

Racial Disparity and Arrests: Did California's Recent Criminal Justice Reforms Affect Jail Bookings?

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Abstract

With tensions between law enforcement and minority communities continuing to make headlines, racial disparities in the criminal justice system are of great concern. Research shows remarkable differences across race and ethnicity in criminal justice experiences (e.g. sentencing, and being under correctional control). Differences are especially stark in comparisons between African-Americans and whites. It is likely that these inequalities are significantly affected by the very first step in the criminal justice process—arrests. In this paper, we examine racial disparity in bookings (arrests that results in finger printing and a booking into a local jail). Our analysis focuses on whether California's large scale criminal justice reforms in California (realignment in 2011 and Proposition 47 in 2014) affected racial disparity in arrests. The large-scale reforms—primarily motivated by federally court-ordered mandates to reduce the state prison population—represent natural policy experiments generating plausible exogenous variation in arrests.

Background and Motivation

With tensions between law enforcement and minority communities continuing to make headlines, racial disparities in the criminal justice system are of great concern. Both media and academic research report remarkable differences across race and ethnicity in criminal justice experiences (e.g. sentencing, and being under correctional control, including incarceration and being on probation or parole). These differences are especially stark in comparisons between African-Americans and whites (e.g. Kaeble, Maruschak, and Bonczar 2015; Bonczar 2003; Raphael and Stoll 2013; Harcourt 2010; Rehavi; and Starr 2014). It is likely that these inequalities are significantly affected by the very first step in the criminal justice process—arrests – where African-Americans are greatly overrepresented, and account for almost 30 percent of arrests (Snyder 2013). In an effort to better understand racial disparity in the criminal justice system, we examine racial disparity in bookings (arrests that results in finger printing and a booking into a local jail).

With reforms such as AB109 - more commonly known as realignment - in 2011 (which shifted responsibility for many non-serious, non-violent, and non-sexual offenders to county jail and probation systems) and Proposition 47 in 2014 (which reclassified several drug and property felonies as misdemeanors), California has been at the forefront of criminal justice reforms over the last decade. Prompted by a 2009 federal court mandate to ease prison overcrowding (and upheld in 2011 by the US Supreme Court), the state's efforts have significantly lessened its overall reliance on incarceration. Since reaching a peak in 2006, the incarcerated population has dropped by more than 50,000, bringing the state's incarceration rate to levels not seen since the early 1990s. Figure 1 shows the notable drops associated with realignment and Prop 47.

These reforms have changed the state's criminal justice system significantly and widely affected how drug and property offenses are sanctioned. They have also affected local criminal justice agencies' capacities (e.g. Lofstrom and Martin, 2014; Grattet et al, 2016). As a result, law enforcement arrest strategies and behavior may have been affected, possibly with differential effects across demographic groups. The largely unanticipated and sudden implementation of these large-scale reforms—primarily motivated by federally court-ordered mandates to reduce the state prison population—represent natural policy experiments generating exogenous variation in arrests, and as such offer valuable opportunities to learn from California's experience. With many states considering implementing criminal justice reforms (mostly motivated by concerns about reliance on costly and ineffective incarceration) would similar changes to those passed in California - in addition to reductions in incarceration - lead to changes in racial disparity?

As Figure 2 shows, the number of monthly arrests for drug and property offenses – offense categories with significant reclassification as a result of Prop 47 - changed suddenly and very notably with the passing of Prop 47 in November 2014 (the proposition immediately went into effect after voters passed it on November 4, 2014). The monthly number of felony drug arrests dropped from 12,900 to 3,400 between October 2014 and December 2014. The monthly number of misdemeanor drug arrests increased from 7,800 to 10,100 over the same brief period, not nearly enough to make up for the drop in felony drug arrests. The monthly number of felony property arrests declined from 8,600 to 5,600 between October and December in 2014, while misdemeanor property arrests went up 5,700 to 7,400. The sudden and substantial changes supports the notion that Prop 47 especially can reasonably be treated as a natural experiment to examine racial disparity in arrests.

