

Supporting Information:
The Obama Effect?
Race, First-time Voting, and Future Participation

October 27, 2021

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1 Effect of 2012 Voting on Future Voting

To put the effects of 2008 voting on future political behavior in context, and to test another formative voting experience where we might expect Blacks to experience stronger mobilizing effects than other groups, I estimate the effect of voting in the 2012 presidential election on downstream voting. This comparison offers a “most similar test” to the 2008 election. President Obama is still on the ballot, and Black turnout in 2012 was the highest ever seen in a United States presidential election, just outpacing 2008. Voting for the first time in 2012 may have felt less momentous than voting for the first time in 2008, but this election still represents a formative voting experience that should be more positive and more meaningful, and thus exert a stronger effect on downstream participation, for Blacks than for non-Blacks. The results for 2008 voting provide particularly strong evidence against my hypotheses because the 2008 election is the electoral context, if the model of empowerment-driven first-time voting put forth in this paper were true, where we would most expect to observe higher mobilizing effects for Blacks. If voting in 2012 also does not produce the hypothesized effects, then it is further unlikely that the interaction of formative electoral context and racial identity is a primary determinant of voting habits.

Figure 1 shows the CACE estimates for 2012 voting on voting in 2014 and 2016. Here, we see no evidence of a mobilizing advantage for Black voters. The effects on 2014 voting are statistically indistinguishable across racial groups, while Hispanics again see the largest effects on 2016 voting.

identification as voting in 2008. Since the outcome is measured in 2017 for both the 2008 and 2012 analysis, I cannot make the comparison as to how each election influences registration and party identification after equivalent amounts of time. Still, we see results that are generally similar in magnitude. The differences arise in that the effect for Blacks on registration is higher than that for Whites. This not the case in the 2008 analysis.

Additionally, the effect for Blacks on Democratic party identification is the statistically equivalent to the effect for Hispanics.

Figure 1: Weighted Average of State-Level 2012 Effects

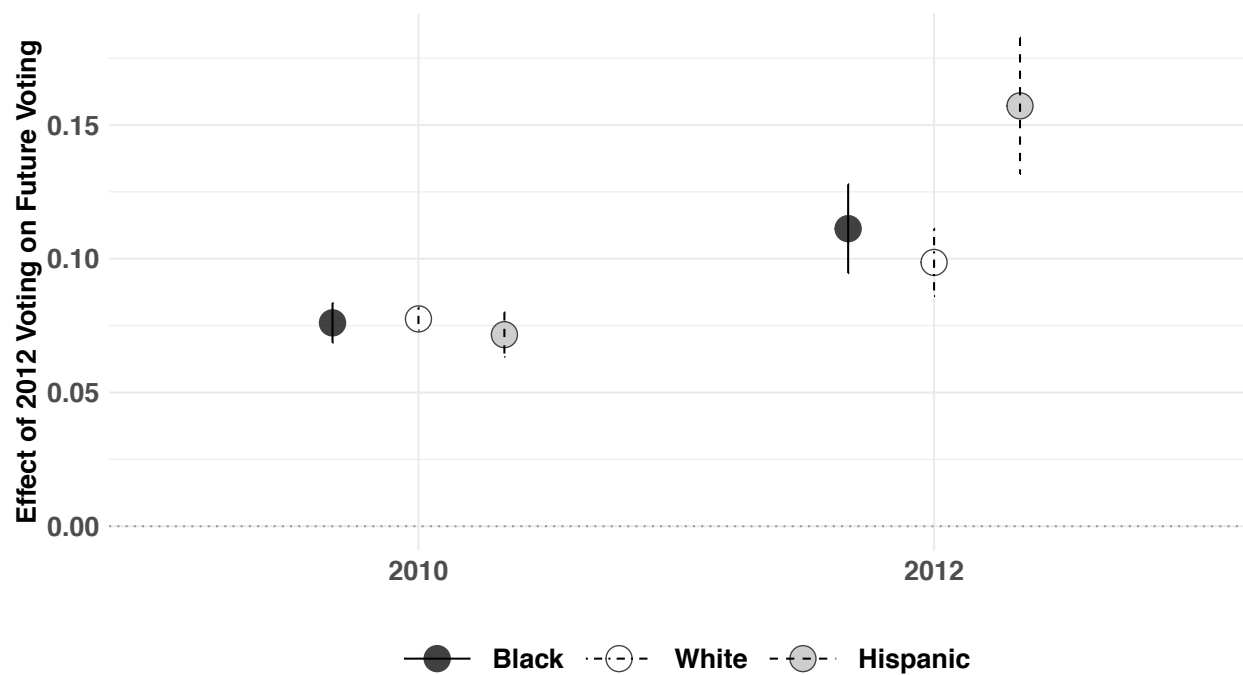
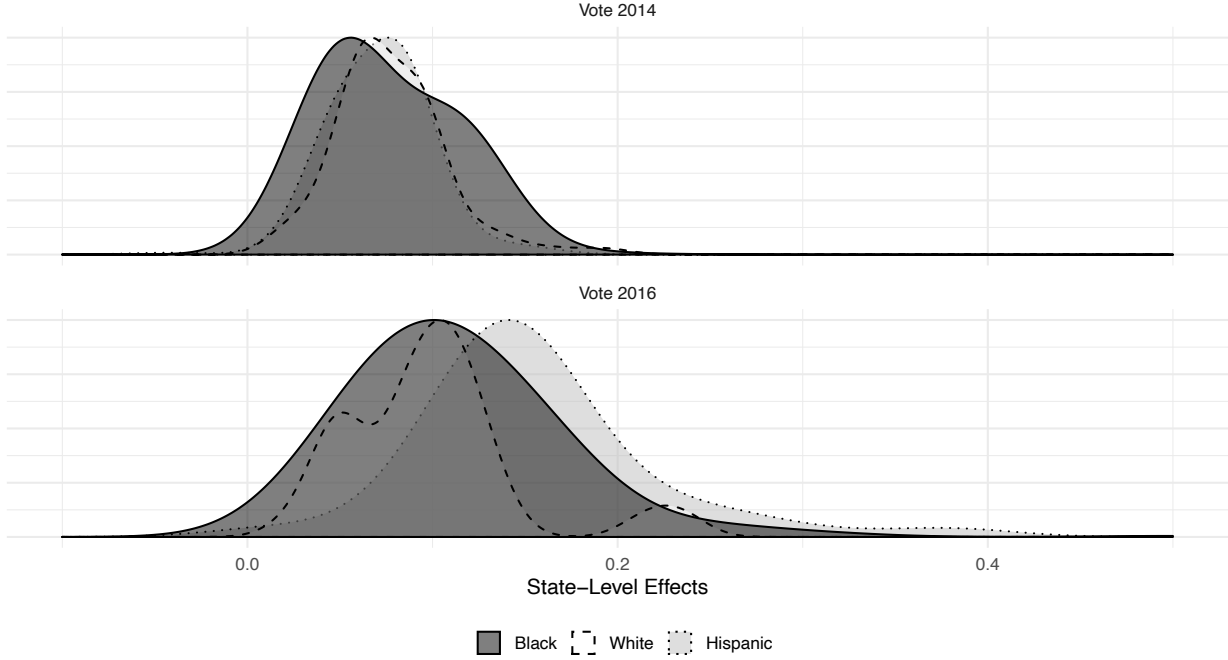


Figure 2: Weighted Distributions of State-Level 2012 Voting Effects



Distributional density of state-level CACEs, weighted by the inverse of the variance of the estimates.

2 Effect of 2008 Voting on Future Registration and Partisanship

Here, I present the effect of voting in 2008 on 2017 registration and partisanship. While the effect of 2008 voting on future voting most directly addresses the hypotheses put forth in this paper, examining the effect of voting for the first time in 2008 on the likelihood of being registered in the future, and its effect on future partisanship, is clarifying in two primary ways. First, in the United States, the registration and party systems present major obstacles to participation (Powell, 1986), and political empowerment can spur minority group turnout by helping minority voters overcome structural and institutional obstacles to voting (Walton, 1985). Measuring the effect of voting for the first time in 2008 on the likelihood of being registered in the future should help disentangle the extent to which the lack of a mobilizing

advantage for Blacks compared to other racial group is a result of differential effects on future registration versus differential effects on behavioral determinants of voting, such as stronger attachments to politics. Second, analyzing future partisanship as an outcome clarifies one mechanisms by which voting in 2008 could produce empowering effects on habitual voting, by producing stronger and more persistent ties for first-time voters to the Democratic party.

Estimation for these outcomes is the same as in the main voting specifications, but the outcome is the number of registered voters or registered Democrats or Republicans as of the date of the voterfiles in each birth-day cohort. Similar to the main analysis, I estimate the effects separately for each state and racial group, and then calculate the fixed-effects meta analysis weighted average across states¹ for each racial group. Thus, I compare the the effect of voting in 2008 on being registered, and on being registered as a Democrat or Republican, in 2017. To calculate the CACEs, I again estimate a two-stage least squares (2SLS) estimator².

For Blacks, voting for the first time in 2008 caused a 0.251 increase in the likelihood of being registered eight years later. This effect is comparable to the effect for first-time White voters (0.261), but notably less than the effect for first-time Hispanic voters (0.412). Figure 3 plots the meta-analysis weighted averages for the effect of 2008 voting on future registration, Democratic partisanship, and Republican partisanship for Blacks, Whites, and Hispanics, and Figure 4 presents the distribution of state-level effects. The effect for Blacks on future Democratic partisanship (0.251) is comparable to that for Hispanics (0.234), and greater

¹I estimate the effect on registration for all 25 states. Of the 25 states in my data, 15 record partisanship at the time of registration: Arkansas, California, Connecticut, Florida, Kansas, Kentucky, Massachusetts, Maryland, Nebraska, Nevada, New York, Oregon, Pennsylvania, Rhode Island, and West Virginia. Thus, I limit the analysis of 2008 voting's effect on future partisanship to these 15 states. Later in the Appendix, I demonstrate the consistency of the main results on future voting and registration to this subset of states that record partisanship.

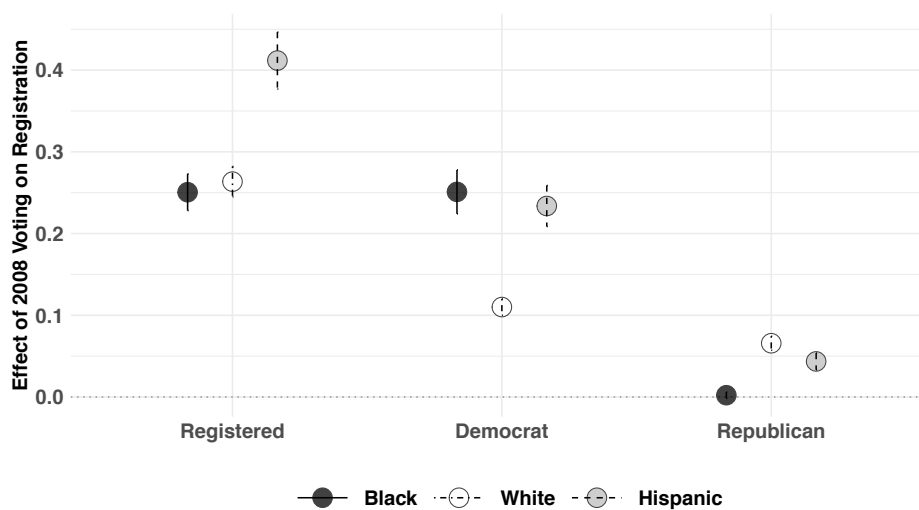
²

$$(1) \quad \text{Vote}_{1,i} = \alpha_0 + \alpha_1 Z_i + \alpha_2 X_i + \alpha_3 Z_i * X_i + \alpha_4 \text{Lagged Registration}_{2,i} + \epsilon_{1,i}$$

$$(2) \quad \text{Registration}_{2,i} = \beta_0 + \beta_1 \widehat{\text{Vote}}_{1,i} + \beta_2 X_i + \beta_3 \widehat{\text{Vote}}_{1,i} * X_i + \beta_4 \text{Lagged Registration}_{2,i} + \epsilon_{2,i}$$

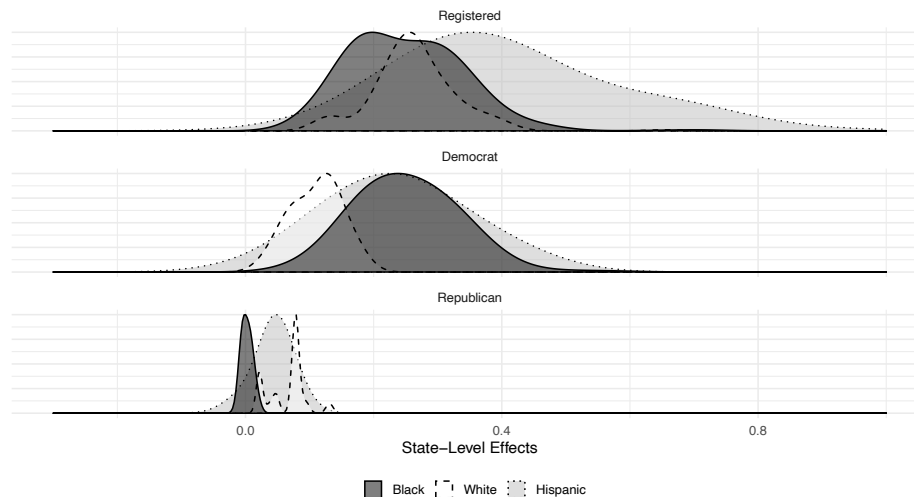
than the effect for Whites (0.11). Blacks see effectively no increase in their likelihood of being a registered Republican eight years later as a result of voting in 2008, while Hispanics see a 0.044 increase and Whites see a 0.067 increase³.

