The Effect of Presidential Election Outcomes on Alcohol Drinking *

Isabel Musse[†] Rodrigo Schneider[‡]

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Abstract

The growing political polarization and the increasing use of social media have been linked to straining social ties worldwide. The 2016 presidential elections in the United States reflected this trend with reports of fear and anxiety among voters. We examine how election results can be linked to episodes of anxiety through the use of alcohol as self-medication. We analyze a daily dataset of household purchases of alcohol in the weeks following presidential elections. We find that, within 30 days from Election Day, a 10 percentage point increase in support for the losing candidate increases alcohol expenditure by 1.1%. The effect is driven by counties with a higher share of supporters of the losing candidate and is robust to controlling more flexibly for omitted variables related to alcohol consumption. The increase in alcohol consumption is present in the 2016 elections and absent in the previous three presidential elections.

Keywords: Elections; Risky health behaviors; Alcohol

JEL codes: I12; P16

^{*}The researcher's own analyses were calculated (or derived) based in part on data from the Nielsen Company (US), LLC and marketing databases provided through the Nielsen Dataset at the Kilts Center for Marketing Data Center at the University of Chicago Booth School of Business. The conclusions drawn from the Nielsen data are those of the researcher and do not reflect the views of Nielsen. Nielsen is not responsible for, had no role in, and was not involved in analyzing and preparing the results reported herein.

[†]Department of Economics, University of Illinois at Urbana-Champaign, 214 David Kinley Hall 1407 W. Gregory Dr.; Urbana, Illinois 61801; email: imusse2@illinois.edu

[‡]Department of Economics, Skidmore College, Filene Hall, 2nd Floor, 815 North Broadway; Saratoga Springs, NY 12866; email: rschnei2@skidmore.edu

1 Introduction

Political polarization has been increasing in the United States in the last years (Iyengar et al., 2019). In 2016, 52% of Americans reported that the upcoming presidential election was a significant source of stress, despite their political affiliation (American Psychological Association, 2017). Election outcomes are largely related to an increase in anxiety and a decline in self-reported well-being (Stanton et al., 2010). However, we do not know if election outcomes also increase risky health behaviors.

In this paper, we measure the impact of supporting a losing presidential candidate on alcohol expenditures—a risky health behavior.¹ We use data on total daily purchases of alcohol at the household level in a difference-in-differences (DID) model with a continuous treatment variable (Acemoglu, Autor and Lyle, 2004) to test if counties with larger support for losing presidential candidates consume relatively more alcohol after the election than counties with smaller support for the losing candidate. We test separately for four presidential elections in the United States, from 2004 to 2016.

Our results show that the effect of supporting a losing candidate on alcohol expenditure is positive and significant only for the 2016 election. Within 30 days from Election Day, each 10 percentage point increase in support for the losing party increases alcohol expenditure by 1.1%. Our results are robust to different bandwidths (20 and 40-day); to controlling more flexibly for unobservable factors that change non-linearly over time and are related to alcohol consumption; and to a falsification test using placebo election days to capture pre-trend in alcohol expenditure.

We find that support for the losing candidate increased alcohol expenditure only after the 2016 Election Day, which is evidence that the 2016 election was different from others. According to the literature, it was a unique election due to the emotional charge of political campaigns (Nai, Martínez i Coma and Maier, 2019), the unprecedented use of social media,

¹For a discussion about the correlation between alcohol expenditure and alcohol consumption in the Nielsen dataset, see Cotti, Dunn and Tefft (2015).

the decline in trust in the mainstream media (Allcott and Gentzkow, 2017), and the overwhelming wrong predictions of who would become the next president (Valentino, King and Hill, 2017). In addition, the documented divisions on political values among Republicans and Democrats had never been so wide as in the 2016 elections (Pew Research Center, 2017).

