions/Ye	ears Since I	Publicati	on)
		0	1	Difference	t-stat	p-value
	Not RBPE(0) vs. RBPE(1)	2.301	0.204	2.097	10.867	0.000
	Not Top Journal(0) vs. Top Journal(1)	2.076	5.037	-2.960	-2.827	0.008
Web of Science	Not Black(0) vs. Black Author(1)	2.279	1.533	0.745	1.536	0.134
	No Discrimination(0) vs. Discrimination(1)	2.106	2.751	-0.646	-1.766	0.079
	Male (0) vs. Female (1)	2.310	2.120	0.190	0.649	0.516
	Not RBPE(0) vs. RBPE(1)	2.697	0.337	2.360	10.191	0.000
	Not Top Journal(0) vs. Top Journal(1)	2.360	6.483	-4.123	-3.031	0.005
Scopus	Not Black(0) vs. Black Author(1)	2.616	1.667	0.949	1.798	0.080
	No Discrimination(0) vs. Discrimination(1)	2.435	3.062	-0.628	-1.559	0.120
	Male (0) vs. Female (1)	2.647	2.423	0.224	0.695	0.487
	Not RBPE(0) vs. RBPE(1)	7.116	0.975	6.141	9.796	0.000
	Not Top Journal(0) vs. Top Journal(1)	5.930	24.748	-18.818	-3.191	0.003
Google Scholar	Not Black(0) vs. Black Author(1)	6.859	6.400	0.458	0.144	0.886
	No Discrimination(0) vs. Discrimination(1)	6.420	8.412	-1.992	-1.608	0.109
	Male (0) vs. Female (1)	7.006	6.497	0.509	0.526	0.599

Estimates of the Determinants of Citations. Tables 4 and 5 provide ordinary least squares estimates of coefficients in linear models of total and average citations. Elsewhere we produce

maximum likelihood estimates of coefficients in a negative binomial model of total and average citations (Mason, et al, 2021). These models are estimated separately for each citation platform (WoS, SCOPUS, and Google Scholar) and control for race and gender of author, top five journal, Law Review, *The ANNALS of the American Academy of Political and Social Science, Journal of Economic Literature/Journal of Economic Perspectives (JEL/JEP)* and with article classification and year fixed effects. Mason, et al (2021) also report results with and without year fixed effects and article classification fixed effects with little substantive impacts on the key results reported herein. The results we report here for the linear models are robust across alternative specifications and estimations.

Tables 4 and 5 display the estimated coefficients on the interaction term, Black author x top-five journal variable, and on the *RBPE* variable. In the WoS and SCOPUS measures, there are negative and statistically significant impacts on total citations of articles in top-five journals published by Black authors. In the Google Scholar metrics, the negative effects on total citations of Black authors publishing in top-five journals are not statistically significant. Still, the magnitude of the coefficients on the interaction term between race and top-publication outlet is remarkable. Blacks who publish race and crime articles in top economics journals can expect from 25 to 73 fewer citations than their non-Black counterparts. Race and crime articles published in the *RBPE* can expect 25 to 69 fewer citations, as seen in Table 4. These effects are statistically significant in the SCOPUS and Google Scholar platforms.

When one focuses not on total citations but on citations per year since publication as seen in Table 5, the negative impacts on citation of being a Black author and publishing in top-five journals are no longer statistically significant. This suggests a generational shift where younger

Black scholars do not face a penalty when publishing their economics of race and crime articles in top journals. But, this also suggests a decay effect associated with older articles.

The negative effects on average citation counts of articles published in the *RBPE* remain, however. Articles published the *RBPE* can expect to face 1.7 to 3.5 fewer citations per year after publication and these effects are statistically significant for the SCOPUS and Google Scholar citation platforms.

Table 4

Ordinary Least Squares Estimates of Coefficients in Linear Model of Total Citations of Economics of Race and Crime Articles										
	V	WOS Scopus Google Scholar								
	Estimate	Std. Error		Estimate	Std. Error	Estimate	Std. Error			
(Intercept)	15.929	17.425		-15.561	13.868		-28.637	50.489		
Black Author * Top Five Journal	-24.705	12.305	**	-32.647	14.904	**	-73.073	50.642		
RBPE	-25.423	15.464		-24.533	7.896	***	-68.755	24.577	***	
Controls for Author Race, Gender,			,							
Journal type, Ranking of Journal		Yes			Yes			Yes		
Year Fixed Effects		Yes			Yes			Yes		
Article Category Fixed Effects	Yes Yes					Yes				
F test p-value	< 0.001			< 0.001		< 0.001				
Adjusted R sq	0.233 0.256				(	0.211				
Note: * < 0.1; **<0.05; ***<0.01;										

Table 5

					٠,	··· ··	h. c:			
Ordinary Least Squares Est	imates of	Coefficier	its in Linea	ar Model	ot (	Litations	Years Sir	ıce		
Publicati	ion of Eco	onomics of	Race and	Crime Ar	ticl	es				
	١	VOS	S	copus		Goog	le Schola	r		
	Estimate	Std. Error	Estimate	Std. Error		Estimate	Std. Error			
(Intercept)	-2.445	1.607	-1.313	1.180		-17.492	6.446	***		
Black Author * Top Five Journal	-1.281	1.898	-1.495	2.724		9.731	22.158			
RBPE	-0.921	0.706	-1.732	0.491	***	-3.496	1.396	**		
Controls for Author Race, Gender,										
Journal type, Ranking of Journal	Yes Yes Yes						Yes			
Year Fixed Effects		Yes		Yes			Yes			
Article Category Fixed Effects		Yes		Yes			Yes			
F test p-value	<	0.001	<	< 0.001		< 0.001				
Adjusted R sq	0.162 0.156				0.168					
Note: * < 0.1; **<0.05; ***<0.01; Stardard Errors are White's robust standard errors										

Findings of Racial Discrimination in EconLit Listed Articles. We have also explored the determinants of findings of racial discrimination or racism among EconLit listed articles. Note that the method used to create the variable "finding of discrimination" is a multi-step method that involves reading the abstracts and conclusions of each paper that mentions racial discrimination or racism. No attempt was made in the coding to distinguish between findings of statistical discrimination vs. taste-based discrimination. Nor was any distinction made between systemic or structural racism and individual prejudice or racial animosity. Instead, the coding is a more generic validation of whether the article reaches a conclusion about whether the (mostly empirical) results point to racial discrimination of any form.

Table 6

Maximum Likelihood Estimates of Logistic Model of Finding Discrimination in EconLit Listed Articles													
		Model I			Model II			Model III			Model IV		
	Estimate	Std. Error		Estimate	Std. Error		Estimate	Std. Error		Estimate	Std. Error		
(Intercept)	-1.585	0.136	***	-17.908	3956.180		-2.386	0.754	***	-20.750	6523.000		
Black Author	1.082	0.406	***	1.229	0.470	***	0.935	0.429	**	0.894	0.499	*	
Top Five Journal	0.287	0.444		0.342	0.484		0.120	0.489		0.266	0.542		
Black Author * Top Five Journal	0.216	1.160		0.255	1.322		-0.551	1.255		0.037	1.433		
Female Author	0.111	0.194		-0.128	0.210		0.321	0.217		0.091	0.236		
RBPE	0.403	0.418		1.491	0.554	***	0.222	0.442		1.286	0.605	**	
Law Review	0.170	0.257		0.409	0.290		-0.295	0.285		0.010	0.320		
Annals	0.928	0.316	***	0.860	0.361	**	0.928	0.356	***	0.943	0.405	**	
JEL/JEP	0.486	1.163		0.185	1.217		0.510	1.230		0.195	1.248		
Year Fixed Effect		No			Yes			No			Yes		
Article Category Fixed Effect		No		No		Yes			Yes				
Log Likelihood		-378.576		-336.421		-329.667			-291.417				
AIC		775.150		7	70.842		7	03.334		7	06.834		
Note: * < 0.1; **<0.05; ***<0.01.													

Table 6 reports maximum likelihood estimates of coefficients in a logistic model of the probability of a finding of racism or racial discrimination. Taking the exponent of the estimated coefficients on author race, one finds that the odds of finding discrimination are 2.4 to 3.4 times higher for Black authors than for non-Black authors.. Depending on whether one accounts for time or type of article fixed effects, the odds of finding discrimination are 3.6 to 4.4 times higher for articles published in the *RBPE* as opposed to those published in other journals.. The odds of finding racism or racial discrimination in articles published in the *Annals*, a journal favored by non-economists, are more than two times that for all other articles.

In summary, the bibliometric analysis shows that there are wide differences in citations among articles published in the *Review of Black Political Economy* vs. other publication outlets. The analysis reveals that Black authors, regardless of publication venue, and papers published in the *RBPE* are more likely to find racial discrimination. Articles published in the top five journals, which understandably are cited more than most other articles, are no more or less likely to find racism or racial discrimination.

Depending on whether we measure citations as averages or totals and depending upon whether we use the Web of Science, SCOPUS or Google Scholar citation engines, and whether the models are linear or negative binomial, we find evidence of systematically lower citations for Black authors publishing in top journals and articles published in the *Review of Black Political Economy*. We find that articles with Black authors 2.4 to 3.4 times more likely to find discrimination or racism than articles published by non-Black authors. Articles published in the *Review* are also 3.6 to 4.4 times as likely to find racial discrimination, but these journal effects are not always statistically significant. The consistency of the findings across different citation engines, different model specifications and estimations is all the more compelling in light of the fact that there are major differences in the coverage of Black authors and of the *Review of Black Political Economy* across the three search engines.

## Informative Contributions to the Literature that are Frequently Overlooked

The bibliometric analysis identified some patterns as to what literature is published in top economics journals, what types of findings are most visible, and whose work is most likely to be cited. This raises the question: what is the field missing by overlooking the work by certain authors or in certain journals? In this section of the paper, we discuss articles that offer useful insights into issues around crime and race, especially research authored or co-authored by African American scholars; are published in the *Review of Black Political Economy* or a heterodox journal; or provide an analysis of racism and crime in a theoretical framework other than the rational choice model of crime. <sup>11</sup> Particular focus is given to issues of crime and social identity, mass incarceration, and police use of force.

