### The Obama Effect on Economic Outcomes: Evidence from Event Studies<sup>\*</sup>

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March 31, 2010

#### Abstract

Racial differences in economic outcomes are wide-spread and persistent. Theories of statistical discrimination and of identity posit that these differences are partly the effect of perceptions—of skills and of identity. In this paper, I study the impact of an event that has plausibly changed the perceptions of what African Americans can achieve: Barack Obama's election. I use an event study methodology and focus on key election events, such as the first primary victory (Jan. '08), the convention (Aug. '08), the general election (Nov. '08) and the inauguration (Jan. '09). I consider first the impact on a measure of discrimination, racial bias in traffic stops. I find evidence of discrimination against Blacks, but the extent of discrimination does not change with the Obama events. I then consider the impact on crime rates, labor force participation, applications to Law School, contribution to public goods (measured by organ donations), and time spent in investment activities. Across these outcomes, the Obama election events did not have an immediate impact for Blacks compared to Whites, with the possible exception of Law School applications. While the Obama election could change beliefs over the long term, in the short-term it does not appear to have changed behavior.

<sup>\*</sup>I thank Saurabh Bhargava, Rachel Croson, Jonah Gelbach, Enrico Moretti, Devin Pope, Ebonya Washington, and audiences at Columbia University and the University of Texas at Dallas for helpful suggestions and comments. Xiaoyu Xia provided excellent research assistance. I thank the Berkeley Population Center and the NICHD R21 (HD056581) grant for support.

#### 1 Introduction

Racial differences in economic outcomes are wide-spread and persistent, from wage levels (Blinder, 1973; Neal and Johnson, 1996) to call-back rates in interviews (Bertrand and Mullainathan, 2004). The differences extend beyond the workplace to political choices (Washington, 2006), health (Blanton et al., 1996), and bargaining outcomes (List, 2004).

One classical explanation for these racial differences is taste-based discrimination (Becker, 1971): Blacks earn lower salaries because of discriminatory preferences of the (mostly White) employers. The differences, however, could also be due to statistical discrimination (Arrow, 1973). Even absent any taste for discrimination, an employer is less likely to call back an applicant who belongs to a group that is on average less qualified. Some of the differences in outcomes may also be due to different identities (Akerlof and Kranton, 2000 and Austen-Smith and Fryer, 2005): Blacks make different educational choices because of group-specific social norms.

The theories of statistical discrimination and of identify share one common feature: they posit that the racial differences are, at least partly, the effect of *perceptions*—of skill, of discrimination, and of identity. If employers form a negative opinion of a racial group, they respond in their hiring decisions. In turn, Blacks who believe that they are discriminated will not put as much work effort because they do not believe that it will pay off. A particular version of this explanation is the "acting White" idea (Austen-Smith and Fryer, 2005). In a society where Blacks are a relatively small minority, Blacks are lumped in one low-ability category, giving Blacks limited incentives to work hard to be rewarded for their effort. Blacks may choose to embrace a counter-cultural identity that leads them to reject a "White society" (Akerlof and Kranton, 2000).

A key prediction of these two classes of models, then, is that racial differentials in outcomes can be quite responsive to changes in perceptions. This prediction is hard to test, however, because few events change racial perceptions significantly.

In this paper, I study the impact of an event that has plausibly altered the perceptions of what Blacks can achieve: Barack Obama's candidacy and ultimate election to 44th President of the United States. This salient and successful role model is likely to have changed the perception of ability of Blacks and their identity. This change, in turn, can plausibly give Blacks more incentives to invest in education, in the workplace, and in public goods, like Obama himself has done. A second, complementary impact of the election is the change in the perceptions of discrimination. In most primary elections and in the final election, a large fraction of Whites voted for Barack Obama, to the surprise of many. This political support across racial lines is likely to have reduced the perception of racial discrimination. In turn, this can also plausibly have changed the economic incentives for Blacks to invest.

While it is hard to measure these perceptions, surveys provide some evidence of a change

in perceived racial relations in the year of Obama's election. In a series of Gallup polls (Figure 1), respondents were asked whether they thought that 'relations between whites and blacks will always be a problem for the United States, or [...] a solution will eventually be worked out'. In the surveys for the years 2006 and 2007, the share of optimistic respondents was 54 percent in both years, a share consistent with historical patterns. In June of 2008, this share increases to 58 percent, to further increase to 67 percent on November 5, 2008, right after the election.

Did the Obama election, then, change discriminatory behavior by Whites and economics outcomes for Blacks, as predicted by these models? In this paper, I use an event study methodology to address this question. I focus on key election events, such as the first primary victory (January '08), the Democratic convention (August '08), the general election (November '08), and the inauguration (January '09). These events discretely changed the priors about Obama's electability, or increased his prominence. To separate the Obama effect from confounding factors, such as the economic crisis, I focus on short-run event studies and examine the impact of the events at the daily or monthly level, attempting to hold constant the underlying economic trends. Also, the focus on differential outcomes for Blacks compared to Whites controls for time factors that are common across races.

First, I focus on the evidence of discriminatory behavior by Whites. As a measure of racial discrimination, I follow Knowles, Persico, and Todd (2001) and use their measure of racial profiling in traffic stops based on comparing the efficacy of searches by race. A race-blind police force that is attempting to detect drug dealers should search drivers up to the point where the marginal probability of detecting drugs or weapons is the same for drivers of different races. Hence, for a race-blind police, the probability of finding drugs or weapons conditional on conducting a search should be the same for searches of drivers of different races. A police that discriminates against a racial group, instead, will conduct excess searches of individuals of that group, leading to a *lower* share of drivers with drugs among the searched drivers of that racial group.

Using data for all traffic stops in Illinois, I find substantial evidence of discrimination against Blacks in the year preceding Obama's election, in 2007. In particular, conditional on a search being conducted, Blacks are 25 percent less likely to be found carrying drugs or weapons. While the race of the police officer is not observable, this provides statistical evidence of discrimination by the police body as a whole.

Then I consider whether key events in Obama's election affect the extent of discrimination. Using either a monthly or daily event study specification, I find no evidence of a systematic effect of the Obama events on the success rate in car stops. To test for the robustness of the results, I replicate the findings using, as an alternative measure of discrimination, the share of searches as a fraction of the population of that race. Events studies using this alternative specification similarly provide evidence of discrimination in the pre-2008 period, and no change to this discrimination due to the Obama events.

The null effect of the Obama event could be due to heterogeneity of effects cancelling each other out. For example, it is possible that Obama's election increases the discriminatory behavior among police officers that were already prejudiced, while it lowers discriminatory behavior among the other officers. While we cannot test this directly, we match the officers to the county where the stop occurs, and examine the heterogeneity of the effects with respect to a measure of revealed racial preferences: the vote share for Obama in the 2008 general election relative to the vote share for Kerry in the 2004 general election. Presumably, individuals that hold more negative attitudes towards Blacks are less likely to have voted for Obama, relative to their vote for Kerry. When we examine the event effects separately for the different types of counties, we find no evidence of a difference in the returns. At this more disaggregate level, as at the aggregate level, we detect no impact of the Obama election events.