Our paper speaks to three strands of the literature. First, it is related to studies on why people care about election outcomes and dislike to vote for the losing candidate. The fact that individuals do vote and participate in elections, despite the marginal probability of casting a pivotal vote, shows that there are psychological motivations to vote (Downs, 1957). Individuals also report a significant drop in their life satisfaction when they support the losing candidate, which shows that they are affected by election outcomes (Pinto et al., 2019).

Second, our paper speaks to the literature about how voting for the losing candidate increases fear and anxiety once election results are revealed (Marcus and Mackuen, 1993). Several studies show that stress and anxiety increase following Election Day, especially among those who supported the losing candidate. The literature reports these spikes in stress and anxiety both from using cortisol as a biomarker (Stanton et al., 2010; Hoyt et al., 2018) and from self-reports (Hagan et al., 2020; Majumder et al., 2017). Third, our paper is related to the literature on the use of alcohol as a form of self-medication for anxiety (Darden and Papageorge, 2018). Several studies find a positive correlation between alcohol use and stress in different settings, in what is known as the stress-dampening effect of alcohol (Holahan et al., 2001; Carrigan et al., 2008).

Our results provide novel evidence that risky behaviors change in response to electoral results depending on who wins, and that such effect depends on characteristics of the electoral process. While our analysis cannot pin down why only the 2016 Election Day generated such an increase in the risky behavior of spending more on alcohol, we acknowledge a combination of factors that are unique to 2016: the harsher tone of political campaigns, the use of social media, and the unanticipated results.

Our findings are relevant for two reasons. First, we show that election outcomes increase risky health behaviors and that the increase depends on the characteristics of the election. Such an increase in alcohol consumption can have long-term effects on health and on human capital which can be a public health concern. Second, some of the components of the 2016 elections are not unique to the United States, nor to electoral processes overall. Therefore, our results can be informative about changes in risky behaviors in other anxiety-triggering situations.

This paper is organized as follows: Section 2 describes the methods; it starts with a simple conceptual framework of why the demand for alcohol is expected to increase after Election Day for supporters of the losing candidate. Next, it describes the alcohol purchases and election data and presents the DID empirical approach to estimate the effect of election outcomes on expenditures with alcohol. Section 3 presents the main results and robustness checks. Section 4 concludes.

2 Methods

2.1 Conceptual Framework

In this section, we introduce a simple conceptual framework to predict how alcohol consumption will change after Election Day depending on the share of voters for the losing party in a county. We set up a framework of changes in individual behavior that explains what we observe in the aggregated data.

We have three main assumptions: (i) individuals care about election outcomes and dislike to lose more than they enjoy winning; (ii) voting for the losing candidate increases fear and anxiety once election results are revealed; and (iii) alcohol is used as self-medication to decrease the feelings of fear and anxiety. In the end, we discuss factors that differentiate the 2016 election from others—including the role of the media and the unexpected results.

First, individuals care about elections. The fact that they turn out to vote, even though

the probability of casting a pivotal vote is extremely low, shows that there are psychological motivations behind the decision to participate in the electoral process that are beyond the rational cost-benefit analysis of voting proposed in the seminal work by Downs (1957).² As Zech (1975) describes, among the psychological reasons explaining the decision to vote is the feeling of complying with civic duty and the satisfaction of voting for the winning candidate.³ An analysis of the 2012 and 2016 U.S. presidential elections shows that voters not only care about voting for the winning candidate but feel a significant drop in their life satisfaction when they support the losing candidate (Pinto et al., 2019). The results are especially strong and consistently significant across all measures of happiness among supporters of the losing candidate in the 2016 election. This fact illustrates that losing affects subjective life satisfaction more than winning, especially during an election where the losing party was expected to win. After Election Day, supporters of the losing party use traumatic metaphors to make sense of their loss (Carmack and DeGroot, 2018).

Second, during elections, voters become emotionally involved with the electoral campaign, through fear of the results and enthusiasm with a candidate (Marcus and Mackuen, 1993). To measure how elections are correlated with stress, some studies use concentrations of salivary cortisol—a steroid hormone used as a biomarker of the stress response (Hellhammer, Wüst and Kudielka, 2009). Other studies use self-reported level of stress or anxiety as an outcome. Most studies agree that stress increases on and following Election Day, and even more among voters for the losing party.⁴ There is still some discussion in the literature about how long the effects last.

