

De-Policing as Reform? Police Tactics After Black Lives Matter's 2020 Protests

Please cite as: Murgolo, Emanuele. 2026. "De-Policing as Reform? Police Tactics after Black Lives Matter's 2020 Protests." *American Politics Research* 54 (4): 500–511.
<https://doi.org/10.1177/1532673X261443520>

ACCEPTED VERSION

Abstract

Can mass protests for racial justice influence police patrol tactics? Which racial and spatial mechanisms underlie these changes? Previous literature suggests that high-profile events can lead individual agents to alter their enforcement activities by 'de-policing.' However, literature is scarce (and conflicting) about the relationship of de-policing with crime, and effects across racial groups are underexplored. In this article, I argue that this apparent de-policing is, in reality, a positive reform of police patrol tactics induced by public pressure, which forced law enforcement to reconsider its approach to police-civilian interactions and focus on adopting a conservative stopping strategy, more targeted against higher-risk individuals, and more sensitive regarding the unequal treatment of minorities. To do so, I analyze this issue combining pedestrian stops and crime data from Chicago, asking whether the 2020 BLM protests led the Chicago Police Department to change its patrol strategy. When protests erupted, crime and policing got progressively decoupled: when criminality rose, stops did not. While overall crime simply returned to its pre-BLM (and pre-COVID-19) trends and levels, policing changed radically: stops, searches and arrests dropped and became stationary, while hit rates rose sharply. Stops also decreased differently across racial groups: almost exclusively for Black civilians, and mostly in minority districts. This decline in minority policing is evident across all officer groups, further indicating that the change reflects a broad shift in policing tactics rather than individual-level shirking.

Keywords: policing, Black Lives Matter, de-policing, social movements, police reform

1 Introduction

Policing in the U.S. has gone under increasing scrutiny in the last decade, as movements such as Black Lives Matter have shed light on how police profiling and violence disproportionately affect racial minorities (Edwards et al. 2019; Knox et al. 2020). In parallel, the scholarly literature has dedicated a lot of attention to how police-civilian interactions lead to disparities across outcomes such as stops, searches, arrests, or use of force (Gelman et al. 2007; Baumgartner et al. 2018; Shoub et al. 2020), underscoring the role law enforcement has in reproducing the marginalization of ‘Race-Class Subjugated Communities’ through coercion (Soss and Weaver 2017).

More recently, scholars have focused on how these police-civilian interactions change as a result of high-profile events, with authors describing a phenomenon of decreased law enforcement activity, particularly after police killings, known as ‘de-policing’, possibly to avoid getting caught in controversies (Shjarback et al. 2017). In this paper, I analyze a similar case: the events of the summer of 2020, when the murder of George Floyd, a Black man, at the hands of Derek Chauvin, a police officer in Minneapolis, spurred nationwide protests to end police violence and profiling against racial minorities. In many U.S. cities, this led to decreased police activity (Zhang et al. 2024; Roman et al. 2025).

Studying the effect of these demonstrations, this paper aims to answer these research questions: Did the 2020 Black Lives Matter protest in the U.S. induce changes in police tactics in Chicago? And if so, which mechanisms (related, in particular, to crime, space, and the policing of race) underlie these changes? Here, I argue that, possibly as a compound effect of outrage sparked by the murder of George Floyd, and of the massive demonstrations that represented a critical juncture for protests against discriminatory enforcement, the ‘de-

policing’ we observed in Chicago (the case study under consideration) actually reflects positive changes in police tactics, especially *vis-à-vis* racial minorities, induced by the movement’s demands for reform, and by the increased public scrutiny that ensued after the killing.

For my empirical strategy, I examine the time-series variation in rates of stops, searches, arrests, hits, and crime rates on one hand, and the association between policing and crime on the other, as well as the variation of these quantities across race and space. Moreover, I leverage officer-level data from Chicago to explore whether shifts in the agents’ enforcement patterns (particularly regarding the arrest patterns towards different racial groups) are associated with the officers’ demographic characteristics. In doing so, I probe into which mechanisms underlie de-policing and how this phenomenon has been partially misunderstood until now. Through this strategy, I aim to make an empirical contribution to the literature on de-policing, police patrol strategies, and the effect that social movements can have on law enforcement in the United States, particularly with respect to policing tactics and the well-documented racial disparities in their actions (Knox et al. 2020; Pierson et al. 2020).

What I find is that law enforcement activity did indeed decline, although as a result of both the COVID-19 pandemic and Black Lives Matter protests, making it difficult to separate these two effects, but with three important caveats, which constitute the core contributions of the paper. The first is that the 2020 Black Lives Matter protests had a unique effect in decoupling policing from crime: while at the onset of the pandemic the relationship between the two strengthened, as criminal activity became more strongly interconnected with stops, searches and arrests, once protests began in Chicago this association dropped dramatically, continued to do so for a year, and became practically null. The second is that the mechanisms underlying this change are nuanced: overall crime did not rise again after the demonstrations

(although violent crime did); rather, its pattern followed natural seasonal fluctuations, in part as a result of lockdown being lifted in the summer. At the same time, however, police activities transformed markedly: rates of stops, searches, and arrests fell and became stationary and, more importantly, hit rates rose steeply. The third is that de-policing happened primarily due to a reduction in stops of Black civilians, while activity involving Hispanics and Whites barely varied, suggesting that demonstrations for racial justice induced a positive change by prompting the CPD (Chicago Police Department) to curb disparities in stops. This is also reinforced by the results of the officer-level analysis, showing that the decline in the arrest rate of Black civilians can be appreciated across Black, Hispanic, and White officers alike, again suggesting that the shift did not stem from individual agents shirking from their duties, but rather it was the result of an overall shift in police tactics, particularly towards Black civilians.

This paper hence shows that protests can induce positive changes in policing strategy, making departments more aware of issues such as over-policing and prompting them to reconsider their approach to police-civilian interactions, including with respect to racial disparities. Exploring the racial, spatial, and officer-level mechanisms at play, I also contribute to the theorized mechanisms of de-policing, arguing that – at least in this case – it does not appear to be the result of individual officers shirking, to avoid getting entangled in controversies (Shjarback et al. 2017). Rather, it appears to stem from targeted changes in institutional practices, a finding that squares with recent scholarship that rejected the so-called ‘demoralization’ hypothesis to explain de-policing (Marier and Fridell 2020).

2 De-policing, crime, and race

Previous work in this field has focused on ‘de-policing’, also known as the ‘Ferguson Effect’ (Shjarback et al. 2017), i.e., the reduction of police activities (stops, searches, arrests) triggered by external events, such as protests, public scrutiny, or reform (Rosenfeld and Wallman 2019). Analyzing high-profile cases such as the murders of Michael Brown in 2014 in Ferguson and of George Floyd in 2020, researchers found that police activities declined as a result of Black Lives Matter protests putting police brutality and discrimination at the center of the public eye (Powell 2023), although sometimes with contrasting evidence (Stone et al. 2009; Chanin and Sheats 2018; Kim 2024b).

However, which mechanisms underlie these changes are still unclear: little research (and little consent in the field) exists on whether de-policing is associated with other factors such as criminal activity or local sociodemographic characteristics. In this regard, while researchers sometimes contend that this retreat has at times caused a spike in crime levels (Shi 2009; Powell 2023; Kim 2024a), this relationship might not be as evident as it is argued (Morgan and Pally 2016). Moreover, most scholars do not explore the interaction of de-policing with race, which can be especially relevant in the context of studying the effect of movements for racial justice. The few studies that do examine these dynamics find that de-policing is associated with neighborhood composition (Shjarback et al. 2017; Kim 2024b), and that its effects extend across racial groups (Zhang et al. 2024).

The extant literature is also fragmented in the selection of outcomes, as most scholars do not test comprehensively for changes in police activity across all types of law enforcement actions, such as stops, searches, arrests, and hit rates¹. Equally important is the fact that one of the theorized mechanisms of why we observe de-policing, i.e., individual officers shirking

¹ Hit rates are defined as the percentage of successful stops, i.e., those where a search is performed, and where policemen retrieve contraband. They can be an informative measure of how effective the patrol strategy is (Ayes, 2002).

from their duties due to fear of public scrutiny, is contested and lacks comprehensive empirical evidence that leverages officer-level data. This is why, in the research design for this study, detailed in Section 3, I address these gaps using Chicago as a case study and the fine-grained data it offers.

Until now, prior literature has largely framed de-policing as a response of individual agents to public scrutiny and outrage. The nationwide protests of summer 2020, however, constituted a major turning point in the recent trajectory of the Black Lives Matter movement, and a critical juncture in bottom-up demands for police reform (Francis and Wright-Rigueur 2021). This, I argue, may have generated additional pressure on law enforcement agencies, especially in cities with more prominent demonstrations, such as Chicago, to reform their modes of interaction with minority civilians.

2.1 Police responsiveness to change

In this paper, I hence focus on whether and how de-policing happened in Chicago after the 2020 BLM demonstrations. The emphasis on studying the mechanisms of de-policing is particularly relevant, as it intersects with the broader literature on organizational responsiveness by police agencies to external events, policy reforms, or internal mandates. Scholars have, at times, highlighted the organizational constraints that pose significant obstacles to police reform, particularly focusing on resistance from the brass and rank-and-file officers, as well as from police unions (Skogan 2008), possibly related to a cultural unwillingness to reform (Robinson 2020). Whether we could reasonably expect law enforcement agencies to be responsive to external events is, hence, an open question that merits some discussion.

While implementing successful police reform has proved hard for the aforementioned reasons, other scholars have underscored how law enforcement has, in other situations, deeply changed its routine activities as a result of internal or external stimuli. Studying the effect of Black Lives Matter on police violence, Campbell (2024) shows that places with an early onset of BLM demonstrations saw a significant reduction in police lethal use of force, as a response to increased public scrutiny. Others have reported similar results from Chicago, showing that increased police oversight after high-profile police killings led to a decrease in stops and use of force incidents (Rivera and Ba 2026).

Law enforcement practices have also been shown to change in response to internal regulations. A recent study on a police mandate in Fayetteville, NC, by Epp and Erhardt (2021) finds that requiring officers to obtain written consent to conduct searches was associated with fewer searches but the same level of contraband retrieval, without any rise in crime levels. Mummolo (2018), studying a procedural change in the NYPD, found similar effects too: hit rates soared, unnecessary stops dropped, with no negative spillovers on criminal activity.

All in all, the literature hence shows that police agencies' responsiveness to internal or external events varies considerably, but external or internal events can definitely trigger substantial change in law enforcement activity. The degree of change likely depends on factors related to context, political and bureaucratic incentives, institutional rigidity and continuity, agency culture, and many others, especially due to the highly decentralized structure of U.S. policing (Robinson 2020). Nonetheless, scholars have found that, at times, law enforcement agencies in the U.S. can respond positively to public scrutiny and policy inputs by changing their behavior quite drastically. The central question of this study is whether this could have happened in Chicago, too.

3 Research design

In this paper, I hence aim to address these literature gaps – regarding the mechanisms across race, space, crime, and at the officer level, that underlie de-policing – to provide a comprehensive overview of how these processes can unfold. To do so, I examine Chicago as a case study, to conduct an in-depth analysis and on how these mechanisms unfolded in a peculiar local context, where police brutality and profiling have been prominent issues (Baer 2018; Bleakley 2019). Like many others, Chicago is a city that saw massive protests during the summer of 2020. Demonstrations started around May 28th, 2020, and according to data collected by the Armed Conflict Location & Event Data (ACLED), during the month of June 2020 alone, at least 51 protest events happened in Chicago, with as many as 30.000 people attending single demonstrations. Therefore, Chicago represents a relevant and informative case for examination, and analyzing a local context is well suited to the scope and objectives of this study, which centers on changes in police tactics following local protests and the mechanisms underlying those shifts. The CPD also collects an abundance of data regarding the nature of police-civilian interactions, containing information about race, space, and the patrolling officers, which fits the nature of the research questions posed in this paper.

To address the research questions at the core of the study, I use pedestrian stop data provided by the Illinois Department of Transportation (IDOT) and publicly available crime data². Both datasets provide geocoded information on where the stop or crime happened in Chicago and span from 2016 to 2021, although only the first contains individual-level information about race. The officer-level data was accessed through a FOIA request directed to the Chicago Police Department, and allows me to link the demographic characteristics of

² The crime data is collected under the Citizen Law Enforcement Analysis and Reporting (CLEAR) system by the CPD, and is available for download in the Chicago Data Portal.

an arrestee to those of the officer(s) participating in their arrest, particularly regarding the agents' race.

Concerning the research design, the variables of interest are police activity (defined as stops, searches, arrests, and hits) and crimes in Chicago. I analyze them jointly under the assumption that patrolling is, at least partially, informed by criminal activities (Rosenfeld and Fornango 2017). This is also the reason why I focus on pedestrian stops as the unit of analysis in my paper, since these are connected to police agents walking their 'beat' and monitoring local communities. These stops should, theoretically, act as a form of preventive policing, which has been found to have a positive effect in reducing crime (Petersen et al. 2023). They are hence suitable to study law enforcement strategy in general, as well as its connection to criminal activity.

As stated before, the interest of this paper lies not only in understanding if policing decreased after the Black Lives Matter protests of 2020, but especially in delving into the mechanisms that might explain the nature of the change in law enforcement's tactics. Hence, for my empirical strategy, I first use an Interrupted Time Series regression, a quasi-experimental method to gauge whether demonstrations had a significant effect on changing policing and crime patterns separately. Interrupted Time Series have been used effectively to study the effect of externalities on policing and in the de-policing literature as well (Chanin and Sheats, 2018; Mummolo, 2018; Powell, 2023).

Then, to study which mechanisms might explain change, I analyze the joint relationship between law enforcement activity – measured through stops, searches, arrests, and hit rates – and crime. I also explore how these changes over time played out across different racial groups, to see if changes were heterogeneous and if they were more beneficial for minorities, rather than White civilians. Finally, I also explore whether change was heterogeneous across

police officers’ characteristics (in particular, their racial status), to assess if the shift in police tactics was spread homogeneously across White and minority agents alike, or whether a group was more likely to be affected than the others. This also allows me to test, at least partially, whether any possible shift in de-policing might be resulting from individual officers, or an isolated group, shirking their duties, rather than a general change whose effects can be seen spread across the police force.