Figure 3: Weighted Average of State-Level 2008 Voting Effects on Registration and Partisanship



³The observed increase in the likelihood of being registered to both major parties is consistent with previous work by Meredith (2009).

Figure 4: Weighted Distributions of State-Level 2008 Voting Effects on Registration and Partisanship



Distributional density of state-level CACEs, weighted by the inverse of the variance of the estimates.

The effects on future registration mirror the effects on future voting. Voting for the first time in 2008 considerably increases the likelihood of being registered over 8 years later for Blacks, but this increase is not greater than the effect for Whites or Hispanics. These results provide further evidence against an empowerment model of habitual voting. The effect for Hispanics is higher than that for Blacks or Whites, consistent with this group’s higher effects on future voting. These results suggest that part of the future mobilizing advantage for Hispanics is due to voting in 2008 having a greater effect on bringing Hispanic voters into the electorate and through helping Hispanic voters overcome obstacles to long-term registration.

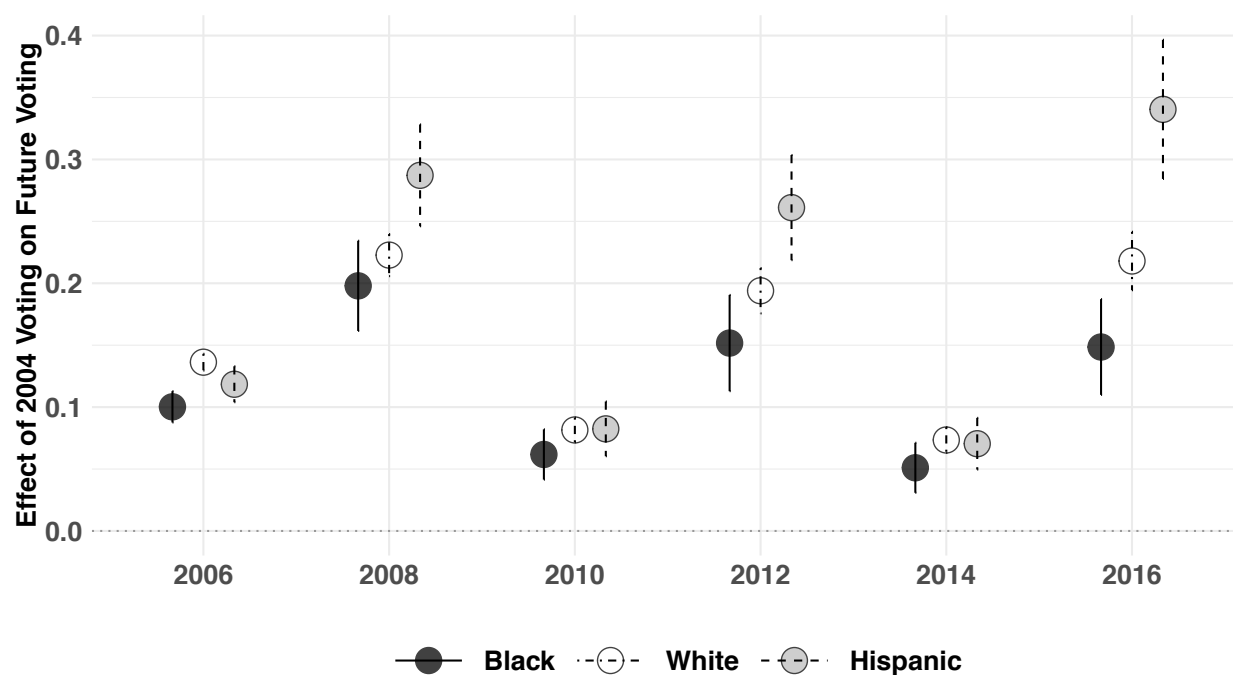
3 Effects of Voting in Other Presidential Elections

Here I present the general results of voting in other presidential elections (2000, 2004) on voting in all available downstream elections through 2016. As discussed in the paper, directly comparing the magnitude of the effects of elections from different points in time is difficult.

The data are all measured in 2017, so the levels of measurement error differ between treatment elections. The modeled comparison in the paper offers the best available comparison given these constraints, and I present the general results here for reference.

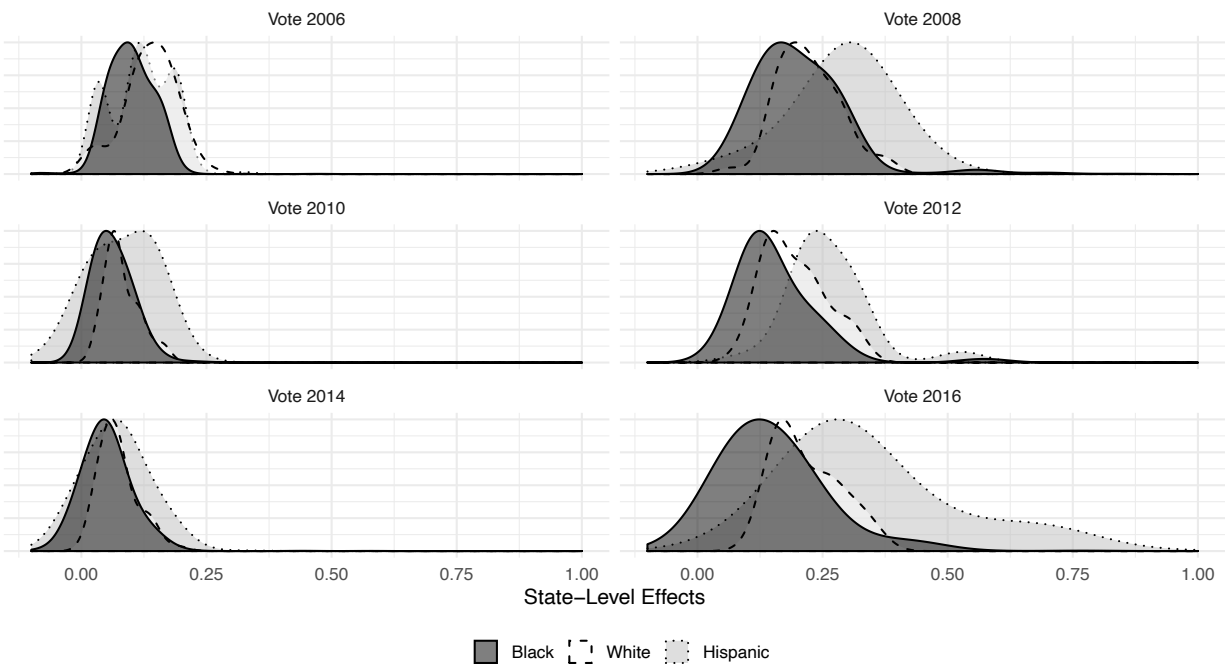
3.1 2004 Election

Figure 5: Weighted Averages of 2004 State-level Effects



Points represent the meta analysis weighted average of state-level CACE estimates, weighted by the inverse of the variance of the estimates. Bars represent 95% confidence intervals.

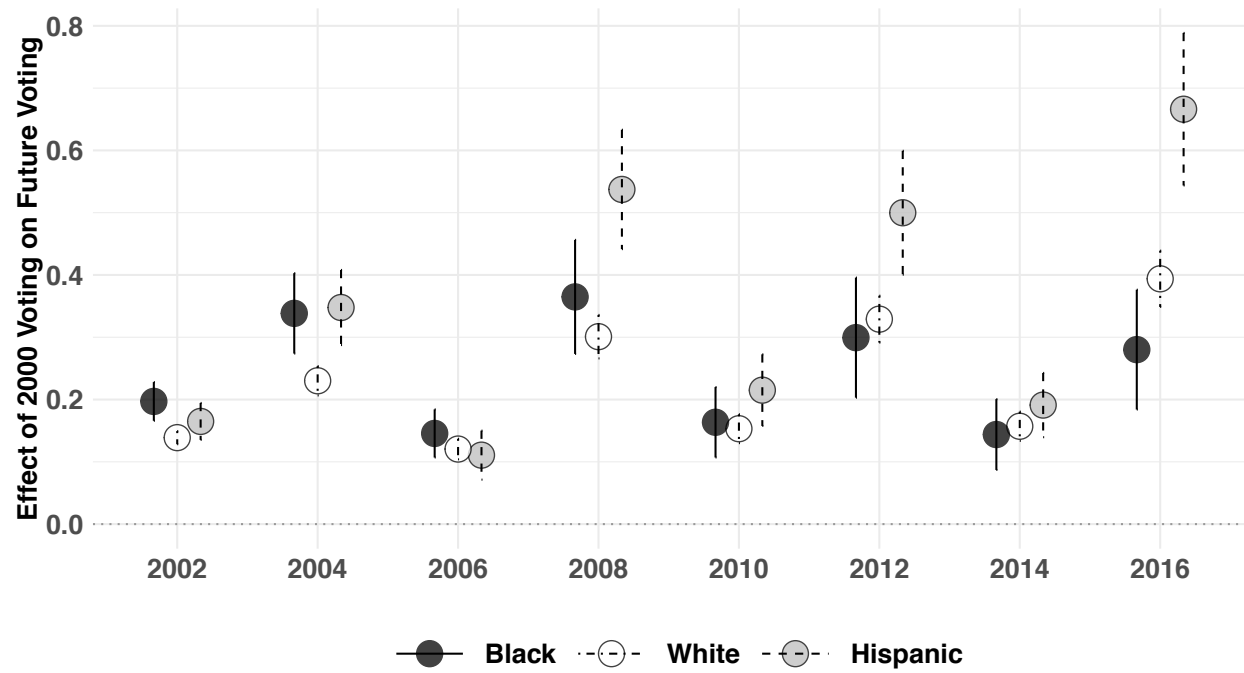
Figure 6: Weighted Distributions of State-Level 2004 Voting Effects



Distributional density of state-level CACEs, weighted by the inverse of the variance of the estimates.