In the United States, Stanton et al. (2010) find that, after the 2008 presidential elections, the level of cortisol among those who supported the (losing) Republican candidate rose, while

²See Schneider, Athias and Bugarin (2019) for a recent discussion of the consequences of voting costs on electoral outcomes.

³For more on the benefits of voting for the winning candidate, see Bartels (1985); Kenney and Rice (1994); Morton and Ou (2015).

⁴The act of casting a ballot itself is also related to increases in stress. In Israel, Waismel-Manor, Ifergane and Cohen (2011) find an increase in cortisol levels for voters at the ballot box. The authors do not report differential effects among those that expect to win or lose.

it remained constant among those who supported the Democratic candidate. Hoyt et al. (2018) find similar results—a higher level of cortisol across all adults leading to the election; after the election, they find a smaller recovery in the levels of cortisol for those who had negative attitudes towards the winning candidate. Trawalter et al. (2012) examine the 2012 election and also find an increase in cortisol on Election Day, mainly among Republicans. Within a week after Election Day, however, the authors do not find different effects on cortisol levels by political affiliation. Although these studies arrive at a similar conclusion, an important limitation is that their sample size is usually small and the collection of salivary cortisol is voluntary.

Studies that rely on self-reported stress and anxiety find similar results. Pinto et al. (2019) use Gallup survey data to examine the effect of the 2012 and 2016 presidential elections on subjective well-being, including measures of stress and worry. They find a decline in subjective well-being among voters for the losing party that lasts, on average, two weeks. Hagan et al. (2020) detect an increase in reported symptoms of stress after the 2016 presidential elections among college students; the increase is accentuated among minority groups and those that supported the (losing) Democratic party. Majumder et al. (2017) also find an increase in self-reported stress and anxiety leading to and after the 2016 elections; in the post-period, being affiliated to the Democratic Party was correlated with higher measures of election-related stress. And Smith, Hibbing and Hibbing (2019) show that, in the first trimester of 2017, around 40% of the American population reported feeling stress as a consequence of politics.

Our third hypothesis is that alcohol is used on and after Election Day to alleviate symptoms of anxiety and stress—because alcohol use reduces stress or because people are more inclined to drink it under stress (Sayette, 1999). The use of alcohol has been interpreted as self-medication to mental health problems, especially to explain the comorbidity of anxiety and substance use disorders (Darden and Papageorge, 2018; Bolton, Robinson and Sareen, 2009; Smith and Randall, 2012). Besides, several studies find a positive correlation between

alcohol use and stress, in what is known as the stress-dampening effect of alcohol. Such use of alcohol depends on personal characteristics, beliefs about its efficacy, and the type of event triggering stress (Holahan et al., 2001; Carrigan et al., 2008; Dawson, Grant and Ruan, 2005; Keyes et al., 2012). In the lab, alcohol diminishes self-reported anxiety to unexpected threats (Bradford, Shapiro and Curtin, 2013). However, the pharmacological explanation for the effect of alcohol on stress remains unclear (Sayette, 2017).

In addition to these three assumptions, we expect features of the 2016 presidential elections to add another layer of stress and anxiety to the days following Election Day, which would raise even more the consumption of alcohol among supporters of the losing party. Leading to Election Day, the 2016 elections were already different due to the emotional charge of political campaigns (Nai, Martínez i Coma and Maier, 2019). The use of social media reached a high in 2016—for example, the number of Facebook users jumped from 890 million in 2012 to 1,227 million in 2016 (Facebook, 2016). The decline in trust in the mainstream media and the rise of false articles that can mislead voters are also unprecedented to the 2016 elections (Allcott and Gentzkow, 2017). Another unique feature of the 2016 Election Day was the wrong predictions of who would become the next president; the vast majority of polls predicted that Donald Trump would lose the popular and Electoral College vote (Valentino, King and Hill, 2017).