Regarding the analysis, potential limitations stem from the way the data are collected and reported. Police stop records are compiled manually by officers, and as noted by the Illinois Department of Transportation, these data are self-reported by police agencies. The same limitation applies to the crime data, that is also compiled by the Chicago Police Department (which, additionally, may introduce some endogeneity concerns, as the crime data may be a function of police activity). Recent scholarship indicates that systematic underreporting by police represents an additional source of bias that likely affects estimates of racial disparities (Cook and Fortunato 2022; Watson et al. 2024). Other researchers have also emphasized that administrative records of police-civilian interactions are also vulnerable to post-treatment bias, which further complicates inference regarding racial disparities and discrimination (Knox et al. 2020). At the same time, similar administrative datasets have been widely used in prior empirical research, suggesting that, while imperfect, they remain appropriate for analyses of this type (Goel et al. 2016).

4 Results

4.1 Policing and crime

Table 1 presents the results of Interrupted Time Series models for police activity (measured as the rate of stops, searches, arrests, and hit rate), as well as crime, with daily

observations spanning from January 1st, 2016, to December 31st, 2021. Stops and searches are benchmarked over the 2020 5-year population estimates of the American Community Survey³, and are multiplied by 100,000 to standardize the coefficients. Searches and arrests are also benchmarked over population estimates and are multiplied by 1,000,000, while hit rates (which are, in turn, benchmarked over the number of total searches) are multiplied by 100. The models also include lagged dependent variables (lagged at *T minus one*) and month fixed-effects to control for autocorrelation and seasonality in the time-series (Wilkins 2018).

The three main coefficients in the Table (Before BLM, BLM Effect, and Post BLM) represent, respectively: the trend before the protests started (modeled as a continuous variable indicating the time passed since the start of the observations); the abrupt change induced by Black Lives Matter (a dummy variable indicating the passing of the policy); the subsequent long-term trends (modeled as a continuous variable describing the units of time passed since the policy implementation), against the counterfactual of what the tendency would have been if the demonstrations had not taken place. Models are estimated for the entire city, while an analysis of changes by police district can be found in Section B of the Online Appendix.

Table 1: Interrupted Time Series Models Coefficients. Full models include a lagged DV and fixed-effects by month

	Stops		Searches		Arrests		Hits		Crimes	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Before BLM	0.001*** (0.0001)	0.0004*** (0.0001)	0.01*** (0.0003)	0.004*** (0.0003)	0.0003** (0.0001)	0.0002* (0.0001)	0.004*** (0.0003)	0.004*** (0.0003)	-0.001*** (0.0001)	-0.001*** (0.0001)
BLM Effect	-4.43*** (0.16)	-1.25*** (0.12)	-10.53*** (0.47)	-4.07*** (0.40)	-3.74*** (0.22)	-1.80*** (0.20)	7.48*** (0.60)	6.53*** (0.62)	-1.43*** (0.18)	-1.07*** (0.14)
Post BLM	-0.001*** (0.0004)	-0.0001 (0.0003)	-0.01*** (0.001)	-0.002* (0.001)	-0.001* (0.001)	-0.0001 (0.0005)	0.01*** (0.002)	0.01*** (0.002)	0.001 (0.0005)	0.001** (0.0004)
Lag Rate Stops		0.74*** (0.01)								

³ Using yearly estimates does not change the results, as the year-to-year variation in population estimates by race is negligible.

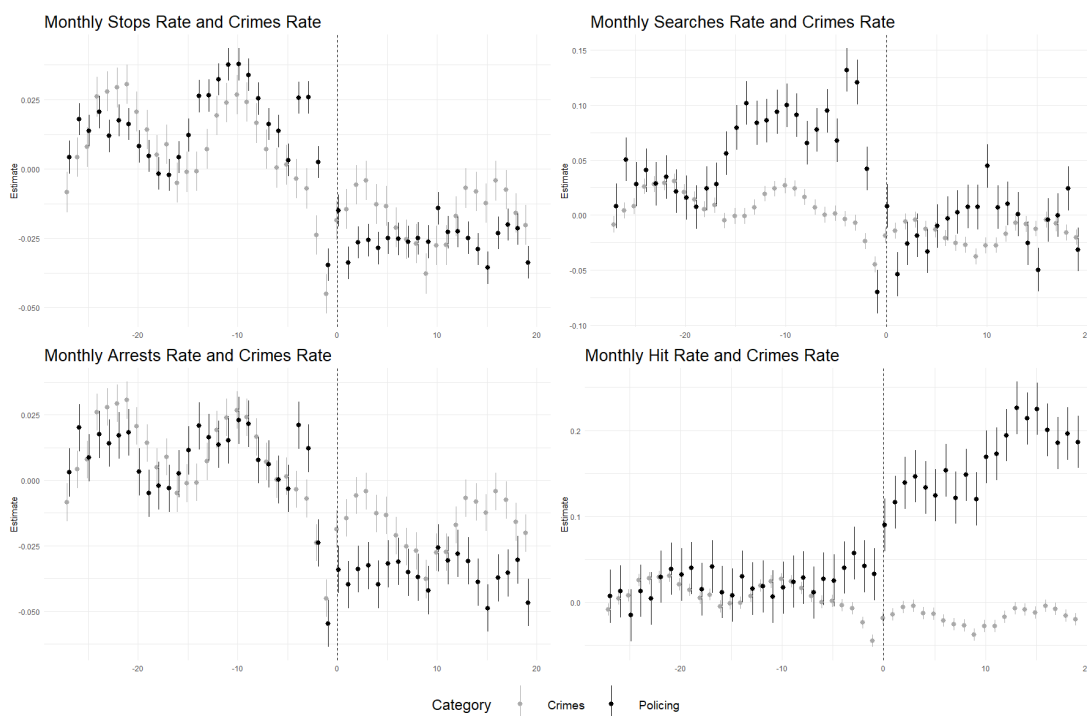
Lag Rate Searches						0.62***				
						(0.02)				
Lag Rate Arrests							0.55***			
							(0.02)			
Lag Hit Rate								0.08***		
								(0.02)		
Lag Rate Crimes										0.49***
										(0.02)
Constant	5.53***	1.41***	9.78***	4.65***	8.30***	4.15***	19.07***	16.86***	14.83***	7.07***
	(0.08)	(0.12)	(0.24)	(0.37)	(0.12)	(0.23)	(0.31)	(0.65)	(0.09)	(0.28)
FE	No	Yes	No	Yes	No	Yes	No	Yes	No	Yes
Observations	2,192	2,191	2,192	2,191	2,192	2,191	2,192	2,191	2,192	2,191
<i>Note:</i> *p<0.1; **p<0.05; ***p<0.01										

These initial models show three things: one, that de-policing across stops, searches, and arrests happened both in the immediate aftermath of protests and continued in the longer term. Two, that overall crime dropped as a result of demonstrations, and then did not change significantly in the long term. Three, that hit rates grew immediately, and that this change was sustained in the longer run, meaning that stops and searches became more effective in retrieving contraband. This indicates that Black Lives Matter demonstrations had both short and long-term implications in changing police tactics, both by themselves and in relation to criminality: de-policing did not correspond to a spike in overall crime in Chicago (although model 10 shows a minor increase, discussed below), while stops became more effective in retrieving contraband. These results are robust to the inclusion of lagged dependent variables and month fixed-effects, as well as to a wide set of robustness checks displayed in the Online Appendix, Section F (including models with clustered standard errors at the police-district level, and hierarchical models with district-level random intercepts). A caveat is found in the ITS model that includes only the rate of violent crimes (Table F.1), which displays a slight increase for those after the demonstrations. It remains unclear, however, whether this

represents a direct effect of decreased police activity or is instead driven by other factors, such as the aftermath of COVID-19 lockdowns. Previous research likewise finds limited evidence that increases in violent crime can be directly attributed to de-policing (Rosenfeld and Wallman 2019).

To visualize the change induced by BLM, I then plotted the monthly trend of policing activities (stops, searches, arrests, hits) against crime. The dashed line represents the month of May, when protests started, and observations span from January 1st, 2018, to December 31st, 2021. The y-axis measures change compared to the reference month (i.e., January 2018). Figure 1 is consistent with the ITS model results: stops, searches, and arrests declined, hit rates increased, and crime rose, but only returned to its pre-pandemic levels.

Figure 1: Change in monthly rates of police activity vs. crime. Rates are benchmarked over 2020 ACS 5-year population estimates (total population)



Among these, the change in hit rates is one of the most relevant, statistically and substantially. The fact that the police reduced their enforcement activities is, on one hand, not

associated with any significant rise in criminal activity, which never really surpasses the pre-pandemic trends. Moreover, as overall crime did not rise beyond the pre-pandemic and pre-BLM levels, policing became much more effective: agents who performed a stop retrieved contraband at a much higher rate than before the protest. Previous literature had claimed that de-policing can lead to crime increases (Powell, 2023; Kim, 2024a) and that its underlying mechanisms are to be found in the fact that protests inhibit agencies from engaging with proactive policing. This analysis shows that this is not necessarily the case, at least when considering overall crime levels. After the demonstrations, and due to the public scrutiny and pressure, the CPD became more effective in its enforcement activities: it initiated less contact with civilians, searched them and arrested them at lower rates than before, and yet almost doubled the probability of retrieving contraband in a stop (Figure C.3). Protests functioned effectively: civilian oversight and demand for change forced law enforcement to modify their tactics, and whether it was voluntary or not, the effects were mostly positive.

Further evidence that the police in Chicago shifted their policing approach as a result of protests, and that this did not directly lead to a crime spike, can be found in the fact that the association between criminal activity and stops, searches, arrests, and hits significantly changed after the onset of the protests. Figure 2 shows the rolling correlation between police activity and crime⁴ and the changes due to the COVID-19 pandemic first lockdown, as well as to the eruption of the Black Lives Matter demonstrations.

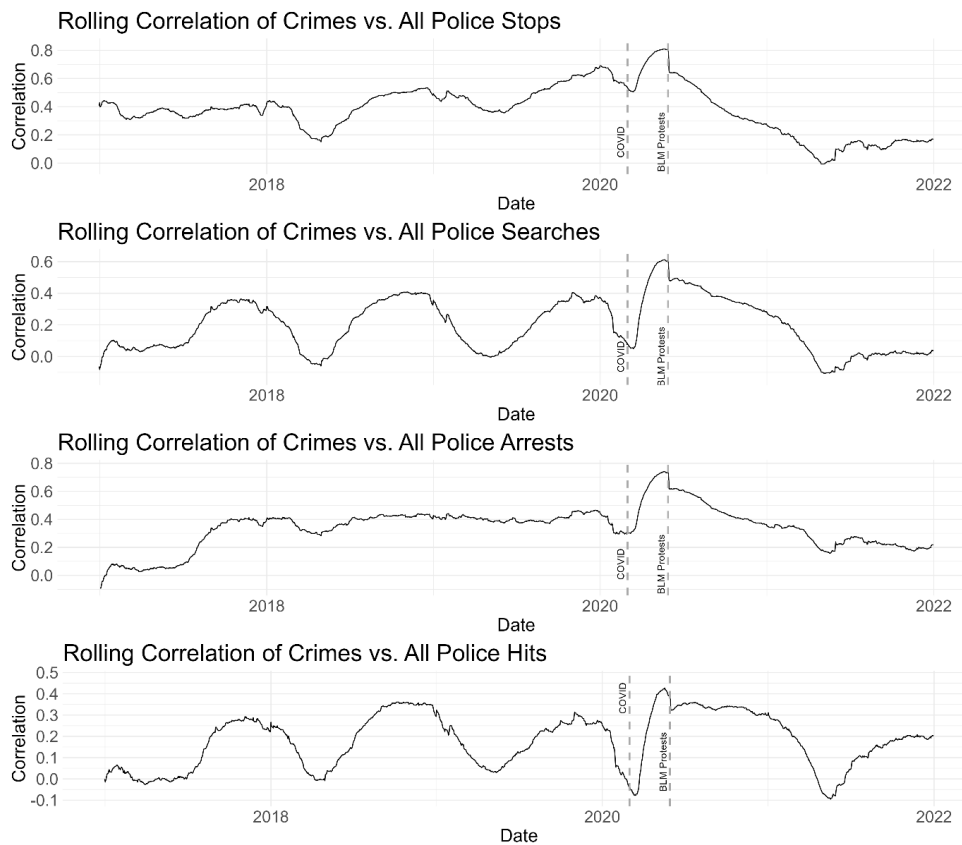
Naturally, one would assume the existence of an association between policing and criminality, as law enforcement is tasked, normally, with the fight and prevention of crime. In the graph, we see that before March 2020, stops and arrests are at least partially explained by crimes. Searches and hits, on the other hand, exhibit a different behavior, with seasonal peaks

⁴ As noted above, because crime data are collected and reported by the CPD, the estimates may be subject to endogeneity-related bias.

and valleys in their relationship with criminality. However, all these patterns are broken by two events: the COVID-19 lockdowns and the Black Lives Matter protests. Regarding the first, the association between crime and policing shoots up, likely because people's movements were restricted and the police were able to zero in on criminal activity.

Then, on the day when protests started, the rolling correlation drops dramatically and continues on a downward trend for months following. This is more evident regarding the rolling correlation of crime with stops, searches, and arrests, which falls when protests start and continues on a downward trend afterwards. Hit rates behave differently in relation to crime: they have a downward jump, then stay stable for many months, before returning to the aforementioned seasonal trend of peaks and valleys. This, again, suggests that hits are a crucial component to understanding how law enforcement's strategy changed in the aftermath of the demonstrations.