Having examined the impact on discriminatory behavior, I turn to examine the impact of these events on five economic outcomes for Blacks: (i) crime rates; (ii) labor force participation; (iii) application to a professional school (Law School); (iv) contribution to public goods, measured by organ donations; and (v) time spent in investment activities, such as work, as opposed to leisure activities, such as watching television. These five outcomes present a cross-section of labor market, educational, and public good contribution choices. In all of these cases, lowered perception of discrimination and changes in a role model can plausibly lead to improvements in outcomes for Blacks, i.e., lower crime rates or higher labor force participation.

For all of these outcomes, I use high-frequency daily (monthly in the case of labor force participation) data and consider decision where changes in perceptions due to Obama's candidacy can in principle have an immediate effect: avoiding criminal endeavours, joining the labor force, sending an additional graduate school application, giving the assent to an organ donation, or helping more in the household. As above, to address the concerns about alternative factors affecting these variables, such as the recession in 2008, I examine the short-run response to events and use Whites as a control group.

Across these outcomes, I find no evidence of an Obama effect, with the possible exception of Law School applications. There is no impact on crime rates for Blacks (or for Whites), no evidence of an impact on labor force participation, on organ donation, or on net time use on investment activities. These null effects are not due to lack of power since, in most cases, I am able to rule out reasonably small effects. For example, I can rule out with 95 percent confidence that an Obama event lowered crime by Blacks by more than 1 percent, or that it increase the labor force participation of Blacks by more than 1 percent. For the Law School applications, I find suggestive evidence of an increase of applications by 40 percent for Blacks in the Obama event months, although the effect is only marginally significant.

It is, of course, possible that the Obama effect on perceptions and economic outcomes is small in the short-run but large in the long-run.<sup>1</sup> However, the survey evidence on racial

<sup>&</sup>lt;sup>1</sup>Unfortunately, as in so many other settings, identifying long-run effects is difficult given the confounding

relations suggest that the highest optimism about racial relations occurred around Obama's election. The share of respondents that is optimistic about racial relations reverts to about the baseline levels by October 2009 (Figure 1). The short-lasting impact of the Obama election on racial relations is consistent with survey responses being driven by emotional responses (e.g., pride) which are likely strongest in the short-run. If this is the case, an effect would be most likely identified in the short term.

This paper is related to a small but growing literature in psychology and sociology that attempts to identify the effect of Obama's candidacy on beliefs and behavior. All of the existing studies are laboratory-based and typically use variation in exposure to pictures of Obama to examine the effect on racial attitudes (Aronson et al., 2009; Plant et al., 2009). In contrast, we present field evidence on economic outcomes. One study (Marx, Ko, and Friedman, 2009) considers the Obama effect on test scores by comparing a small sample of respondents that took a (fictitious) test before and after the Democratic convention. This study finds an increase in test score for the Blacks students in the group taking the test after the convention, but the effect only holds for the self-selected group that chose to listen to Obama's acceptance speech.

More generally, this paper relates to the literature on the impact of political role models on behavior. Mullainathan and Washington (2008) examines the lasting impact of voting on political polarization. Beaman et al. (forthcoming) finds that (randomized) exposure to female legislators improves perceptions of female leader effectiveness and ultimately leads to electoral gains for women. It is an important question along which dimensions, and at which horizon, exposure to political role models changes behavior, and when it does not.

This paper also relates to the literature on the evidence of racial discrimination, including the evidence from police behavior (Knowles, Persico, and Todd, 2001) and the evidence from wage differentials (Charles and Guryan, 2008).

#### 2 Data and Events

In this section I introduce the various data sets on economic outcomes (summarized in Table 1) and then discuss the Obama events.

**Traffic Stops.** The measure of racial discrimination builds on Knowles, Persico, and Todd (2001). Knowles et al. propose a novel test of race-based discrimination in vehicle searches. Rather than focusing on the share of a demographic group that is stopped and searched, it tests for differences in the ratio of searches that lead to findings of drugs, weapons, or other illegal elements. A demographic group is discriminated against by the police if the share of searches that are successful is lower for that group than for other groups. That is, the police searches a group too much, given the fact that *ex post* there is a lower success rate in the

time effects. One example is the identification of the effects of exposure to media violence which is possible in the short-run (Dahl and DellaVigna, 2009), but implausible in the long-run.

searches.

The original Knowles et al. (2001) focuses on data on a specific highway in Maryland and does not find any evidence of discrimination against Blacks, though it does find evidence of discrimination against Hispanics. For this paper, we obtained the data on all traffic stops in Illinois from 2005 to 2008. The data contains all stops, whether the stop lead to a search, and in case of a search whether drugs, weapons, or other paraphernalia were found. It also has information on the race of the person searched and the location of the stop, but no information about the identify of the police officer conducting the search. Since the data reports consistently the findings of the searches only from 2007 on, we focus the analysis on the 2007 and 2008 years. In these years, the average number of daily searches is 200.67 for White drivers and 93.31 for Black drivers.<sup>2</sup>

**Crime.** The crime data is from the Monthly Arrest and Citation Register (MACR) database of the California Department of Justice. The data consists of all incidents of crime covering the years 2006-2008, amounting to 5,741,812 records. It includes information on the race of the offender though not on the race of the victim. We use this data set to construct a monthly and daily time series of crimes. At the daily level, the average number of crime incidents committed is 1,788.02 with a White offender and 871.76 with a Back offender.

Labor Force Participation. The data for Labor force Participation is from the BLS and it covers the years 2006-2009.

Application to Law School. The record on law school applications are from a highlyranked school and include all applications submitted for the Classes of 2006, 2007, 2008, and 2009. Applications are rolling and are submitted typically between October and January of the previous academic year, with a small number of applications in September, February and March. The records contain the exact date in which the application was received, which is the date of application for online submissions (the majority in recent years) and the date of processing for submissions via mail. We include only US applicants, for whom the applications indicate the race of the applicant. The average number of daily applications are 23.71 for White applicants and 2.79 for Black applicants.

**Organ Donations.** As a measure of public good contribution, for the organ donors that are involved in a fatal accident we observe the cases where the organs are donated. In the case of an accident, the family of the victim is typically contacted for a decision about the organ donation. While in principle assent of the family is not required if the victim had expressed the intention to be an organ donor, in practice in most States the authorities do not proceed with an organ explant if the family objects to it. Hence, we observe a measure of pro-social behavior by the family of the victim. We have records of all organ donations with the date of the donation and the race of the donor from the United Network for Organ Sharing (UNOS) for the years 2006-2008. The average daily number of donations is 14.77 for white donors and

<sup>&</sup>lt;sup>2</sup>The results not change if we use the older years as well as a control group.

3.55 for black donors.