2.2 Data

We use two main sources of data in our analysis. The total expenditure on alcohol comes from the Nielsen Homescan Consumer Panel Dataset. The election data come from the MIT Election Data and Science Lab. We aggregate alcohol purchases to the county-daily level, creating a variable of total expenditure.

Alcohol data The alcohol expenditure data are built from alcohol purchases from households in the Nielsen Homescan Consumer Panel Dataset. The data are a longitudinal panel of approximately 40,000 (2004-2006) to 60,000 US households, and it covers the period from 2004 to 2017.⁵ We consider all households in the sample and aggregate their purchases to the county-daily level.

Households scan purchases of alcohol that they take home; therefore, our analysis excludes any form of alcohol that is not brought into the house before consumption (e.g., in bars and restaurants). Panelists use in-home scanners to record their purchases, from any outlet, intended for personal, in-home use. Nielsen estimates that, on average, 30% of households' consumption is accounted for in the consumer panel data. Our main outcome is the total dollars spent on alcohol. We consider the following categories of alcoholic beverages: beer, wine, and liquor. The average daily expenditure with alcohol in a county varies from 17.30 dollars in 2004 to 22.20 dollars in 2016 (dollars in the current year).

Election data The election data is from the MIT Election Data and Science Lab. We use reports the percentage of the vote at the county level for both Democrats' and Republicans' presidential candidates in the 2004, 2008, 2012 and 2016 U.S. elections. We use the share of the vote for the candidate who lost the presidential election as our main independent variable to explain alcohol expenditure. The average share of support for the 2016 losing candidate in our data is 47.31 percent, varying from 16.11 to 95.91 percent.

2.3 Empirical Approach

Our objective is to identify the impact of supporting a losing presidential candidate on alcohol consumption. Although we have information at the individual level on alcohol expenditure, we only observe presidential electoral outcomes at the county level. Thus, we cannot directly test the effect of supporting a losing candidate on alcohol consumption. To circumvent this issue, we aggregate by day and for each county the individual expenditure on

⁵Households join and leave the panel over the years. Around 20 percent of households drop from the sample every year, and new households are included to keep the average number of households at around 60,000 per year. Despite the rotation, more than 15 percent of households in the sample in 2016 have been part of it since 2004.

alcohol. Then, relying on the assumption that our aggregation of individual expenditure on alcohol represents the consumption of alcohol at the county-daily level, we test our research question using a DID model with a continuous treatment variable, following Acemoglu, Autor and Lyle (2004). More specifically, we test whether counties with larger support for losing presidential candidates consume relatively more alcohol after the election than counties with smaller support for the losing candidate. Formally, we estimate the following model for each presidential election separately:

$$Log(Alcohol_{cde}) = \alpha + \gamma After_{de} + \beta After_{de} * Share_{ce} + \omega_c + \delta_w + \lambda_m + \epsilon_{cde}, \qquad (1)$$

where $Alcohol_{cde}$ is the total expenditure on alcohol in county c and day d, within 30 days before and after the Election Day of election e.⁶ The difference in alcohol expenditure after the election is capture by γ and our main coefficient of interest is captured by β , which shows the change in alcohol consumption after Election Day across varying degrees of support at the county level for the losing candidate (i.e., $Share_{ce}$). If our theory is correct, this coefficient should be positive showing that alcohol expenditure increases more after Election Day among counties with higher levels of support for the presidential candidate who lost. We include fixed effects at the county level (ω) to control for time-invariant county characteristics. We include days of the week (δ) and month (λ) fixed effects to control for seasonality and differences in alcohol consumption intensity over the weekend. Finally, ϵ_{cde} represents the error term.