-

<sup>&</sup>lt;sup>11</sup> For a bibliography of black scholars with published research on crime and criminal justices, see Megan Stevenson and Margaret Shin. (2020). "Reading list: Black economists on criminal justice," Charlotte, VA: University of Virginia Law School.

#### Crime and Social Identity

The rational choice model of crime assumes criminal justice agents (police, prosecutors, judges, parole and probation officers, prison officials) are identity-free public servants, focused solely on efficiently providing public safety. Yet, it is often implicitly assumed that African Americans citizens have a higher cultural propensity for crime than white citizens. Both assumptions are open to question: criminal justice agents have racial identities; African American identity is not defined by a high propensity of crime; and officer-citizen identity matches are strategic interactions that influence policing and other criminal justice outcomes. Moreover, African American identity is not monolithic, as Gyimah-Brempong and Price (2008) point out in their analysis of the effects of skin-color on prison sentencing. Incorporating alternative concepts of identity frame into the analysis of race and crime may yield theoretical and empirical outcomes with persistently biased outcomes.

Policing and racial threat. Sociological and criminological research often incorporates the assumption that police are concerned with social control and racial threat goals that may be inconsistent with the efficient provision of public safety. The racial threat perspective examines the empirical consequences for criminal justice and policing policies when competing racial groups have unequal political economic power. A fundamental assumption of this approach is that the racial group with greater political economic power uses that power to exercise social control over subordinate racial groups. Hence, racial discrimination within the racial threat

-

<sup>&</sup>lt;sup>12</sup> Research on racial profiling by police is of interest because African Americans are oversampled in police stops (relative to their share of the population). Differences in the probability of stops by race are efficient if, all other things equal, there are racial differences in the probability of guilt. See, for example, the statistical discrimination argument of Knowles, Persico, and Todd (2001) and similar research. Equilibrium with statistical discrimination implies an equal probability of guilt, that is, an equal "hit rate," for African Americans and whites, though a higher search rate for African Americans who are observationally the same as white drivers.

perspective has an instrumental objective – social control – and, thereby, is not necessarily the result of incorrect or insufficient information (prejudice, statistical discrimination) or irrationally negative feelings (bigotry, tastes). From this perspective, the criminal legal system operates to protect the power and privilege of a political economic elite relative to subordinate groups and a dominant racial elite (whites) relative to subaltern groups, in particular, nonwhite racial and ethnic minorities.

A system of recursive equations yields a reduced form equation that summarizes the empirical content of the racial threat perspective.

- 1. An economic or racial elite's mean assessment of racial threat increases with the fraction of nonwhite racial and ethnic minorities within the relevant geographical area, but decreases with the extent of segregation of nonwhite racial and ethnic minorities. The positive Percent Minority effect indicates that as the fraction of a subaltern group increases within a geographical area, (a) the dominant group is threatened by greater political or economic competition, (b) an enhanced expectation of violence is attributed to the stigmatized group, or (c) there are other negative stereotypical assessments (Stults and Baumer, 2007). The negative Racial Segregation effect embodies the notion that greater interracial contact within an area increases racial animosity, when greater contact is associated with greater political and economic competition (Blumer, 1958).
- 2. The Demand for Crime Control increases with the assessment of a racial threat by the economic or racial elite.
- 3. The Law Enforcement Response by criminal justice institutions is a positive function of the Demand for Crime Control by the economic or racial elite. This response may consist of changes in one or multiple enforcement activities, for example, increasing the size of the police force, greater public expenditures on policing activities, or greater arrest and imprisonment of members of the subaltern group.

For the most part, the empirical literature tends to affirm these hypotheses (Stults and Baumer, 2007; Dollar, 2014). In particular, Feigenberg and Miller (2021) establish that within the county of a given state there is a non-monotonic relationship between the severity of punishment and the density of African Americans in the county's population. The severity of punishment peaks when the African American population reaches 30 to 37 percent, at which point punishment is 15 to 27 percent more severe than in an all-white jurisdiction. Thereafter,

the severity of punishment declines.

Ethnic and racial minorities will have a strategic response to white identity actions (Darity, Mason, Stewart, 2006). Specifically, since racial and ethnic minorities are aware that the dominant group views the members of subaltern groups as a racial threat, nonwhite persons strategically respond by attempting to limit the actions of the dominant group. Empirical studies of racial threat suggest a positive correlation between the racial density of the police and the racial density of the population: political representation within the local government varies according to Percent Minority Population and this change in political representation produces change in the demographic composition of the police force. For example, the election of an African American mayor leads to an increase in Percent Minority Police (Hopkins and McCabe, 2013). Subaltern groups do not have to have a political majority to influence criminal justice policy. When Percent Minority Population reaches 25 to 30 percent, nonwhite racial and ethnic minorities are able to exercise substantive influence on political decisions regarding the exercise of social control (Stults and Baumer, 2007).

Policing differs by the racial and ethnic identity of officers, especially by the officer-citizen identity match (Feigenberg and Miller, 2020; Close and Mason, 2006, 2007; Eitle, Stolzenberg, and D'Alessio, 2005). Racially discriminatory behavior during officer-citizen interactions is less surprising when one considers that there is some degree of racial discrimination by white officers against Black colleagues (Rim, Ba, and Rivera, 2020). In particular, the Law Enforcement Response by police is as a negative function of the percent nonwhite racial and ethnic minority officers within a police department.

Based on data recorded from close observation of the Cincinnati police force, given that a person was considered a suspect, Brown and Frank (2006) find that when a police-suspect

interaction occurs white officers are more likely than Black officers to make an arrest; both Black and white officers are more likely to arrest Black citizens than white citizens; and, Black officers are more likely to arrest a Black citizen than a white officer. These outcomes are similar to Close and Mason (2007), who also find that both Black and white officers search Black drivers too often – though the excess searches are higher among white officers. Further, Black officers are less likely than white officers to make unnecessary traffic stops and more likely than white officers to write traffic citations or equipment violations rather than charge stopped drivers with a crime (Close and Mason, 2006).

Organizational identity. Racially biased policing is a practice embedded in the police organizational context. Because each troop has a set of command and troop rules/norms, the use of police discretion varies across troops (or, precincts for municipal police). As the demographic composition of a police troop changes, the organization's social context changes in important ways that shape the policing process, for example, by creating an organizational identity that provides more disproportionately favorable or unfavorable outcomes for some citizen groups (Watkins-Hayes, 2011).

Racial identity is a produced good (Stewart, 1995). Law enforcement officers can be guided to substitute professional identities over pre-existing racial identities (Oberfield, 2012; Stewart, 2009). An organizational identity is imposed on agents through rules, procedures, institutional oversight, and cultural norms. Watkins-Hayes (2009) suggests that there is a process of "racialized professionalism" among street-level bureaucrats, in particular, law enforcement officers, such that police seek to integrate their racial identity into "their understanding and operationalization of their work and their goals for what it should accomplish (Watkins-Hayes, 2011:237)."

Darity, Mason, and Stewart (2006) show that agents construct racialized social identity norms through repeated social interactions governed by a process of own-group altruism and other-group antagonism. Whether or not an agent becomes an "individualist," that is, one who attempts to engage in social interactions without conforming to a racial identity and without being seen by others as a member of the same or a different racial group, is shaped by the fraction of other agents who are either "individualists" or persons with a racialized identity. In a society governed by strong and persistent racial identity norms, police are more likely to be "racialized" police than "individualist" police. So, although professional (police department) and organizational (precinct) identities limit variation in policing outcomes that are associated with differences in the racial and ethnic identity of officers and matches between police and citizens, law enforcement officers still have sufficient discretion to engage in racialized decision-making. For example, police searches of drivers and, hence, the efficient provision of public safety, are governed by an individual law enforcement officer's use of bureaucratic discretion in combination with the possibly contending norms of racial identity, professional identity, and organizational identity.

Stimulating a person's social identity has an effect on the actions taken by that person, specifically, moving the person toward actions that are consistent with the norms for their identity-group (Benjamin, Choi, and Strickland, 2010). If African American and Latinx officers are particularly responsive to accusations that police are unjust in their interactions with African American and Latinx citizens, then raising the fraction of African American and Latinx officers within the troop increases the probability that every officer within the troop will have professional interactions with other officers who stress the importance of racially unbiased policing. Stimulating the professional identity of the troop will make all the troop's officers less

likely to engage in biased policing; continuous contact by white officers with individual minority officers can change the behavior (if not the attitudes and preferences) of white officers (Sklansky, 2006).

Officer Identity. Individual police officers have both a law enforcement (or "blue") identity and a racial identity. Hence, the racial composition of police departments may yield startling responses to public policy changes and to activist demands by racial and ethnic minorities to change departmental culture and racial composition. Racial identity reactions to changes in the intensity of other-race identity strategies are counter-intuitive. For example, a national increase in anti-Islamic hate crimes raises the cost of being Muslim; yet, when faced with this rising cost Arab Americans opted to move away from a white racial identity and to increase self-identification as Black or other (Mason and Matella, 2014). In the same way, an increase in white antagonism against African Americans raises the cost of being Black; yet, when faced with this rising cost African Americans chose to increase the intensity of Black racial identity by increasing the probability of a Black-alone racial identity relative to self-identifying as mixed-race (Mason, 2017).

African American civilian protests against police abuse of authority raise the cost of unprofessional law enforcement behavior. Thus, we should expect a reduction in police abuse of authority and unnecessary use of force. African American civilian protests may raise the cost of unprofessional police behavior by increasing political oversight and regulation of police, inspiring greater media attention to police-citizen interactions, and encouraging greater civic involvement by citizens concerned with police efficiency and racial justice. But, African American protests against police abuse of authority is also a racial identity action; hence, we would expect an identity reaction from white police – an increase in actions associated with an

increase in the intensity of white racial identity. It seems perverse to observe increases in an action when costs are rising, unless one considers that social identity norms may be used to allocate access to resources and authority. African American civilian protests against police abuse of authority are demands for greater access to police power and resources. Such demands may be seen as a racial threat to white police power and, thereby, greater social control by white police over protesting populations, regardless of their reasonableness or ability to increase justice.