**Time Use.** The daily diaries from the ATUS data provide information on time spent on different activities from 2006 to 2008. Each respondent in the ATUS data indicates all the activities undertaken in one day in 15 minutes increments. On average, there are 34.62 respondents on a given day, of which 13.25 percent are black. We use this data to construct a measure of time spent in investment activities, net of time spent in leisure activities. The measure of investment activities includes time spent on work (166.71 minutes on average), educational activities (16.71 minutes), sports (17.59 minutes), volunteering (9.77 minutes), help in household (34.51 minutes), and help for other household (8.95 minutes). The time spent on leisure activities includes the time spent on watching television (167.23 minutes), on eating and drinking outside the home (13.92 minutes), gambling (0.8 minute), smoking (0.38 minute) and the time spent partying (6.92 minutes). The final measure of time spent on net investment activities averages to 72.02 minutes (s.d. 362.15) for White respondents and -4.49 minutes (s.d. 400.66) for Black respondents.

**Obama Events.** In order to evaluate the effect of the Obama role model, we analyze the short-run response to a series of events, first at the monthly horizon and then at the daily horizon.

Panel A of Table 2 lists the most prominent events at the daily level. The first daily event is the unexpected victory in the Iowa Democratic primary on January 3, 2008. This victory loomed large because an almost entirely white State voted for a Black candidate by a significant margin, upsetting the expectations that Hillary Clinton would win. In Figure 2 we plot the price of the Intrade security for whether Obama would become to Democratic primary nominee from the beginning of January 2008 until the end of July 2009. The Iowa victory significantly increases the predicted probability of victory from about 25 percent up to 70 percent.

This electoral victory was quickly followed by a primary lost to Hillary Clinton in New Hampshire on January 8, with Obama coming in as a close second. After the New Hampshire loss the Intrade security price decreases from 70 percent to about 40 percent and it hovers around this price for most of the month. We code this event as a negative event.

As the next daily event, we identify the date of the major round of concentrated primaries, the so-called Super Tuesday (2/5/2008). The fact that the count of delegates won on this day was a narrow victory for Obama was overall positive news for Obama and drew substantial headlines given the clustering of 22 Democratic primaries on this day. While the price of the Intrade security briefly declines, it then increases significantly over the following week to over 50 percent.

Following superTuesday, a number of smaller primaries increase the lead of Barack Obama. However, it is hard to point to each individual event as a major individual event. There is, however, a significant negative event when, after a string of eleven consecutive primary election wins, Obama loses the Ohio primary on March 4. In the three days surrounding this primary, the Intrade security declines by 13 percent.

We classify as the next (positive) event the major speech on race ('A More Perfect Union') that on March 18, 2008 Obama gave in response to the controversy over the Rev. Wright statements about religion and politics. This speech was generally positively received by all sides, largely put the Rev. Wright controversy to rest, and is regarded as one of Obama's best speeches. This event did not have an immediate impact on the Intrade security price, but it is followed by an increase in the betting price. In addition, the speech is likely to have had an impact (presumably positive) on perceived racial relations, aside from affecting Obama's probability of election.

In the weeks following the March 18 speech on race, Clinton and Obama trade victories in the primaries. The most significant event according to the Intrade price is the May 6 North Carolina primary, which is a victory for Obama. Over 4 days, the Intrade security increases from 74 to 90 percent.

As the final event of the primary season, we consider the concession speech by Hillary Clinton on June 7, 2008. Previous to this speech, the conclusion of the primary season on June 3, 2008 had left significant uncertainty as to Hillary Clinton's exit strategy. The concession speech made it near certain that Obama would be the first African American to become the Democratic Party candidate for a Presidential election.

The end of the primary season is followed by the The Democratic Convention at the end of August 2008 and in particular Obama's speech on August 28, 2008, was perceived to be successful and a unifying event after the divisions in the primary between supporters of Barack Obama and supporters of Hillary Clinton.

The next key event is Barack Obama's victory in the general election on November 4, 2008 over John McCain. The election of Obama, while considered likely, was by no means assured. With Obama's election, it becomes apparent that racial barriers did not stop a Black candidate from occupying the highest office in the country.

The final event is the official inauguration as 44th President of the United States of Barack Obama on January 20, 2009. This event, while of course completely expected, triggered a nation-wide celebration reflected also in very high approval ratings for Obama.

While in the daily event studies we consider all these events, in the monthly event studies we consider only what we deem the most important events (Panel B): the initial primaries (January 2008), the Convention (August 2008), the final election victory (November 2008), and the Inauguration (January 2009). This classification combines the two most important election victories—the first primary in Iowa and the final election—and two expected, highly ceremonial events—the Convention and the Inauguration. We consider all of these four months positive events, including January 2008. Despite the New Hampshire and Nevada losses, after the Iowa victory the probability of election for Obama hovers around 30 to 40 percent, significantly higher than the 20 percent pre-primaries probability.

This categorization of events is admittedly subjective and subject to criticism. To address this concern, in the next Sections we report the raw monthly series by race for the outcome variables to illustrate the identification. The daily event studies results do not depend on any particular event.

#### 3 Effect on Racial Profiling

As a measure of racial discrimination, we use the measure of racial profiling in traffic stops of Knowles, Persico, and Todd (2001). Discrimination in traffic stops has long been alleged based on the fact that Blacks are disproportionately stopped and disproportionately searched as a share of the population. Knowles et al. (2001) point out however that disproportionate searches are not direct evidence of discrimination. Blacks may, for example, drive different cars or drive in different areas that statistically are associated with higher incidence of criminal behavior; as such, one would expect a police force that is attempting to control crime to indeed stop them more frequently. If Blacks are stopped more often because they ultimately are more likely to carry drugs, Knowles et al. argue, it is not discrimination by race, but rather effective crime prevention, which should be the purpose of the police.

Knowles et al. (2001) propose instead to compare the efficacy of searches by race. A raceblind police force that is attempting to detect drug dealers should search drivers up to the point where the marginal probability of detecting drugs or weapons is the same for drivers of different races. To the extent that the distribution of the marginal drivers is not different from the distribution of the infra-marginal driver, with a race-blind police the probability of finding drugs or weapons should be the same for searches of drivers of different races. A police that discriminates against a racial group, instead, will search individuals of that group excessively. Discrimination in the data, hence, will be detected as a *lower* share of drivers with drugs among the searched drivers of that racial group.

We implement this test using a comprehensive data set of all traffic stops in Illinois, a state with a sizeable Black minority. Following Knowles et al. (2001), we compute the share of all car searches that lead to findings of contraband, drugs, weapons, stolen goods, alcohol, or paraphernalia.

As first evidence, we present in Figure 3 the monthly series for  $y_{m,r}$ , the share of successful searches in month m for race r (Black/White), over the year 2007-2008. In each of the 24 months in the sample, the share of successful searches is lower for Black searched drivers than for White searched drivers, *prima facie* evidence of discrimination against Blacks. This result differs from the finding of Knowles et al. (2001) who find no statistical difference between the share of successful searches for Black and White drivers.