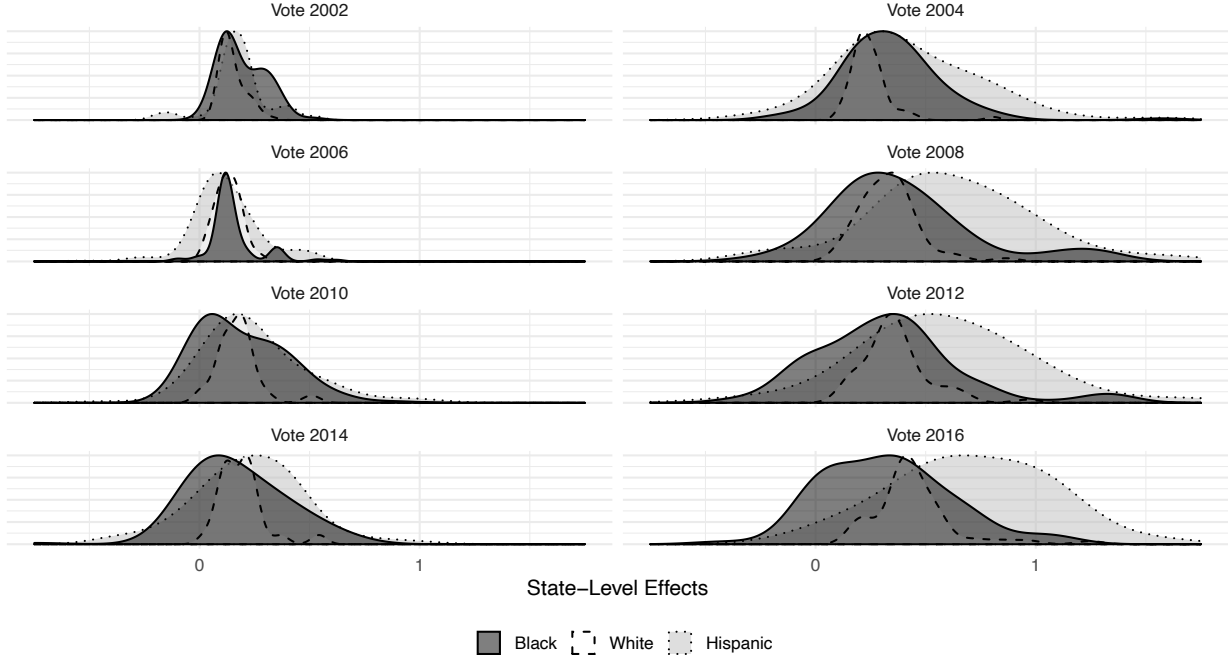
3.2 2000 Election

Figure 7: Weighted Averages of 2004 State-level Effects



Points represent the meta analysis weighted average of state-level CACE estimates, weighted by the inverse of the variance of the estimates. Bars represent 95% confidence intervals.

Figure 8: Weighted Distributions of State-Level 2000 Voting Effects



Distributional density of state-level CACEs, weighted by the inverse of the variance of the estimates.

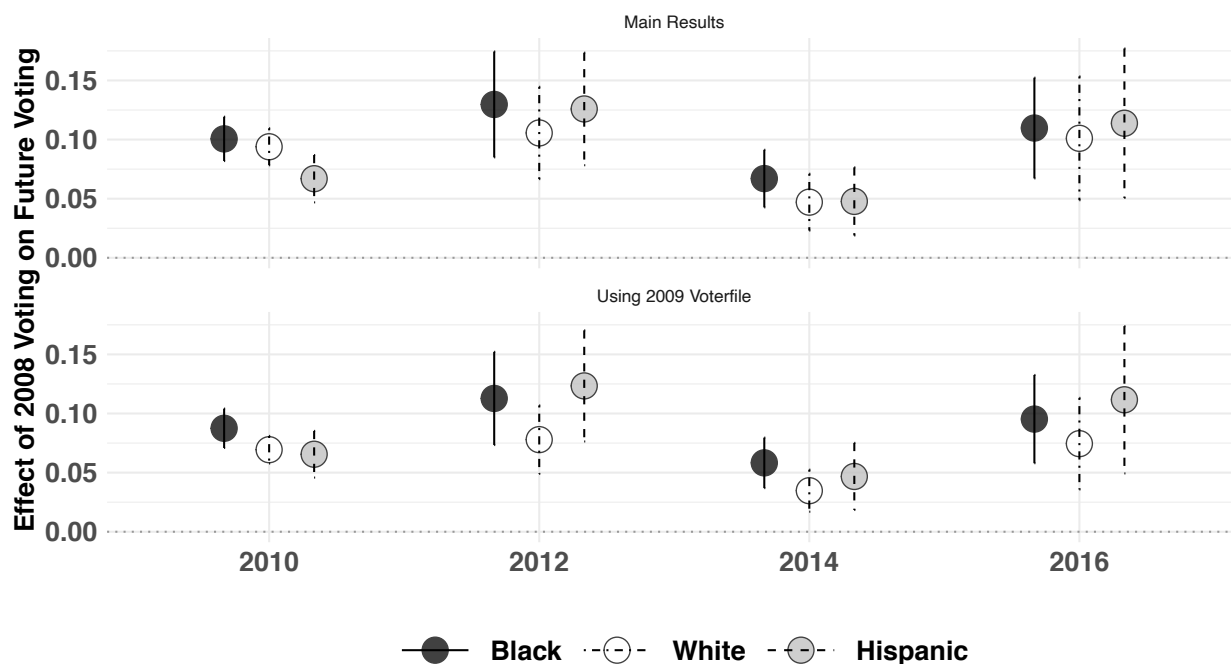
4 Testing Robustness of Results to Voterfile Purging: Re-estimating Effects Using 2009 Florida Voterfile to Measure 2008 Turnout

One threat to inference in the main analysis is that using contemporary voterfiles to measure turnout in previous elections may understate 2008 turnout, as contemporary data only contain voters who are still registered at the date of the voterfiles. In the main text, I discuss how differential changes in registration status across racial groups could spuriously generate the observed patterns in the data. To test this concern directly, I obtained a 2009 Florida voterfile, and here I re-estimate the main effects for Florida using this older voterfile to measure 2008 turnout. Thus, the measures of turnout in the treatment election (2008)

will not be understated, and I can compare the results using the 2009 voterfile to those observed using the 2017 voterfile data. If these results dramatically differ in general magnitude or in the effects of Blacks relative to other racial groups, then it would suggest that using contemporary data poses problems for the analysis.

Figure 9 presents the estimated effect of 2008 voting on voting in 2010, 2012, 2014, and 2016, plotting both the re-estimated effects using the 2009 voterfile to measure 2008 turnout, and the main effects from the manuscript. The sign and magnitude of the effects on future voting in this state are consistent using this older voterfile. The effects for Blacks relative to other racial groups are also consistent. This demonstrates that at least in Florida, using contemporary voterfiles does not produce substantially different effects, and this consistency generally supports the argument that differential changes in registration status are unlikely to spuriously generate the observed patterns in the data.

Figure 9: Comparing 2008 Effects in Florida using an Older Voterfile

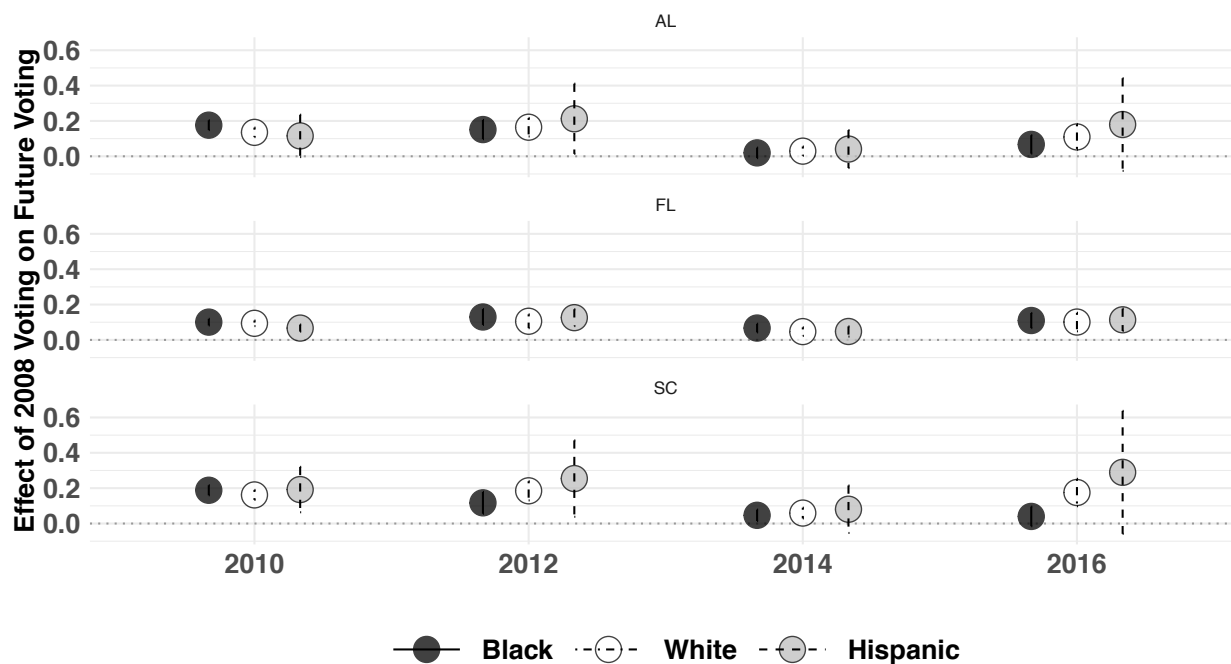


Points represent the state-level CACE estimates. Bars represent 95% confidence intervals.

5 Results in States that Record Race

Race in the voting file is generally imputed from voter's surname and census demographics of their residential location. As discussed in the paper, these imputations are highly accurate and frequently used in the studies of minority turnout. While I cannot observe the counterfactual of how results would look in states that impute race if it was instead recorded, we can at least look at the results where race is explicitly measured. Here, I demonstrate the consistency of the overall conclusions when I rely solely on the states that record race with registration (within my data, these states are Alabama, Florida, and South Carolina). Figure 10 plots the effect of 2008 voting on future voting in each of these states. On this subset, we still see that Blacks experience no mobilizing advantage as a result of voting in 2008, and the coefficients for Hispanics are similarly largest in 2012 and 2016 (albeit not statistically distinct from the estimates for Blacks).

Figure 10: 2008 Effects in States that Record Race in Voterfiles



Points represent the state-level CACE estimates. Bars represent 95% confidence intervals.

6 Robustness to Different Bandwidths

Here I present the robustness of the results to different bandwidth specifications. I estimate the results for each state at bandwidths from 14 through 352 days in intervals of 14 days, and calculated the meta-analysis fixed effects weighted average at each bandwidth as in the main analysis. These results and the main results (365 day bandwidth) and the corresponding 95% confidence intervals are plotted in Figure 11. The results are generally consistent for each outcome across bandwidths, both in the relative ordering or the effects for Blacks, Whites and Hispanics and in the magnitude of the effects. Towards the smaller bandwidths, where power is low and variance is quite high, we see smaller effects that are not statistically distinguishable from zero. Generally, however, the results appear robust to bandwidths much smaller than the 365 day bandwidth used in the paper and in similar analyses.