Cunningham and Gillezeau (2019) provide an event study of the effect of African American social protests from 1964 to 1971 on police killings in the following years. There were more than 700 uprisings during this period. The timing of the first uprising in a county is the treatment variable. This study finds that in the short run (1 to 4 years after an uprising), there are an extra 0.6 to 1.2 lethal interventions per year by police against non-white citizens in counties that experienced an uprising. In the long run (5 to 9 years after treatment) there are an extra 1 to 1.7 non-white deaths per year. Also, in the short-run, there are an extra 0.7 to 0.8 white deaths per year. There are no significant long run effects for white civilians. The cumulative effects over nine years after a riot is that police kill an additional 3.8 to 6.6 white citizens and 9 to 15.1 non-white citizens. More granular analysis reveals that the statistically significant results are driven by rioting in Midwestern and Western states.

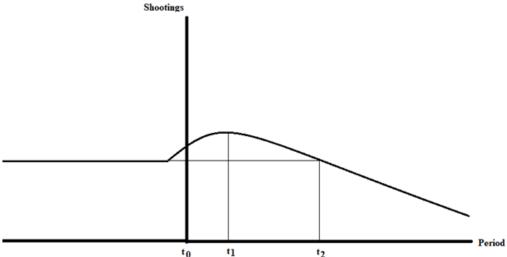
Cunningham and Gillezeau find no change in a county's trend of criminal activity after a riot: uprisings did not cause an increase in a county's violent or non-violent criminal activity. The trend in the number of police employed per 1,000 residents was unaffected by the timing of a county's first racial uprising. However, the number of police killed per year does increase after an uprising. On average, an additional 0.582 officers are killed in event year 2. This number

continues to increase in the short run and is statistically significant in event year 5. The authors offered no guidance on the causes of the increase in police line of duty deaths, for example, whether the riot increased community hostility toward police; whether there was increase in risky behavior among police during the post-uprising period; or, whether the post-uprising increase in police killing of civilians pushed citizens to respond to police hostility. The latter scenario is consistent with an identity response (protection against police) as a reaction to the police's identity response (more civilian killings in response to the racial threat of an uprising against police).

Cox, Cunningham, and Ortega (2020) add insight on police identity reactions to perceived racial threats to white control over the racial composition of the police force. Specifically, Cox, et al. find that the threat of an affirmative action lawsuit to hire more non-white police has contradictory effects on police shootings of African American citizens. There is a short run backlash effect, police react to the racial threat of an affirmative action lawsuit with more aggressive policing of African American citizens resulting in an increase in the number of Black shootings. Also, there is a long run diversity effect; as the department becomes more diverse, there will be a decrease in the number of black shootings.

Figure 1

Figure 2. Trend of police shootings after threat to alter racial composition of force



t<sub>0</sub> = threat of affirmative action, t<sub>1</sub> = start of dominance of diversity effect, t<sub>2</sub> = start of net positive benefit period

Per Figure 1, backlash may begin shortly before  $t_0$  and it dominates the diversity affect up to  $t_1$ . At  $t_1$ , backlash effect = diversity effect. After  $t_1$ , diversity effect dominates backlash effect. Shooting<sub>j</sub>  $\leq$  Shootings<sub>0</sub> for all  $t \geq t_2$ . Event history analysis shows that shootings begin rising 1 year before threat and peak year of threat and that shootings decline to their pre-threat level about 2 years after the affirmative action lawsuit. The negative effects for shootings of non-white civilians are statistically significant for years 6 through 11 after the affirmative action lawsuit.

The police backlash reaction to racial uprisings and to affirmative action lawsuits indicate that racial discrimination in law enforcement is due to instrumental discrimination. Further, the results also indicate that full policy impacts take time. The short run impact may be misleading. Policies seeking to change social norms should account for an identity backlash from agents benefitting from the currently existing norms.

## Police Use of Force

Perhaps one of the most highly visible public policy issues reported on in recent years in

the mainstream and social media is the issue of excessive and deadly use of force by law enforcement officers. Until recently economists have had to say little about this important and policy-relevant topic. As Gooden and Myers (2018) contend, the current problem of police use of force is not a new one and was prominently examined by non-economists 50 years ago in the seminal Kerner Commission report. Police use-of-force has remained a central topic is related fields for decades.

Ajilore and Shirey (2017), whose empirical analysis of police use of force was perhaps the first published in an economics journal, examined citizens' allegations of excessive force by the Chicago police department from 2011 to 2015. The data are the Chicago extract of the Citizens Police Data Project (2016), a national dataset of police interactions with the public. The dependent variable consists of all citizen complaints, from placing hands on citizens to various categories of excessive force, where excessive force complaints include instances with and without the use of a firearm and with and without injury. They estimate two equations: the probability a complaint is an excessive force complaint; and, the probability that a police complaint is sustained.

Their preferred specification shows that African American men are 12.3 percent more likely than white males to file excessive force complaints (relative to all other complaints) and African American male officers are 2.2 percent less likely than white male officers to be the subject of excessive force complaints. African American men are 19.5 percent less likely to have their excessive force complaints sustained than white men and women. The south side of Chicago is 93 percent African American and covers 50 percent of the city's land area. African American men who reside on the south side are 22.7 percent less likely to have their excessive force complaints sustained than white men and women.

Employing a different approach than Ajilore and Shirey, Fryer (2019) in a highly cited and influential paper, separates use of force into non-lethal uses of force and officer involved shootings. Non-lethal uses of force include seven items: put hands on a civilian, force to a wall, handcuff, draw a weapon, push to the ground, point a weapon, and pepper spray or strike with a baton. Using the New York City Stop, Question, and Frisk Program dataset for 2003 to 2013 and controlling for civilian demographics, encounter characteristics, and civilian behavior, along with precinct and year fixed effects, and comparing racial and ethnic minorities to white civilians, the odds ratio for being subjected to non-lethal force increases by 17.8 percent (African American), 12.2 percent (Latinx), 5.1 percent (insignificant, Asian), and 37.2 percent (Other race). 13

Fryer's analysis of officer-involved shootings (OIS) is constructed from two subsamples of data from the Houston police force for 2000 to 2015. First, Fryer selects all observations where OIS = 1. Second, with the help of the Houston police department, Fryer constructs a control group, a matched benchmark sample where OIS = 0 for a set of police-citizen interactions "in which lethal force is more likely to be justified: attempted murder of a public safety officer, aggravated assault on a public safety officer, resisting arrest, evading arrest, and interfering in an arrest (page 1213)." For Fryer's model with the complete set of explanatory variables, African Americans and Latinx are 27.4 percent less likely and 21.1 percent more likely, respectively, to be shot by police than non-Latinx, non-Black persons, but, the race and ethnicity coefficients are not significant. The widely cited findings of Fryer challenge the views of Black activists that there are persistent, systemic racial disparities in police shootings. In our bibliometric analysis

-

<sup>&</sup>lt;sup>13</sup> Using the Police-Public Contact Survey dataset for 1996 to 2011 and controlling for civilian demographics, encounter characteristics, civilian behavior, and year of interaction and comparing racial and ethnic minorities to white civilians, the odds ratio for being subjected to non-lethal force increases by 177 percent (African American), 182 percent (Latinx), and -24.2 percent (insignificant, Other race).

of citations in the race and economics of crime literature, we note while Black authors are more likely to find racial discrimination or racism than non-Black authors but that papers published in top-five journals are more likely to be cited, in the case of the Fryer article – written by a prominent conservative Black economist – the issue is low visibility of critiques of the findings.

Fryer's specification of the dependent variable for officer involved shootings has multiple problems. <sup>14</sup> First, as Ajilore and Shirey explain, some shootings occur with lower uses of force and others do not. The former might capture interactions where there was an escalation of force while the latter does not. Failure to incorporate this information creates measurement error for the dependent variable and this error may be correlated with the officer's race, the citizen's race, or the officer-citizen racial identity match. Second, there are officer-involved deaths of civilians that do not involve the use of a firearm; these deaths are not included Fryer's dependent variable. Third, drawing and pointing a gun at a citizen without firing is not a shooting, but both are exceptional acts of force. It would be helpful to explicitly account for use of a firearm, even if no shooting occurs, since both drawing and pointing a gun at a citizen indicates that an officer is prepared to use deadly force. Fourth, police undercount the number of officer-involved deaths. (Lee, et al., 2017; *The Guardian*, 2020; Swaine and McCarthy, 2016).

Aside from problems with the specification of the dependent variable, Fryer does not cite nor does he exploit the aforementioned literature on the economics of identity to explain officer-citizen identity match for officer-involved shootings. The paper does report, however, that there are statistically significant effects of officer-citizen race differences for non-lethal uses of force. The failure to cite other contrarian evidence – even by Black economists – might be reflective of what Price (2008) regards as a tendency to devalue the research on and about Blacks. As

14

<sup>&</sup>lt;sup>14</sup> See Knox, et al. for an exploration of the assumptions that must be made for a causal study of racially biased policing when using administrative data on police-citizen interactions.

Mason et al. (2005) document, moreover, works establishing a pattern of racism or racial discrimination are less likely to be cited than works that report no racism or racial discrimination.

Public policy makers are concerned about allegations of racially discriminatory behavior in *officer-involved deaths and severe beatings* of civilians and face potential reactions for the public when there is exoneration of white officers who kill African American and Latinx citizens. The reactions from the public have included massive calls for defunding of police departments in many cities across the country. Research by economists can contribute to the understanding by policy makers of the causes and consequences of racially disparate Officer-involved shootings.