The focus of this analysis is whether the Obama role model changed patterns of behavior, in this case racial profiling by the police. Given the substantial pre-existent racial differential measured in 2007, key Obama events could partially close this gap if Barack Obama's election changes positively the perceptions that Whites have of Blacks. In the key months for the Obama events (January '08, August '08, and November '08), there is however no discernible pattern of changes in the share of successful searches. In January '08, the share increases for Blacks, but it rises equally for Whites, and in the other two event months there is no sizeable movement.

Monthly Event Studies. To provide a statistical test, we estimate the following regression model using the monthly data. Denote by  $d_m^O$  an indicator variable for the months with positive events regarding Obama's election, as per Panel B of Table 2. Also denote by  $d_r^B$  an indicator variable for race r = Black. We estimate the OLS regression

$$y_{m,r} = \alpha + \beta d_m^O + \beta^B d_m^O * d_r^B + \gamma d_r^B + \Delta X_m + \varepsilon_{m,r}, \tag{1}$$

where the controls  $X_m$  consist of 12 month-of-year indicators to capture seasonality and year indicators to capture time trends. The standard errors are clustered by month, so as to allow for correlation between the two monthly realizations for Whites and Blacks. The coefficient  $\gamma$ captures the average difference in outcome  $y_{m,r}$  between Blacks and Whites. The coefficient  $\beta$  captures the increase in outcome y for Whites in months with positive Obama events, controlling for seasonality. The coefficient  $\beta^B$  captures the differential increase for Blacks relative to Whites in correspondence to the Obama events. We can thus test three hypotheses: (i) the Obama events did not have any effect ( $\beta = \beta^B = 0$ ); (ii) the Obama events had an effect, and this effect does not differ across races ( $\beta = \beta^B \neq 0$ ); (iii) the Obama events had an effect on Blacks, but not on whites ( $\beta = 0 \neq \beta^B$ ).

Column (1) in Table 3 shows estimates of (1). The estimated coefficient  $\hat{\gamma}$  indicates a highly significant 5.28 percent point difference in the success ratio of the searches between Blacks and Whites. This 25 percent difference is consistent with discrimination against Blacks, as we discussed above. We do not find instead any evidence of a change in this pattern in the months associated with salient Obama events. The estimate of the differential effect on Blacks,  $\hat{\beta}^B = .003$ , indicates an (insignificant) increase in the success ratio corresponding to a 2 percent change relative to the baseline.

In Column (2) we estimate this same specification using a narrower definition of searches, which includes only findings of drugs. With this alternative specification, there is a similar finding of baseline discrimination against Blacks, and a marginally significant decrease in this discrimination for Blacks (that is, an increase in the success ratio) with key events in the Obama election.

One may be concerned about the Knowles et al. (2001) proxy for discrimination. As an alternative test, we re-estimate specification (1) using as dependent variable  $y_{m,r}$  the log of the number of drivers of race r that are searched in month, divided by the population of that race. This specification investigates whether the Obama events changed the extent to which

Blacks are searched at all, compared to Whites. Column (3) in Table 3 indicates evidence that Blacks are substantially more likely to be searched, and that this pattern does not change significantly with the Obama events.

**Daily Event Studies.** The monthly event studies, while showing transparently the timeseries variation in the outcomes, are not designed to capture the dynamic response of the outcomes to the Obama events. For example, they treat events occurring at the beginning of a month and events occurring at the end of a month in a similar fashion, and they would not adequately capture an Obama effect that appears immediately after the event, but disappears, say, within a week. The monthly event studies, in addition, do not utilize the additional events, such as the super-Tuesday primaries and the speech on race (Table 2).

To better capture the dynamics of the response and to incorporate the full set of events, we perform daily event study regressions. Denote by  $y_{t,r}$  the share of successful searches on day t for race r (Black/White). Calling  $t_{EV}$  the date of an event, we denote by  $d_{t,[s,S]}^O$  a variable that is 1 (respectively, -1) for days  $[t_{EV} + s, t_{EV} + S]$  of a positive (negative) event, and zero otherwise. For example,  $d_{t,[0,6]}^O = 1$  indicates days within the first week after a positive event, and  $d_{t,[-7,-1]}^O = -1$  indicate days in the week before a negative event. We estimate the OLS model

$$y_{t,r} = \alpha + \beta_{[-7,-1]} d^{O}_{t,[-7,-1]} + \beta_{[0,6]} d^{O}_{t,[0,6]} + \beta_{[7,13]} d^{O}_{t,[7,13]} + \beta^{B}_{[-7,-1]} d^{O}_{t,[-7,-1]} d^{B}_{r} + \beta^{B}_{[0,6]} d^{O}_{t,[0,6]} d^{B}_{r} + \beta^{B}_{[7,13]} d^{O}_{t,[7,13]} d^{B}_{r} + \gamma d^{B}_{r} + \Delta X_{t} + \varepsilon_{t,r}.$$
(2)

The controls  $X_m$  consist of 365 day-of-year indicators to capture time-invariant seasonality, 7 day-of-week indicators to capture within-week variation, and year indicators to capture time trends. The standard errors are clustered at the month level to capture any autocorrelation within a month as well as correlation across races (within a month).

This methodology allows to test for immediate (that is, one-week) effects of the Obama events ( $\beta_{[0,6]}$  and  $\beta_{[0,6]}^B$ ), as well as effects delayed by one week ( $\beta_{[7,13]}$  and  $\beta_{[7,13]}^B$ ). In addition, it presents 'placebo' results of the events in the previous week ( $\beta_{[-7,-1]}$  and  $\gamma_{[-7,-1]}$ ). In order to increase power, this specification makes the restriction that a negative event has the same effect of opposite sign as a positive event.

In Table 4 we present the results of the estimates. Using the benchmark measure of success ratio of searches (Column 1), we find no evidence of a change in the first or second week following a Obama event, either for Blacks or for Whites. When we use the more restrictive definition of the success ratio that only uses drugs (Column 2), we similarly find no evidence of an effect; thus the marginally significant finding of a decrease in discrimination in the monthly event studies (Table 3, Column (2)) does not replicate here. Then, using the log of the number of searches over population (Column (3)), we find suggestive evidence of a decrease in the number of Black searches 7 to 13 days later, though not 0 to 6 days after the event. Finally, we provide graphical evidence of the event study effects at the daily level. We estimate the regression

$$y_{t,r} = \alpha + \gamma d_r^B + \Delta X_t + \varepsilon_{t,r},\tag{3}$$

with the same controls X as in regression (2) and generate the residual  $\hat{\varepsilon}_{t,r}$ . We renormalize the dates in event time and average the residuals across the events, changing the sign for the negative event. We then plot the average residual for the 20 days before and after the events in Figure 9a. This graphical evidence also shows no indication of a change in the behaviors following the event.