Figure 2: Change in the Rolling Correlation of Stops/Searches/Arrests/Hits Vs. Crime



Squaring this finding with the previous tables and figures, this effect does not seem to be related to a significant change in criminal activity, which, as stated, does not surpass pre-lockdown levels, but rather to a change in the nature of policing strategy. What appears to have happened is that the CPD decoupled its patrol procedures from the volume of crime (which, after the lockdowns were lifted, started to grow, but only to return to its pre-pandemic seasonal fluctuations) and likely re-focused its strategy in the direction shown by results displayed in Table 1 and Figure 1: stopping less, and more deliberately, cutting unnecessary contact with civilians and focusing on higher-risk individuals to better tackle crime, which resulted in a sustained high association between hits and criminal activity for months after the demonstrations.

Two relevant caveats exist to the analysis of the relationship between policing and crime, and how it changed as a result of demonstrations. First, while it is true that ITS models and

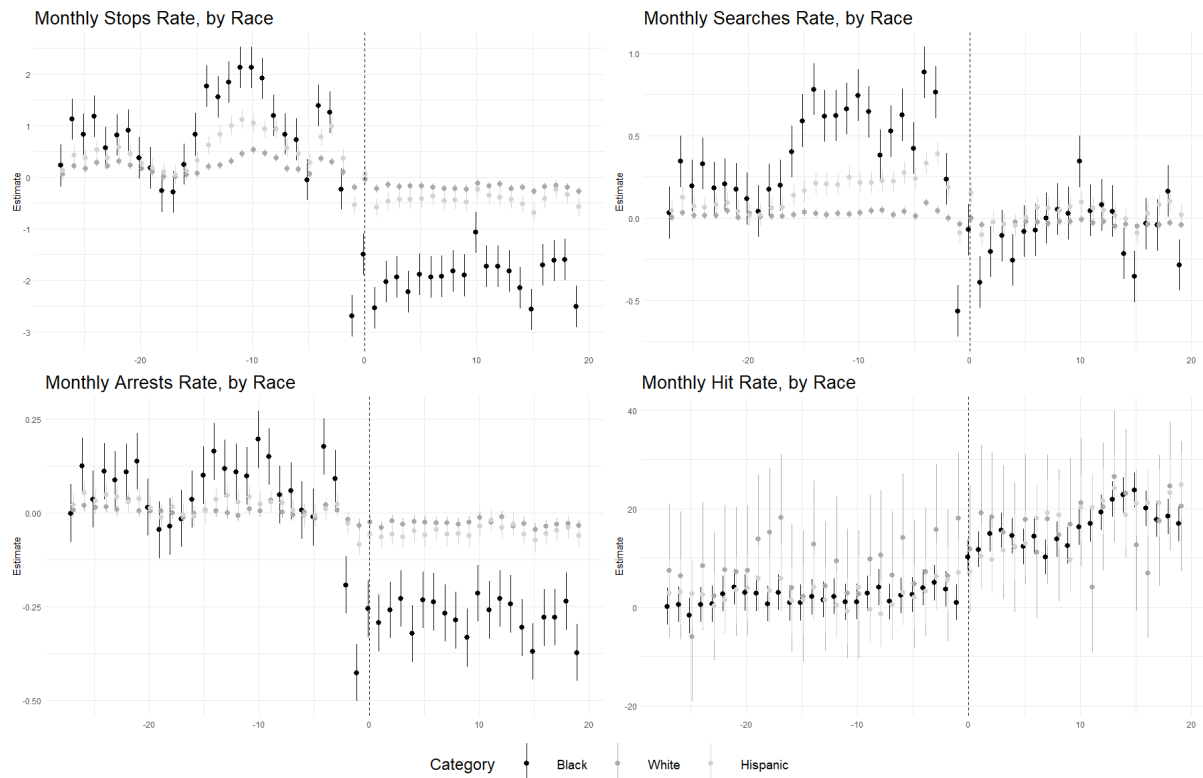
the figures do not show an increase in overall crime, when analyzing only violent crime, ITS models display a minor increase in the violent crime rate after May 2020 (see Table F.1, Online Appendix). Moreover, the analysis of clearance rates displayed in Section H of the Online Appendix show that the CPD cleared less crimes as a result of this shift in proactive policing, although the effect is mostly evident for lower-level offenses (i.e., not violent crimes), and it seems to have been, at least partially, a result of the COVID-19 lockdowns too, as time-series graph show the biggest drop in clearances happening during the initial pandemic months.

4.2 The policing of race after Black Lives Matter

To analyze the mechanisms of change, this section first shows how the degree of monthly⁵ changes in police activity varied across racial groups, considering Blacks, Hispanics, and Whites: results are displayed in Figure 3.

⁵ If we change the level of aggregation to weeks, the results do not change. See also Figure D.1 in the Appendix

Figure 3: Change in monthly stops/searches/arrests/hit rates, by race. Rates are benchmarked over 2020 ACS 5-year population estimates, by racial group



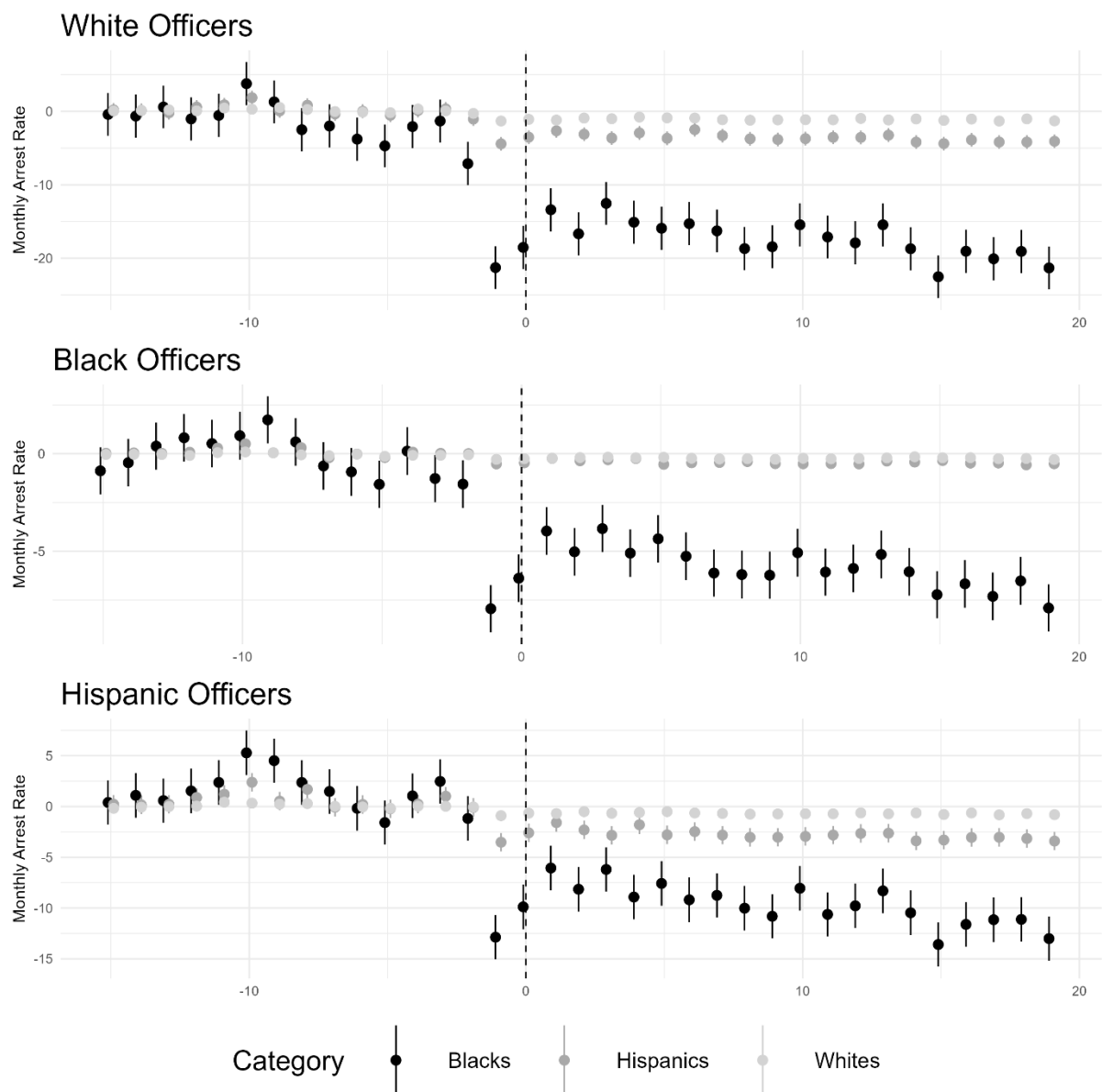
On one hand, a small difference can be seen in hit rates rising more, after BLM, for minorities (see also Figure C.3 in the Online Appendix). This suggests that the stopping strategy became particularly more conservative regarding interactions with Black and Hispanic civilians. More importantly, this is paired with the fact that lower police activity happened with a high degree of heterogeneity across racial groups: the most significant change is seen for Black civilians, who were stopped and arrested less, suggesting once again that de-policing by itself is an insufficient framework to describe what came about, at least in the case of Chicago, as a consequence of Black Lives Matter's protests of 2020. The demonstrations had a positive effect in curbing some unfair policing practices, with particular benefits for Black residents of the city. To put the effect size into perspective, the CPD, in the 365 days after BLM, stopped *on average* 135 Black people less, every day, compared to the same period between May 2018 and May 2019.

To further probe into the mechanisms of change, particularly regarding how the Chicago Police Department shifted its police tactics *vis-à-vis* the policing of race, I also leverage a dataset, obtained through a FOIA request to the CPD, that allows me to link the race of arrested civilians to that of the arresting officer(s)⁶. This allows me to see whether the decrease in arrests against Black civilians was driven by a particular group of officers or whether the change was spread evenly, regardless of the agents' demographics.

Figure 4 below displays the change in the monthly arrest rates, by officer and civilian race, between 2019 and 2021. As shown, results are in line with previous findings that show a decrease in Black arrests, but no substantial change in policing towards White and Hispanic civilians. More importantly, the Figure shows that all officer groups substantially decreased their arrest numbers against Black residents after the demonstrations, with results lasting, again, well into 2021.

⁶ Many arrest events are linked to multiple officers. Results do not change if I consider only the race of the primary arresting officers in the data.

Figure 4. Change in monthly arrest rates among officers of different racial groups (White, Black, Hispanic), against Black/Hispanic/White civilians. Observations spanning from January 1st, 2019, to December 31st, 2021



To check for any heterogeneity in the spatial variation of changes in policing, I also plot the association between stops and crime, and the changes in the rate of stops (overall, and against Black civilians only) by police district. Results are displayed in the Appendix, Sections B and C, and show that while the correlation between stops and crimes is quite homogeneous across districts, stops fall mostly in those areas where Blacks (or, in some

cases, Hispanics) represent a bigger share of the population. On the other hand, whiter districts exhibit smaller or null changes in the rate of stops, signifying that the change in police tactics was not random across space and race. The decrease in stops does not appear to be linked to the officers' racial composition in the district (see Table A.4 in the Appendix), nor by the officers' sex (Figure I.1, Appendix), again reinforcing the idea that changes cannot be explained by the individual actions of a smaller group of agents (e.g., minority officers) reacting to Black Lives Matter.

I also conduct a further spatial analysis, using spatial regressions, where I analyze changes in monthly police activity by neighborhood (census tract), adjusting for socio-economic covariates. Results are displayed in Section G of the Online Appendix and confirm the results of the main text. Figure G.1, in particular, shows that enforcement activity against Black civilians changed without any visible pattern regarding the neighborhoods' characteristics.

Finally, as a further robustness check, I also include a difference-in-differences model in the Appendix, Section E, testing again for whether stops against Black people fall significantly after the demonstrations, and it confirms the results shown in the main text. This model is only included as a robustness check, as it ultimately rests on the assumption that Black people were the only group 'treated' by the change in the CPD's patrol tactics.

5 Conclusions

The paper asks whether the effect of the 2020 Black Lives Matter protests can be framed as either de-policing or reform. The answer is, in a sense, both: law enforcement diminished its activity, changed its patrol approach, and this resulted in less yet more effective policing. Studying it by itself, as well as through its association with crime, I show that lower law enforcement activity had no evident negative spillovers on crime, which did not rise during

the months of de-policing. At the same time, racial disparities in stops and arrests shrank, while stops themselves became more effective. Findings somewhat differ from what Roman et al. (2025) reported when analyzing four other contexts (Austin, Los Angeles, Philadelphia, and Seattle), especially regarding hit rates, further underscoring Chicago's interesting features as a case study. At the same time, they contribute to a rich literature that shows that, albeit under the right circumstances and depending on institutional and contextual factors, police agencies can respond to external or internal demands to change their police patrol tactics, with positive spillovers on racial disparities (Mummolo 2018; Epp and Erhardt 2021; Rivera and Ba 2026).

I argue that results indicate two things: 1) de-policing happened, especially regarding stops, but contrary to what previous findings show, we cannot say that it led to a spike in crime rates; 2) law enforcement changed its tactics as a result of protests, not necessarily by shirking, but rather becoming more cautious when deciding to initiate a stop, with positive spillovers on the efficacy of hit rates and on racial disparities all around. Police-civilian interactions became more effective, and unequal treatment against Black civilians shrank significantly, without negative effects on crime. Most of these changes in patrol tactics happened across all police districts in Chicago, are associated with the districts' racial composition, are sustained in the long-term, show the biggest effect for interactions with Black civilians, and are not driven by a particular group of officers. This suggests that the shift was neither random nor driven by individual agents, nor limited in its scope. Rather, it implies that the research question at the core of the paper receives an affirmative answer: the CPD did indeed make big (and positive) changes due to the protests' pressure. Police activity went down in quantity and up in quality, mostly for minorities, and without causing an increase in criminality. Ultimately, this paper makes a relevant empirical contribution,

showing that organized, massive protests such as those of the Summer of 2020 are a force that has the power to change deep and entrenched institutional practices, although not as overtly as we might be used to.