Figure 11: Voting CACEs of 2008 Voting by bandwidth

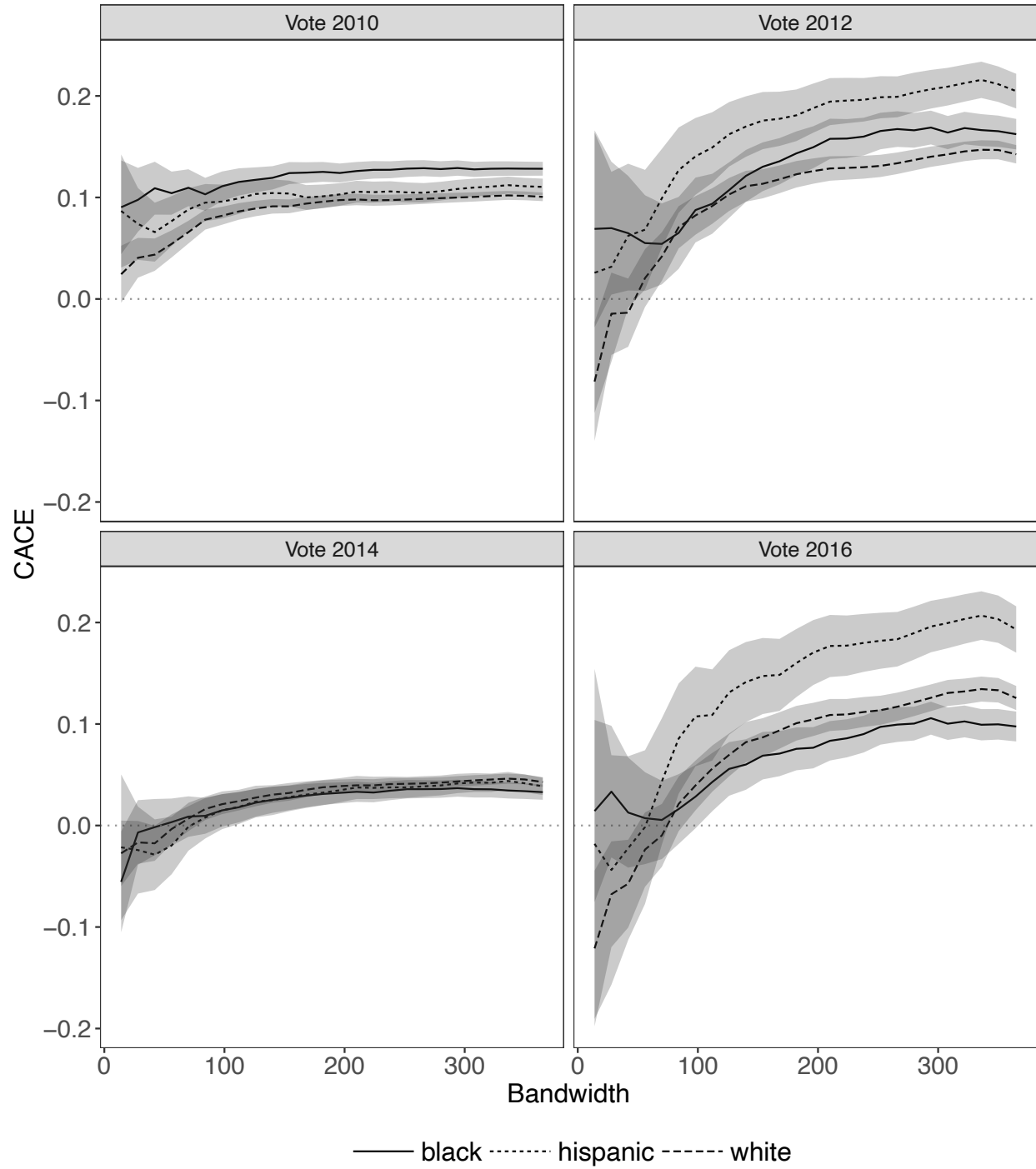
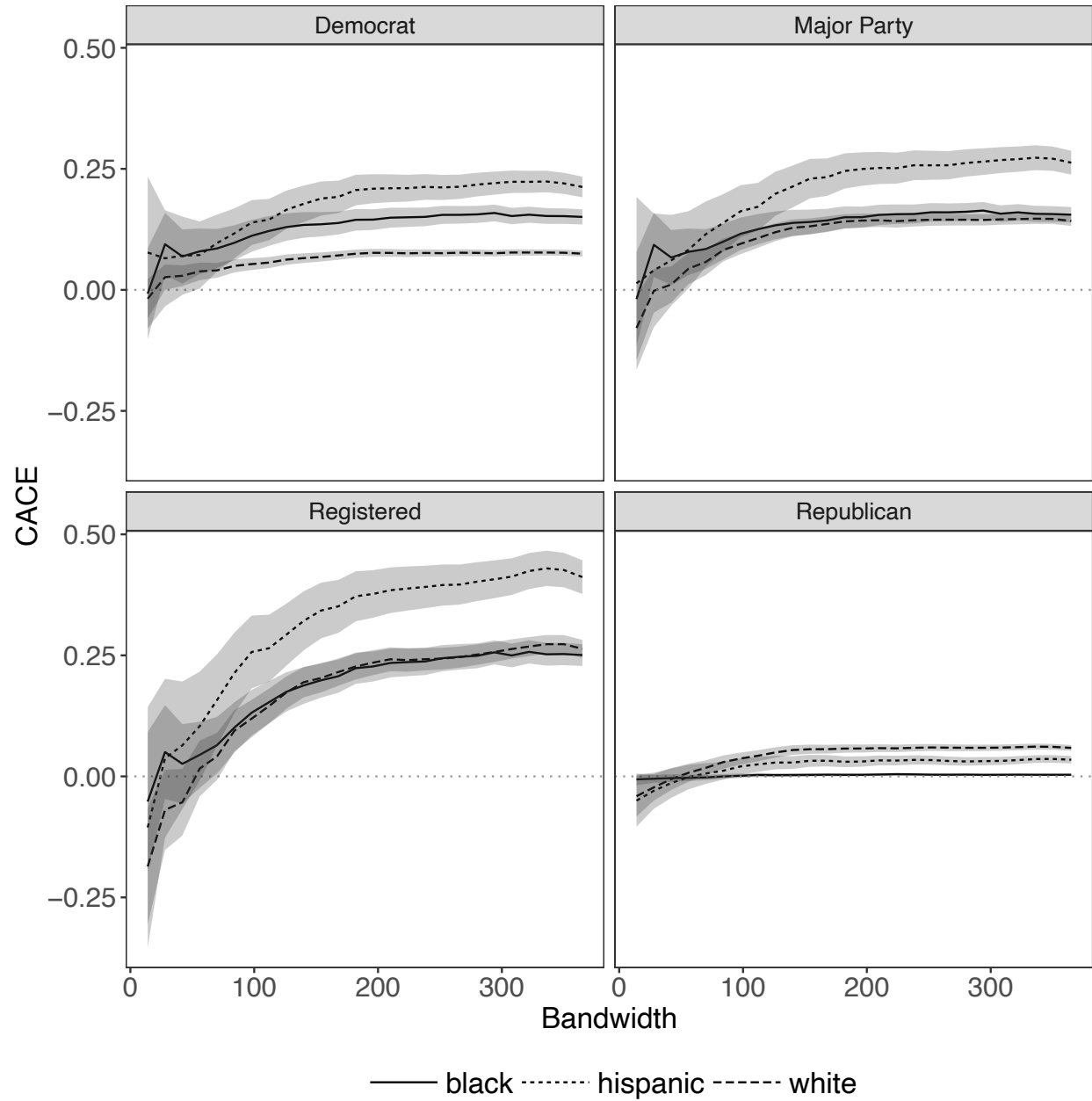


Figure 12: Registration and PID CACEs of 2008 Voting by bandwidth



7 Alternative Specifications

Here I present the robustness of the results to higher and lower order polynomial specifications as well as specifications with and without the the lagged downstream vote variable. I present result from the meta-analysis fixed effects weighted average of the state-level CACEs for each alternative specification. The results are generally consistent with those in the main body of the paper.

The higher and lower order polynomials 2SLS specifications are formalized below.

Polynomial 0

- (1) $\widehat{\text{Vote}}_{1,i} = \alpha_0 + \alpha_1 Z_i + \alpha_2 \text{Lagged Vote}_{2,i} + \epsilon_{1,i}$
- (2) $\text{Vote}_{2,i} = \beta_0 + \beta_1 \widehat{\text{Vote}}_{1,i} + \beta_2 \text{Lagged Vote}_{2,i} + \epsilon_{2,i}$

Polynomial 2

- (1) $\widehat{\text{Vote}}_{1,i} = \alpha_0 + \alpha_1 Z_i + \alpha_2 X_i + \alpha_3 Z_i X_i + \alpha_4 X_i^2 + \alpha_5 Z_i X_i^2 + \alpha_6 \text{Lagged Vote}_{2,i} + \epsilon_{1,i}$
- (2) $\text{Vote}_{2,i} = \beta_0 + \beta_1 \widehat{\text{Vote}}_{1,i} + \beta_2 X_i + \beta_3 \widehat{\text{Vote}}_{1,i} X_i + \beta_4 X_i^2 + \beta_5 \widehat{\text{Vote}}_{1,i} X_i^2 + \beta_6 \text{Lagged Vote}_{2,i} + \epsilon_{2,i}$

Polynomial 3

- (1) $\widehat{\text{Vote}}_{1,i} = \alpha_0 + \alpha_1 Z_i + \alpha_2 X_i + \alpha_3 Z_i X_i + \alpha_4 X_i^2 + \alpha_5 Z_i X_i^2 + \alpha_6 X_i^3 + \alpha_7 Z_i X_i^3 + \alpha_8 \text{Lagged Vote}_{2,i} + \epsilon_{1,i}$
- (2) $\text{Vote}_{2,i} = \beta_0 + \beta_1 \widehat{\text{Vote}}_{1,i} + \beta_2 X_i + \beta_3 \widehat{\text{Vote}}_{1,i} X_i + \beta_4 X_i^2 + \beta_5 \widehat{\text{Vote}}_{1,i} X_i^2 + \beta_6 X_i^3 + \beta_7 \widehat{\text{Vote}}_{1,i} X_i^3 + \beta_8 \text{Lagged Vote}_{2,i} + \epsilon_{2,i}$

where $\widehat{\text{Vote}}_{t,i}$ is the number of votes cast by birth-day cohort i in election t and Z_i is whether the birth-day cohort i is eligible to vote in election 1. X_i is the running variable, the number of days that birth-day cohort i is from the election eligibility cutoff. I also estimate specifications without the lagged outcome variable.