Officer-involved shootings are a proper subset of officer-involved deaths and severe beatings of civilians. There are incremental steps from no force to lethal force (Headley and Wright, 2019). Police-citizen interactions may have outcomes where there are no arrests and no force, no arrests and force, arrest but no force, and both arrests and force (Headley and Wright, 2020). Empirical examination of official-involved deaths and other extreme uses of force should be undertaken within the context of both incremental steps in the use of force and bivariate outcomes of arrests and use of force. Otherwise, one may not have an appropriate benchmark for measuring the impact of the racial identity of civilians (and other variables of interest) on the probability an officer uses lethal force.

Further, there are two kinds of officer-involved deaths: 1) an officer shoots (or otherwise kills) a suspect after lesser uses of force do not subdue the suspect or after the interaction gets out of control; and, 2) officer shoots or kills a suspect after arriving on scene and making a needed split-second decision. A single equation binary dependent variable analysis may be appropriate for the second case, but, an ordered logit, multivariate logit, or similar regression is

appropriate for the first case. If there was an arrest along with use of force, a simultaneous equation model is necessary.

Wexler (2020) shows that there is an increased probability of use of force when officers know the race of the civilian prior to interaction. Fryer's analysis does not provide information on whether the race of the suspect is known prior to interaction. "Suicide by cop" exists when a suspect exhibits "intentionally life-threatening behaviors in order to coerce a law enforcement officer to respond with lethal force (American Association of Suicidology, 2013)." Suicide-by-cop suspects are usually young white males (Patton and Fremouw, 2016). Empirical analyses of officer-involved deaths should account for "suicide by cop" and other indicators of the mental health of suspects.

Table 7. Police involved deaths, US: 2015 and 2016

	2015		2016	
	Total	Percent	Total	Percent
Gunshot	1017	0.887	1011	0.925
Taser	50	0.044	22	0.020
Struck by vehicle	31	0.027	21	0.019
Death in custody	47	0.041	37	0.034
Other	1	0.001	2	0.002
Unknown	0	0.000	0	0.000
Total	1146	1.000	1093	1.000

Source: The Guardian. "The counted: people killed by the

police in the US." Downloaded November 20, 2020.

https://www.theguardian.com/us-news/ng-interactive/2015/jun/01/the-counted-police-killings-us-database

The *Guardian* newspaper found twice as many national police-involved-deaths as the Federal Bureau of Investigation ("FBI") (Swaine and McCarthy, 2016). The FBI (using reports from local authorities) counted 442 deaths for 2015. The Guardian counted 1146. Almost 95 percent of these deaths were caused by gunshots or tasers (Table 11).

Based on the *Guardian's* report, New York City carried out a detailed examination of police-involved deaths. Dr. Mary T. Bassett, Ph.D, Commissioner, New York City Department

of Health and Mental Hygiene, identified 105 law enforcement related deaths in New York City from 2010 to 2015, versus just 46 deaths publicly reported for the same period. <sup>15</sup> There were 61 legal interventions, that is, law enforcement delivered the deadly force; 31 arrest-related deaths (deaths which occurred during the process of pursuit, apprehension, or in custody); and 13 community/bystander deaths (deaths to persons who were not intended suspects, for example, persons hit by police bullets, pedestrians killed from vehicle accidents during police activity, etc) (Lee, et al, 2017).

One-third of legal intervention deaths were not assigned legal intervention ICD-10 codes, often because law enforcement involvement was not indicated on the death certification. <sup>16</sup> The incidence of legal intervention death was significantly higher among non-Latinx Blacks than non-Latinx whites. There were no non-Latinx white deaths categorized as legal intervention where the decedent was unarmed; whereas 6 (18%) non-Latinx Black decedents and 5 (38.5%) Latinx decedents were unarmed.

Both criminology and economic research indicate that the ecology of police-citizen interaction is an important variable for explaining outcomes of these interactions. The importance of precinct fixed effects in Fryer's NYC Stop and Frisk specifications of non-lethal use of force is consistent with this research. The racial composition of the area of interaction is one measure of the ecology of stop. If police engage in "enforcement redlining," that is, providing a lower quality of law enforcement in African American or Latinx areas than white areas, then the precinct fixed effects obscure race effects on the probability of use of force.

\_

<sup>&</sup>lt;sup>15</sup> Mary T. Bassett, Ph.D, Commissioner, New York City Department of Health and Mental Hygiene, January 2014 to August 2018, analyzed law enforcement deaths for 2010 to 2015. The draft was completed in 2017. She concludes that the city undercounts deaths involving police.

<sup>&</sup>lt;sup>16</sup> ICD-10 code. Any injury sustained as a result of an encounter with any law enforcement official, serving in any capacity at the time of the encounter, whether on-duty or off-duty. Includes: injury to law enforcement official, suspect and bystander

We have referenced a single paper by Fryer repeatedly in our critique of research on police shootings. Least the reader misinterpret the critique as a direct attack, we repeat that the Fryer paper was published in one of the most cited and prominent economic journals in the world. The findings are far-reaching and almost reactionary in the sense that they support claims that there is no racism in the criminal legal system. What is it about the economics profession that such results *rejecting* racism or racial discrimination as a causal factor in explaining racial disparities in such a critical policy outcome as police shootings are published in a top economics journal while the larger literature of results carefully documenting the nature and persistence of racial disparities do not get published or cited?

There is much valuable research by Black economists and their co-authors worthy of greater exposure. For example, in March 2010, the Chicago police department changed its taser policy, allowing patrol officers to use the weapons instead of restricting their use to sergeants (Ba and Grogger, 2019). Allowing patrol officers to use tasers did not decrease or increase the proportion of African Americans and Latinx involved in (lethal and non-lethal) use-of-force incidents in Chicago.

Holz, Rivera, and Ba (2019) seek to ascertain the impact on a Chicago police officer's use-of-force when an officer's peer has been injured on the job. The officer's peer group consists of officers randomly drawn into the police academy during the same month. Academy peers currently working in the same police district are excluded in order to prevent contamination from correlated shocks to civilian non-compliance. Holz et al. find that injuries to peers on the job increase the use of force by seven percent in the week following the injury. Notably, officers are twice as responsive when the injured peer is of the same race. It is difficult to determine if this is a pure race effect: same race peers are more likely to be actual peers than all persons who

entered the academy at the same month. Using race to define the peer group may eliminate attenuation bias (versus when race is not used to define the peer group). The increases in use-of-force are driven by increases in the lower level of force, but the seven percent estimate may be a lower bound estimate since the intensity of connections formed during the academy may decrease with time and injuries to co-workers yield a greater response than injuries to peers in other districts. <sup>17</sup> Officers are responding to outcomes experienced by peers, not choices made by peers. Use-of-force incidents against African American civilians increase the week after an African American citizen is responsible for injuring an officer's police academy peer. There are no increases in use-of-force against Latinx (white) citizens after a Latinx (white) civilian injures an officer's peer. <sup>18</sup>

Hoekstra and Sloan (2020) confirm the importance of racial identity for policing and the officer-citizen identity match, factors that have been strongly emphasized by African American economists. They find that, "[T]he type of white person attracted to the police force is systematically different from the typical black person when it comes to likelihood of using force (page 4)." Hoekstra and Sloan examine millions of 911 calls for two separate cities, one predominately white and African American and the other predominately white and Latinx. In both cases, officers do not select the calls to which they will respond; instead; officers are assigned to calls by the dispatcher and must respond unless they are presently engaged in another activity. Race is assessed from the address from which the call originated, based on the geocode in a Census Block Group.

For all uses of force they find that white officers are 0.0429 percentage points more likely

<sup>&</sup>lt;sup>17</sup> Additional findings show that peer injury causes a 15 percent increase in citizen complaints against officers for failure to provide service.

<sup>&</sup>lt;sup>18</sup> Holz, et. al. note that African Americans are 81 percent of Chicago's use-of-force victims and 80 percent of persons who injure an officer.

to use force than African American officers, an increase of 40 percent relative to the mean use of force for all officers and an increase of more than 55 percent relative to the mean use of force for African Americans officers. For gun use of force, they find that white officers are 0.00463 percentage points more likely to use force than African American officers, an increase of 61 percent relative to the mean gun use of force for all officers and an increase of more than 136 percent relative to the mean gun use of force for African Americans officers.

For all uses of force and for opposite race police-citizen interactions, the analysis indicates that white officers are 0.0618 percentage points more likely to use force than African American officers during an interaction with an African American citizen, an increase of 60 percent relative to the mean use of force for all officers. Opposite race effects are concentrated in police beats with high rates of use of force: an increase of 82 percent in beats with high rates of use of force and is insignificant in beats with low rates of use of force.

For gun use of force, white officers are 0.0369 percentage points more likely than African Americans to use force on African American citizens, an increase of 520 percent relative to the mean gun use of force for all officers. Again, opposite race effects for gun use of force are concentrated in police beats with high rates of use of force. Hoekstra and Sloan (2020, page 26) conclude that the opposite-race effect for gun use of force "seems largely driven by much higher rates of gun force used by white officers in mostly-black neighborhoods, compared to black officers."

Although there are no racial differences between white and African American officers in gun force used in white neighborhoods, white officers use gun force five times as often in neighborhoods that are at least 80 percent African American. The probability of all uses of force is causally related to the officer-citizen racial identity match: an opposite race identity match

increases the use of force by 30 to 60 percent. This is driven by the behavior of white officers in African American neighborhoods, as African American officers use modest force in both white and African American neighborhoods, but white officers substantially increase their use of force when they are dispatched to calls in Black neighborhoods.

Similarly, the Latinx and white officer-citizen identity match also influences an officer's use of force. Overall, white and Latinx officers use force at the same rate. Officers dispatched to calls of a different ethnic group are more than two times as likely to increase the use of force; white officers dispatched to Latinx neighborhoods increase their use of force more than Latinx officers. For all uses of force and for opposite ethnicity police-citizen interactions, findings indicate that opposite ethnicity officers are 0.0649 percentage points more likely to use force than Latinx officers, an increase of 75 percent relative to the mean use of force for all officers. Hoekstra and Sloan (2020, page 29) conclude, "the rate at which white officers use force increases by more as those officers are dispatched to more Hispanic neighborhoods, compared to Hispanic officers."