We take advantage of the high-frequency nature of our dataset and also add a non-linear function of time that gives us more flexibility to test bandwidth selection and manage omitted variables. This approach allows us to rely on an identification strategy that is more flexible than a simple DID model. While the latter restricts unobserved variables related to alcohol consumption to vary linearly, the former allows unobserved factors to act non-linearly over

⁶We test different bandwidths and obtain similar results.

time (Auffhammer and Kellogg, 2011). Formally, we add the following term to Equation 1 and relax the assumption of linearity:

$$\sum_{n=1}^{2} \kappa_n (Date_{de} - Election Day_{de})^n \tag{2}$$

Including these variables to our model allow us to capture closeness to Election Day and, by adding the exponent to our running variable, we allow unobserved variables related to alcohol consumption to vary non-linearly. Finally, we flexibly test for different bandwidths using this specification.⁷

3 Results

We start this section estimating Equation 1 and then reporting the results of our main specification. In Table 1, we estimate Equation 1 separately for each U.S. presidential election available in our sample using a 30-day bandwidth. We only find positive and significant results in the 2016 election: there is a 1.1% increase in alcohol expenditure after Election Day for each 10 percentage point increase in support for the losing party (Democratic party in this case). The evidence that alcohol consumption increases among Democratic stronghold counties exclusively after the 2016 U.S. presidential election is consistent with our hypothesis that voters facing adverse and unexpected electoral results feel anxious and stressed and, thus, self-medicate with alcohol. In the Appendix, we provide two robustness checks. First, Table A.1 shows that our results are robust to changing the bandwidth to 20 and 40 days. Second, in Table A.2, we relax the assumption that unobserved variables related to alcohol expenditure vary linearly and add equation 2 to our main model specification. Our results, however, are not sensitive to this change.

Next, we exploit the fact that our DID model allows for variance in treatment and investigate which part of the distribution in the vote share for the losing party drives our

⁷We follow the approach recommended by Gelman and Imbens (2019) and restrict our attention to estimators based on local linear or quadratic polynomials.

results. In Figure 1, we split counties into five equal parts, for each of the four elections considered, according to the distribution of vote for the losing candidate. Then, we compare the expenditure on alcohol post-election to pre-Election Day contrasting each quintile to the baseline (i.e., first quintile). As we show, the only significant effect is found in the fifth quintile of the 2016 presidential election after a rise in alcohol consumption in the fourth quintile. The average support for Hillary Clinton in the counties belonging to the fifth quintile was 71 percent. Therefore, our results suggest that places predominantly voting for the democratic candidate were more likely to consume alcohol after the unexpected 2016 electoral outcomes. This result is in line with Kőszegi and Rabin (2006) model with gainloss utilities, where reference points are derived from consumers' rational expectations about outcomes and emotional cues are driven by deviations from expectations. As the empirical literature exploring this model shows, people can change their usual behavior when faced with unexpected losses in dramatic ways (e.g, being more likely to be the perpetrator of domestic violence or increasing sentence lengths assigned by judges) (Card and Dahl, 2011; Eren and Mocan, 2018).

In Figure 2, we change our model specification to a regression discontinuity in time following Anderson (2014) and Davis (2008). Our cutoff is defined as the election day and we report an estimation restricting our sample to the 4th and 5th quintiles. We acknowledge that regression discontinuity is not an ideal approach in our case because there may be a lag on people's response to electoral outcomes or it may be the case that people have stocked alcohol in their homes prior to election day, which allows them to immediately respond to elections' results by drinking more of their stock without affecting their alcohol expenditure. Nonetheless, this analysis can provide insights and mitigate concerns with the alternative hypothesis.

Our analysis shows that, within the first two weeks after the 2016 election, there was a significant increase in alcohol expenditure among democratic stronghold counties (i.e., supporters of the losing party). The results are weaker for the remaining elections we analyzed,

reinforcing our argument that the 2016 elections were an especially emotional election. Figure 2 shows an increase in alcohol expenditure a few weeks after the election, which may be explained by the holiday season. Importantly, there is no sharp increase in alcohol expenditure prior to Election Day; this fact mitigates the concern with a larger expenditure on alcohol for election night parties, which could downward bias our results. Another important result is that we see a similar pattern of increase in alcohol consumption after Election Day among counties with a higher share of support for the losing candidate across all elections, independent of it being won by Democrats or Republicans. This finding eliminates the possibility that our results are explained solely by counties with more support for the Democrats increasing their alcohol expenditures after elections independently of electoral outcomes.