The analysis is not without limitations, especially as the scope is limited to the analysis of one city, with peculiar demographic and institutional characteristics. Future research should continue to explore the effects of the 2020 demonstrations on de-policing and its mechanisms, from a comparative perspective, especially if officer-level data became available in other contexts. The broader literature suggests that whether de-policing happens, and how it plays out, is intrinsically tied to local characteristics, which makes it hard to broadly generalize the results seen here. Another important caveat is the aforementioned observed growth in violent crimes: while it is unclear whether it was directly related to the observed de-policing, future research should focus on determining whether the observed decrease in proactive policing can be linked to the growth of violent crimes in many U.S. cities, especially homicides. The analysis of clearance rates shown in the Online Appendix, for example, suggests that there might have been some negative spillovers that negatively affected the clearance of (mostly) non-violent crimes, although more research is needed to understand these patterns. Related to this, future researchers could leverage, if available, data on 911 calls and public calls for service, to further our understanding of the underlying mechanisms of de-policing. Finally, a limitation akin to all police studies that make use of administrative records of stops and crimes stems from the aforementioned biased nature of the data, where systematic underreporting and post-treatment bias are likely to weaken the reliability of such data.

As much as we are used to think of police reform as something happening in the institutional realm – such as through mandatory bias training, added oversight, community

policing programs (to cite some) – it is undeniable that pressure from civil society can be a factor in changing police behavior, although not as overtly as laws or programs usually do. Looking at the results of this paper, it is hard to argue against the fact that demonstrations for racial justice in policing did, indeed, force the CPD to rethink its strategy. The change is evident: as the movement pushed its demands, police-civilian interactions decreased, became more effective and targeted, and less discriminatory.

6 References

- Baer, Andrew S. 2018. “The Men Who Lived Underground: The Chicago Police Torture Cases and the Problem of Measuring Police Violence, 1970-2016.” *Journal of Urban History* 44 (2): 262–77. <https://doi.org/10.1177/0096144217691770>.
- Baumgartner, Frank R., Derek Andrew Epp, and Kelsey Shoub. 2018. *Suspect Citizens: What 20 Million Traffic Stops Tell Us About Policing and Race*. Cambridge University Press.
- Bleakley, Paul. 2019. “A Thin-Slice of Institutionalised Police Brutality: A Tradition of Excessive Force in the Chicago Police Department.” *Criminal Law Forum* 30 (4): 425–49. <https://doi.org/10.1007/s10609-019-09378-6>.
- Campbell, Travis. 2024. “Black Lives Matter’s Effect on Police Lethal Use of Force.” *Journal of Urban Economics*, RACE, SOCIAL JUSTICE, & CITIES, vol. 141 (May): 103587. <https://doi.org/10.1016/j.jue.2023.103587>.
- Chanin, Joshua, and Brittany Sheats. 2018. “Depolicing as Dissent Shirking: Examining the Effects of Pattern or Practice Misconduct Reform on Police Behavior.” *Criminal Justice Review* 43 (2): 105–26. <https://doi.org/10.1177/0734016817704696>.
- Cook, Scott, and David Fortunato. 2022. “The Politics of Police Data: State Legislative Capacity and the Transparency of State and Substate Agencies | American Political

- Science Review | Cambridge Core.” *American Political Science Review* 117 (1): 280–95. <https://doi.org/10.1017/S0003055422000624>.
- Edwards, Frank, Hedwig Lee, and Michael Esposito. 2019. “Risk of Being Killed by Police Use of Force in the United States by Age, Race–Ethnicity, and Sex.” *Proceedings of the National Academy of Sciences* 116 (34): 16793–98. <https://doi.org/10.1073/pnas.1821204116>.
- Epp, Derek A., and Macey Erhardt. 2021. “The Use and Effectiveness of Investigative Police Stops.” *Politics, Groups, and Identities* 9 (5): 1016–29. <https://doi.org/10.1080/21565503.2020.1724160>.
- Francis, Megan Ming, and Leah Wright-Rigueur. 2021. “Black Lives Matter in Historical Perspective.” *Annual Review of Law and Social Science* 17 (Volume 17, 2021): 441–58. <https://doi.org/10.1146/annurev-lawsocsci-122120-100052>.
- Gelman, Andrew, Jeffrey Fagan, and Alex Kiss. 2007. “An Analysis of the New York City Police Department’s ‘Stop-and-Frisk’ Policy in the Context of Claims of Racial Bias.” *Journal of the American Statistical Association* 102 (479): 813–23. <https://doi.org/10.1198/016214506000001040>.
- Goel, Sharad, Justin M. Rao, and Ravi Shroff. 2016. “Precinct or Prejudice? Understanding Racial Disparities in New York City’s Stop-and-Frisk Policy.” *The Annals of Applied Statistics* 10 (1): 365–94. <https://doi.org/10.1214/15-AOAS897>.
- Kim, Dae-Young. 2024a. “Did De-Policing Contribute to the 2020 Homicide Spikes?” *Police Practice and Research* 25 (3): 343–57. <https://doi.org/10.1080/15614263.2023.2235056>.
- Kim, Dae-Young. 2024b. “The 2020 De-Policing: An Empirical Analysis.” *Police Quarterly* 27 (3): 380–402. <https://doi.org/10.1177/10986111231218438>.

- Knox, Dean, Will Lowe, and Jonathan Mummolo. 2020. "Administrative Records Mask Racially Biased Policing." *American Political Science Review* 114 (3): 619–37. <https://doi.org/10.1017/S0003055420000039>.
- Marier, Christopher J., and Lorie A. Fridell. 2020. "Demonstrations, Demoralization, and de-Policing." *Criminology & Public Policy* 19 (3): 693–719. <https://doi.org/10.1111/1745-9133.12492>.
- Morgan, Stephen L., and Joel A. Pally. 2016. "Ferguson, Gray, and Davis: An Analysis of Recorded Crime Incidents and Arrests in Baltimore City, March 2010 through December 2015." Preprint. <https://doi.org/10.31235/osf.io/nshme>.
- Mummolo, Jonathan. 2018. "Modern Police Tactics, Police-Citizen Interactions, and the Prospects for Reform." *The Journal of Politics* 80 (1): 1–15. <https://doi.org/10.1086/694393>.
- Petersen, Kevin, David Weisburd, Sydney Fay, Elizabeth Eggins, and Lorraine Mazerolle. 2023. "Police Stops to Reduce Crime: A Systematic Review and Meta-Analysis." *Campbell Systematic Reviews* 19 (1): e1302. <https://doi.org/10.1002/cl2.1302>.
- Pierson, Emma, Camelia Simoiu, Jan Overgoor, et al. 2020. "A Large-Scale Analysis of Racial Disparities in Police Stops across the United States." *Nature Human Behaviour* 4 (7): 7. <https://doi.org/10.1038/s41562-020-0858-1>.
- Powell, Zachary A. 2023. "De-Policing, Police Stops, and Crime." *Policing: A Journal of Policy and Practice* 17 (January): paac070. <https://doi.org/10.1093/polic/paac070>.
- Rivera, Roman G., and Bocar A. Ba. 2026. "The Effect of Police Oversight on Crime and Misconduct Allegations: Evidence from Chicago." *The Review of Economics and Statistics* 108 (1): 57–74. https://doi.org/10.1162/rest_a_01377.

- Robinson, Laurie O. 2020. "Five Years after Ferguson: Reflecting on Police Reform and What's Ahead." *The ANNALS of the American Academy of Political and Social Science* 687 (1): 228–39. <https://doi.org/10.1177/0002716219887372>.
- Roman, Marcel, Klara Fredriksson, Chris Cassella, Derek A. Epp, and Hannah L. Walker. 2025. "The George Floyd Effect: How Protests and Public Scrutiny Changed Police Behavior." *Perspectives on Politics* 23 (4): 1250–70. <https://doi.org/10.1017/S1537592725000052>.
- Rosenfeld, Richard, and Robert and Fornango. 2017. "The Relationship Between Crime and Stop, Question, and Frisk Rates in New York City Neighborhoods." *Justice Quarterly* 34 (6): 931–51. <https://doi.org/10.1080/07418825.2016.1275748>.
- Rosenfeld, Richard, and Joel Wallman. 2019. "Did De-Policing Cause the Increase in Homicide Rates?" *Criminology & Public Policy* 18 (1): 51–75. <https://doi.org/10.1111/1745-9133.12414>.
- Shi, Lan. 2009. "The Limit of Oversight in Policing: Evidence from the 2001 Cincinnati Riot." *Journal of Public Economics* 93 (1): 99–113. <https://doi.org/10.1016/j.jpubeco.2008.07.007>.
- Shjarback, John A., David C. Pyrooz, Scott E. Wolfe, and Scott H. Decker. 2017. "De-Policing and Crime in the Wake of Ferguson: Racialized Changes in the Quantity and Quality of Policing among Missouri Police Departments." *Journal of Criminal Justice* 50 (May): 42–52. <https://doi.org/10.1016/j.jcrimjus.2017.04.003>.
- Shoub, Kelsey, Derek A. Epp, Frank R. Baumgartner, Leah Christiani, and Kevin Roach. 2020. "Race, Place, and Context: The Persistence of Race Effects in Traffic Stop Outcomes in the Face of Situational, Demographic, and Political Controls." *Journal of Race, Ethnicity, and Politics* 5 (3): 481–508. <https://doi.org/10.1017/rep.2020.8>.

- Skogan, Wesley G. 2008. "Why Reforms Fail." *Policing and Society* 18 (1): 23–34.
<https://doi.org/10.1080/10439460701718534>.
- Soss, Joe, and Vesla Weaver. 2017. "Police Are Our Government: Politics, Political Science, and the Policing of Race–Class Subjugated Communities." *Annual Review of Political Science* 20 (1): 565–91. <https://doi.org/10.1146/annurev-polisci-060415-093825>.
- Stone, Cristopher, Todd Foglesong, and Christine Cole. 2009. "Policing Los Angeles Under a Consent Decree: The Dynamics of Change at the LAPD." *Program in Criminal Justice Policy and Management, Harvard Kennedy School*.
<https://www.hks.harvard.edu/publications/policing-los-angeles-under-consent-decree-dynamics-change-lapd>.
- Watson, Jeremy, Gordon Burtch, and Brad N. Greenwood. 2024. "Do Digital Technologies Reduce Racially Biased Reporting? Evidence from NYPD Administrative Data." *Proceedings of the National Academy of Sciences* 121 (24): e2402375121.
<https://doi.org/10.1073/pnas.2402375121>.
- Wilkins, Arjun S. 2018. "To Lag or Not to Lag?: Re-Evaluating the Use of Lagged Dependent Variables in Regression Analysis." *Political Science Research and Methods* 6 (2): 393–411. <https://doi.org/10.1017/psrm.2017.4>.
- Zhang, Yan, Jihong Solomon Zhao, and Chia-Hung Lin. 2024. "A Link Between the George Floyd Incident and De-Policing: Evidence From Police Arrests Across Three Racial and Ethnic Groups." *Police Quarterly* 27 (4): 475–504.

A. Summary statistics

This section presents summary statistics, first describing changes in police activity and the main types of criminal activity, before and after BLM protests. Then, the last two tables describe population and officer demographics by race, for each CPD district.

Relevant variation in policing can be seen, as displayed in Table A.1 in the proportion of searches, that went up, and of successful searches, also rising.

Table A.1: Summary statistics, police stops

BLM	Stops	Searches	Hits	Arrests	Prop. Searches	Prop. Hits	Prop. Arrest
Before	557989	142897	32733	70999	0.26	0.06	0.13
After	106595	45179	17408	14469	0.42	0.16	0.14

Regarding crimes, Table A.2 displays some of the main types of criminal acts, and their relative proportion over the crime total before and after Black Lives Matter Demonstrations took place. As can be seen the proportion of homicides rose slightly, while narcotics and theft diminished.

Table A.2: Summary statistics, crimes

BLM	Crimes	Narcotics	Theft	Homicide	Battery	Prop. Narcotics	Prop. Theft	Prop. Homicide	Prop. Battery
Before	1151932	57538	271201	2795	215233	4.99	23.54	0.24	18.68
After	339817	9063	64754	1388	65651	2.67	19.06	0.41	19.32

Table A.3 shows the racial composition of each police district in Chicago⁷, and whether the population is mostly Black. As it can be seen, the drops in stops shown in Figure B.1 and Figure C.2 are concentrated in those districts that have a bigger share of African-American residents.

Table A.3: Population demographics by police district

District	Total Population	White	Black	Hispanic	Percentage Black
1	62781	32952	13452	3766	21.43
2	95439	17747	65993	3242	69.15
3	75235	1472	71010	1123	94.38
4	123575	9925	76399	35381	61.82
5	74396	843	70064	2524	94.18
6	90841	312	88525	914	97.45
7	71071	262	68787	1167	96.79
8	247373	51491	52219	139854	21.11
9	165201	24307	19044	94610	11.53
10	118093	4300	39440	73441	33.40
11	70474	1664	59671	8118	84.67
12	127869	51775	23039	42329	18.02
14	117738	49809	8027	54039	6.82
15	59458	959	55468	2265	93.29
16	199476	138043	2022	45434	1.01
17	144096	55743	4782	62232	3.32
18	117041	88418	10681	5806	9.13
19	200786	150551	13305	20025	6.63
20	91279	49420	9909	16519	10.86
22	101941	34863	62094	3318	60.91
24	141038	60488	25322	29746	17.95
25	200391	29371	33033	133005	16.48

Finally, Table A.4 displays the officers' demographics by police district in Chicago, as of May 2020 (when demonstrations started)⁸. As can be seen, officers' demographics often do not match the district's neighborhood composition, with white officers being over-represented in many areas. This excludes the possibility that the decrease in policing against

⁷ Population data is obtained from the 2010 U.S. Census Population Estimates, cfr. <https://johnkeefe.net/chicago-race-and-ethnicity-data-by-police-district>.

⁸ Cfr. City of Chicago, Office of Inspector General, <https://igchicago.org/information-portal/data-dashboards/sworn-cpd-member-demographics-and-staffing/>

Blacks could be attributed, for example, to the individual-level decisions of Black officers, since changes do not appear to be linked to officers' demographics.