There are collateral effects to police use of force. Ang (2020) "finds that exposure to police violence leads to persistent decreases in GPA, increased incidence of emotional disturbance and lower rates of high school completion and college enrollment. These effects are driven entirely by black and Hispanic students in response to police killings of other minorities and are largest for incidents involving unarmed individuals." Legewie and Fagan (2019) "find that exposure to police surges significantly reduced test scores for African American boys, consistent with their greater exposure to policing. The size of the effect increases with age, but there is no discernible effect for African American girls and Hispanic students."

Finding and maintaining policies that successfully reduce officer-involved deaths (especially, deaths of racial and ethnic minority citizens) has been the subject of four major national commissions: 1931 Wickersham Commission, 1968 Kerner Commission Report, 2015 President's Task Force on 21st Century Policing, and the 2018 Commission on Civil Rights' Report on Police Use of Force (Headley and Wright, 2019). Nevertheless, there is no national standard for collecting and comparing the use of force across police departments. Using the Fatal Encounters dataset, which has tried to catalog every police-involved gun death since 2000, Jennings and Rubado (2017) estimate E(OIS per 100,000 residents|X, Policy), where X represents citizen, officer, and agency characteristics and Policy = {matching racial composition of police force to racial composition of city, require paperwork of officers where guns are pointed at citizens and no shots are fired, assigning regular beats to officers, requiring more community policing training). They do not find a significant effect for community policing and racial representation on police-involved gun deaths of civilians. 19 They do find that requiring officers to file a report when they point a gun at a citizen but do not shoot lowers civilian gun deaths without increasing the gun deaths of police officers. Specifically, departments with a firearm display report requirement had 0.322 fewer deaths per 100,000 residents in comparison to departments without the policy, a reduction of 18.4 percent from the mean of 1.75 deaths per 100,000 residents. Forty-six percent of police agencies require filing a report when a gun is drawn but not fired (page 219). The paperwork requirement for police threatening a civilian with a drawn gun lowers gun deaths because: 1) it is a deterrent to unnecessary use of force because of additional demands on an officer's time; 2) it implies police leaders are committed to avoiding

<sup>&</sup>lt;sup>19</sup> Agency-level policy variables obtained from the US Bureau of Justice Statistics' Law Enforcement Management and Administrative Statistics (LEMAS) along with demographic data from the US Census American Community Survey (ACS) are merged with the Fatal Encounters data. The law enforcement agency is the unit of analysis. OIS per 100,000 ranged from 0 to 13, with a mean of 1.75.

gun draws; and, 3) it is part of a commitment to best practices among agencies that have this requirement.

## Mass incarceration and family structure and functioning

Despite its public policy significance, mass incarceration is not often referenced in the EconLit database that relate to the economics of race and crime. Incarceration becomes more punitive during a mass incarceration regime. For example, during the mass incarceration era of 1980 to 2008, Raphael and Stoll (2013) report that increases in crime are responsible for about 20 percent of the increase in mass incarceration. The factors that explain most of the increase in mass incarceration are an increase in the mean length of sentence, given that a criminal violation has occurred, which accounts for one third of incarceration growth; and, the probability of imprisonment given that a criminal was convicted tripled.

As the criminal legal system becomes more punitive, the crime rate also increases. The rising crime leads to greater incarceration and, thereby, more crime. The system comes to rest in a high crime rate and high incarceration rate equilibrium (Temin, 2018). This high crime rate and high incarceration rate equilibrium means the criminal legal system is a major stratifying institution in American society. The influx of Southern African Americans into Northern cities during the peak years of the Great Migration (1940-1970) increased the African American population percentage within commuting zones. These racial composition changes induced changes in the childhood environment of commuting zones (Derenoncourt, forthcoming). Among other changes, the overall change in childhood environmental included increased spending on police, higher incarceration rates, and more crime. The induced responses to higher percentages of African Americans within commuting zones "explains 43% of the upward mobility gap between black and white men in the region today."

An increasingly punitive incarceration regime was the federal, state, and local governmental response to the African American social protests of the 1960s and 1970s. From 1971 to 1994, greater racial control (instrumental discrimination explicitly expressed via the so-called War on Drugs) encouraged more severe sentences for a given crime rate. <sup>20</sup> Legal scholar Michelle Alexander (2010) provides an intersectional refinement of this argument: mass incarceration is an attack against African American males designed to win votes of poor and working class whites. Alexander argues that the criminal legal system has labeled racial and ethnic minority males "criminals" and then used that categorization as a rationale for "discrimination, exclusion, and social contempt (page 2)." It is perfectly legal to discriminate against convicted felons in an extensive range of social and economic activities: labor and housing markets, voting and political participation, access to educational assistance and institutions, access to public assistance, denial of jury service, etc. Petach and Pena (2020) provide empirical support for the "Alexander hypothesis;" localities "with higher levels of inequality experienced larger increases in the overall incarceration rate" and the increase in the white/nonwhite poverty ratio is associated with an expansion in non-white incarceration rates but no change in white incarceration rates.

Individual social and economic factors that contribute to incarceration, such as educational and labor market opportunities, are well studied and continue to be a focus of contemporary research. For example, Booker T. Washington (President, Tuskegee University) and Julius Rosenwald (philanthropist) built 5,357 schools, shops, and teacher homes across

<sup>&</sup>lt;sup>20</sup> According to John Ehrlichman, domestic policy advisor to President Nixon, "The Nixon campaign in 1968, and the Nixon White House after that, had two enemies: the antiwar left and black people . . . You understand what I'm saying? We knew we couldn't make it illegal to be either against the war or black, but by getting the public to associate the hippies with marijuana and blacks with heroin. And then criminalizing both heavily, we could disrupt those communities . . . We could arrest their leaders, raid their homes, break up their meetings, and vilify them night after night on the evening news. Did we know we were lying about the drugs? Of course we did (Baum, 2016)."

the rural South between 1912 and 1932. Eriksson finds "that full exposure to one of the new primary schools built as part of the Rosenwald program reduces the probability of incarceration by 1.9 percentage points (Eriksson, 2020)." Also, raising a state's minimum wage rate by \$1 per hour leads to approximately 12 to 25 fewer incarcerations per 100,000 state residents (Ghosh, Hoover, and Liu, 2020). Increasingly, scholars are also interested in the impact of racial differences in wealth on racial differences in incarceration. Zaw, Hamilton, Darity (2016) show that family wealth and the probability of individual incarceration are inversely related. Even so, for a given level of wealth, African Americans are more likely to experience incarceration than whites and Latinx. They also show a racial wealth gap among persons who will be incarcerated in the future as well as among those previously incarcerated.

However, the direction of causality may also run in the opposite direction: incarceration excludes individuals from beneficial networks and decreases skill accumulation, two-parent family formation, and individual earnings and wealth accumulation. Hence, a correlation between race and crime, for example, a positive correlation between African American status and the probability of incarceration, does not necessarily imply that relatively greater family structure instability and greater family dysfunctional behavior causes relatively greater incarceration; rather, the direction of causation might be that relatively greater incarceration causes racial differences in family structure and function.

Incarcerated persons pay two prices for their conviction: time costs and financial sanctions associated with being convicted for a criminal activity; and, collateral consequences (invisible punishments) for former convicts returning to society (Chiteji, 2017). The invisible punishment imposed on returning citizens includes lower labor market earnings and substantial criminal justice debt beyond the financial sanctions associated with a criminal conviction. States

and localities impose numerous fines, fees, and surcharges on individuals as their case makes its way through the justice system, including charging the individual for the time spent in jail. Chiteji (2014) shows that incarceration reduces wealth accumulation; thereby, extending punishment from youth to old age.

Mass incarceration also imposes costs on law abiding citizens: 1) it makes law abiding citizens less safe because it locks up too many nonviolent criminals, who then become potentially violent because of their exposure to violence in prison; 2) it is costly to taxpayers, reallocating tax revenue from schools, health care, and public amenities; 3) it reduces the economic resources available to families through the costs of incarceration and the reduced employment prospects for individuals when released from prison; and, 4) it gives prosecutors increasing amounts of power to fight crime, which endangers all of our civil liberties (Forman, 2010).

Mass incarceration affects family structure and family function (Myers, 2000). More than half of all prisoners have children under the age of 18 and nearly two thirds of incarcerated women have children and lived with their children prior to being jailed (Sykes and Pettit, 2014; Cox, 2012). Forty-five percent of prisoners were living with their children prior to imprisonment (Sykes and Pettit, 2014:128). Women with longer sentences may face termination of parental rights and have their children placed in foster care. Additionally, persons convicted on some felonies (such as drug violations) may be ineligible for a variety of public assistance programs, such as Temporary Assistance to Needy Families, public housing, and public sector employment. Craigie (2020), importantly, finds that Ban-the-Box policies could raise the probability of public employment for those with a previous conviction by 30 percent, which would have disparate racial impact given conviction disparities.

Most incarcerated persons are male and most of them were fathers prior to incarceration.

Mass incarceration is one component of African American male marginalization, that is, the social unwantedness and economic redundancy of African American males. Male marginalization provides an explanation for the rise in the fraction of never-married African American women ages 16 to 39, as well as other changes in family structure and the wellbeing of young African American women and children (Cox, 1940; Darity and Myers, 1995; Myers, 2000). These changes occur because there are insufficient marriageable males, which is caused in part by mass incarceration.