7.1 Higher and Lower Order Polynomial Specifications

7.1.1 Effect of 2008 Voting on Downstream Voting

Figure 13: Voting CACEs – Polynomial 0

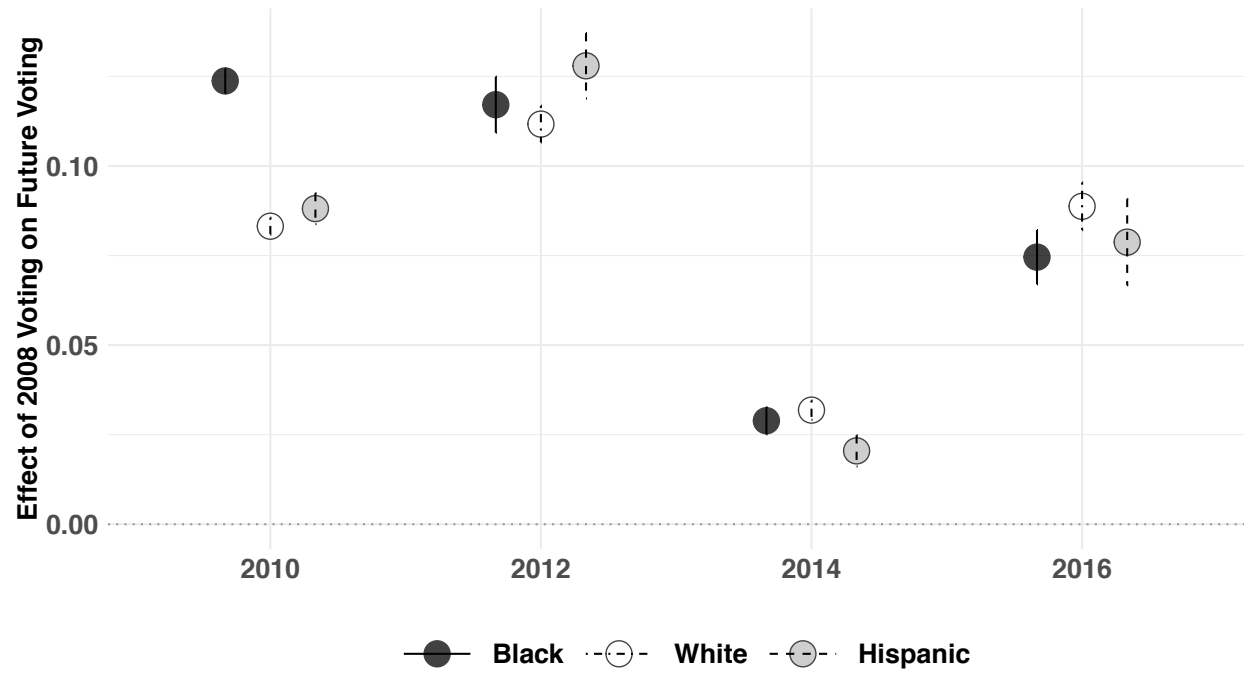


Figure 14: Voting CACEs – Polynomial 2

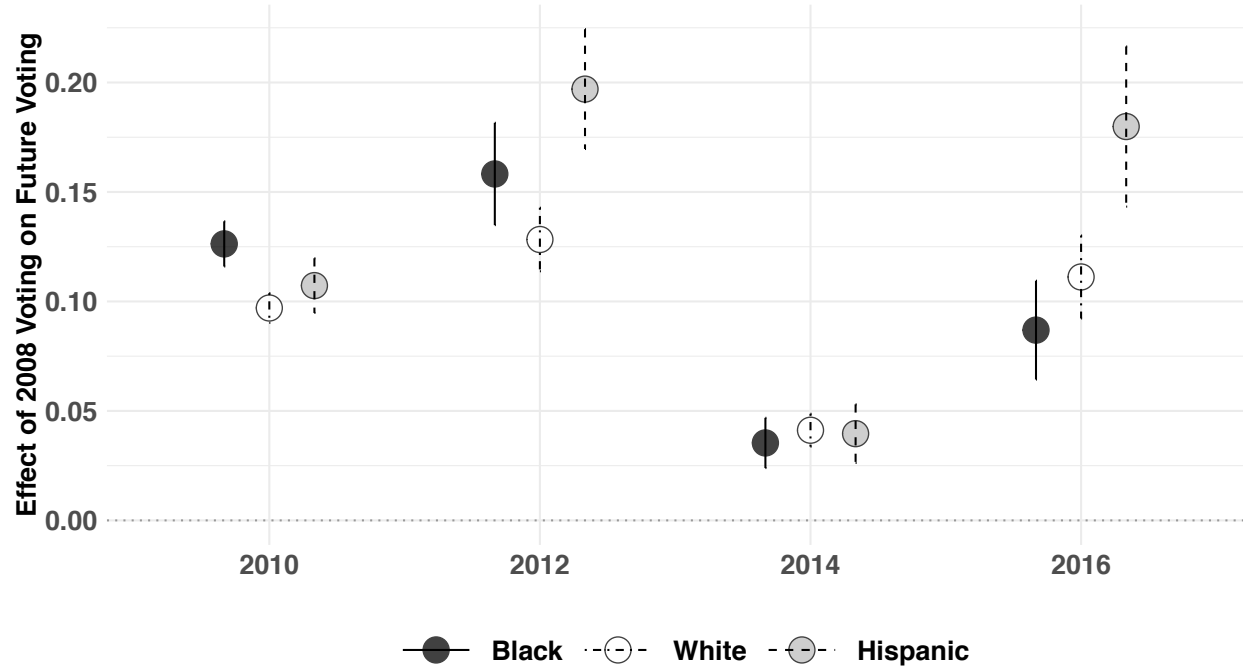
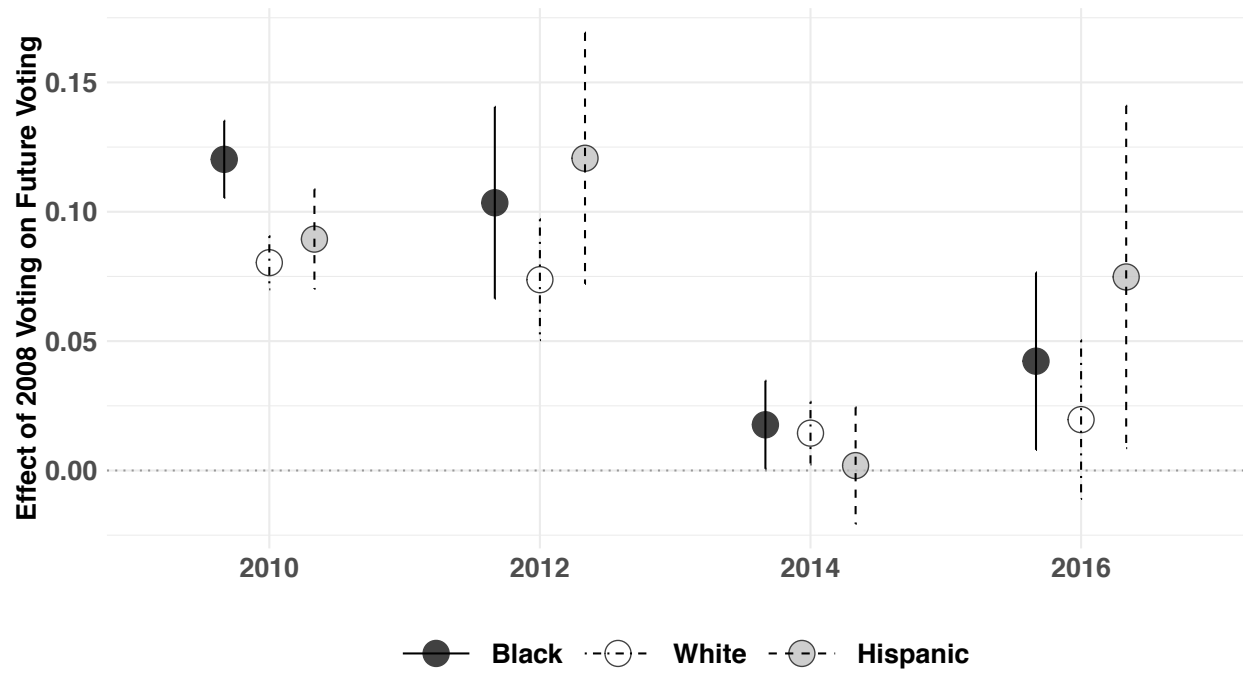