**Heterogeneity.** The evidence at the monthly or daily level implies that the Obama events did not on aggregate have a significant effect on discriminatory behavior towards Blacks by police officers in Illinois. The aggregate null effects, however, may mask substantial heterogeneity. It is possible, for example, that the election of Obama was associated with a decrease of discrimination among officers who were already more favorably oriented towards Blacks, but an increase in discrimination among the more discriminatory officers. In this case, the election of a Black present further polarized racial attitudes.

Unfortunately, this data set (like most data sets on car stops) does not include information about the police officer that could allow for such tests. However, we can exploit the information about the location of the car stops. Most police officers in this data set are likely to be working in locations within their county of residence, given that the data on car stops comes from the Department of Transportation, as opposed to the Highway Administration. While no data set we know of includes measures of discriminatory attitudes at such a fine level as the county<sup>3</sup>, we can use the reveled preferences in the form of the voting behavior in the 2008 general election. Counties that vote more in favor of Barack Obama are more likely to have positive attitudes towards Blacks than counties that do not. An obvious confound is that Barack Obama and John McCain differ in multiple ways in addition to their race. As a partial way to address this confound, we use as measure of county-level racial preferences the difference between the Democratic 2-party vote share in 2008 and in 2004:  $v_{08}^D - v_{04}^D$ . By comparing Obama to Kerry and McCain to Bush, we can partially control for political preferences of the electorate.<sup>4</sup>

We thus split counties into three groups: Pro-McCain countries  $(v_{08}^D - v_{04}^D < .05)$ , denoted with  $d^{Mc} = 1$ , intermediate counties  $(.05 < v_{08}^D - v_{04}^D < .10)$ , denoted with  $d^{Int} = 1$ ) and pro-Obama counties  $(.10 < v_{08}^D - v_{04}^D)$ , denoted with  $d^{Ob} = 1$ . We then estimate the monthly event study regression:

$$y_{m,W} - y_{m,B} = \alpha + \beta d_m^O + \beta^{Int} d_m^O * d^{Int} + \beta^{Ob} d_m^O * d^{Ob} + \gamma^{Int} d^{Int} + \gamma^{Ob} d^{Ob} + \Delta X_m + \varepsilon_{m,r}.$$

The dependent variable is the difference in the discriminatory behavior (such as the success

<sup>&</sup>lt;sup>3</sup>For example, Charles and Guryan (2008) in their study of the impact of discrimination in labor markets use measures of survey-based discrimination from the GSS, aggregated at the Census region level.

<sup>&</sup>lt;sup>4</sup>The event study results are similar if we simply use the vote share for Obama in 2008.

ratio of a car search) for White drivers relative to Black drivers in month m. An increase in this variable can be interpreted as an increase in discrimination against Blacks. The coefficient  $\beta^{Ob}$  captures whether discrimination responds differently to the Obama events in counties that vote more pro-Obama than in counties that vote more pro-McCain. Similarly, one can interpret  $\beta^{Int}$ .

The results in Table 5 indicate that the effect of the Obama events does not differ significantly across the three groups of counties. Indeed, the pattern of the effects is not even monotonic across the three groups. This pattern of findings holds for both the benchmark measure of success ratio (Column (1)), the measure that uses only drugs (Column (2)), and the measure based on number of searches (Column (3)). This suggests that the key finding in the aggregate event studies—that key events associated with Obama's election did not induce a change in this pattern of discrimination—is not due to heterogeneous effects of opposing signs.<sup>5</sup>

#### 4 Effect on Outcomes for Blacks

For each outcome, we first present graphical evidence on the monthly time series by race (White versus Black) and present regression-based evidence of the monthly event study. We then use in Table 6 the same model as in specification (1), where  $y_{m,r}$  denotes the log of the count of occurrences of an outcome (crime, organ donation sign-ups, etc.) in month m for race r (Black/White).<sup>6</sup> We then present daily event studies in Table 7 with a specification modeled on (2) expect that we use a Poisson count model for all the outcomes except for the time use one. We also present daily event plots in figures 9b-9d.

**Crime.** Figure 4 plots the monthly data for crime occurrences with a Black offender and a White offender for the years 2006-2008. Overall the crime rates in California are quite persistent over time, with moderate seasonality. The year 2008 in which the Obama election unfolded is, to a first approximation, associated with a somewhat higher crime rate for Blacks, but not for Whites, the opposite of what one would expect if the Obama election has lowered the propensity to commit crime by Blacks. Obviously, this could also be due to the increased unemployment rate in 2008 that may have affected Blacks differentially. Turning to the monthly events, we find no systematic difference in crime in the months with the most significant Obama events in the data—January, August, and November 2008—relative to other months, for either Whites or Blacks.

The monthly event study regression findings in Column (1) of Table 6 indicate a significant decrease in crime for whites ( $\hat{\beta} = -.0422$ ) and an insignificant relative increase in crime for

 $<sup>{}^{5}</sup>A$  surprising finding is that counties which vote more in favor of Obama (relative to Kerry) are not associated with a lower racial differential in success rate, indicating if anything the opposite in Columns (2) and (3).

<sup>&</sup>lt;sup>6</sup>For the applications to Law School, the year fixed effects refer to the academic year.

Blacks ( $\hat{\beta} = .033$ ). The evidence therefore does not support the idea that Obama's election reduced the crime rate among Blacks. This conclusion is not due to a lack of power. Given the precise estimates, we can rule out that, compared to the effect for Whites, that the average Obama event lowered the crime rate in the month by more than 0.7 percent, a small decrease.

In the daily event study estimates, we use a Poisson count model to estimate the effect at a higher horizon. Given the lower frequency of crime occurrences at the daily level, the Poisson model is more appropriate than a log OLS specification. The estimates in Column (1) of Table 7 are broadly consistent with the monthly results: Compared to the effect for Whites, the effect for Blacks is a 2.9 percent (marginally significant) *increase* in crime in the first week and a 3.7 percent significant increase the second week. Hence, not only there is no decrease in the crime rate, but there is some evidence of an increase, consistently with the monthly event study estimate of Table 3.

In Figure 9b, we plot the day-by-day event study estimate following the procedure outlined above, and using log occurrences of crime as the dependent variable. The plot provides some evidence of an increase in crime for Blacks in the second week after the event.

Labor Force Participation. Figure 5 presents the labor force participation for Blacks and Whites over the years 2006-2009. There is no evidence in the data of an increase in labor force participation for Blacks in the key months for the election, except for August 2008. The point estimates of the monthly event study regression in Table 4 indicates a precise null effect: Given the stability of the labor force participation series, we can reject an increase in the participation rate for Blacks (compared to Whites) of 0.6 percentage points, off of a basis of 63 percentage points, that is, a one percent effect. For this outcome, given that the data is at the monthly level, we do not estimate the daily event study models.

Application to Law School. Criminal behavior and labor force participation do not appear to have been responsive to a change in role model induced by the Obama events. However, it is conceivable that the Obama victory may have changed the economic behavior of Blacks in other dimensions that are more closely associated with Obama's background. A clear example is Obama's Law School education which was extensively covered by the media. As such, we consider the impact on applications to a top-ranked Law School.