To explore the robustness of our results further we perform a falsification test using placebo election days. We run the main specification in Table 1, using the 60-day interval, but redefine the dummy after the election to be equal one after a fictitious Election Day. We create three placebo election days: 60, 90, and 120 days before the true Election Day.⁸ Figure 3 shows that the β coefficient from Equation 1 is not statistically significant in any placebo elections. This exercise mitigates concerns with significant pre-trends in the consumption of alcohol that are different across political parties' ideology.

The increase in alcohol consumption is likely to have further consequences on health and human capital that we do not discuss in this paper. On the one hand, a large literature links alcohol consumption to negative health outcomes, which are later related to an increase in mortality (Mokdad et al., 2018). Alcohol consumption is also positively correlated with other risky behaviors, such as drunk driving (Levitt and Porter, 2001) and criminal offenses (Carpenter and Dobkin, 2010). On the other hand, as discussed in Section 2.1, the use of alcohol can be a strategy to manage short-term rises in stress (Darden and Papageorge,

⁸Since each analysis has a 30-day bandwidth, the choice of these dates means that the sample in the first placebo test contains 60 days up to the beginning of the original interval (i.e., used in Table 1); the second contains 60 days up to one month before the beginning of the true interval, and the third contains 60 days up to two months prior to the beginning of the true interval. There is no overlap in the sample period of the placebo with the true analysis, which guarantees that the placebo results are not contaminated by the true election outcomes.

4 Discussion

In this paper, we measure the impact of supporting a losing presidential candidate on alcohol expenditures. Because individuals care about election outcomes and dislike to lose more than they enjoy winning, we expect that voting for the losing candidate increases anxiety, which is often self-medicated with alcohol. We expect that alcohol expenditures would increase after Election Day in a county with a higher share of votes for the losing candidate.

We use data on total daily purchases of alcohol at the household level in a DID model with a continuous treatment variable. Our results show that the effect of supporting a losing candidate on alcohol expenditure is positive and significant only for the 2016 election. Within 30 days after Election Day, each 10 percentage point increase in support for the losing party increase alcohol expenditure by 1.1%. Our results are robust to using different bandwidths, creating a falsification test and for controlling for unobserved factors that change non-linearly over time. The fact that our results are unique to 2016 agrees with the literature that discusses the particular features of the 2016 presidential elections (emotional charge of political campaigns, use of social media, and wrong predictions of who would become the next president, among others).

Our findings are relevant for two reasons. First, our results show that risky health behaviors increase after a stress-inducing event. The increase in alcohol consumption is larger within four weeks of Election Day, but it can have long-term effects on health and on human capital, which are not captured in our analysis. Second, some of the components of the 2016 elections are not unique to the United States, and not unique to electoral processes. Our results can be informative about changes in risky behavior in the case of other fear and anxiety-triggering episodes.

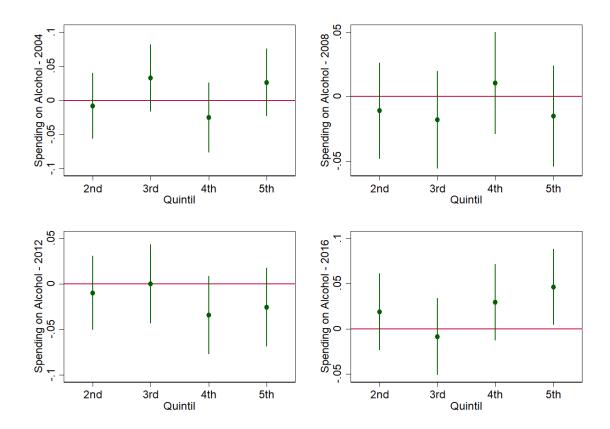
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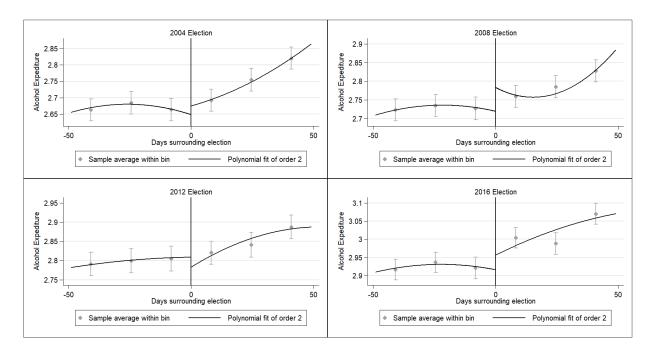
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Figure 1: Testing how different levels of support for the losing candidate affects alcohol expenditure after Election Day