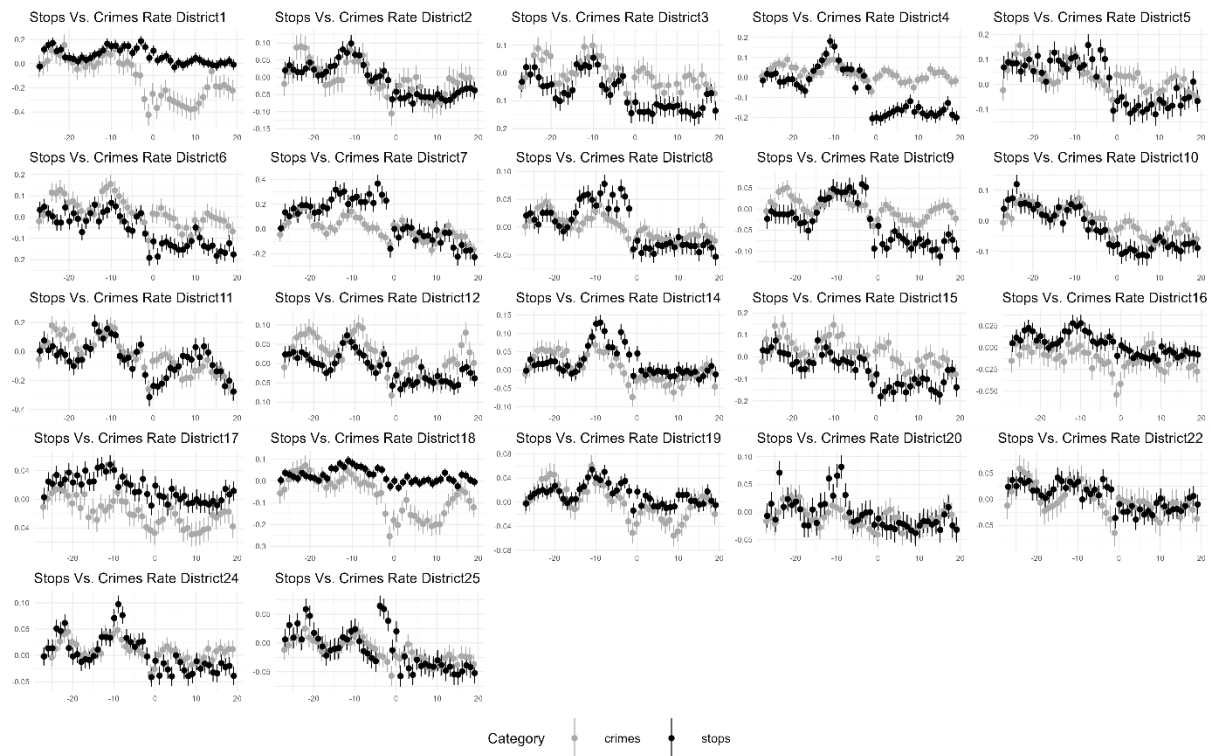
Table A.4: Distribution of sworn CPD members by district and race, May 2020

District	White	Black	Hispanic	Total	Percentage Black
1	162	67	100	338	19.82
2	76	200	86	380	52.63
3	81	174	97	370	47.03
4	179	103	97	387	26.61
5	103	188	55	350	53.71
6	108	194	95	408	47.55
7	182	129	137	463	27.86
8	216	33	141	400	8.25
9	196	35	139	390	8.97
10	134	25	197	367	6.81
11	223	71	138	451	15.74
12	155	41	153	369	11.11
14	103	28	137	291	9.62
15	169	52	107	344	15.12
16	194	9	57	273	3.30
17	132	17	80	253	6.72
18	221	50	107	399	12.53
19	203	47	113	393	11.96
20	145	16	65	252	6.35
22	141	74	69	286	25.87
24	192	16	59	299	5.35
25	228	25	160	435	5.75

B. Spatial heterogeneity by police district

This section explores spatial heterogeneity, by police district, in the rate of stops for all pedestrians (Figure B.1), as well as in the relationship between the volume of stops and crimes (Figure B.4). Regarding the first, change seems to be more evident in those districts that are located in the South Side of the city - where the population is mostly Black - as discussed in the next section of the Appendix too.

Figure B.1: Change in monthly rate of stops vs. crime, by police district



To better visualize these changes, the maps shown in Figure B.2 shows changes in the daily number of stops by police district. Again, as can be seen, the most prominent difference can be seen in areas with a higher Black population, where stops diminish more drastically. Changes can be compared to the plotted percentage of Black residents and officers by district, displayed in Figure B.3 below.

Figure B.2: Change in daily total of stops by police district, before/after BLM

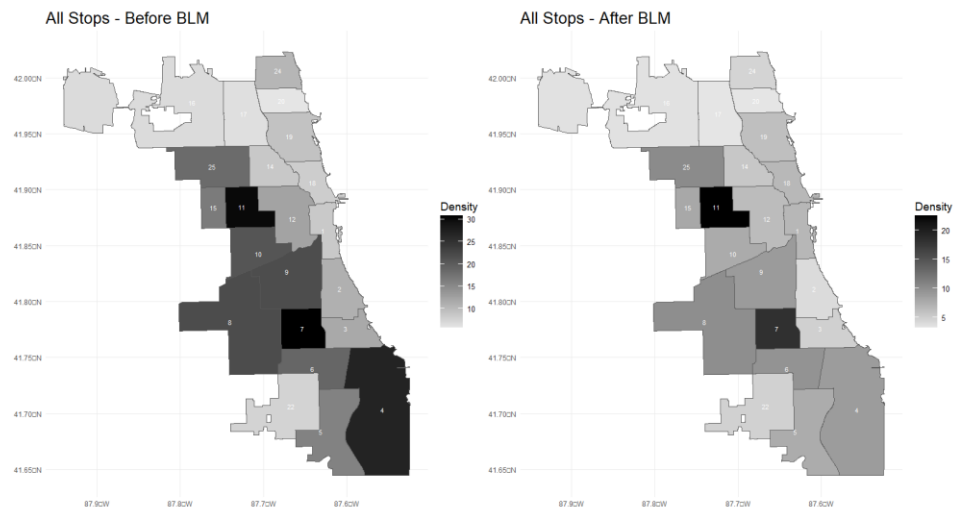
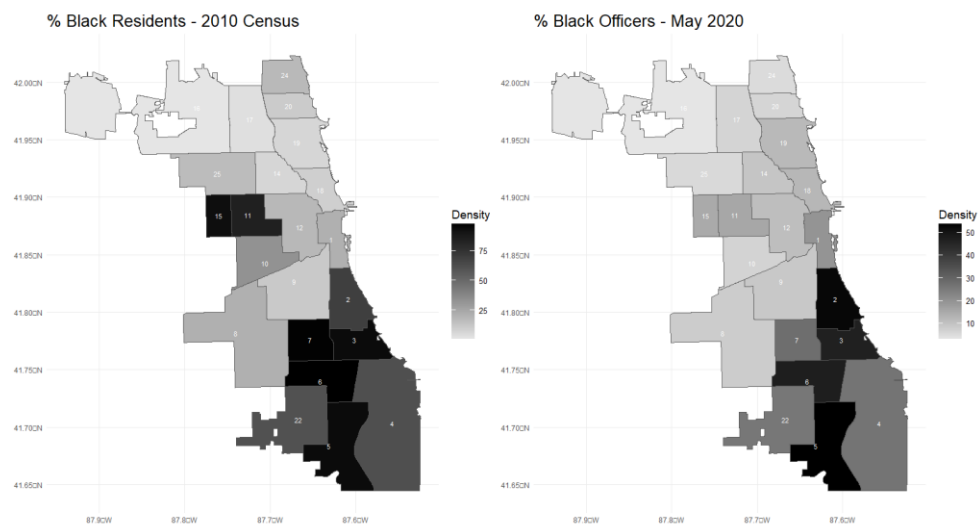
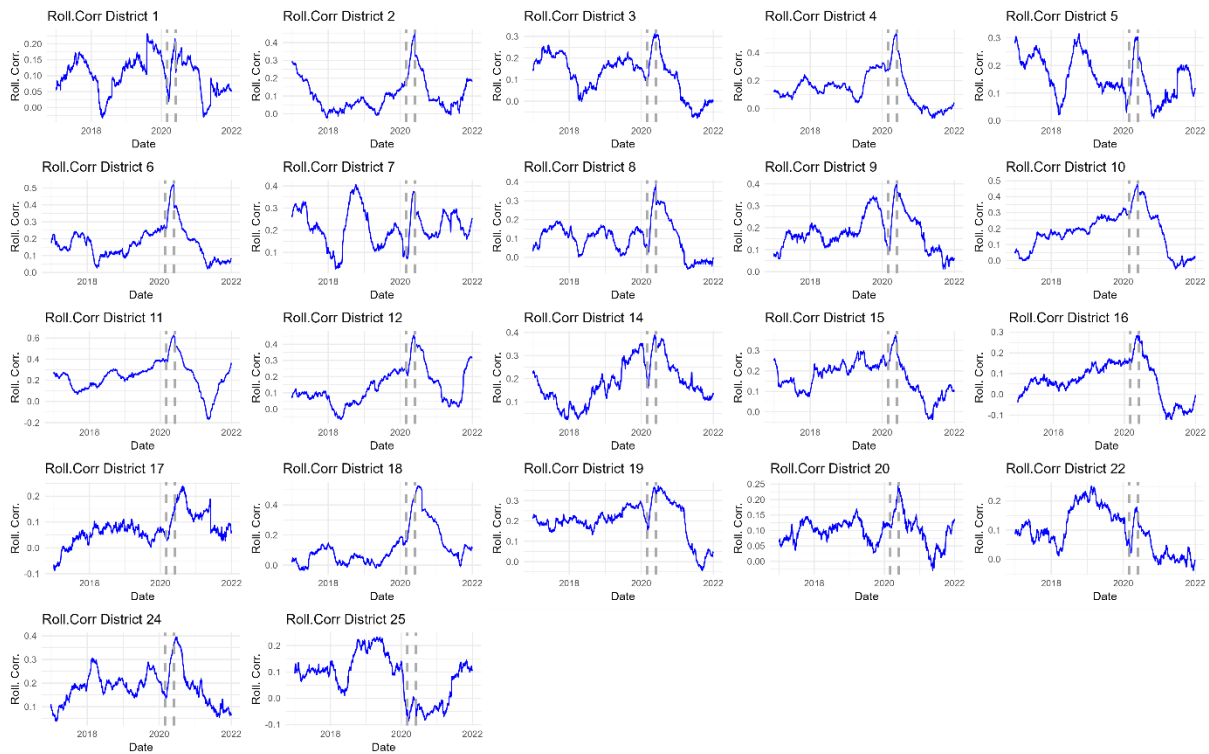


Figure B.3: Percentage of Black Residents/Officers, by Police District



On the other hand, changes in the rolling correlation of stops and crime exhibit very little apparent spatial variation: all districts appear to show an increase due to the COVID-19 pandemic, then a decrease due to Black Lives Matter’s demonstrations.

Figure B.4: Change in rolling correlation of stops vs. crime, by police district

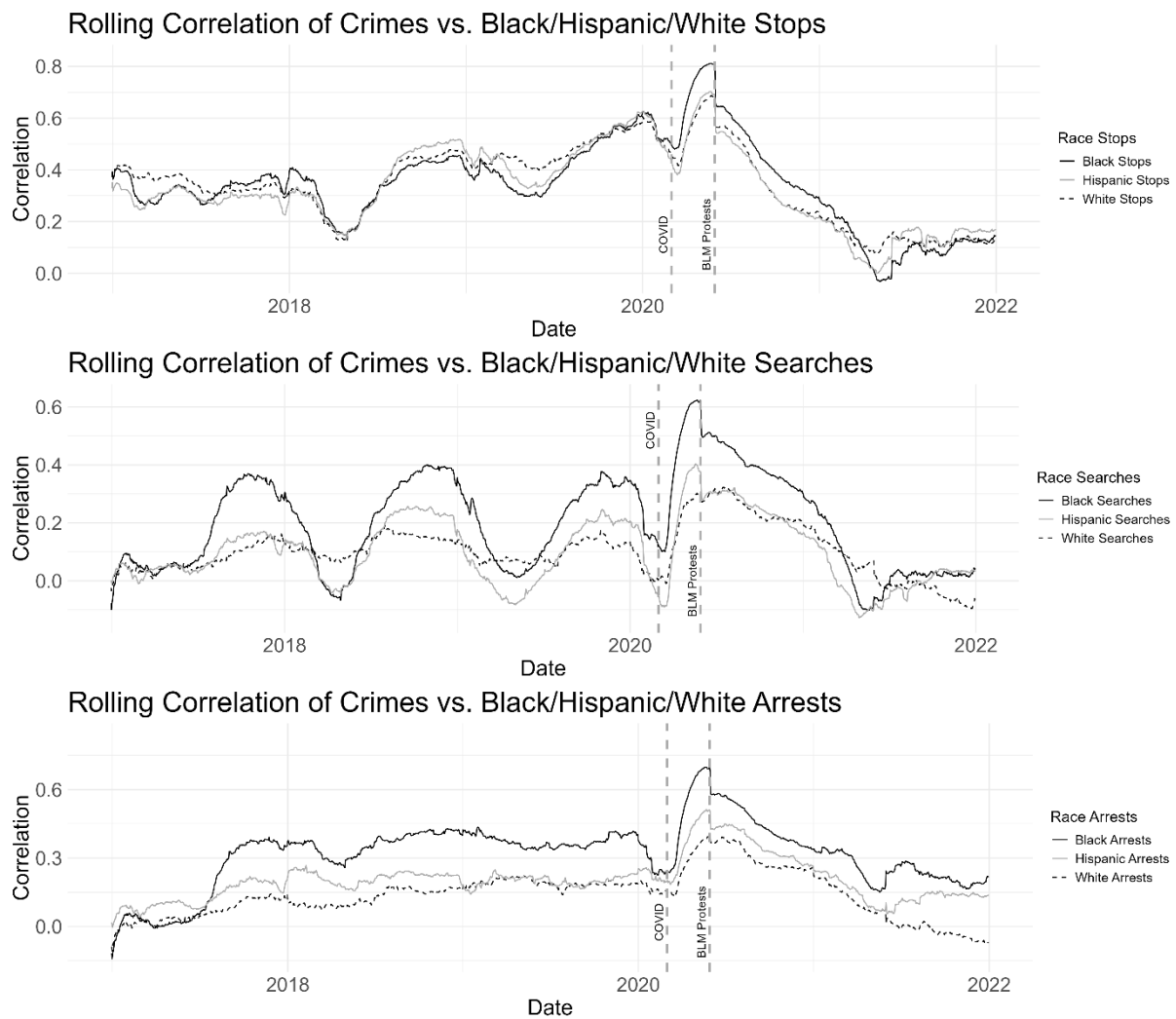


C. Effect heterogeneity by race

In this section of the Appendix I look at whether relevant indicators exhibit heterogeneity across racial groups, considering the three main racial demographics of the city: Blacks, Hispanics and Whites. Figure C.1 shows the rolling correlation of stops, searches and arrests vs. crimes for the three groups⁹. As can be seen, patterns are quite similar and do not show significant degrees of variability, although the effect appears to be slightly more evident for Blacks across the measured outcomes.