There is some suggestive evidence that racial differences in arrests changed as a result of the reforms, especially Prop 47. A look at arrest rates for felony drug and property offenses show that disparity has decreased since 2008, but also that there are noticeable post-Prop 47 drops in the gap between African-Americans and whites (see Figure 3). A look at violent offenses, which were not reclassified as a result of Prop 47, also show decreases in African-American and white arrest rate differences since 2008, but no discernible changes associated with Prop 47 (see Figure 4).

To date, research around these reforms, mostly concentrating on realignment, have focused on key potential impacts such as crime, recidivism, prosecution, spending, jails and prisons (see for example Lofstrom and Raphael, 2015; Bartos and Kubris, 2018; Bird and Grattet, 2014; Freedman and Menchin, 2012; Lin and Petersilia, 2014; Lofstrom and Raphael, 2013; Romano, 2015). To the best of our knowledge, only one paper so far has examined the reforms in the context of arrests. Mooney et al (2018) examines the effects of Proposition 47 on racial/ethnic disparities in drug arrests and find that Black–White disparities in felony drug arrests decreased. Here, we build on those efforts by broadening the analysis to include arrests of other offenses, and specifically focusing on bookings.

In this paper, we analyze racial disparity in the likelihood of being booked into local jail and utilize the exogeneity and timing of the significant changes in California to assess their possible impacts. We take advantage of unique data recently made available to the research team by the state Department of Justice. The incident-level Monthly Arrest and Citation Register (MACR) includes the universe of all arrests made in the state between 1980 and 2016. More specifically, we examine racial disparity by estimating conditional probability models of the likelihood of being booked into jail, conditional on an arrest, and whether racial disparity has changed as a result of realignment and Prop 47.

While previous research has found no evidence that these reforms had impacts on violent crime, several papers have found evidence that they contributed to increases in property crime (Lofstrom and Raphael, 2016; Bird et al, 2018: and Bartos and Kubrin, 2018). The focus on the conditional booking probability has the advantage that it is less likely to be affected through a change in crime rates than examining arrest probabilities. Hence, it is more likely to reflect changes in law enforcement discretion. The focus on law enforcement discretion is arguably especially pertinent in the context of racial disparity. Lastly, given greater discretion of the decision to cite and release someone or book the suspect into jail is plausibly greater for lower level offenses, we will closely examine misdemeanor bookings rates (a group of offenses that grew with the passing of Prop 47).

Data and Empirical Strategy

The data used in this paper comes from the Monthly Arrest and Citation Register (MACR). These data consist of arrest and citation data reported monthly by law enforcement agencies (LEAs) throughout California to the California Department of Justice (CA DOJ) Criminal Justice Statistics Center (CJSC) (the CA DOJ has statutory authority to collect arrest data). For each arrest in California between 1980 and 2016, the MACR data contain information on law enforcement agency and jurisdiction, arrest offense, disposition, arrest date, and whether the arrest led to a booking or the suspect was cited and released. The data also include information on date of birth, gender, and race/ethnicity of the suspect. To more clearly ascertain possible shifts in racial disparity caused by realignment and Prop 47, we limit our analysis to the period 2010 to 2016 in this period.

To analyze racial disparity in arrests, we examine racial gaps in the probability of being booked into jail, conditional on an arrest. We define the following probability model of being booked into jail ($y=1$) for observed arrest i , by law enforcement agency j for an offense k at time t .