The Darity-Myers discussion of male marginalization emphasizes male institutionalization (involvement with the criminal legal system); premature death and disability (outcomes of violent crime); and, whether the individual has any children. Marginalized males are clearly unavailable as mates if they have suffered premature death (violent crimes and accidents) or if they are involuntarily institutionalized, e.g., jail/prison or hospital. If not involuntarily institutionalized, marginalized males may be economically unsuitable as mates due to insufficient or unstable earnings.<sup>21</sup> Or, marginalized males may be socially unsuitable as mates because of current participation in illegal activities.<sup>22</sup>

In support of the Darity-Myers discussion of African American male marginalization, Liu (2018) finds that a one percentage point increase in the incarceration rate of Black males: 1) reduces the probability of marriage for young African American women by 2 to 3 percentage

.

<sup>&</sup>lt;sup>21</sup> Chetty, et al. (2020) do not reference the Darity-Myers discussion of black male marginalization, though they find evidence consistent with black male marginalization. Specifically, conditioning on parental income African American young adults have marriage rates that are 30 percentage points lower than white young adults. This intergenerational marriage gap is correlated with gender-specific gaps in intergenerational mobility. Conditioning on parental income; black males have wages that are 7 percentiles lower than white males, are much less likely to be employed, work 9 hours per week less than white males, have a substantial higher probability of incarceration than white males, and the college attendance rate is 7 percentage points lower. The intergenerational racial gaps among women are smaller or non-existent.

<sup>&</sup>lt;sup>22</sup> There is empirical evidence that for African American men, limited legal earnings opportunities are the primary determinant of drug dealing (Myers, 1992), and increases in joblessness tend to be associated with increases in the incarceration rate of African American men (Myers and Sabol, 1987).

points; 2) increases the probability a Black child is born to an unmarried mother and lives in a mother-only family by 4.5 and 3.5 percentage points, respectively; and 3) reduces the probability that young African American men and women will attain at least one year of college by 4.4 and 3.2 percentage points, respectively.<sup>23</sup> These outcomes vary according to increases in the extensive and intensive margins of incarceration.<sup>24</sup> Finally, Liu finds that one standard deviation in the punitiveness of sentencing policies in areas where a person lived during childhood increases racial inequality in the racial income gap by 0.7 percent, holding parental income constant.

## **Summary and Policy Conclusions**

Logan and Myers (2020) argue that economists largely are not trained to address questions of 'structural' or 'systemic' racism and often ignore in their writings the structural determinants of racial disparities in various market and non-market contexts. This essay documents the problem of the marginalization of race in the subfield of the economics of crime. We have approached the problem of marginalization of race in the economics of crime literature from two perspectives. First we examine whether articles on race and the criminal legal system by Black authors or appearing in the leading Black economics journal are less likely to be cited in the literature. The bibliometric analysis suggests that Black authors are less likely to be cited, and articles that appear in the non-top economics journals, in the *Review of Black Political Economy*, or in non-economics journals are less likely to be cited. For individual researchers

<sup>&</sup>lt;sup>23</sup> See also Foster and Hagan (2009) for empirical results which support and complement Liu's analysis of the intergenerational effects of parental incarceration.

<sup>&</sup>lt;sup>24</sup> Mechoulan (2011) finds that the Black male imprisonment rate has a positive effect on the fertility rate (18 to 19 years of age), educational attainment (18 to 20 years of age), and employment (20 to 23 years of age) of Black women, with no effect on the probability of marriage. Besides, studying a younger age group than the women in Liu's sample, Mechoulan does not address the measurement error issues raised by Liu, nor does he fully address the endogeneity of the Black male imprisonment rate.

who publish in the *RBPE* or who are Black, this might have adverse effects on their advancement in the field as they might be judged to be less productive than they actually are. Under-citation might also restrain the advancement of the field since research will proceed without the benefit of the insights that could be gained from the analyses not cited.

A second perspective on the marginalization of race in the economics of crime literature explores how the under-citation phenomenon can have adverse effects on policy development. We provide illustrations from key insights into policing and the effects of mass incarceration on individuals, families, and society. In a world when many of the presidential candidates openly embraced language like remedying "systemic racism" or "structural racism" in the criminal legal system and when one of the first acts of the newly elected president in 2021 was to sign an executive order on racial equity in the criminal legal system designed to address racism and racial discrimination, it is discomforting to discover that the flagship archive of economics articles undervalues and fails to cite research that attempts to explore the nature of racism or racial discrimination in the criminal legal system. With a deeper and more nuanced understanding of both the mechanisms and frameworks that lead to over policing and over incarceration within the African American community, better policies could be developed that could reduce both and lead to better outcomes for families and society as a whole.

We are cautious about interpreting the marginalization and undervaluation of the works of Black economists and research published in the *RBPE* as a conscious and deliberate attempt to derail the careers of a relatively small share of the universe of professional economists. We recognize that there are many other avenues by which the observed disparities in citations and the patterns of publication refuting claims of racial discrimination or systemic racism might arise. We identify three possible mechanisms that could produce the observed results we

document in this essay independently of any racial animus on the part of the mainstream economics profession. One involves the nature of the data economists use to research racial disparities. Another has to do with the nature of citation indices that are used to determine the relative worth of publications and scholarship. A third has to do with abstracting of journals and how summary information is gathered and shared now and in the past.

Data on Race and Crime. Despite volumes of data on the alleged deficiencies of African Americans and other racial minority group members caught in the web of the criminal legal system, until recently, little was known about the race and ethnicity or other characteristics of the police, prosecutors, judges, or probation or parole officers. Good advances arise in the literature when one is able to document the characteristics of police officers vs civilians in traffic stops or other encounters.

Citation Indices and Bias. It may be surprising to many readers that there are substantial differences in the coverage and methods used to count citations among the major citation engines. Not all economics journals are covered by all citation engines and some articles located in EconLit are not found in some citation engines because not all issues of some journals, like the Review of Black Political Economy are covered by these citation indices. Unless one is a subscriber of the RBPE one might not even know about the papers published in the 1970s and 1980s on the economics of race and crime or the special volume published on that topic in the late 1980s.

Abstracting and Knowledge. When people physically visited the musky stacks at the University's library, it was customary to browse through many articles in one or more volumes of a journal. With digital journals, readers often only browse through abstracts of the article. Surprisingly, many older articles, even in top-five journals, have no abstracts. Whereas

Econometrica abstracts first appeared in 1949, abstracts were not required for the Journal of Political Economy (JPE) until 1971; The Quarterly Journal of Economics (QJE) in 1980; The Review of Economic Studies in 1982; and The American Economic Review (AER) in 1986.

Prior to 2007, there were no abstracts of articles in the Review of Black Political Economy. But, that is not a "black thing" because prior to 2006, there were no abstracts of articles in the Journal of Economic Literature either. Note that a large surge in the production of Black Ph.Ds in economics occurred during the decades of the 1970s and 1980s, a period when many Black economists were publishing papers without abstracts that current generations of economists could peruse and cite.

In short, there are reasonable non-accusatory explanations for why Black authors are not cited and why the papers published in their organization's official journal are largely unknown to generations of non-Black economists. Unfortunately, policy makers who rely on the advice and wisdom of professional economists thereby are deprived of the important contributions that these scholars have made and the alternative viewpoints that they can offer to the policy discourse.

## References

- Ajilore, Olugbenga, and Shane Shirey. "Do #AllLivesMatter? An Evaluation of Race and Excessive Use of Force by Police." *Atlantic Economic Journal* 45, no. 2 (2017): 201-12.
- Ajilore, Olugbenga. "The Militarization of Local Law Enforcement: Is Race a Factor?" *Applied Economics Letters* 22, no. 13 (2015): 1089-93.
- Alexander, Michelle. *The New Jim Crow: Mass Incarceration in the Age of Colorblindness*. New York: The New Press, 2010.
- Alexander, Michelle. *The New Jim Crow: Mass Incarceration in the Age of Colorblindness.* 10th Anniversary ed. New York: New Press, 2020.
- Ang, Desmond. "The Effects of Police Violence on Inner-City Students." *The Quarterly Journal of Economics* 136, no. 1 (2020): 115-68.
- Ba, Bocar, and Jeffrey Grogger. "The Introduction of Tasers and Police Use of Firearms: Evidence from the Chicago Police Department." *AEA Papers and Proceedings* 109 (2019): 157-60.
- Baum, Dan. "Legalize It All, How to Win the War on Drugs." *Harper's Magazine*, April, 2016. <a href="https://harpers.org/archive/2016/04/legalize-it-all/">https://harpers.org/archive/2016/04/legalize-it-all/</a>.
- Benjamin, Daniel J., James J. Choi and A. Joshua Strickland. "Social Identity and Preferences." *The American Economic Review* 100, no. 4 (2010): 1913-928.
- Blumer, Herbert. "Race Prejudice as a Sense of Group Position." *Pacific Sociological Review* 1, no. 1 (1958): 3-7.
- Bonczar, Thomas P. BJS: Special Reports: Prevalence of Imprisonment in the U.S. Population, 1974-2001, Washington, DC: United States Bureau of Justice Statistics, 2003.
- Braun, Sebastian Felix "United States of America" in *The Indigenous World 2020*. Edited by Dwayne Mamo. pp. 579-587. Copenhagen: IWGIA
- Brown, Robert A, and James Frank. "Race and Officer Decision Making: Examining Differences in Arrest Outcomes between Black and White Officers." *Justice Quarterly* 23, no. 1 (2006): 96-126.
- Chetty, Raj, Nathaniel Hendren, Maggie R. Jones, Sonya R. Porter. (2020). "Race and Economic Opportunity in the United States: An Intergenerational Perspective" Quarterly Journal of Economics, 135(2) (May):711–783.
- Chakravartty, Paula, Rachel Kuo, Victoria Grubbs, and Charlton McIlwain. "#CommunicationSoWhite." *Journal of Communication* 68, no. 2 (2018): 254-266.
- Chiteji, Ngina. "Prodigal Sons: Incarceration, Punishment, and Morality." *Faith & Economics*, no. 70 (2017): 3-49.