Figure 15: Voting CACEs – Polynomial 3



7.2 Specifications without Lagged Downstream Vote Variable

7.2.1 Effect of 2008 Voting on Downstream Voting

Figure 16: Voting CACEs – No Lagged Downstream Vote

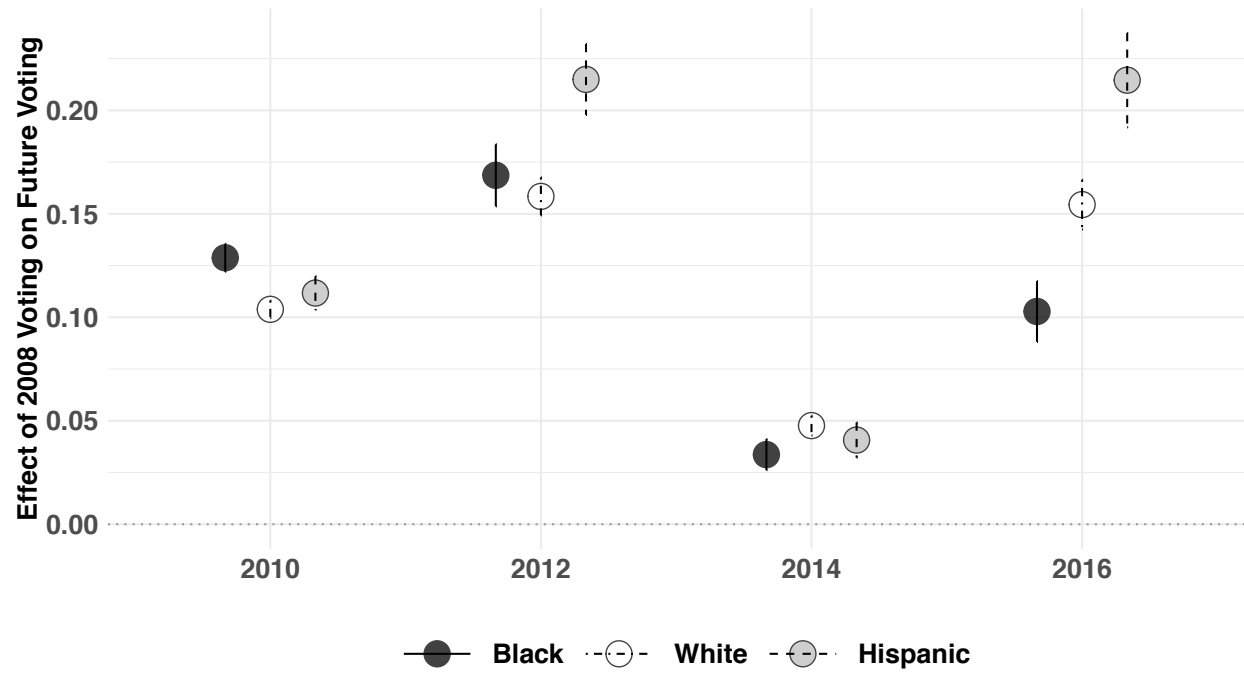


Figure 17: Voting CACEs – No Lagged Downstream Vote, Polynomial 0

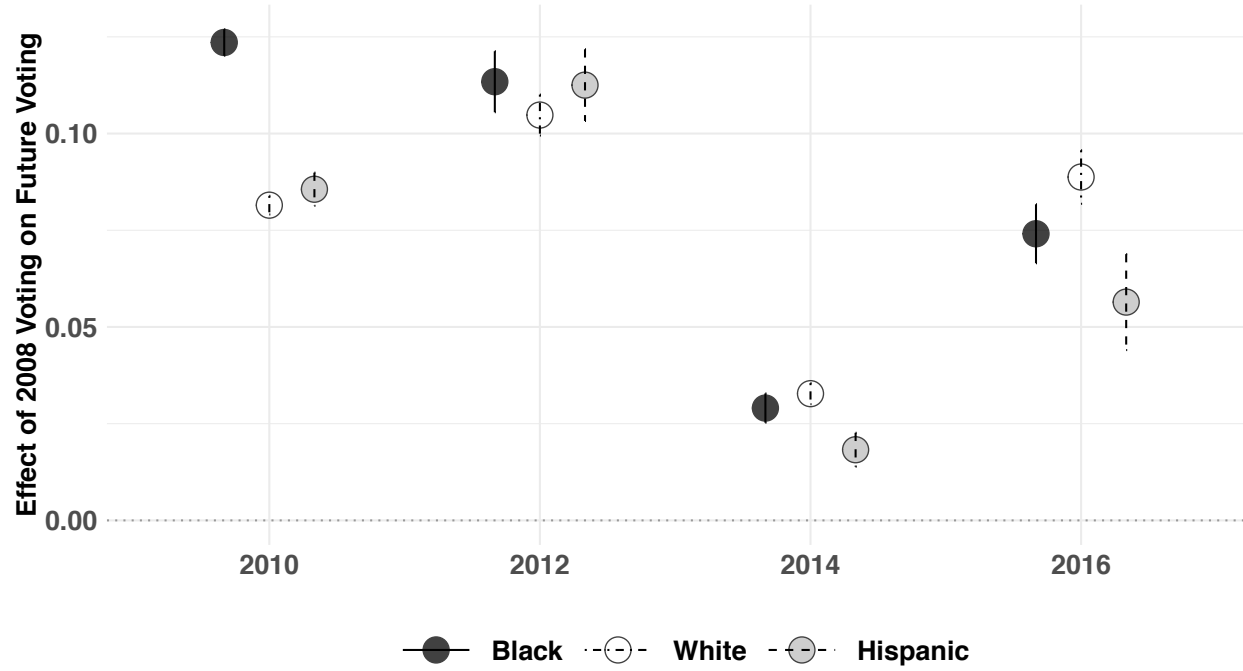


Figure 18: Voting CACEs – No Lagged Downstream Vote, Polynomial 2

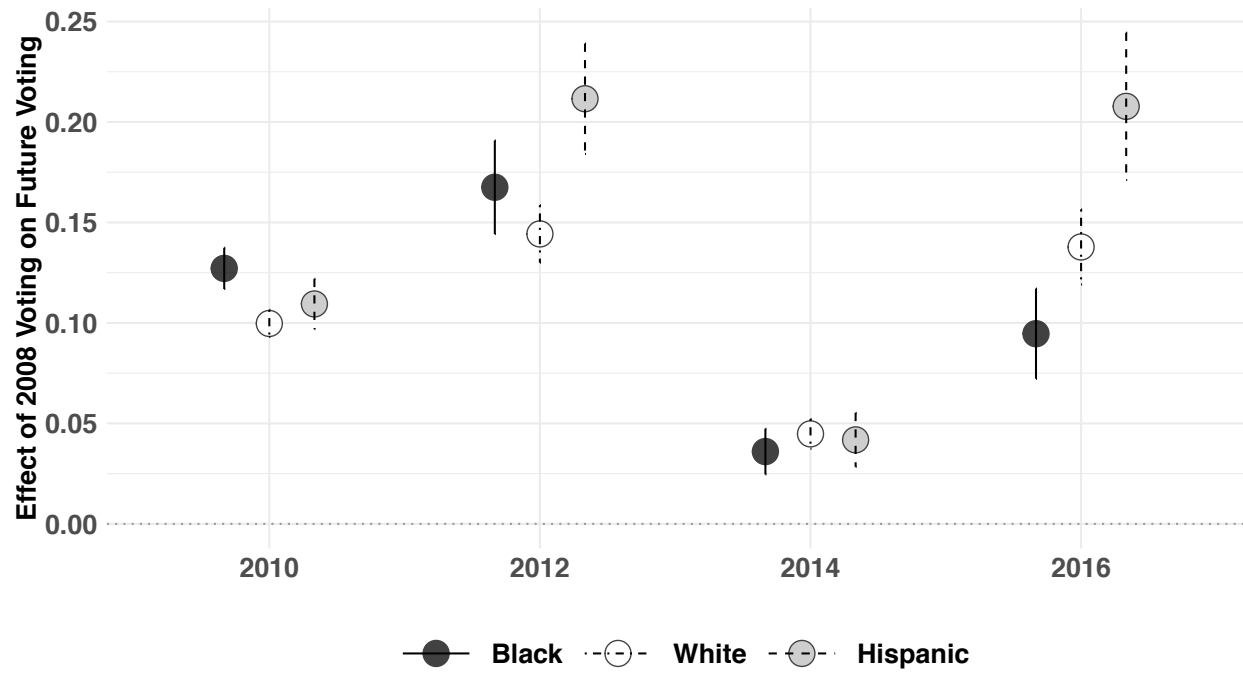
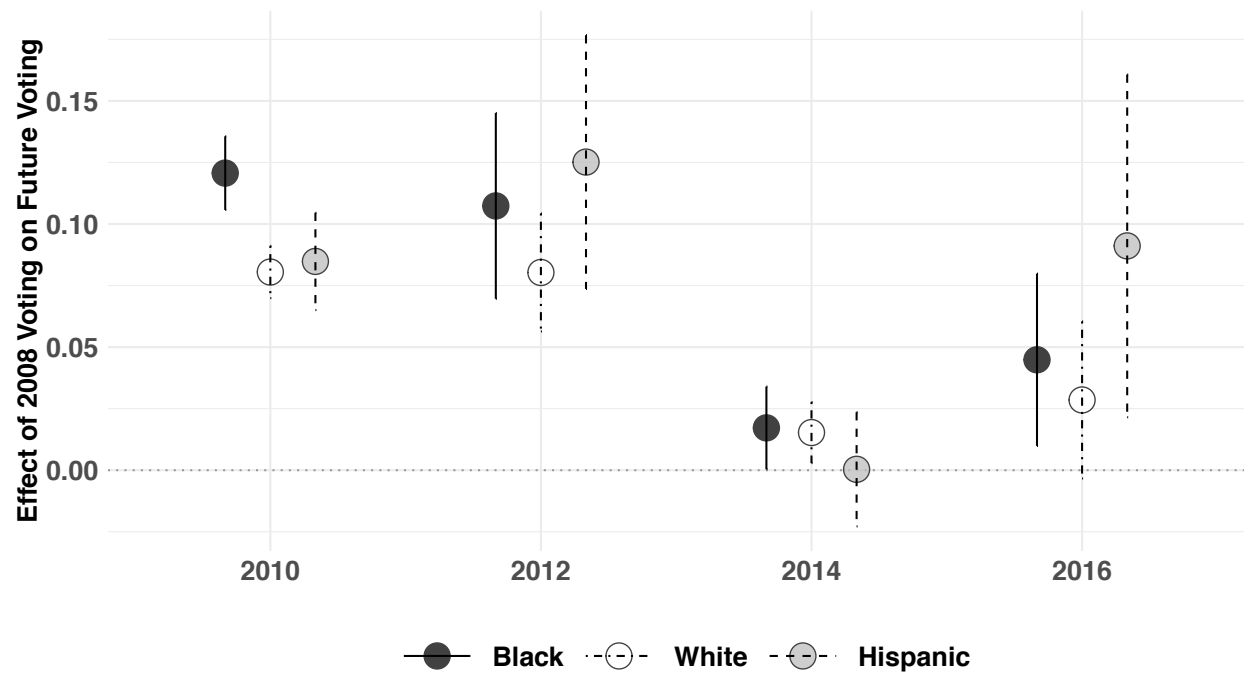


Figure 19: Voting CACEs – No Lagged Downstream Vote, Polynomial 3



8 Effect of 2008 Voting by Gender

Figure 20: Weighted Average of State-Level 2008 Voting Effects on Future Voting by Gender

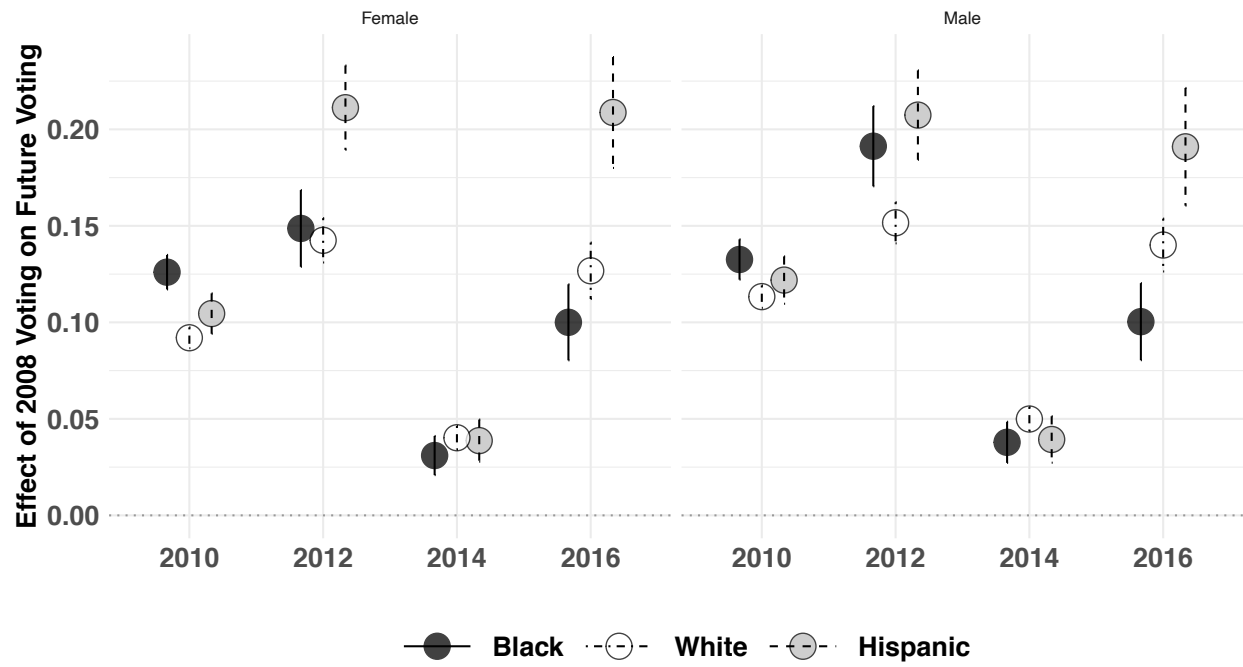
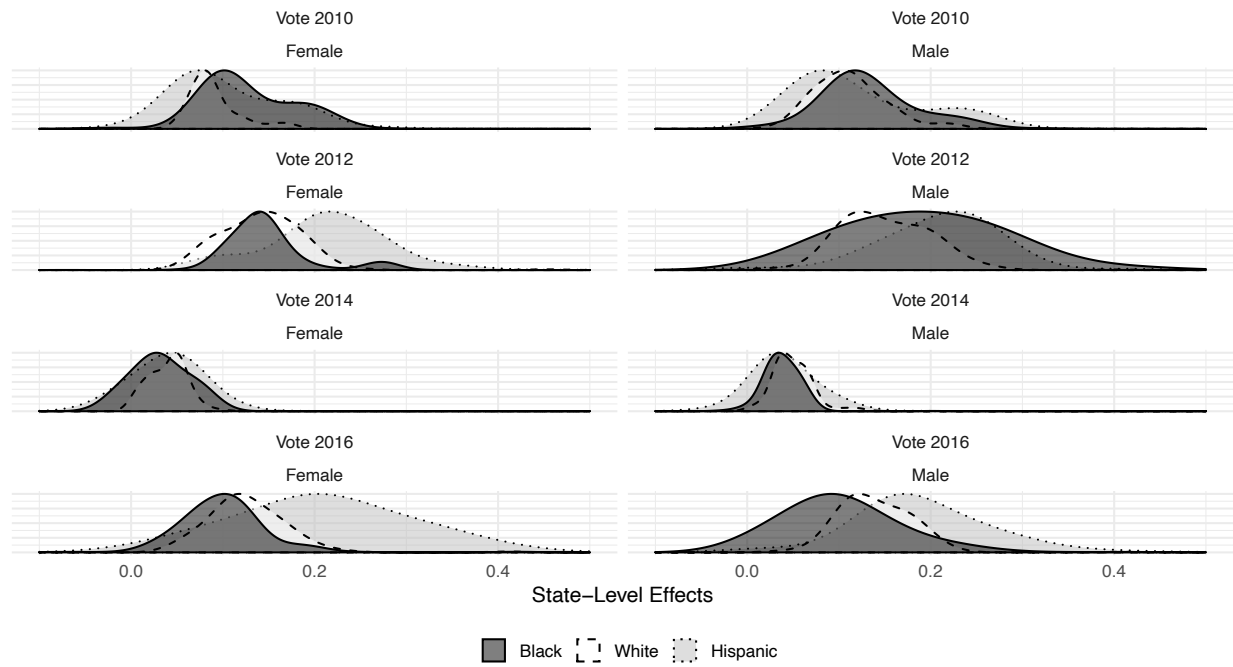


Figure 21: Weighted Distributions of State-Level 2008 Voting Effects on Future Voting by Gender



Distributional density of state-level CACEs, weighted by the inverse of the variance of the estimates.

Figure 22: Weighted Average of State-Level 2008 Voting Effects on Future Registration by Gender

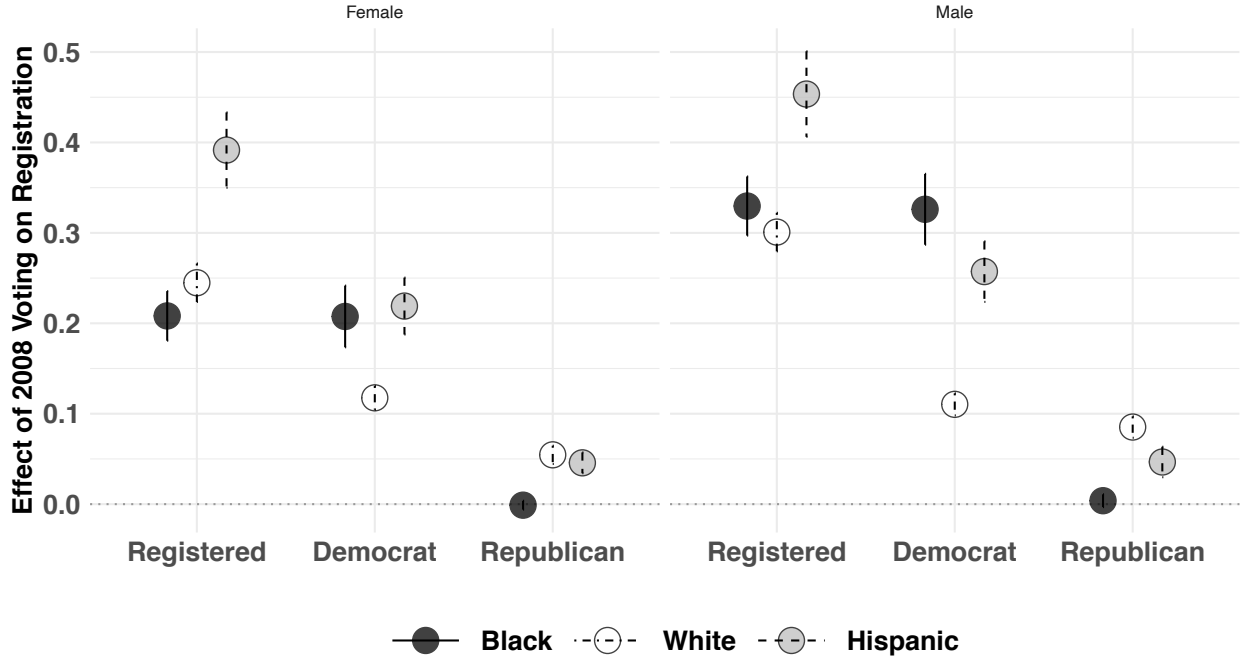
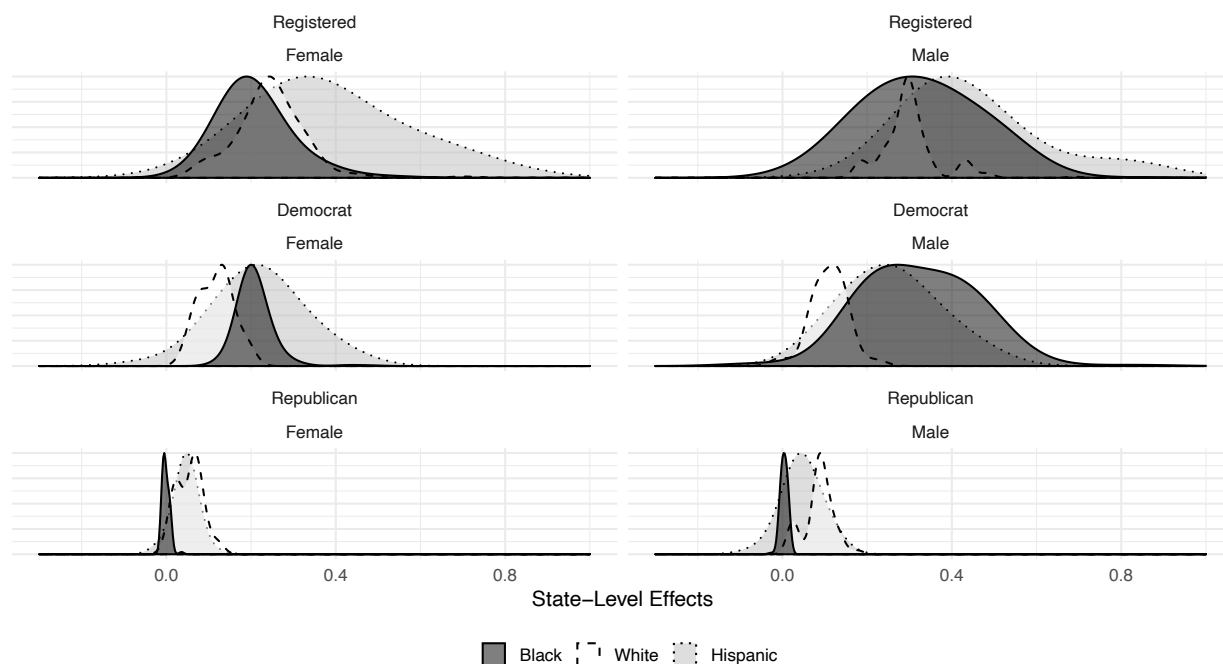


Figure 23: Weighted Distributions of State-Level 2008 Voting Effects on Future Registration by Gender



Distributional density of state-level CACEs, weighted by the inverse of the variance of the estimates.

