ECON 185 Assignment 3

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1 Mapping Discretion

Prosecutors have discretion at multiple stages in criminal justice process, such as charging, sentence enhancements, and granting diversion. This paper focuses on diversion specifically as a measure of prosecutorial leniency

Diversion programs allow eligible defendants to resolve their case outside of a traditional conviction. Defendants may be offered a program such as drug treatment, a rehab facility, or community supervision. If the defendant successfully completes their assigned program, the charges are dropped and no conviction occurs as a result.

Although eligiblity is guided by certain criteria, the choice lies on the prosecutor. Because diversion removes a defendant from the standard prosecution path, it represents a excercise of leniency. This discretion raises the question of whether access to diversion differs across racial or ethnic groups.

2 Hypothesis

I hypothesize that, among defendants facing similar observable case severity (e.g similar charge types, felony exposure, number of charges, and priors), White defendants are more likely than Black or Hispanic defendants to be granted diversion.

3 Empirical Execution

3.1 Data Source and Sample

The data is drawn from the 2024 Orange County District Attorney Transparency Portal and includes case, charge, diversion, prior allegation, and defendant demographic files. The unit of analysis for this experiment will be case-defendant. We will treat the defendant identifier as unique to a specific case, meaning all outcomes and control variables will be compared at the case-defendant level and merged using this identifier.

3.2 Variables

Depndent Variable: Diversion

The primary outcome variable is an indicator for whether a defendant received diversion for their case. Specifically, *Diversion_i*, equals 1 if the defendant appears in the diversion file for 2024 and 0 otherwise. Because the defendant identifier is treated a unique to a specific case, this variable captures whether diversion was granted to the case-defendant.

Race and ethnicity are measured using the categorical indicators for Black, Hispanic, Asian, and Other defendants, with White as the omitted group.

To account for observable case severity, I include controls constructed from charge and prior tables. *AnyFelony* was created if the defendant faced any felony charge in the case. This could indicate substantially greater punishment relative to misdemeanors. Gender was also added an additional control

Other Controls

We also control for the total number of charges with *NumberOfCharges*. A greater number may mean a more complex/severe charge. Prior allegations is also included as a control. Specifically, an indicator was constructed for whether the defendant had any prior allegations, and when available, the number of prior allegations, as this could be a key factor for determining eligibility for diversion.

3.3 Model

To test the hypothesis of racial and ethnic disparities in diversion outcomes, I estimate a linear probability model (LPM) of the following form:

$$\begin{aligned} Diversion_i = \alpha &+ \beta_1 Black_i + \beta_2 Hispanic_i + \beta_3 Asian_i \\ &+ \gamma Gender_i + \delta_1 AnyFelony_i + \delta_2 NumberOfCharges_i \\ &+ \delta_3 Priors_i + \varepsilon_i. \end{aligned} \tag{1}$$

The dependent variable $Diversion_i$ is an indicator equal to one if defendant i received diversion in 2024 and zero otherwise. Race and ethnicity are measured using indicator variables for Black, Hispanic, and Asian defendants, with White defendants serving as the omitted reference group.

To account for observable differences in case severity, the model includes controls constructed from the charges and priors tables. Specifically, we include an indicator for whether teh defendant faced any felony charges ($AnyFelony_i$), the total number of charges ($NumberOfCharges_i$), and prior allegations ($Priors_i$). These variables serve as additional factors for offense seriousness and criminal

history, allowing similar cases to be compared to each other when looking for other biases. Gender is also included as an additional control.

The linear probability model is estimated using ordinary least squares. Coefficients on the race and ethnicity indicators can be interpreted as percentage point differences in the probability of receiving diversion, conditional on the included controls.

4 Results

	LPM
Black	0.003
	(0.002)
Hispanic	0.003*
	(0.001)
Asian	0.007**
	(0.003)
Other	0.012***
	(0.003)
Any felony charge	−0.014***
	(0.001)
Number of charges	0.000
	(0.000)
Number of priors	0.017***
	(0.002)
Intercept	0.024***
	(0.001)
Num.Obs.	69 827
R2	0.005
RMSE	0.13
Std.Errors	Custom

+ p <0.1, * p <0.05, ** p <0.01, *** p <0.001

5 Interpretation and Limitations

5.1 Interpretation of Results

Based on the regression results table, there is no evidence of a diversion disadvantage for Black defendants. The estimated coefficient on Black is 0.003, and is statistically insignificant.

On the other hand, Hispanics and Asians experience a higher estimated probability relative to White defendants, at 0.003 and 0,007 respectively.

Among the other variables, having a felony charge in a case lowers probability of diversion which is consistent with usual constraints that limit diversion ability for more serious offenses. What is interesting though is that the number of prior allegations was positively associated with diversion (0.017). This could possibly be due to the targeting of repeat offenders into structured diversion programs like drug court.

5.2 Unobserved Factors and Bias

Although our model controls for observable proxies of case severity, the OCDA dataset does not capture many other factors, such as the strength of evidence, the victim's preferences, how cooperative the defendant is, and other circumstances. If these unobserved characteristics are correlated with both race and diversion decisions, the estimated race coefficients may partially reflect underlying differences in case attributes than biased treatment. This is a form of omitted variable bias, and cannot be accounted for using the available administrative data.

These results should be interpreted as conditional associated rather than casual estimates of discrimination. If we wanted to identify the causal effect, we would have to run something like a quasi-experiment design.