- ——. "Does incarceration affect inequality during old age?" Institute for Research on Poverty, University of Wisconsin, Spring/Summer 2014.
- Citizens Police Data Project. 2016. <a href="https://cpdb.co/data/AB9XY8/citizens-police-data-project">https://cpdb.co/data/AB9XY8/citizens-police-data-project</a> (accessed April 27, 2016).
- Close, Billy R., and Patrick L. Mason. "After the traffic stops: Officer characteristics and enforcement actions." *Topics in Economic Analysis & Policy* 6, no. 1 (2006).
- ——. "Searching for efficient enforcement: Officer characteristics and racially biased policing." *Review of Law & Economics* 3, no. 2 (2007): 263-321.
- Cornwell, Christopher, and William N. Trumbull. "Estimating the economic model of crime with panel data." *The Review of Economics and Statistics* (1994): 360-366.
- Cox, Oliver C. "Sex ratio and marital status among Negroes." *American Sociological Review* 5, no. 6 (1940): 937-947.
- Cox, Robynn JA. "The impact of mass incarceration on the lives of African American women." *The Review of Black Political Economy* 39, no. 2 (2012): 203-212.
- Cox, Robynn, Jamein P. Cunningham, and Alberto Ortega. 2020. "Impact of affirmative action legislation on police killings of civilians," University of Memphis. Working paper: Presented at he Association for Public Policy and Management Conference, November 2020.
- Cox, Robynn. "Crime, incarceration, and employment in light of the great recession." *The Review of Black Political Economy* 37, no. 3-4 (2010): 283-294.
- Craigie, Terry-Ann. "Ban the Box, Convictions, and Public Employment: <u>Economic Inquiry</u>, (2020) 58(1) (January): 425-445.
- Cunningham, Jamein P., and Rob Gillezeau. "Don't shoot! The impact of historical African American protest on police killings of civilians." *Journal of Quantitative Criminology* (2019): 1-34.
- Darity, Jr., William A., Patrick L. Mason, and James B. Stewart. "The economics of identity: The origin and persistence of racial identity norms." *Journal of Economic Behavior & Organization*, 60, no. 3 (2006): 283-305. https://www.sciencedirect.com/science/article/abs/pii/S0167268105001277.
- Darity, Jr., William A., and Samuel L. Myers, Jr. "Family Structure and the Marginalization of Black Men: Policy Implications" M. Belinda Tucker and Claudia Mitchell-Kernan (Editors). *The Decline in Marriage among African Americans: Causes, Consequences, and Policy Implications*. New York: Russell Sage Foundation, 1995, 263-306.
- Delgado, Richard. "The Imperial Scholar: Reflections on a Review of Civil Rights Literature." *University of Pennsylvania Law Review* 132, no. 3 (1984): 561-78.

- Dion, Michelle L., Jane Lawrence Sumner, and Sara McLaughlin Mitchell. "Gendered citation patterns across political science and social science methodology fields." *Political Analysis* 26, no. 3 (2018): 312-327.
- Dollar, Cindy Brooks. "Racial Threat Theory: Assessing the Evidence, Requesting Redesign." *Journal of Criminology* 2014 (2014): 1-7.
- Donthu, Naveen, Satish Kumar, Debmalya Mukherjee, Nitesh Pandey, and Weng Marc Lim. "How to conduct a bibliometric analysis: An overview and guidelines." *Journal of Business Research* 133 (2021): 285-296.
- Eitle, David, Lisa Stolzenberg, and Stewart J. D'Alessio. "Police organizational factors, the racial composition of the police, and the probability of arrest." *Justice Quarterly* 22, no. 1 (2005): 30-57.
- Eriksson, Katherine. "Education and incarceration in the Jim Crow South evidence from Rosenwald schools." *Journal of Human Resources* 55, no. 1 (2020): 43-75.
- Feigenberg, Benjamin, and Conrad Miller. "Racial divisions and criminal justice: Evidence from southern state courts." *American Economic Journal: Economic Policy* 13, no. 2 (2021): 207-40.
- ——. "Would Eliminating Racial Disparities in Motor Vehicle Searches Have Efficiency Costs?" *The Quarterly Journal of Economics* (21 May 2021) <a href="https://doi.org/10.1093/qje/qjab018">https://doi.org/10.1093/qje/qjab018</a>.
- ——. "Racial disparities in motor vehicle searches cannot be justified by efficiency." National Bureau of Economic Research Working Paper, No. 27761. May 2020. DOI 10.3386/w27761.
- Flowe, Douglas J. Uncontrollable Blackness: African American Men and Criminality in Jim Crow New York. University of North Carolina Press, 2020.
- Forman Jr., James. "Why Care About Mass Incarceration?" *Michigan Law Review* 108, no. 6 (2010): 993-1010.
- Foster, Holly, and John Hagan. "The mass incarceration of parents in America: Issues of race/ethnicity, collateral damage to children, and prisoner reentry." *The Annals of the American Academy of Political and Social Science* 623, no. 1 (2009): 179-194.
- Fryer, Jr., Roland G. "An empirical analysis of racial differences in police use of force." *Journal of Political Economy* 127, no. 3 (2019): 1210-1261.
- Ghosh, Pallab K., Gary A. Hoover, and Zexuan Liu. "Do State Minimum Wages Affect the Incarceration Rate?" *Southern Economic Journal* 86, no. 3 (2020): 845-872.
- Goldberg, Noah. "Cops have killed 21 people in Brooklyn since Eric Garner's death. Here's where those cases stand," *Brooklyn Daily Eagle*, September 9, 2019. Downloaded November 20, 2020. https://brooklyneagle.com/articles/2019/09/09/killed-by-cops-list/.

- Gooden, Susan T., and Samuel L. Myers Jr. 2018. "The Kerner Commission Report Fifty Years Later: Revisiting the American Dream." *RSF: The Russell Sage Foundation Journal of the Social Sciences* 4(6): 1–17. DOI: 10.7758/RSF.2018.4.6.01.
- Guardian, The. "The counted: people killed by the police in the US, Recorded by the Guardian with your help." Downloaded November 20, 2020. <a href="https://www.theguardian.com/us-news/ng-interactive/2015/jun/01/the-counted-police-killings-us-database">https://www.theguardian.com/us-news/ng-interactive/2015/jun/01/the-counted-police-killings-us-database</a>.
- Gyimah Brempong, Kwabena. Empirical models of criminal behavior: How significant a factor is race? *The Review of Black Political Economy* 15, 27–43 (1986). <a href="https://doi.org/10.1007/BF02903857">https://doi.org/10.1007/BF02903857</a>.
- Gyimah-Brempong, Kwabena, and Gregory N. Price. 2006. "Crime and Punishment: And Skin Hue Too?" *American Economic Review*, 96 (2): 246-250.
- Hamermesh, Daniel S. "Six decades of top economics publishing: Who and how?." *Journal of Economic Literature* 51, no. 1 (2013): 162-72.
- Hamermesh, Daniel S. "Citations in economics: Measurement, uses, and impacts." *Journal of Economic Literature* 56, no. 1 (2018): 115-56.
- Hamermesh, Daniel. "Measuring success in economics." Sebastian Galiani and Ugo Panizza (Editors). *Publishing and Measuring Success in Economics*. VoxEU CEPR(2020).
- Headley, Andrea M., and James E. Wright. "Is representation enough? Racial disparities in levels of force and arrests by police." *Public Administration Review* 80, no. 6 (2020): 1051-1062.
- ——. "National Police Reform Commissions: Evidence-Based Practices or Unfulfilled Promises?." *The Review of Black Political Economy* 46, no. 4 (2019): 277-305.
- Heckman, James J., and Sidharth Moktan. "Publishing and promotion in economics: the tyranny of the top five." *Journal of Economic Literature* 58, no. 2 (2020): 419-70.
- Hinton, Elizabeth Kai. From the War on Poverty to the War on Crime: The Making of Mass Incarceration in America. Harvard University Press, 2016.
- Hirsch, Jorge E. "An index to quantify an individual's scientific research output." *Proceedings of the National Academy of Sciences* 102, no. 46 (2005): 16569-16572.
- Hoekstra, Mark, and CarlyWill Sloan. *Does race matter for police use of force? Evidence from 911 calls*. National Bureau of Economic Research, No. w26774. February 2020. DOI 10.3386/w26774.
- Holz, Justin, Roman Rivera, and Bocar A. Ba. "Spillover effects in police use of force." *University of Pennsylvania, Institutue for Law & Economics Research Paper* 20-03 (2019).
- Holzer, Harry J., Steven Raphael, and Michael A. Stoll. "Perceived criminality, criminal background checks, and the racial hiring practices of employers." *The Journal of Law and Economics* 49, no. 2 (2006): 451-480.