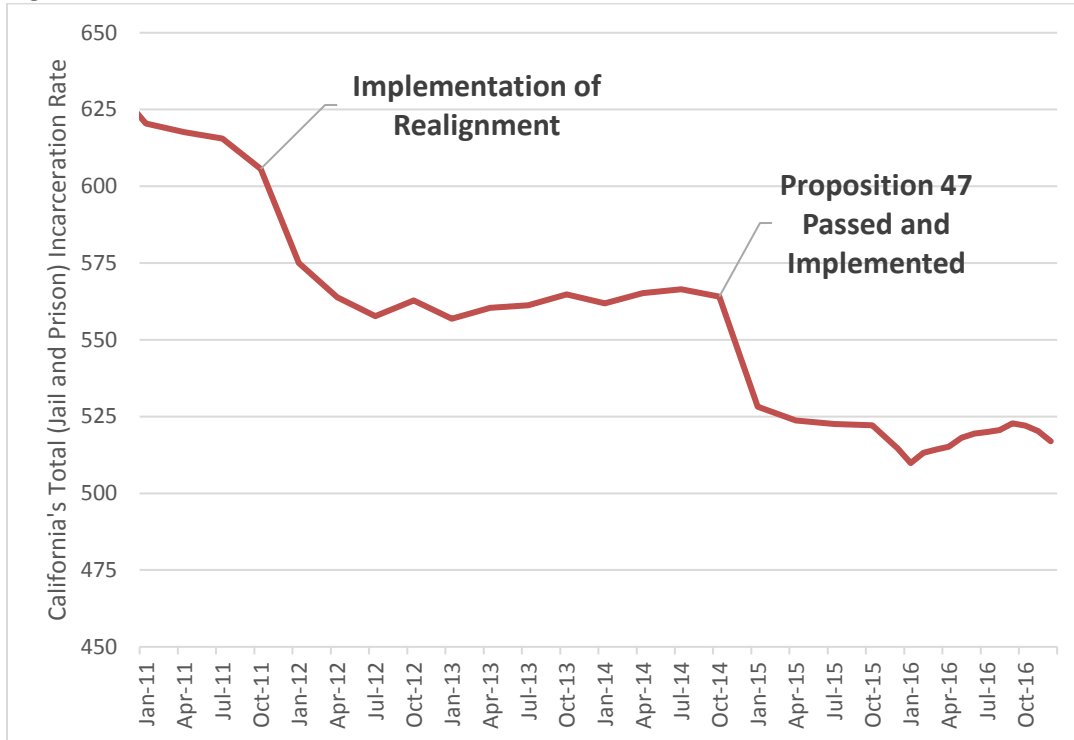
$$\begin{aligned}
 \text{Prob}(y_{ijkt} = 1 | \text{Arrested}_{ijkt}) = & \alpha + \beta \text{Race}_i + \gamma_0 \text{AB109}_t + \gamma_1 \text{Prop47}_t \\
 & + \delta_0 \text{Race}_i \text{AB109}_t + \delta_1 \text{Race}_i \text{Prop47}_t + \eta \text{LEA}_j + \text{Offense}_k + \varepsilon_{ijkt}
 \end{aligned}$$

Where *Race* is a vector of race/ethnicity indicator variables, *AB109* is a dummy variable equal to one for post-realignment periods, *Prop47* is a dummy variable for periods post-Prop 47, *LEA* is a fixed effect for law enforcement agency j , *Offense* is a fixed effect for offense k and ε is a normally distributed error term. The coefficients of particular interest are the vectors β and δ_0 and δ_1 . With specifications that use whites as the reference group, these estimated coefficients represent white-minority racial gaps prior to realignment ($\hat{\beta}$), post-realignment but pre-Prop 47 ($\hat{\beta} + \hat{\delta}_0$) and post-Prop 47 ($\hat{\beta} + \hat{\delta}_1$), where $\hat{\delta}_0$ and $\hat{\delta}_1$ represents differences in racial gaps associated with the respective reform.

In our models where we focus on Prop 47, we explore difference-in-difference specifications where we categorize offenses based on whether they were reclassified as a result of the voter initiative (drug and property offenses) or not (e.g. violent and serious offenses). The assumption is that the non-classified offenses capture broader trends and other factors that determine whether an officer books a suspect into jail.

We are currently in the initial phase of our analysis, including estimating some of the models described above. We expect to have a draft ready by the end of the year.

