

Exhibit I

Preliminary alternative to Fagan regression: Analysis of the relationship between patterns of stops and patterns of reported suspects

GENERALIZED ESTIMATING EQUATION REGRESSION OF STOPS

	(Fagan) Total Stop and Frisk	(Alternative) Total Stop and Frisk
Total Complaints (logged)	218.00*** (18.52)	
Percent Black in precinct	7.99*** (1.17)	-0.16 (0.73)
Percent Hispanic in precinct	5.50*** (1.29)	2.00 (1.16)
Percent other in precinct	3.64* (1.73)	4.78** (1.82)
Black suspects		1.93*** (0.16)
Hispanic suspects		1.32*** (0.29)
Other suspects		0.13 (0.15)
White suspects		0.65* (0.27)
Constant	-1124.91*** (109.80)	-9.98 (51.35)
<i>N</i>	1824	1824
adj. R^2		

Standard errors in parentheses

* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

Logged population exposure

Model estimated with robust standard errors

The table above shows some preliminary results comparing the model used by Fagan with an alternative model that includes the number of complaints by race of suspects (merged suspect/arrest data) as independent variables instead of logged total complaints . Each observation is a precinct-month for the 24 months period starting January 2009 and ending December 2010. 76 precincts times 24 months = 1828 observations.

Note that when the race related to the complaints is added, the percent Black and the percent Hispanic coefficients are no longer significant. Additionally, the percent black coefficient changes sign. This means that, if it were significant, which it is not, that stops are inversely related to percent Black in the population, the opposite of Fagan's claim.

These two results are clear evidence of an omitted variable bias. In respect to the new variables introduced, the Black suspects and Hispanic suspects are significant at the .001 level with positive coefficients. This shows that the total stops in a precinct in a month, are explained by the number of total black and Hispanic suspects rather than by the percentage black or Hispanic population, demonstrating that Fagan's model missed variables that are central to the analysis, and contradict his central claim that race per se explains stops. This results table demonstrates how the regression results can change dramatically by adding variables. The contrasting finding in the table reinforces our claim of the importance of omitted variables in the analysis.