- Hopkins, Daniel J. and Katherine T. McCabe. "After It's Too Late: Estimating the Policy Impacts of Black Mayoralties in U.S. Cities," *American Politics Research*, 40, no. 4 (July 2012): 665-700.
- Huang, Mingqian, Kiyon Naser-Tavakolian, Michael Clifton, Ana M. Franceschi, Derek Kim, Jill Z. Zhang, and Mark Schweitzer. "Gender differences in article citations by authors from American institutions in major radiology journals." *Cureus* 11, no. 8 (2019).
- Hudson, John. "Be known by the company you keep: Citations—quality or chance?." *Scientometrics* 71, no. 2 (2007): 231-238.
- Jennings, Jay T., and Meghan E. Rubado. "Preventing the use of deadly force: The relationship between police agency policies and rates of officer-involved gun deaths." *Public Administration Review* 77, no. 2 (2017): 217-226.
- Kelley, Jennifer Norton, Catherine Stayton, and Gretchen Van Wye. (2017). "Enumeration and classification of law enforcement-related deaths New York City, 2010–2015," *NYC Health*. New York City Department of Health and Mental Hygiene and Centers for Disease Control and Prevention.
- Knowles, John, Nicola Persico, and Petra Todd (2001). "Racial Bias in Motor Vehicle Searches: Theory and Evidence," Journal of Political Economy, 109(1) (February):203-229
- Knox, Dean, Will Lowe, and Jonathan Mummolo. "Administrative records mask racially biased policing." *American Political Science Review* 114, no. 3 (2020): 619-637.
- Lantz, Brendan, and Marin R. Wenger. "The co-offender as counterfactual: A quasi-experimental within-partnership approach to the examination of the relationship between race and arrest." *Journal of Experimental Criminology* (2019): 1-24.
- Lee, Christopher T., Mary Huynh, Paulina Zheng, Alejandro Castro III, Francia Noel, Darlene, Jennifer Norton, Catherine Stayton and Gretchen Van Wye. 2017. "Enumeration and classification of law enforcement-related deaths New York City, 2010–2015." Technical report New York City Dept. of Health. https://www1.nyc.gov/assets/doh/downloads/pdf/about/law-enforcement-deaths.pdf.
- Legewie, Joscha, and Jeffrey Fagan. "Aggressive policing and the educational performance of minority youth." *American Sociological Review* 84, no. 2 (2019): 220-247.
- Liu, Sitian. "Incarceration of african american men and the impacts on women and children." (April 29, 2020). Available at SSRN: <a href="https://ssrn.com/abstract=3601259">https://dx.doi.org/10.2139/ssrn.3601259</a>.
- Lofstrom, Magnus, and Steven Raphael. "Crime, the criminal justice system, and socioeconomic inequality." *Journal of Economic Perspectives* 30, no. 2 (2016): 103-26.
- Logan, Trevon, and Samuel Myers, "The failure of economics and the marginalization of research on race," in Sebastian Galiani and Ugo Panizza (Editors). Publishing and Measuring Success in Economics. VoxEU CEPR(2020) pp. 117-124.

- Manski, Charles F., and Daniel S. Nagin. "Assessing Benefits, Costs, and Disparate Racial Impacts of Confrontational Proactive Policing." *Proceedings of the National Academy of Sciences PNAS* 114, no. 35 (2017): 9308-313.
- Mason, Patrick L. "Not black-alone: The 2008 presidential election and racial self-identification among African Americans." *The Review of Black Political Economy* 44, no. 1-2 (2017): 55-76.
- Mason, Patrick L., and Andrew Matella. "Stigmatization and racial selection after September 11, 2001: Self-identity among Arab and Islamic Americans." *IZA Journal of Migration* 3, no. 1 (2014): 1-21.
- Mason, Patrick L. and Samuel L. Myers, William A. Darity, "Is there racism in economic research?" *European Journal of Political Economy*, Volume 21, Issue 3, 2005, Pages 755-761.
- Mason, Patrick, Samuel L. Myers Jr., Margaret Simms, Yufeng Lai, and Xiang Liu. 2021. "Research Note: Citation Bias and the Economics of Race and Crime Literature." Roy Wilkins Center for Human Relations and Social Justice, Hubert H. Humphrey School of Public Affairs, University of Minnesota.
- Mechoulan, Stéphane. "The external effects of black male incarceration on black females." *Journal of Labor Economics* 29, no. 1 (2011): 1-35.
- Medoff, Marshall H. "The efficiency of self-citations in economics." *Scientometrics* 69, no. 1 (2006): 69-84.
- Mueller-Smith, Michael. "The criminal and labor market impacts of incarceration." Unpublished Working Paper 18 (2015).
- Myers, Jr., Samuel L. "The unintended impacts of sentencing guidelines on family structure." In Annual Meeting of the American Sociological Association, Washington, DC. 2000.
- Myers, Jr., Samuel L. "Black-white differentials in crime rates." *The Review of Black Political Economy* 10, no. 2 (1980): 133-152.
- Myers, Jr., Samuel L., and William J. Sabol. "Unemployment and racial differences in imprisonment." *The Review of Black Political Economy* 16, no. 1-2 (1987): 189-209.
- Oberfield, Zachary W. "Socialization and self-selection: How police officers develop their views about using force." *Administration & Society* 44, no. 6 (2012): 702-730.
- Patton, Christina L., and William J. Fremouw. "Examining "suicide by cop": A critical review of the literature." *Aggression and Violent Behavior* 27 (2016): 107-120.
- Perry, Motty, and Philip J. Reny. "How to count citations if you must." *American Economic Review* 106, no. 9 (2016): 2722-41.
- Petach, Luke, and Anita Alves Pena. "Local Labor Market Inequality in the Age of Mass Incarceration." *The Review of Black Political Economy* 48, no. 1 (2020): 7-41.

- Pettit, Becky. *Invisible Men: Mass Incarceration and the Myth of Black Progress*. New York: Russell Sage Foundation, 2012.
- Phelps, Michelle S., and Devah Pager. "Inequality and punishment: A turning point for mass incarceration?." *The Annals of the American Academy of Political and Social Science* 663, no. 1 (2016): 185-203.
- Posner, Richard A. "An economic analysis of the use of citations in the law." *American Law and Economics Review* 2, no. 2 (2000): 381-406.
- Price, Gregory N. "NEA Presidential Address: Black Economists of the World You Cite!!" The *Review of Black Political Economy* 35, no. 1 (January 2008): 1–12.
- ---- "The problem of the 21st century: Economics faculty and the color line." *The Journal of Socio-Economics* 38, no. 2 (2009): 331-343.
- Price, Gregory N., and Maxton Allen. "The scholarly status of blacks in the economics profession: have the National Economic Association and the Review of Black Political Economy mattered?." *The Review of Black Political Economy* 41, no. 1 (2014): 1-11.
- Price, Gregory N., and Rhonda V. Sharpe. "Is the economics knowledge production function constrained by race in the USA?." *Journal of the Knowledge Economy* 11, no. 2 (2020): 614-629.
- ——. "The dearth of Black economics faculty: Is racial bias the culprit?." *Publishing and Measuring Success in Economics* 2, no. 63.9 (2020): 1.
- Radicchi, Filippo, Santo Fortunato, and Claudio Castellano. "Universality of citation distributions: Toward an objective measure of scientific impact." *Proceedings of the National Academy of Sciences* 105, no. 45 (2008): 17268-17272. DOI: 10.1073/pnas.0806977105.
- Raphael, Steven, and Michael A. Stoll. *Why are so many Americans in prison?*. New York: Russell Sage Foundation, 2013.
- Rim, Nayoung, Bocar Ba, and Roman Rivera. "Disparities in police award nominations: Evidence from Chicago." In *AEA Papers and Proceedings*, vol. 110, 2020. pp. 447-51.
- Sarsons, Heather. "Recognition for group work: Gender differences in academia." *American Economic Review* 107, no. 5 (2017): 141-45.
- Sharpe, Rhonda Vonshay. "We've to build the pipeline. What's the problem? What's next? The remix." *The Review of Black Political Economy* 45, no. 3 (2018): 191-215.
- Sharpe, Rhonda Vonshay. "Black women economists: At the intersection of race and gender." *Women in Economics* (2020): 31.

- Sklansky, David Alan., "Not Your Father's Police Department: Making Sense of the New Demographics of Law Enforcement, "Journal of Criminal Law and Criminology 96, no. 3 Spring (2006).
- Stern, David I., and Richard SJ Tol. "Depth and breadth relevance in citation metrics." *Economic Inquiry* 59, no. 3 (2021): 961-977.
- Stevenson, Megan, and Margaret Shin. Reading List: *Black Economists on Criminal Justice*. University of Virginia Law School, July 4, 2020.
- Stewart, James B. "Be all that you can be?: Racial identity production in the US military." *The Review of Black Political Economy* 36, no. 1 (2009): 51-78.
- ——. "NEA Presidential Address, 1994: Toward broader involvement of black economists in discussions of race and public policy: a plea for a reconceptualization of race and power in economic theory." *The Review of Black Political Economy* 23, no. 3 (1995): 13-36.
- Stults, Brian J., and Eric P. Baumer. "Racial context and police force size: Evaluating the empirical validity of the minority threat perspective." *American Journal of Sociology* 113, no. 2 (2007): 507-546.
- Swaine, Jon, and Ciara McCarthy. "Killings by US police logged at twice the previous rate under new federal program." *The Guardian* (15 December 2016).
- Sykes, Bryan L., and Becky Pettit. "Mass incarceration, family complexity, and the reproduction of childhood disadvantage." *The Annals of the American Academy of Political and Social Science* 654, no. 1 (2014): 127-149.
- Temin, Peter. "The political economy of mass incarceration and crime: An analytic model." *International Journal of Political Economy* 47, no. 3-4 (2018): 317-329.
- Watkins-Hayes, Celeste. "Race-ing the bootstrap climb: Black and Latino bureaucrats in post-reform welfare offices." *Social problems* 56, no. 2 (2009): 285-310.
- ——. "Race, respect, and red tape: Inside the black box of racially representative bureaucracies." *Journal of Public Administration Research and Theory* 21, no. suppl\_2 (2011): i233-i251.
- Weisburst, Emily K. "Police Use of Force as an Extension of Arrests: Examining Disparities across Civilian and Officer Race." *AEA Papers and Proceedings* 109 (2019): 152-56.
- Western, Bruce. Punishment and inequality in America. New York: Russell Sage Foundation, 2006.
- Wexler, Noah. 2020. "Testing for Police Racial Profiling Using Data on Pre-Stop Race Visibility: Evidence from Minneapolis." University of Minnesota. Working paper: Presented Association for Public Policy and Management Conference.
- White, Ariel. "Family matters? Voting behavior in households with criminal justice contact." *American Political Science Review* 113, no. 2 (2019): 607-613.

- ——. "Misdemeanor disenfranchisement? The demobilizing effects of brief jail spells on potential voters." *American Political Science Review* 113, no. 2 (2019): 311-324.
- Winter, Harold. *The Economics of Crime: An Introduction to Rational Crime Analysis*. 2<sup>nd</sup> ed. New York: Routledge, 2020.
- Zaw, Khaing, Darrick Hamilton, and William Darity, Jr. "Race, wealth and incarceration: Results from the National Longitudinal Survey of Youth." *Race and Social Problems* 8, no. 1 (2016): 103-115.