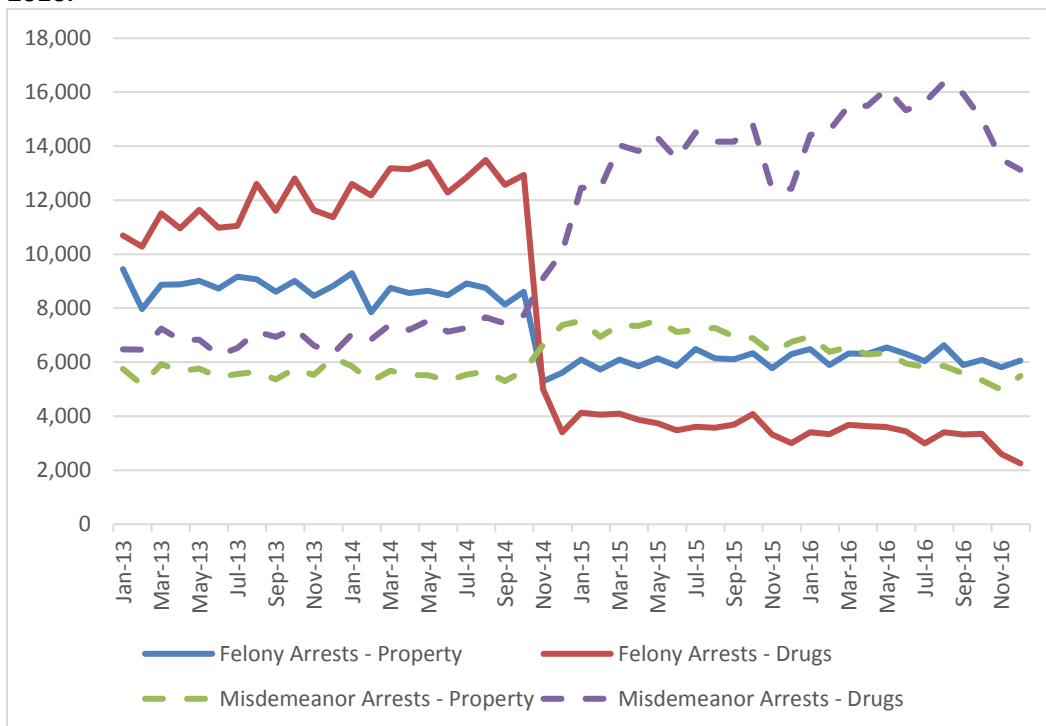
Figure 1. California's Incarceration Rate, 2011-2016.



SOURCE: Board of State and Community Corrections, Jail Profile Survey and California Department of Corrections and Rehabilitation, Monthly Population Report, January 2011–December 2016.

NOTE: The figure shows the total (combined prison and jail) incarcerated population per 100,000 residents. At its peak in 2006, it reached 702.

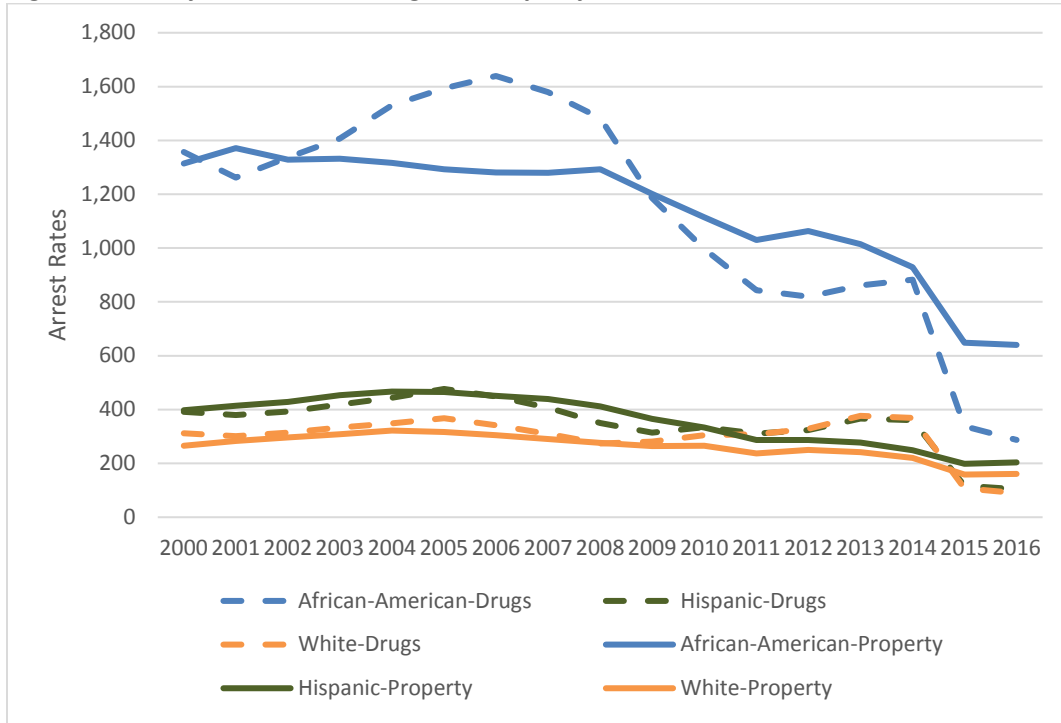
Figure 2. Monthly Number of Felony and Misdemeanor Drug and Property Arrests in California, 2013-2016.