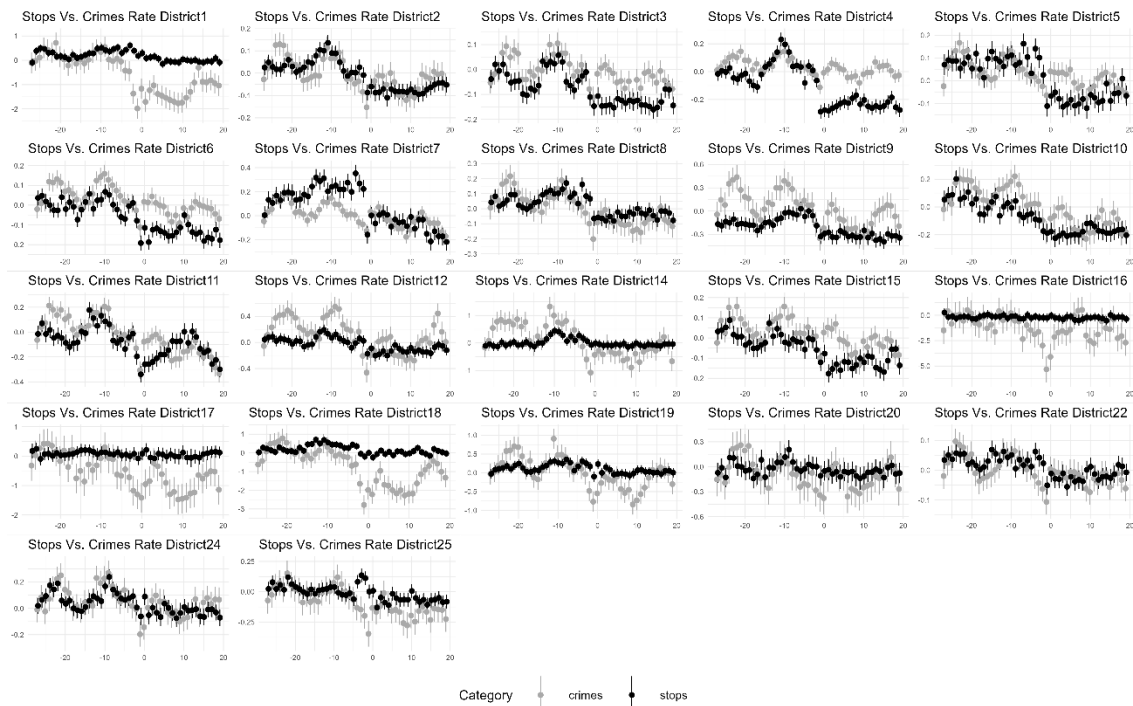
⁹ Hit rates are not included due to the low number of daily observations.

Figure C.1: Change In Rolling Correlation of Stops Vs. Crime, By Race



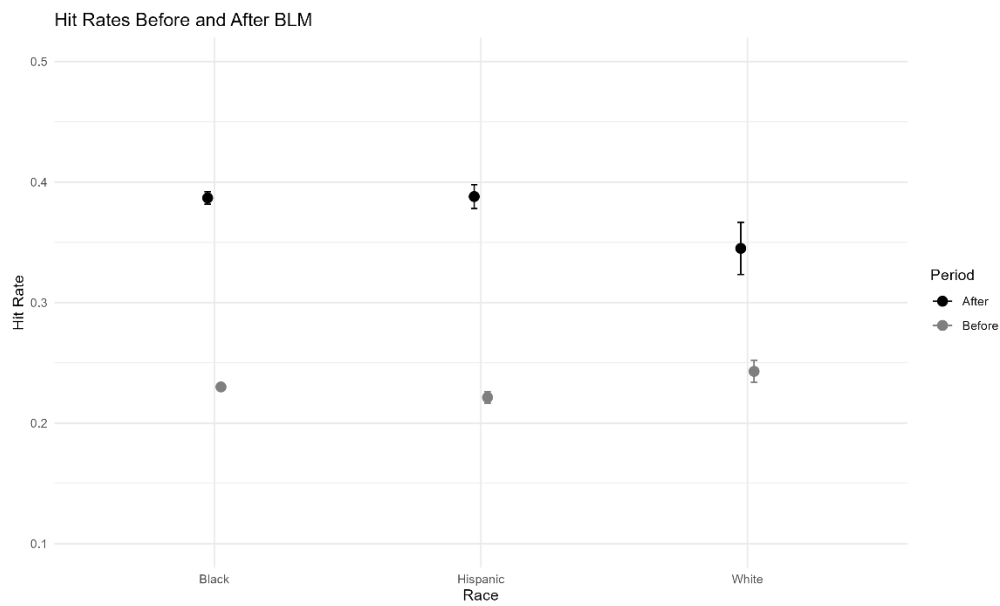
In Figure C.2 I plot the change in the rate of stops against Black citizens only, to see whether there is spatial heterogeneity in how policing patterns against African American citizens change. The effect appears to be stronger again in those districts that are concentrated in the South Side of Chicago, where a majority of the city's Black population resides.

Figure C.2: Change In Monthly Rate Of Stops Vs. Crime, By Police District (Black Stops Only)



Finally, to look at the change in hit rates, I plot the average, by race, for the periods before and after Black Lives Matter demonstrations. The effect is again consistent across all racial groups, although it seems to be slightly more significant for Blacks and Hispanics, suggesting that law enforcement became particularly more effective (and hence cautious) when policing minorities as an effect of protests.

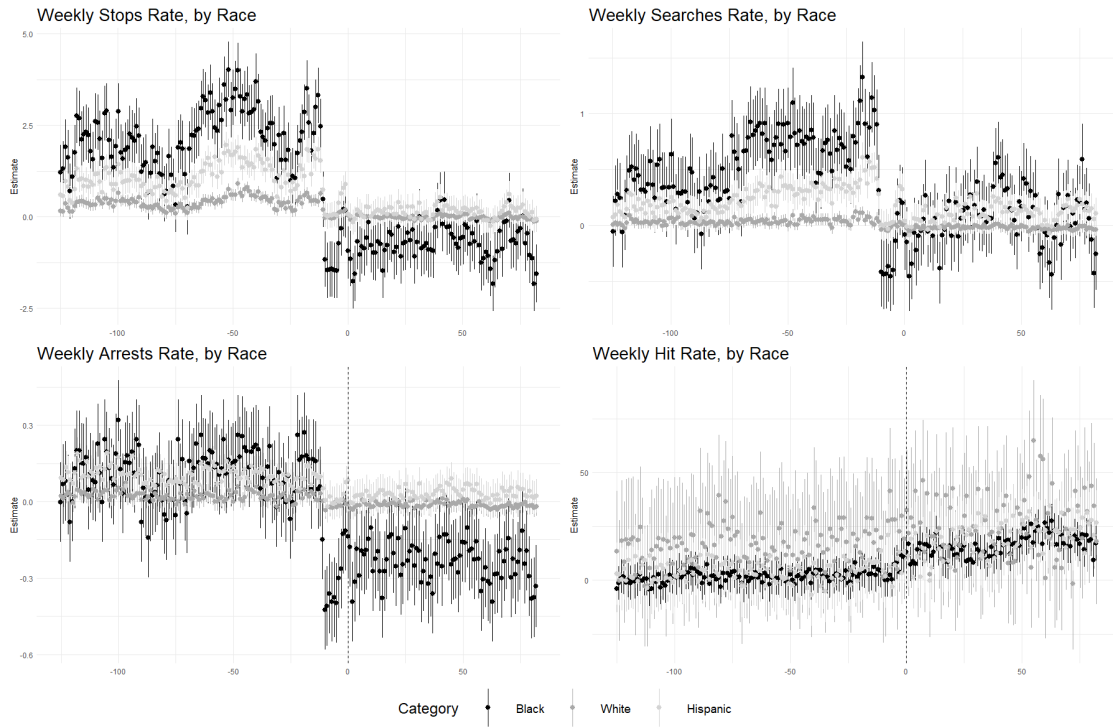
Figure C.3: Hit Rates by Race, Before/After BLM



D. Weekly variation of police activity by race

As a further robustness check, I re-plot the estimates of Figure 3, this time aggregated by week. Results are displayed here, in Figure D.1, and do not show any significant difference when the level of aggregation is changed.

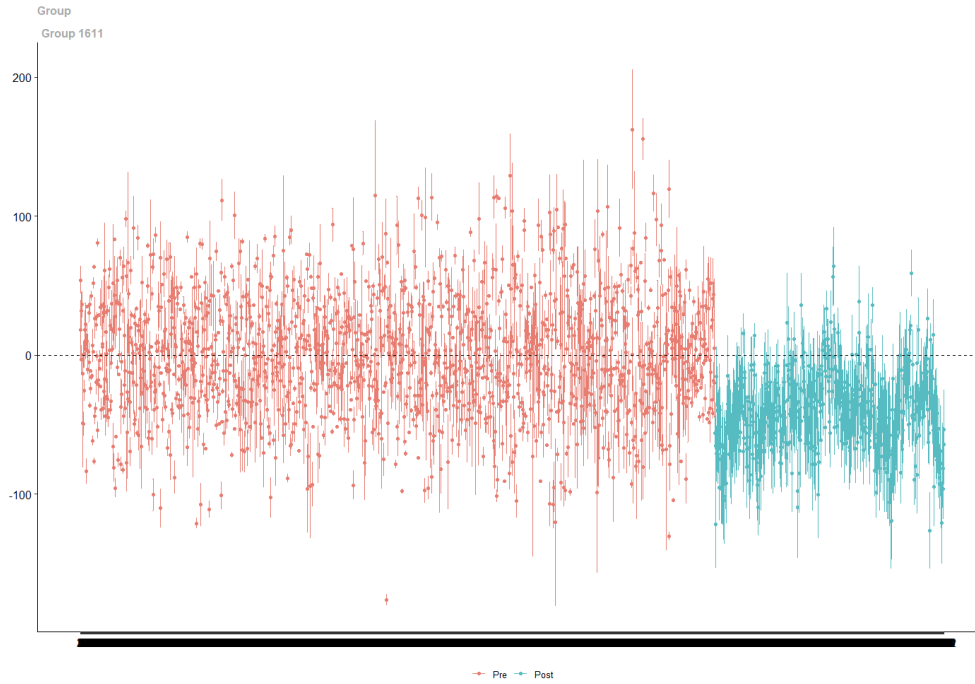
Figure D.1: Change In Weekly Stops/Searches/Arrests/Hit Rates, By Race



E. Difference-in-differences model

As mentioned in the main text, I also include a difference-in-differences model to test whether stop counts against Black people significantly went down after Black Lives Matter demonstrations started in May 2020. The interpretation of this model rests on the assumption that Black civilians, who are shown in the analysis to be the group associated with the biggest change in patrol tactics, are the only treated group in the wake of the CPD's change in strategy after demonstrations. Observations are aggregated by day to preserve more observations, and the dependent variable is stop counts by racial group (including Whites and Hispanics as the untreated groups, and Black as the treated units).

Figure E.1: Difference-In-Differences Model



The ATT estimator of the average effect of the BLM demonstrations on Black stops is displayed in the following table. As it is shown, under the model assumptions, it confirms that demonstrations had a significant impact in lowering police activity against Black civilians, compared to White and Hispanic ones.

Table E.1: Average Treatment Effect on the Treated (ATT) with standard error and confidence interval

	Estimate	95% Confidence Interval
ATT	-41.3617	[-75.0123, -7.711]*
Std. Error	17.169	

F. Interrupted Time-Series robustness checks

This section presents a set of robustness checks for the ITS models reported in Table 1 of the main text, i.e., regarding the effect of BLM protests on overall police activity and crime. Specifically, here I estimate: 1- a specification using only violent crime rates, which are less

likely to reflect police behavior (violent crimes include homicides, robberies, assaults, and criminal sexual assaults); 2- models with standard errors clustered at the police-district level, to allow for within-district correlation; and 3- hierarchical models with random intercepts for police districts.

Table F.1, including only violent crimes, confirms the main text results: these declined immediately after BLM protests, as police stops also declined, and then slightly increased after.

Table F.1: Interrupted Time-Series, the effect of BLM on violent crimes only

Violent Crimes	
Before BLM	-0.0001*** (0.0000)
BLM Effect	-0.09*** (0.02)
Post BLM	0.0004*** (0.0001)
lag_rate_crime	0.28*** (0.02)
Constant	1.19*** (0.04)
FE	Yes
Observations	2,191
<i>Note:</i> *p<0.1; **p<0.05; ***p<0.01	

Tables F.2 and F.3, then, show respectively the models with SEs clustered at the police-district level, and hierarchical models with random intercepts for police districts. Models include both counts and rates as a double robustness check. As shown, results are robust with the main model specification displayed in the main text.