Given the relatively short horizon of the event study, we do not attempt to capture the extensive margin decision—whether to apply to Law School at all. Instead, we focus on the intensive margin decision—how many schools to apply for. Once the LSDAS file is complete, an additional application typically costs between \$50 and \$150, and can be submitted online within a short time frame. To the extent that Obama motivates Blacks to apply to Law Schools, it may induce them to apply to more schools to increase the likelihood of acceptance, and/or to apply to higher-ranked law schools, such as the one in our sample.

While the applications are made on a rolling basis, the large majority of applications come in between October and January, which are the months we focus on. Given that applications occur in only four months with highly seasonal patterns, we present the data in the form of a histograms (Figures 6a and 6b), as opposed to a continuous time series.

The data for Blacks (Figure 6a) shows a distinct year-on-year increase for three months: January 2008, November 2008, and January 2009. These months coincide precisely with the three Obama event months in this sample, consistent with a possibly quite sizeable effect of the Obama role model. While it is not easy to separate an Obama effect from a time-series increase in applications due to the economic crisis, there is no such increase either in the months before January 2008, in October 2008, or in December 2008. We can also compare the impact on Black applicants to the impact on White applicants, which helps to control for common shocks. Figure 6b shows smaller increases for application rates by Whites in November 2008 and January 2009, as for Blacks, though not in January 2008.

Column (3) in Table 6 provides a formal test of the difference between the event study impact on Black and White applicants: the point estimate indicates a 39 percent higher increase for Blacks. This difference, while large, is only marginally significant. In the daily event study regressions (Column (2) of Table 4) there is an estimated increase of Black applications (compared to Whites) of 23 percent in the first week after the event, and of 16 percent in the second week after the event, with this second difference being statistically significant. The graph of the daily event study (Figure 9c) indicates a fairly noisy effect.

Overall, the data suggests that key Obama events likely contributed to a substantial increase in the number of applications to a top Law School. However, the estimates are fairly imprecise given the clustering of applications over four months, and the relatively small number of Black applicants.<sup>7</sup>

**Organ Donations.** Next, we examine the decision (taken by the family) to explant the organs in the case in which a fatal accident occurs. Organ donation is an altruistic decision that benefits an anonymous recipient. Given that the Blacks are a minority in the US, the decision to donate organs quite possibly benefits a non-Black. As such, the disposition to donate the organ by Blacks can be taken as a measure of social preferences of Blacks toward Whites.

The monthly time series (Figure 7) provides no evidence that the Obama event months are associated with a higher willingness to donate organs by either Blacks or Whites, except perhaps for an increase for Blacks in November 2008. Overall, the monthly event study estimates (Column (4) in Table 6) point to a statistically insignificant 2.8 percent increase for Blacks relative to Whites on event months. The daily event studies (Column (3) in Table 7 and Figure 9d) provide no consistent evidence of an effect of the events. Overall, we find no

<sup>&</sup>lt;sup>7</sup>We collected data on applications to a Business School in the same campus as the Law School to attempt to separate the impact on Law Schools in particular from the impact on all educational programs. Unfortunately, the aseline number of applications by Blacks is significantly smaller, and hence it is difficult to provide precise evidence in regard.

consistent evidence of an impact of the Obama election events on a specific form of public good contribution, the decision to donate the organs.<sup>8</sup>

**Time Use.** A final set of outcomes that could be impacted is the allocation of time. The Obama role model represents a case in which the time spent on 'investment' activities such as work and education paid off, and individuals, inspired by his example, may also decide to spend more time on work and education as opposed to watching television and going out. Using the ATUS time diaries, we thus compute a measure of minutes spent on investment activities, net of the time spent on leisure activities (see Section 2). Notice that this measure can be negative if the time spent on leisure activities is larger than the time spend on investment activities.

The monthly average of this daily measure is lower for Blacks than for Whites (Figure 8), and most importantly there is no consistent evidence of increases of the time spent on investment activities in the Obama event months. The regression findings (Column (5) in Table 6) suggest that if anything the Obama event months are associated with a slightly lower use of time for net investment activities, although the estimates are quite noisy. Given these estimates, we can reject that the Obama events increased the time spent in net investment activities (for example, through less TV watching) for Blacks by more than 33 minutes per day. The evidence from the daily event study regressions confirm if anything a negative effect of the events. The lack of a systematic pattern is confirmed when we consider the individual components, such as television usage and time spent helping in the household.

### 5 Conclusion

In this paper, we have used an event study methodology to provide evidence on whether Obama's election has affected racial discrimination against Blacks and economic outcomes for Blacks by changing perceptions.

We first examine the impact on discrimination in car stops by police officers. Using a variety of measures, we find no evidence that key events in Obama's election changed the racial patterns in car searches. This pattern holds even when we separate counties based on a proxy of racial attitudes.

We then examine the effect on a range of economics outcomes for Blacks, from criminal behavior to time use. On most outcomes, we find no systematic evidence of a differential change in outcomes due to the events for Blacks relative to Whites. We can reject fairly small effects, for example a 1 percent decrease in crime. We do find, however, suggestive evidence that the events significantly increased the number of applications to a Law School, suggesting perhaps that the larger impact of the Obama role model is for a highly-educated population.

<sup>&</sup>lt;sup>8</sup>We collected data on applications to Teach for America as a measure of service to the community. Unfortunately, however, the applications to this program are all essentially bunched at one annual deadline.

These findings raise the question of whether the epochal election of Barack Obama has changed only beliefs about racial relations, but not economic outcomes. A possibility is that the election has induced changes, but these changes are limited to the political realm where the Obama example resides. For example, it is possible that the extremely heavy Black turnout of the 2008 Presidential election will persist and apply to future elections as well. A new generation of Black voters may also be motivated to participate in politics. We leave these conjectures to future research.

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**Figure 1. Survey Question about Race Relations (Gallup Polls)** 



**Note:** Figure 2 plots the price of the Intrade security for the event that Obama will secure the Democratic Primary at different dates. Emphasized in the figure are seven events that we use in the event study. A red circle indicates events favorable to Obama, while a green triangle indicates unfavorable events. This Figure lists only events up to June 2008, see Table 2 for a list of all the events.



**Note:** Figure 3 reports the ratio of searches leading to discovery of drugs or weapons as a fraction of all searches undertaken in month *t* for race *j*. A lower value of this ratio for a demographic group is evidence of discrimination (Knowles et al., 2001). The three vertical bars indicate the first primary in IA (Jan. 2008), the Democratic Convention (Aug. 2008), and the general election (Nov. 2008).



**Note:** Figure 4 reports monthly counts of incidents of crime from the MACR data set of the California Department of Justice by race of the offender. The three vertical bars indicate the first primary in IA (Jan. 2008), the Democratic Convention (Aug. 2008), and the general election (Nov. 2008).