9 Effect of 2008 Voting in States that Record Partisan Identification

Here, I estimate the effect on registration and voting in the 15 states in my data that record partisan identification, to demonstrate the robustness of the results on this subsample. The 15 states that record partisanship at the time of registration are Arkansas, California, Connecticut, Florida, Kansas, Kentucky, Massachusetts, Maryland, Nebraska, Nevada, New York, Oregon, Pennsylvania, Rhode Island, and West Virginia.

Figure 24: Weighted Average of State-Level 2008 Voting Effects on Future Voting in States that Record Party Identification

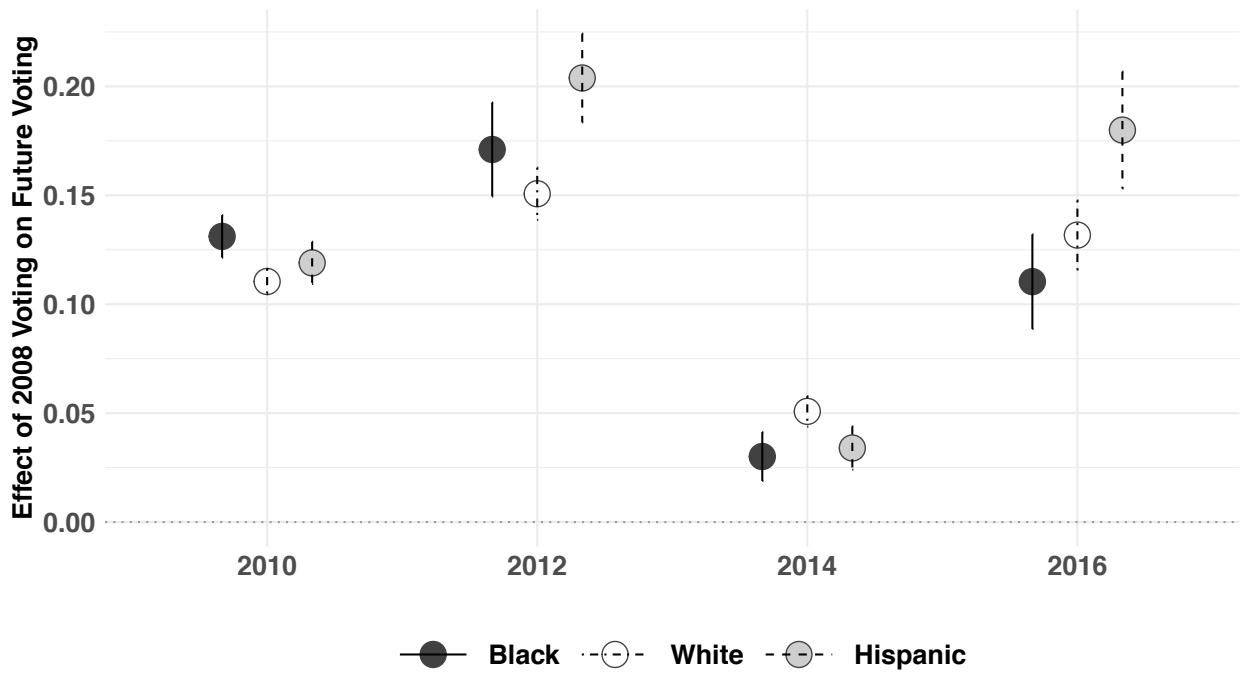
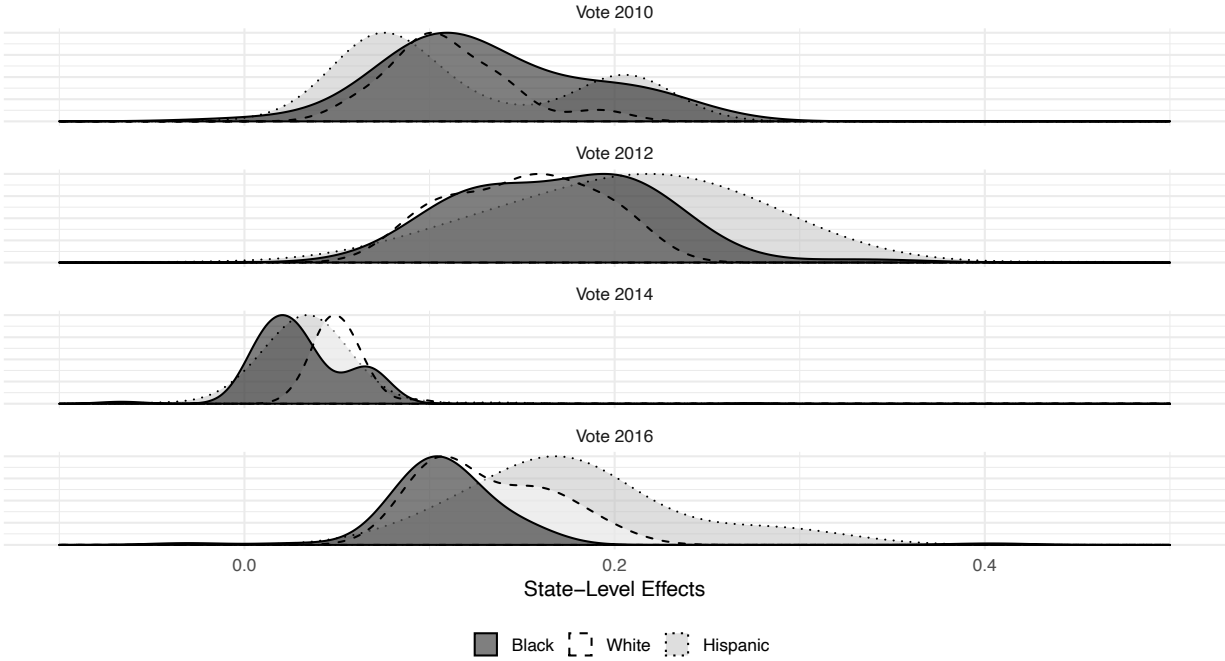


Figure 25: Weighted Distributions of State-Level 2008 Voting Effects on Future Voting in States that Record Party Identification



Distributional density of state-level CACEs, weighted by the inverse of the variance of the estimates.

Figure 26: Weighted Average of State-Level 2008 Voting Effects on Future Registration in States that Record Party Identification

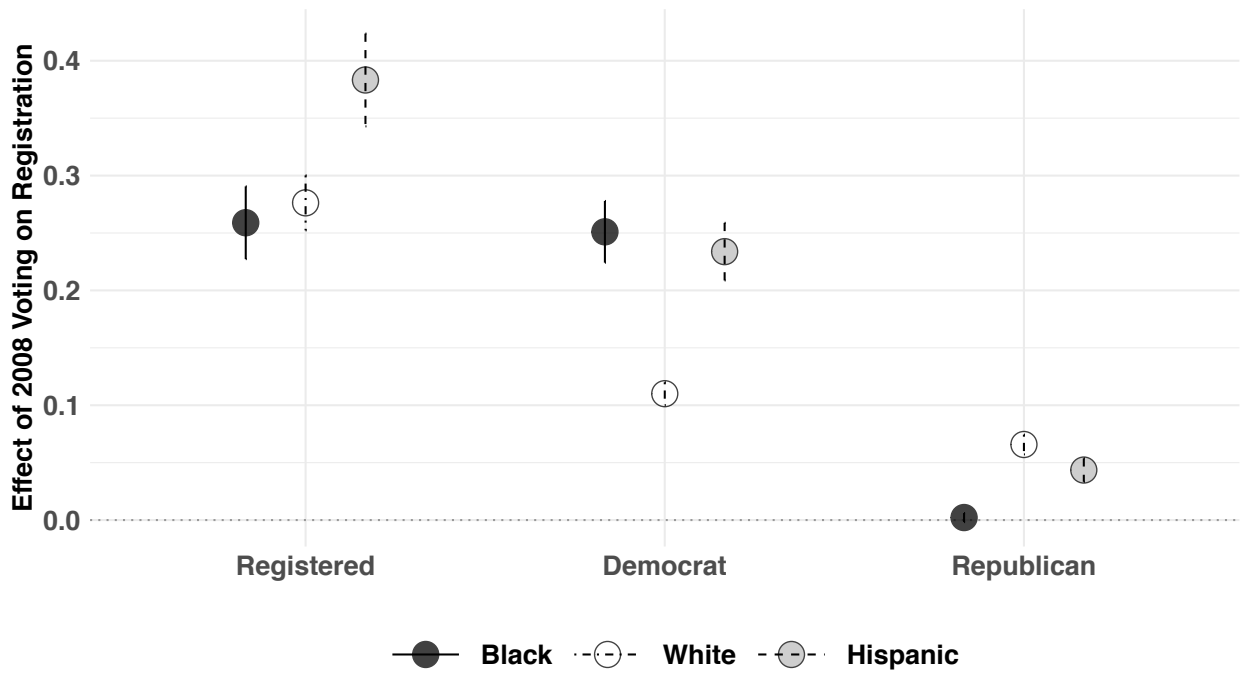
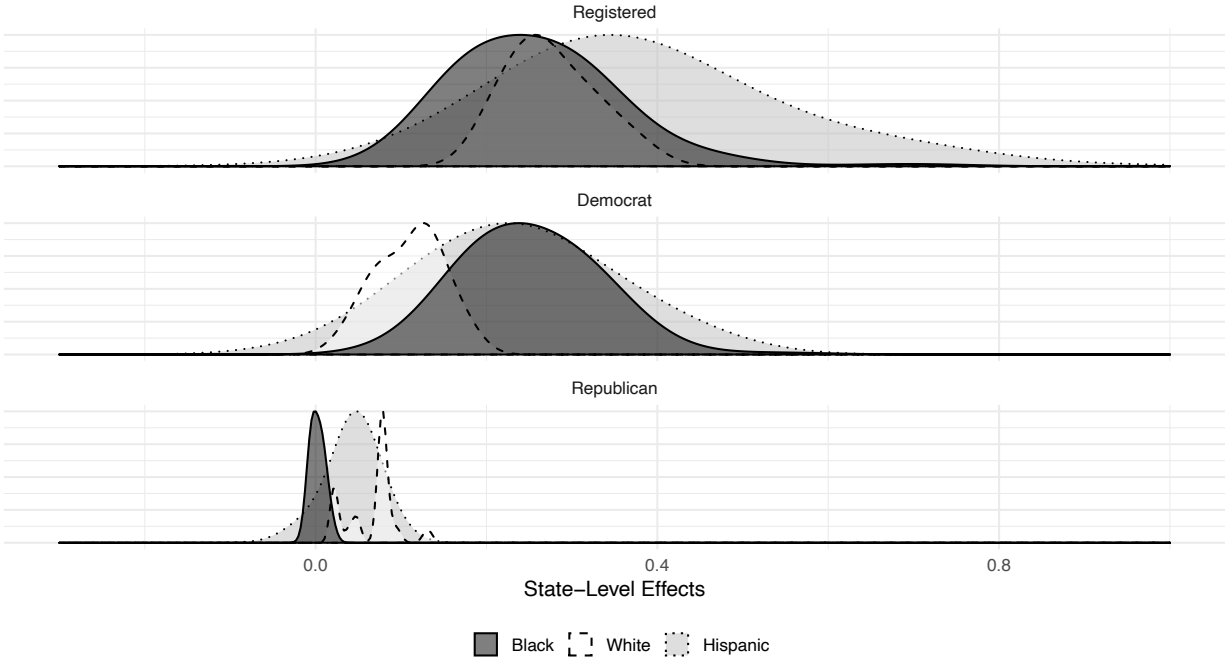


Figure 27: Weighted Distributions of State-Level 2008 Voting Effects on Future Registration in States that Record Party Identification



Distributional density of state-level CACEs, weighted by the inverse of the variance of the estimates.