Table F.2: ITS model with clustered SEs at the police district level

	Stops - Count	Crimes - Count	Stops - Rate	Crimes - Rate
Before BLM	2.748***	-2.522***	0.00003**	-0.00002***

	(0.897)	(0.323)	(0.00001)	(0.00000)
BLM Effect	-294.673*** (35.345)	-123.696*** (34.860)	-0.003*** (0.0004)	-0.001*** (0.0005)
Post BLM	-0.076 (0.066)	0.069 (0.061)	-0.00000 (0.00000)	0.00000 (0.00000)
Constant	380.328*** (51.282)	1,042.265*** (61.278)	0.004*** (0.001)	0.010*** (0.001)
Observations	1,584	1,584	1,584	1,584
R ²	0.142	0.097	0.073	0.034
Adjusted R ²	0.140	0.095	0.072	0.032
Residual Std. Error (df = 1580)	251.883	281.532	0.003	0.005
F Statistic (df = 3; 1580)	86.842***	56.632***	41.729***	18.360***
Note: *p<0.1; **p<0.05; ***p<0.01				

Table F.3: ITS hierarchical models with district-level random intercepts

Predictors	Stops - Count			Crimes - Count			Stops - Rate			Crimes - Rate		
	Estimates	CI	p	Estimates	CI	p	Estimates	CI	p	Estimates	CI	p
(Intercept)	380.33	292.00 – 468.66	<0.001	1042.27	935.17 – 1149.36	<0.001	0.00	0.00 – 0.01	<0.001	0.01	0.01 – 0.01	<0.001
T	2.75	2.19 – 3.31	<0.001	-2.52	-3.02 – -2.02	<0.001	0.00	0.00 – 0.00	<0.001	-0.00	-0.00 – -0.00	<0.001
D	-294.67	-327.63 – -261.71	<0.001	-123.70	-153.09 – -94.30	<0.001	-0.00	-0.00 – -0.00	<0.001	-0.00	-0.00 – -0.00	<0.001
P	-0.08	-0.16 – 0.01	0.093	0.07	-0.01 – 0.15	0.086	-0.00	-0.00 – 0.00	0.118	0.00	-0.00 – 0.00	0.486
Random Effects												
σ^2	22414.43			17827.23			0.00			0.00		
τ_{00}	42876.15	DIST_NUM		64195.92	DIST_NUM		0.00	DIST_NUM		0.00	DIST_NUM	
ICC	0.66			0.78			0.77			0.90		
N	22	DIST_NUM		22	DIST_NUM		22	DIST_NUM		22	DIST_NUM	
Observations	1584			1584			1584			1584		
Marginal R ² / Conditional R ²	0.138 / 0.704			0.094 / 0.803			0.071 / 0.791			0.032 / 0.905		

G. Spatial clustering and regressions

This section introduces two additional robustness checks to account for spatial heterogeneity in the effects of the 2020 protests. First, I examine the impact of BLM protests on the spatial clustering of police stops and crimes using Moran's I. Second, I estimate regression models with spatially varying effects, implemented via interactions between the protest indicator and neighborhood characteristics, to assess how BLM demonstrations affected policing while controlling for segregation, poverty, population size, and crime.

Tables G.1 and G.2 below display the Moran's I, before and after the demonstrations, Table G.1 shows stops and crimes separately, while Table G.2 presents a regression-based Moran's I, with police stop counts modeled conditional on crime counts. All counts are aggregated at the census-tract level.

The Moran's I results indicate that both police stops and crimes were strongly clustered before the BLM demonstrations, and that clustering increased slightly afterward. However, when controlling for crime, the spatial clustering of stops decreased slightly, suggesting that policing became somewhat less concentrated relative to crime patterns following the protests, in line with what rolling correlation models and event-study plots suggested.

Table G.1: Changes in the Global Moran's I before/after BLM, stops and crimes counts

type	period	moran_I	expected	variance	z_score	p_value
Police stops	Pre-BLM	0.577	-0.001	0.000233	37.89	<0.001
Crime	Pre-BLM	0.627	-0.001	0.000228	41.58	<0.001
Police stops	Post-BLM	0.580	-0.001	0.000230	38.34	<0.001
Crime	Post-BLM	0.671	-0.001	0.000234	43.90	<0.001

Table G.2: Changes in the Global Moran's I before/after BLM, police stops conditioned on crimes

period	moran_I	expected	variance	z_score	p_value
Pre-BLM	0.420	-0.001	0.000235	27.52	<0.001
Post-BLM	0.405	-0.001	0.000235	26.55	<0.001

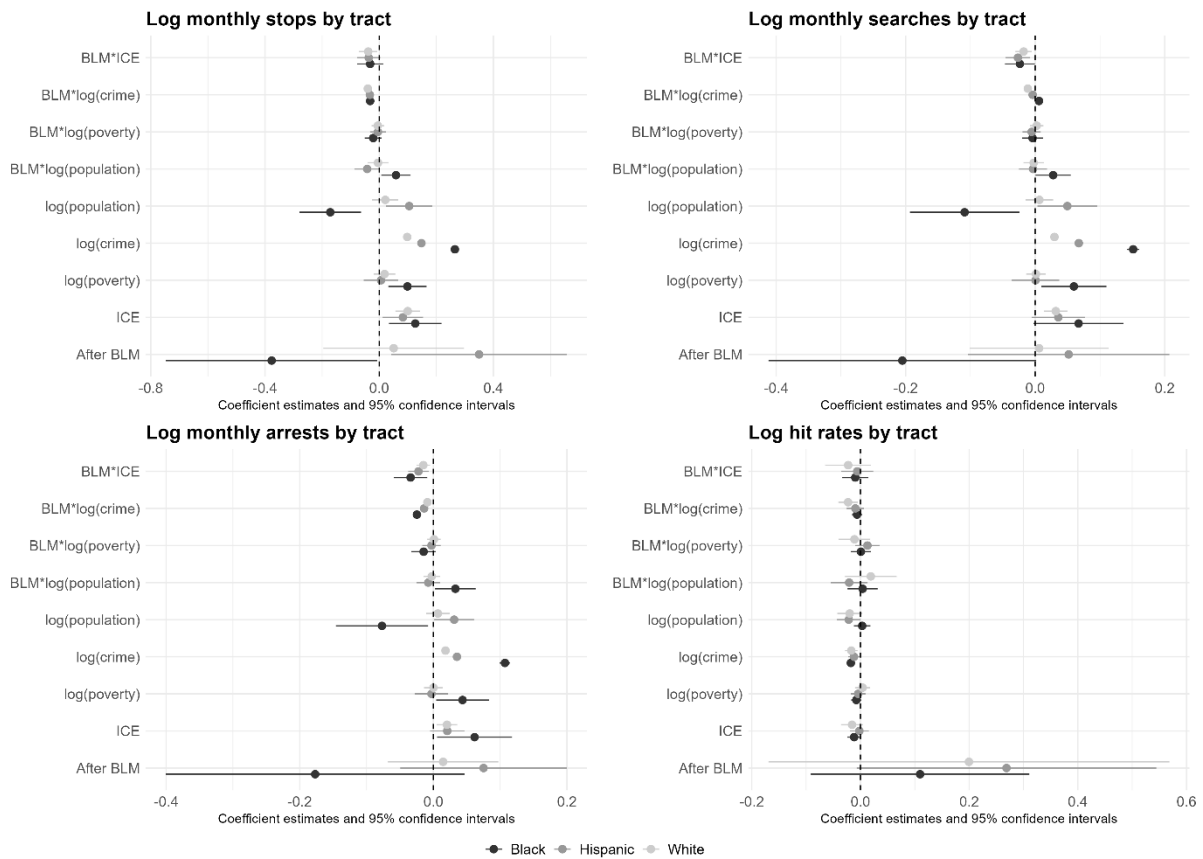
I also estimate a spatial regression model, displayed in equation 1 below, where the logged counts of police stops, searches, and arrests (aggregated by census tract and averaged by month before and after Black Lives Matter) are regressed on monthly neighborhood crime counts (logged as well). The model includes interactions between the post-BLM indicator and neighborhood characteristics, i.e., poverty, segregation (measured using the Index of Concentration at the Extremes), and population, allowing the effects of the protests to vary across neighborhoods. Models are estimated separately for each racial group, capturing differences in how policing changed across Black, Hispanic, and White communities. Counts are logged and incremented by one to reduce skewness, as well as to accommodate cells with zeros in the data.

The equation is as follows:

$$\begin{aligned} \log(Policing_i + 1) = & \beta_0 + \beta_1(\log(1 + Crimes_i) \cdot T_i) + \beta_2(\log(1 + Poverty_i) \cdot T_i) + \\ & \beta_3(ICE_{race,i} \cdot T_i) + \beta_4(\log(Population_i) \cdot T_i) + \epsilon_i \end{aligned} \quad (1)$$

The estimates are displayed in Figure G.1 below. As shown, the ‘After BLM’ coefficient (i.e., ‘T’ in the equation) is negative and significant at a 95% confidence interval for monthly stops and searches involving Black civilians (and still negative, although not significant, regarding Black arrests), but not for other racial groups. Hit rates, on the other hand, grow for all racial groups also when controlling for spatial covariates, consistent with previous analysis.

Figure G.1: Spatial regression models, monthly logged counts of stops/searches/arrests/hits by census tract



H. An analysis of clearance rates

A possible underlying mechanism that explains why we are observing such variations in police activity and crime, and the de-coupling of the two, could theoretically be observed when analyzing clearance rates. In this case, the clearance rate relies on crime data reported by the CPD, which also indicates whether the event resulted in an arrest: hence, it is the proportion of crimes that resulted in CPD agents arrest someone.

This has some strong limitations of its own: first, these clearances do not actually mean that the crime resulted, finally, in a conviction. Second, they rely on self-reported data on crimes and arrests by the CPD, and, as we repeatedly saw in the analysis, arrests went down as a result of police activity going down. This could introduce some endogeneity in this

analysis and undermine its reliability as an ‘independent’ measure of clearance rates. In the end, the drop in clearance rates mirrors the drop in arrest rates, and it is unclear whether this is driven by a change in officers using a higher threshold to arrest a suspect, by CPD making less efforts to police and clear these crimes, or both. These results should hence be interpreted cautiously, and further research that comprehensively zeroes in on this topic is needed to determine why we observe this drop in clearances.

This section displays four figures. Figure H.1 displays the overall change, before and after BLM, in the clearance rate of non-violent and violent crimes respectively. Figure H.2 breaks it down by police district (left-hand side) and by crime type (right-hand side). Figures H.3 and H.4, then, show the time-series variation of the monthly clearance rate of, respectively, violent crimes, and the major types of non-violent crimes.

To make sense of the results: the clearance rate went down after Black Lives Matter protests took place, and, overall, significantly so, both across violent and non-violent crimes, and across all police districts. However, the picture gets a bit muddier when analyzing individual crime types, as for violent crimes, only ‘Assault’ display a significant, negative change. Moreover, looking at the time-series graphs, it appears that not only violent crimes other than ‘Assault’ did not get cleared substantially less than before, but also that most of the drops (when it happens) might be attributed, at least partially, to changes brought by the COVID-19 lockdowns. Hence, while a change did indeed happen, it is unclear how much of this can be attributed to an effect brought by the Black Lives Matter demonstrations exclusively, rather than an effect of the pandemic.

Figure H.1: Change in clearance rates, before and after BLM, violent crimes versus non-violent crimes

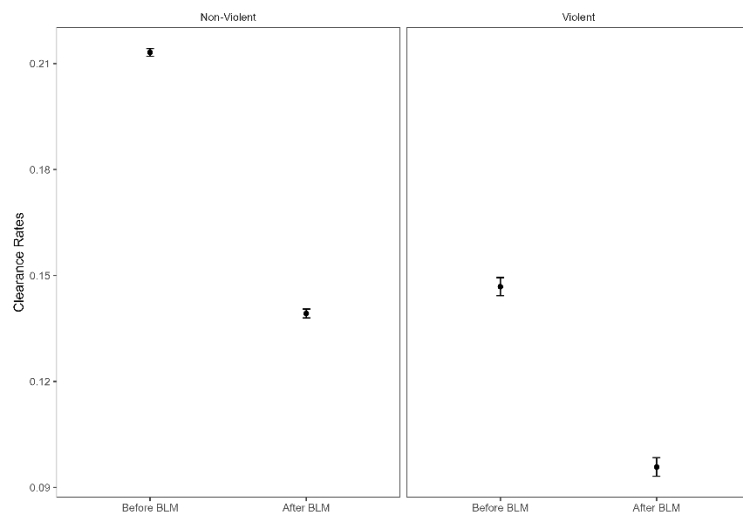


Figure H.2: Change in clearance rates by district (left) and by crime type (right)

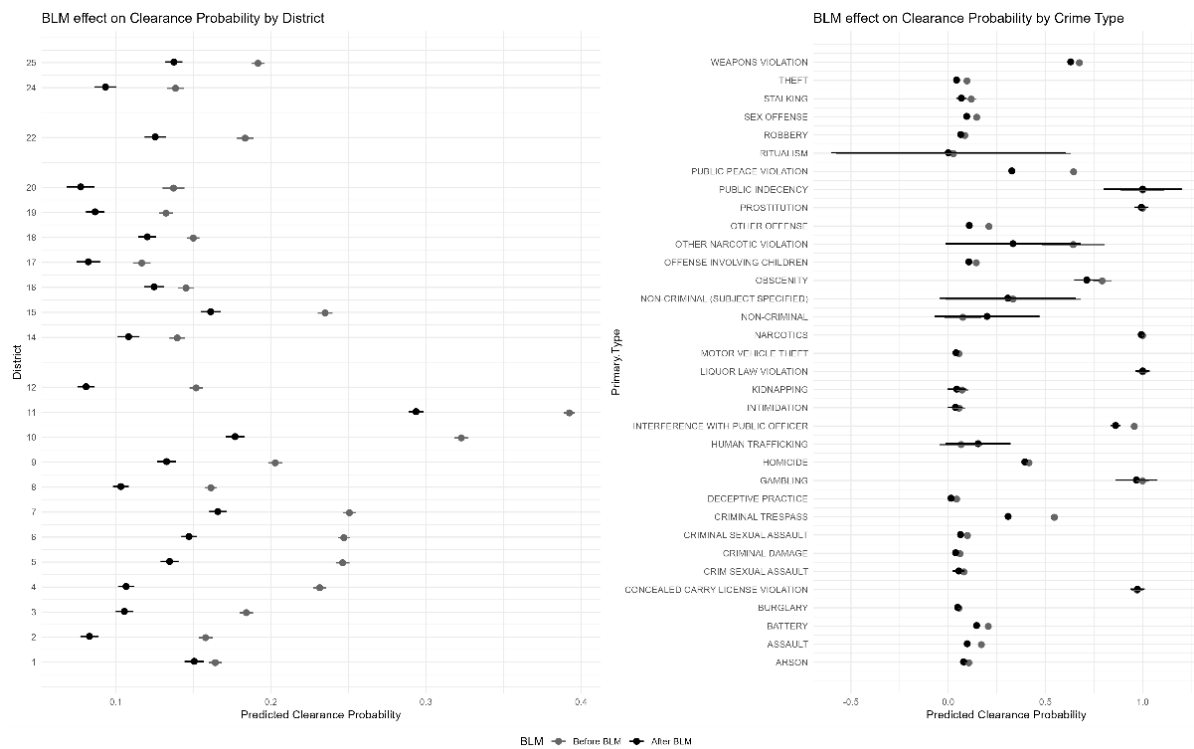


Figure H.3: Time-series analysis of monthly clearance rates by crime type (violent crimes)