**Note:** Figure 5 reports the labor force participation (in %) from the BLS at the monthly level by race. The four vertical bars indicate the first primary in IA (Jan. 2008), the Democratic Convention (Aug. 2008), the general election (Nov. 2008), and the Inauguration (Jan. 2009).



**Note:** The data refers to the applications to a top-ranked Law School. The Figures include only applications in the top four months (October to January). The applications excluded are for September 2005 (118 applications by Whites and 9 by Blacks), March 2008 (2 by Whites), June 2008 (20 by Whites), July 2008 (7 by Whites) and April 2009 (2 by Whites, 1 by Black). The shaded bars indicate the first primary in IA (Jan. 2008), the general election (Nov. 2008), and the Inauguration (Jan. 2009).



**Note:** The data covers all organ donations for the case of fatal accidents in the US. The three vertical bars indicate the first primary in IA (Jan. 2008), the Democratic Convention (Aug. 2008) and the general election (Nov. 2008).



**Note:** Figure 8 reports a monthly series by race of the time spent on net investment activities. This variable is constructed as an average across respondents of a given race and over days in a month of the total daily minutes spent on investment activities *minus* the total daily minutes spent on leisure activities (Source: ATUS time diaries). The investment activities include work, education, sports, volunteering and help in household and outside household. The leisure activities include watching TV, eating and drinking outside the home, gambling, smoking, and partying. The three vertical bars indicate the first primary in IA (Jan. 2008), the Democratic Convention (Aug. 2008) and the general election (Nov. 2008).



Figure 9a-d. Effect of Obama Events, Daily Event Study



**Note:** To construct Figures 9a-d, I obtain the residuals of regressions of the relevant outcome variable on the set of controls of Table 5 (day-of-year, day-of-week, and year fixed effects). Each observation in the regression is a calendar day\*race. The residuals are then shifted to event time and averaged across the daily events listed in Table 2. The residual for the two negative events are changed of sign before aggregation.

Outcome	Discrimination in Traffic Stops	Crime Occurrences	Labor Force Participation	Law School Applications	Organ Donations	Net Time Use on Investment Goods
Data Description	All traffic stop in Illinois	All reports or crime in California from MACR data base	Labor force participation	Applications to a top-ranked Law School	Organ explants due to fatal accident	Time use data from ATUS time diaries
Source	Illinois Department of Transportation	California Department of Justice	BLS	Administrative Law School Records	United Network for Organ Sharing	Bureau of Labor Statistics
Years Covered	2007-2008	2006-2008	2006-2008	Entering year 2006-2009 5 months:	2006-2008	2006-2008
Months Covered	12 Months	12 Months		October-February		12 Months
Data Frequency	Daily	Daily	Monthly	Daily	Daily	Daily
Number of Records	4969811	5741812		28629	24091	37914
Information on Race	Yes (Race of driver stopped)	Yes (Race of offender)	Yes	Yes	Yes	Yes
	Share of searches which result in findings of drugs	Number of occurrrences of	Labor force	Number of applications to a top-ranked Law	Daily number of organ	Average time spent daily in investment activities, net of time spent in
Key Variable	or weapons	crime	participation	School	explants	leisure activities
Mean of Variable	0.196	1329.889		13.251	9.250	86.858
Share Black	0.173	0.166		0.053	0.157	0.133

 TABLE 1

 DATA ON ECONOMIC OUTCOMES AND SUMMARY STATISTICS

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Notes: See text for additional information.

# TABLE 2LIST OF EVENTS FOR OBAMA ELECTION

Panel A: Daily E	Event Study	
Date	Valence	Description
1/3/2008	Positive	IA Primary: Barack Obama wins first primary election (Iowa), against expectations
1/8/2008	Negative	NH Primary: Barack Obama loses second primary (New Hampshire) to Hillary Clinton
2/5/2008	Positive	Super Tuesday: Barack Obama wins 847 delegates (to Clinton's 834) from the 23 States holding primaries on Super Tuesday
3/4/2008	Negative	OH Primary: After a string of 11 primary victories, Barack Obama loses the Ohio primary to Hillary Clinton
3/18/2008	Positive	Speech on Race: Barack Obama gives speech on race which earns very positive reviews
5/6/2008	Positive	NC Primary: Barack Obama wins the North Carolina primary
6/7/2008	Positive	Clinton Concession Speech: Hillary Clinton concedes and endorses Barack Obama
8/28/2008	Positive	Democratic Convention: Barack Obama gives the speech in Democratic National Convention
11/4/2008	Positive	General Election: Barack Obama is elected 44th President of the United States
1/20/2009	Positive	Inauguration: Barack Obama is inaugurated as president

#### Panel B: Monthly Event Study

T aller D: Monthly	Event Study	
Date	Valence	Description
January 2008	Positive	First Primary: Barack Obama wins election in Democratic primary in Iowa, against expectations
August 2008	Positive	Democratic Convention: Democratic Convention by acclamation chooses Barack Obama as Democratic nominee for President
November 2008	Positive	General Election: Barack Obama is elected 44th President of the United States
January 2009	Positive	Inauguration: Barack Obama is inaugurated as president

Notes: See text for additional information.

Specification: Dep. Var.:	OLS Regression Outcome in Month t for Race j (White/Black)				
	Sucessful Search	Sucessful Search	Log (Number of		
Outcome:	Ratio	Ratio (Only Drugs)	Searches / Population)		
	(1)	(2)	(3)		
Dummy for positive	-0.0032	-0.0086*	0.0083		
month for Obama	[0.0062]	[0.0047]	[0.0251]		
Positive Obama month*	0.003	0.0082*	-0.0227		
Black Dummy	[0.0057]	[0.0045]	[0.0272]		
Dummy for Black	-0.0528***	-0.0257***	1.1598***		
	[0.0026]	[0.0023]	[0.0096]		
Month-of-year Dummies	Х	Х	Х		
Year Dummies	Х	Х	Х		
R-squared	0.95	0.88	0.99		
Number of Observations	48	48	48		

 TABLE 3

 EFFECT OF OBAMA EVENTS ON DISCRIMINATION: MONTHLY EVENT STUDY

**Notes:** Each observation is a monthly count of the dependent variable for either whites or blacks. The data refers to traffic stops in IL for the years 2007 and 2008. See Table 1 for the definition of the dependent variable. Standard errors clustered by month in parentheses.