SOURCE: California Department of Justice, Monthly Arrest and Citation Register (MACR), January 2013–December 2016.

NOTE: The figure shows the monthly number of arrests.

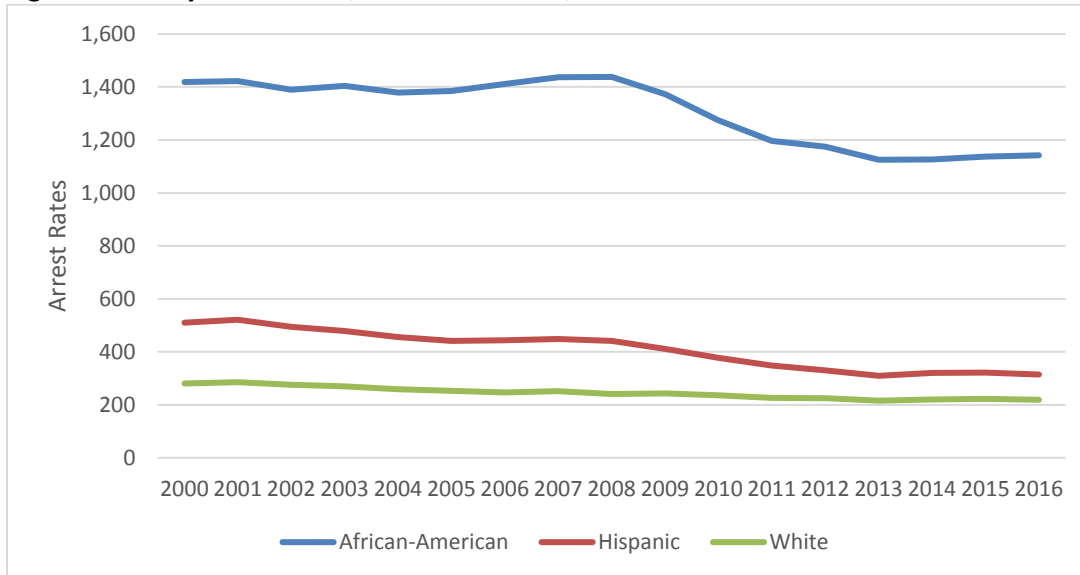
Figure 3. Felony Arrest rates, Drug and Property Offenses, 2000-2016.



SOURCE: California Department of Justice, Monthly Arrest and Citation Register (MACR), 2000–2016.

NOTE: The figure shows arrest rates, i.e. the annual number of arrests per 100,000 residents.

Figure 4. Felony Arrest rates, Violent Offenses, 2000-2016.



SOURCE: California Department of Justice, Monthly Arrest and Citation Register (MACR), 2000–2016.

NOTE: The figure shows arrest rates, i.e. the annual number of arrests per 100,000 residents.

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