10 Effect of 2008 Voting - White versus Non-whites

Comparison

Figure 28: Weighted Average of State-Level 2008 Voting Effects on Future Voting

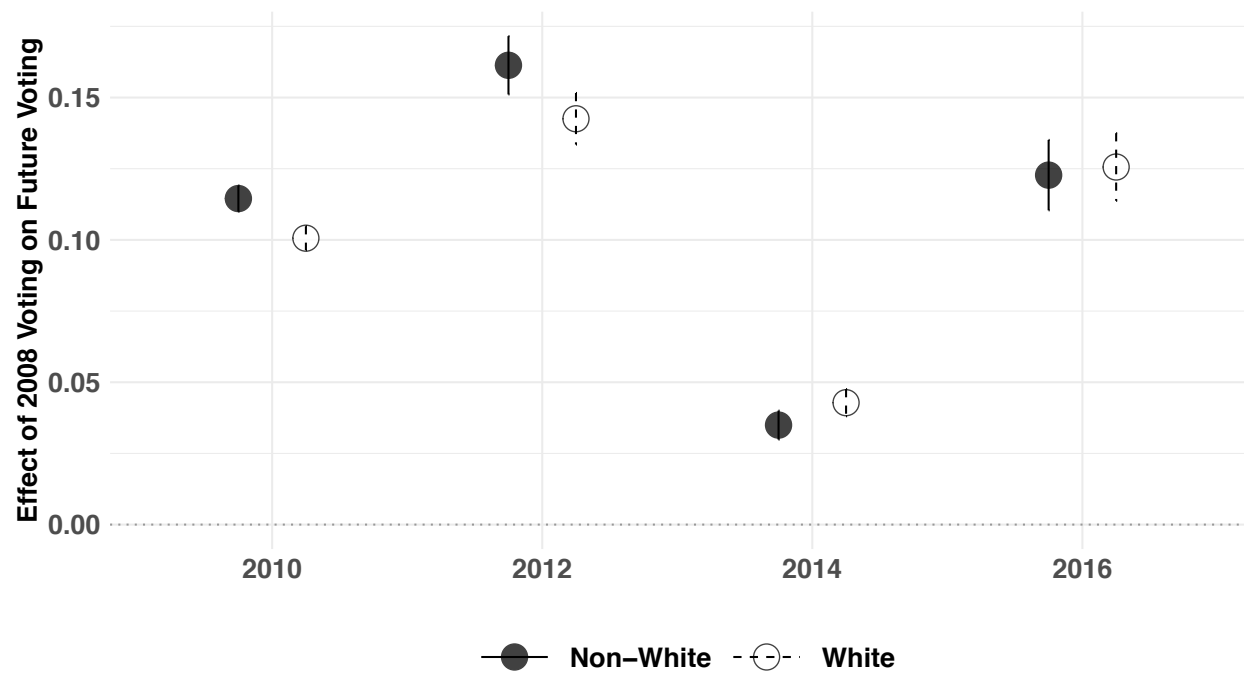
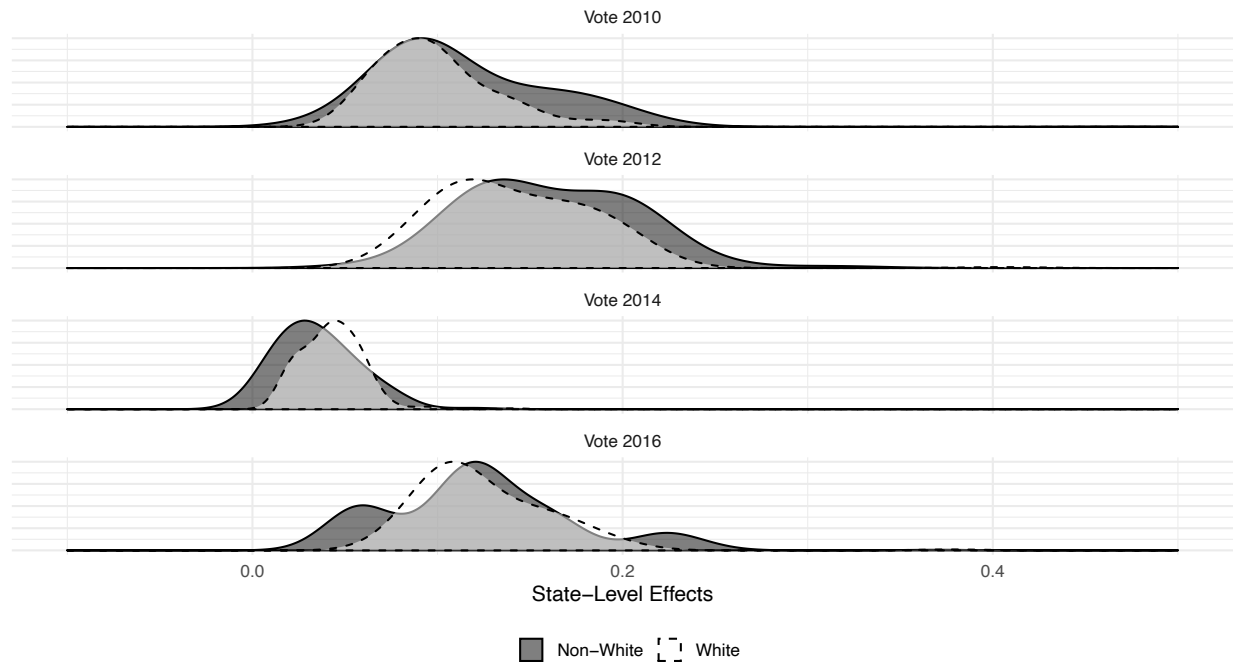


Figure 29: Weighted Distributions of State-Level 2008 Voting Effects on Future Voting



Distributional density of state-level CACEs, weighted by the inverse of the variance of the estimates.

Figure 30: Weighted Average of State-Level 2008 Voting Effects on Future Registration

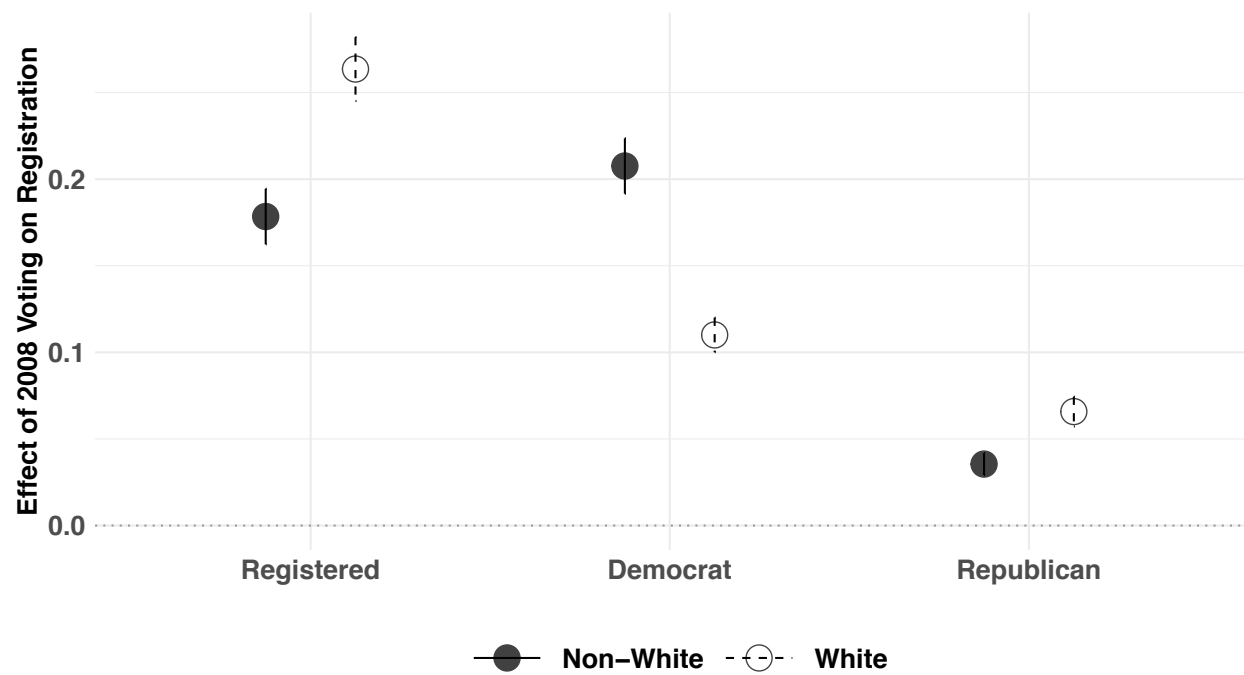
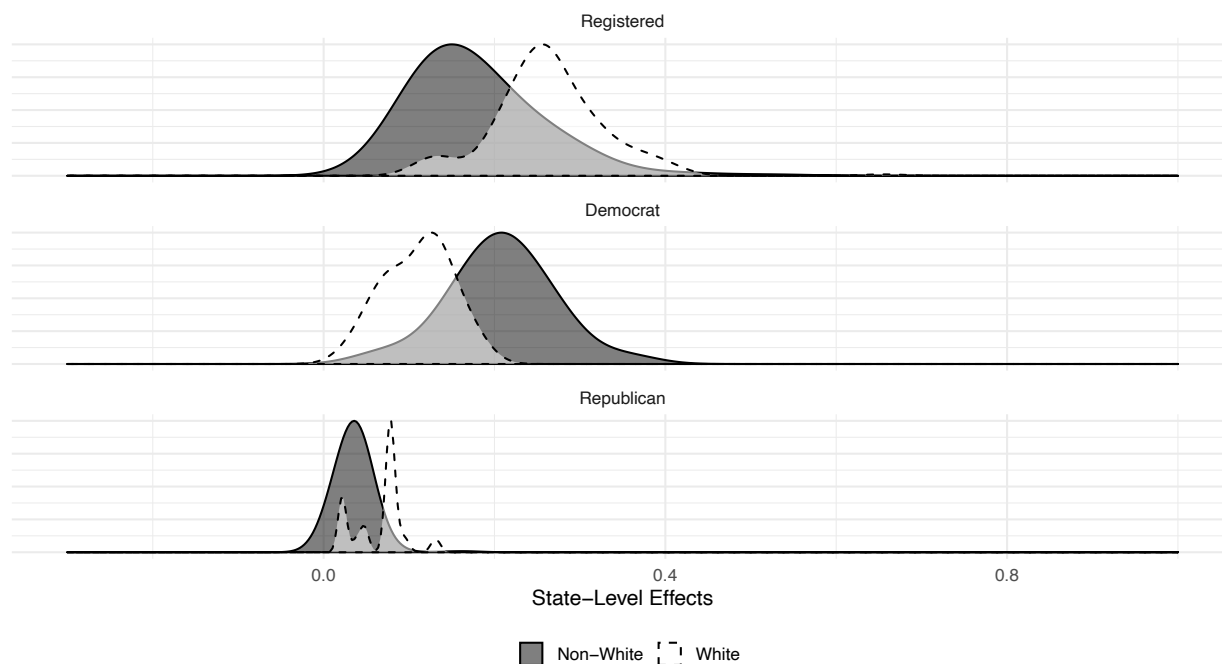


Figure 31: Weighted Distributions of State-Level 2008 Voting Effects on Future Registration



Distributional density of state-level CACEs, weighted by the inverse of the variance of the estimates.

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