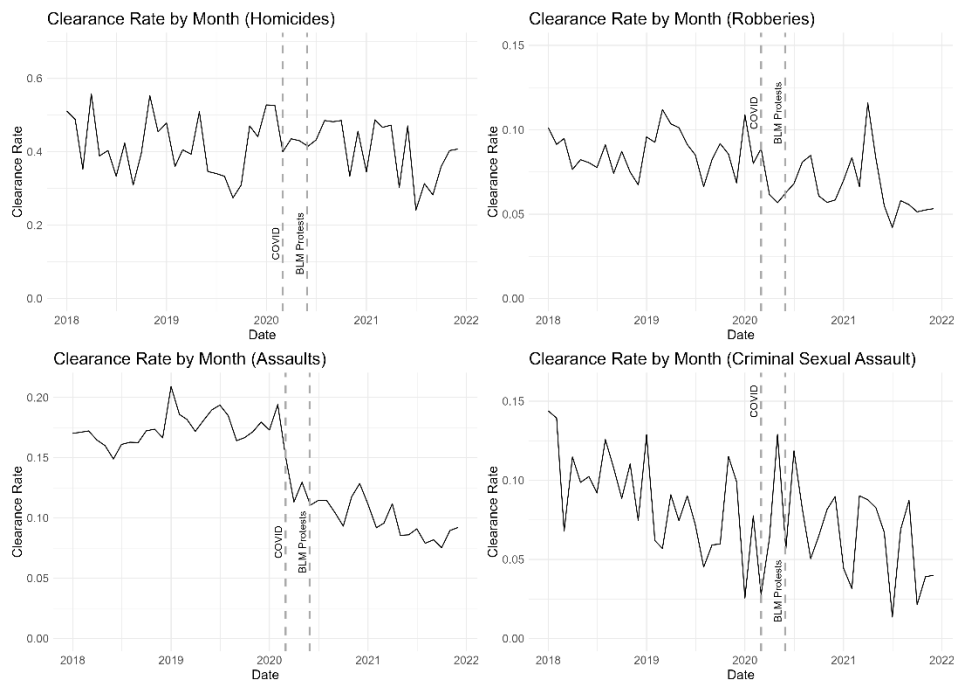
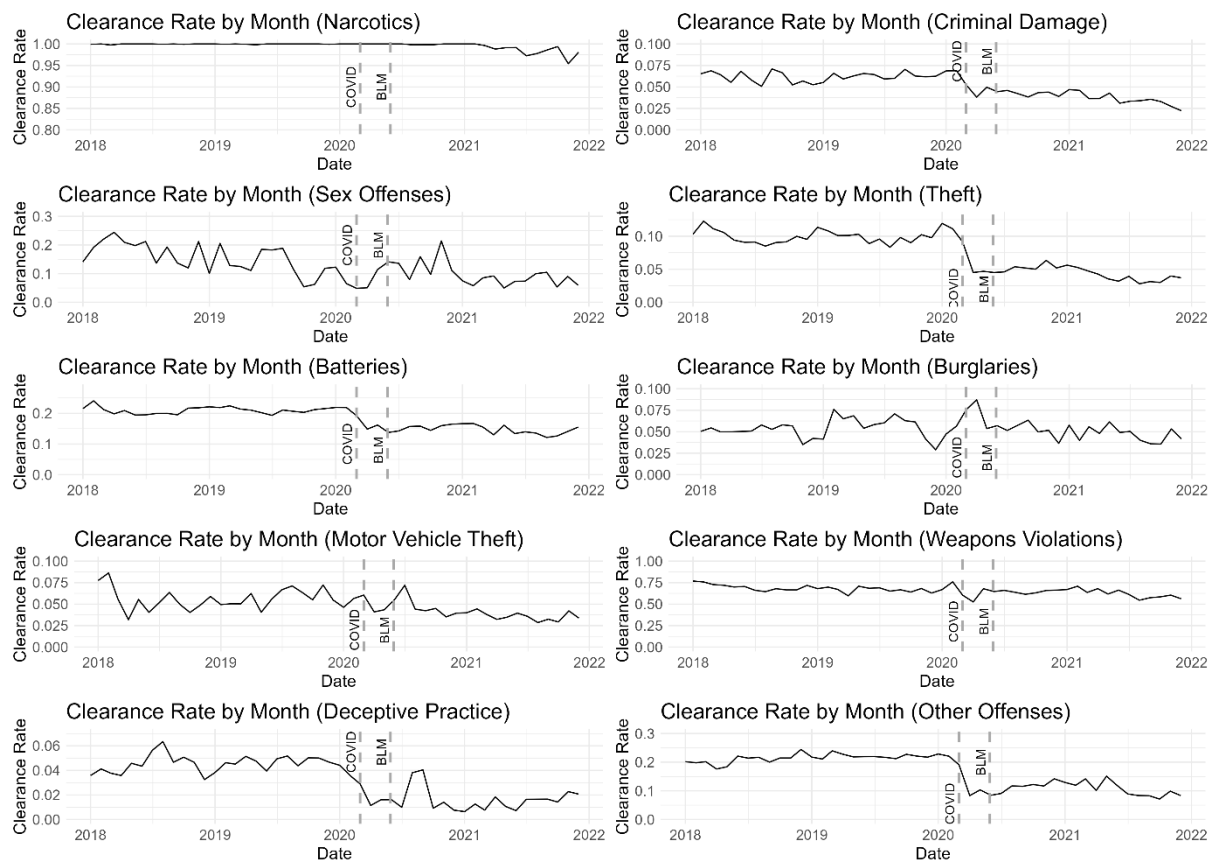


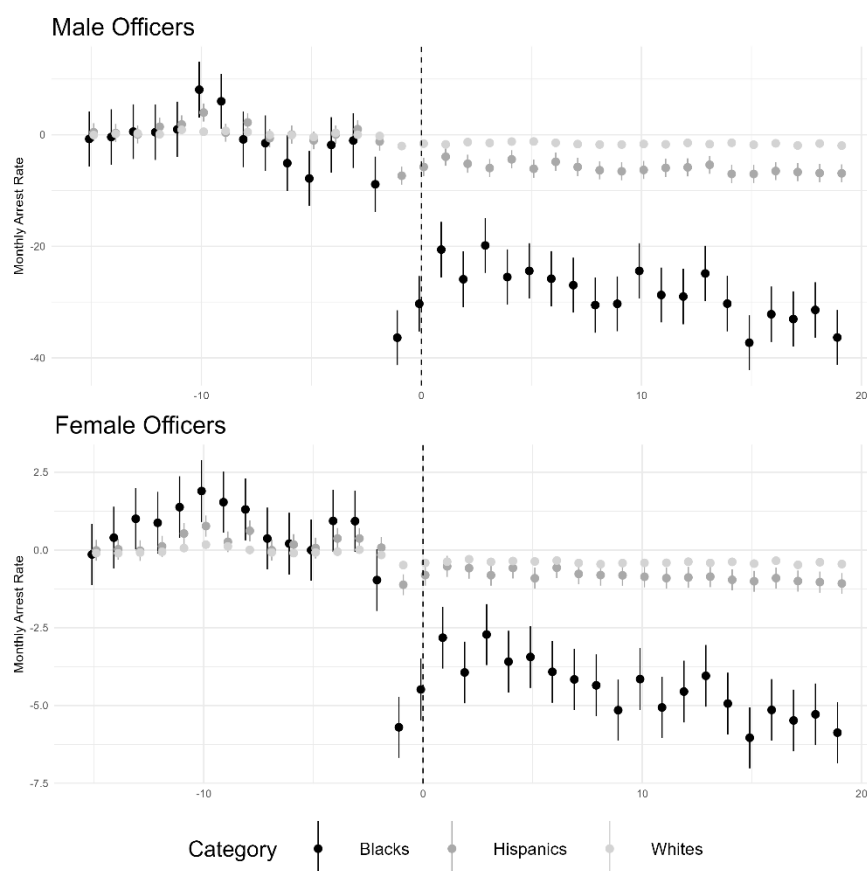
Figure H.4: Time-series analysis of monthly clearance rates by crime type (main types of non-violent crimes)



I. Changes in arrest enforcement by officer sex

In this section I analyze whether we can observe changes in racial arrests, after BLM, between male and female officers. As shown, both groups saw a drop in Black arrests in particular, strengthening the idea that changes in enforcement tactics were diffused across the police force, and not tied to single officers' actions.

Figure I.1: Change in monthly arrest rates among officers by sex (males/females) against Black/Hispanic/White civilians. Observations spanning from January 1st, 2019, to December 31st, 2021



J. An analysis of the homicide spike after May 2020

This section briefly shows how homicide counts which, as other scholars had shown, grew in the 2020 summer, changed after BLM demonstrations in Chicago, by police district. As

shown in the figure and table below, homicides grew in both types of districts (majority vs. non-majority of Black population), although more in districts with a majority of Black residents (which is where the biggest reduction of police activity was concentrated).

Figure I.1: Monthly Homicide Counts by District (Black lines indicate districts where the majority of the population is Black, gray lines otherwise)

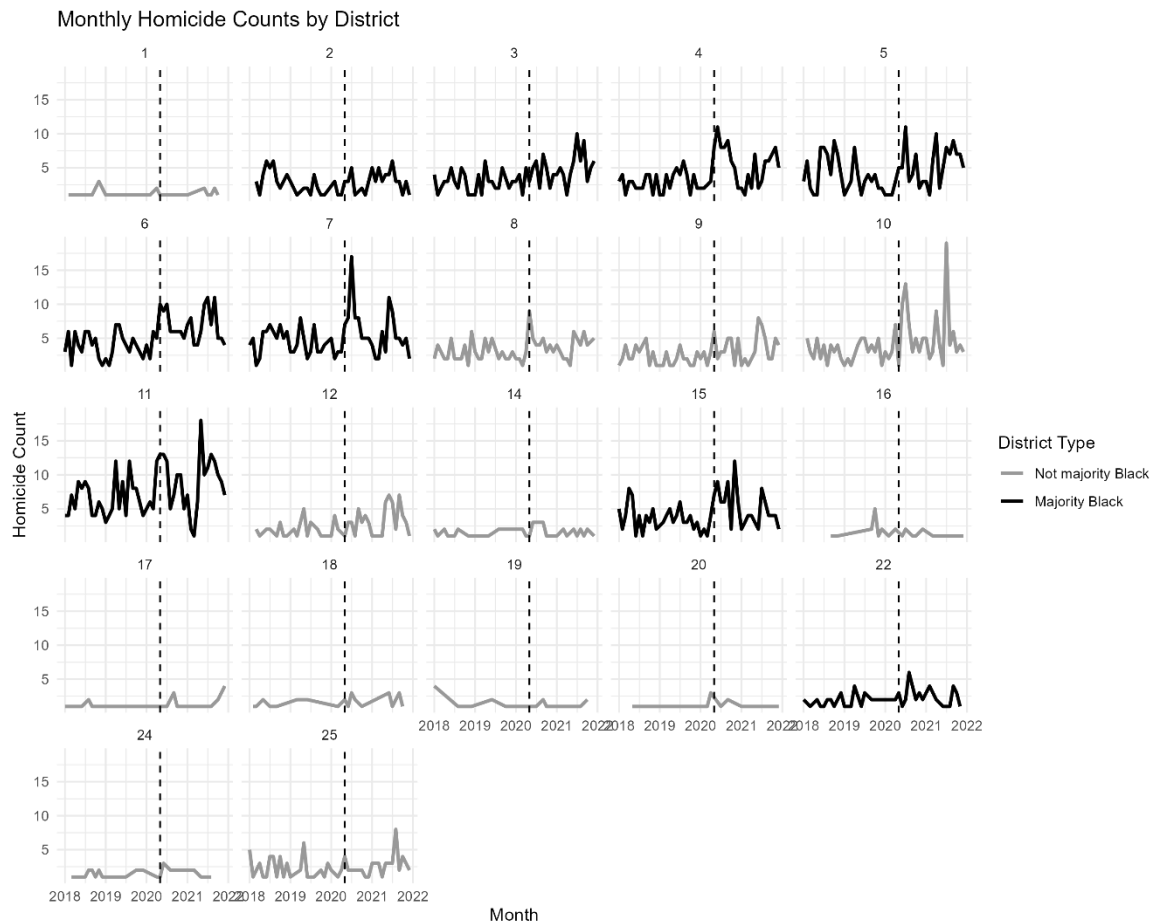


Table I.1: Absolute and percentage change in monthly homicide counts by type of police district

District Type	Before BLM	After BLM	Change	% Change
Not majority Black	1.835462	2.370545	0.5350828	29.15249
Majority Black	3.600911	5.395980	1.7950683	49.85039