Specification:	OLS Regression				
Dep. Var.:	Outcome on Day t for Race j (White/Black)				
Outcome:	Sucessful Search Ratio	Sucessful Search Ratio (Only Drugs)	Log (Number of Searches / Population)		
	(1)	(2)	(3)		
Event for Obama Last Week (Days (0,6)) ( <i>lag</i> )	0.003	-0.0006	0.009		
(1=positive,-1= negative,0=none)	[0.0041]	[0.0048]	[0.0230]		
Event for Obama Last Week (Days (0,6)) ( <i>lag</i> )	-0.003	-0.0033	0.014		
* Black Dummy	[0.0067]	[0.0066]	[0.0345]		
Event for Obama Two Weeks Ago (Days (7,13))	0.0003	-0.0015	0.0814*		
(1=positive,-1= negative,0=none)	[0.0048]	[0.0040]	[0.0449]		
Event for Obama Two Weeks Ago (Days (7,13))	-0.0012	0.0003	-0.0334**		
* Black Dummy	[0.0049]	[0.0060]	[0.0160]		
Event for Obama Next Week (Days (-7,-1)) (lead)	0.0058	0.0007	0.0021		
(1=positive,-1= negative,0=none)	[0.0056]	[0.0044]	[0.0276]		
Event for Obama Next Week (Days (-7,-1)) ( <i>lead</i> )	0.0093	0.0097*	0.005		
* Black Dummy	[0.0081]	[0.0054]	[0.0242]		
Black Dummy	-0.0517***	-0.0261***	1.1663***		
	[0.0024]	[0.0021]	[0.0101]		
Controls for day-of-week and day-of-year	X	X	X		
Controls for years	Х	Х	Х		
R-squared	0.610	0.42	0.95		
Number of Observations	1460	1460	1460		

 TABLE 4

 EFFECT OF OBAMA EVENTS ON DISCRIMINATION: DAILY EVENT STUDY

Notes: Each observation is a daily count of the dependent variable for either whites or blacks. The data refers to traffic stops in IL in 2007 and 2008. See Table 1 for the definition of the dependent variable. Standard errors clustered by month allow for autocorrelation within a month and correlation between races within a month (in parentheses).

Specification: Dep. Var.:	OLS Regression Outcome in Month t for Whites - Outcomes in Month t for Blacks					
		Sucessful Search	Log (Number of			
	Sucessful Search	Ratio (Only Drugs)	Searches / Population)			
Outcome:	Ratio (White-Black)	(White-Black)	(White-Black)			
Dummy for positive	0.0041	-0.0004	-0.0024			
month for Obama	[0.0188]	[0.0111]	[0.0329]			
Positive Obama month*	-0.0033	-0.0122	-0.0289			
Intermediate County	[0.0143]	[0.0093]	[0.0370]			
Positive Obama month*	0.0133	0.0031	0.0381			
Pro-Obama County	[0.0234]	[0.0171]	[0.0374]			
Dummy for intermediate	0.0099	0.0334***	-0.6424***			
County	[0.0087]	[0.0074]	[0.0301]			
Dummy for pro-Obama	-0.0066	0.0312***	-0.4500***			
county	[0.0085]	[0.0075]	[0.0257]			
Month-of-year Dummies	Х	Х	Х			
Year Dummies	Х	Х	Х			
R-squared	0.26	0.5	0.96			
Number of Observations	72	72	72			

 TABLE 5

 EFFECT OF OBAMA EVENTS ON DISCRIMINATION: HETEROGENEITY

Notes: Each observation is a monthly count of the dependent variable for either whites or blacks. See Table 1 for the definition of the dependent variable. Standard errors clustered by month in parentheses.

<u>Spe</u> cification: Dep. Var.:		OLS Regression Outcome in Month t for Race j (White/Black)					
Outcome:	Log of Crime Occurrences	Civilian Labor Force Participation (percentage)	Log of Law School Applications	Log of Organ Donations due to Fatal Accident	Daily Minutes Spent on Net Investment, Averaged in Month t for Race j		
	(1)	(2)	(3)	(4)	(5)		
Dummy for positive	-0.0422**	0.0427	-0.0992	-0.0294	-8.2154		
month for Obama	[0.0165]	[0.1735]	[0.1210]	[0.0376]	[18.7114]		
Positive Obama month*	0.033	0.187	0.3927*	0.028	-8.778		
Black	[0.0202]	[0.2260]	[0.2124]	[0.0426]	[20.0709]		
Dummy for Black	-0.7210***	-2.6875***	-2.3929***	-1.4654***	-74.6959***		
	[0.0076]	[0.0810]	[0.0972]	[0.0256]	[6.6773]		
Month-of-year Dummies	Х	Х	Х	Х	X		
Year Dummies	Х	Х	Х	Х	Х		
R-squared	1.00	0.95	0.99	0.99	0.76		
Number of Observations	72	72	32	72	72		

	TABLE 6	
EFFECT	F OBAMA EVENTS ON OUTCOMES FOR BLACKS AND WHITES: MONTHLY EVENT STU	DΥ

Notes: Each observation is a monthly count of the dependent variable for either whites or blacks. See Table 1 for the definition of the dependent variable. Standard errors clustered by month in parentheses.

Specification:		Poisson Regressio of Occurrences of	OLS Regression Daily Minutes Spent on Net Investment,		
Dep. Var.:		Day t for Race j			
	Crime	Law School	Organ	Averaged in Day t for	
Outcome:	Occurrences	Applications	Donations	Race j	
	(1)	(2)	(3)	(4)	
Event for Obama Last Week (Days (0,6)) ( <i>lag</i> )	-0.0329***	0.011	-0.0704*	-5.9813	
(1=positive,-1= negative,0=none)	[0.0120]	[0.0582]	[0.0361]	[10.7272]	
Event for Obama Last Week (Days (0,6)) ( <i>lag</i> )	0.0298*	0.2375	0.0906	-59.8594**	
* Black Dummy	[0.0154]	[0.2193]	[0.1092]	[26.2306]	
Event for Obama Two Weeks Ago (Days (7,13))	-0.008	0.3923	-0.008	-23.2299	
(1=positive,-1= negative,0=none)	[0.0067]	[0.3149]	[0.0296]	[14.7791]	
Event for Obama Two Weeks Ago (Days (7,13))	0.0369***	0.1595**	-0.026	-29.8396	
* Black Dummy	[0.0064]	[0.0788]	[0.0937]	[24.5250]	
Event for Obama Next Week (Days (-7,-1)) (lead)	-0.0148	0.0146	-0.0121	-8.7081	
(1=positive,-1= negative,0=none)	[0.0107]	[0.0444]	[0.0324]	[20.4833]	
Event for Obama Next Week (Days (-7,-1)) ( <i>lead</i> )	0.029	0.3956**	0.061	-9.7039	
* Black Dummy	[0.0191]	[0.1552]	[0.1062]	[39.1271]	
Black Dummy	-0.7215***	-2.2630***	-1.4623***	-82.4592***	
	[0.0065]	[0.0684]	[0.0218]	[6.1643]	
Controls for day-of-week and day-of-year	X	X	X	X	
Controls for years	Х	Х	Х	Х	
R-squared				0.410	
Number of Observations	2190	1008	2190	2104	

# TABLE 7 EFFECT OF OBAMA EVENTS ON OUTCOMES FOR BLACKS AND WHITES: DAILY EVENT STUDY

Notes: Each observation is a daily count of the dependent variable for either whites or blacks. See Table 1 for the definition of the dependent variable. Standard errors clustered by month to allow for autocorrelation within a month and correlation across races (in parentheses).