Note: Each figure shows the result of one regression. Each point shows a coefficient and its 95% confidence interval. The coefficient is the change in the consumption of alcohol post-election in each quintile of support for the losing candidate. The omitted category is the first quintile.

Figure 2: Testing discontinuity on alcohol expenditures over time among counties with high levels of support for the losing candidate



Note: This figure shows the regression discontinuity (RD) plot of the average total expenditure on alcohol on the 4th and 5th quintiles of the distribution of the share of votes for the losing party. Positive days are post-election and bins size is approximately 16 days with a 99% confidence interval.

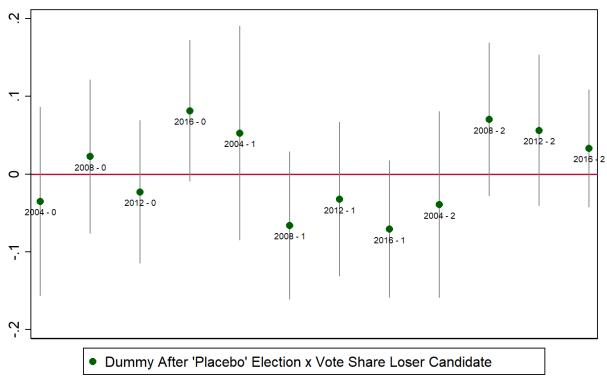


Figure 3: Placebo tests using 30-day bandwidth

with 95% confidence interval

Note: This figure shows estimations of the β coefficient in Equation 1 for each presidential election we study using three fictitious election days: 60, 90, and 120 days before the true Election Day. In the figure, they correspond to Election Day 0, Election Day 1, and Election Day 2, respectively.

Table 1: Testing whether higher levels of support for the losing candidate affect alcohol expenditure after Election Day

VARIABLES	(1) 2004 Election	(2) 2008 Election	(3) 2012 Election	(4) 2016 Election
\hat{eta}	0.032 (0.062)	-0.009 (0.047)	-0.081* (0.048)	0.112*** (0.042)
N	22,457	33,622	32,031	32,758
Number of Counties	1,620	2,068	1,996	2,009

Note: Robust standard errors, clustered at the county level, are reported in parenthesis. All regressions use county, day of the week and month fixed effects. The 1%, 5% and 10% level of significance are represented by ****, ***, and *, respectively.

Appendix A: Additional Figures and Tables

Table A.1: Testing different bandwidths

MADIADI DO	(1)	(2)	(3)	(4)
VARIABLES	2004 Election	2008 Election	2012 Election	2016 Election
Panel A - 20-day bandwidth				
\hat{eta}	0.108	-0.024	-0.112*	0.163***
	(0.078)	(0.059)	(0.062)	(0.057)
N	14,561	21,866	20,787	21,292
Number of Counties	1,512	1,947	1,885	1,922
Panel B - 40-day bandwidth				
\hat{eta}	0.065	-0.055	-0.045	0.098***
	(0.060)	(0.041)	(0.042)	(0.037)
N	29,350	43,977	41,897	42,778
Number of Counties	1,677	2,131	2,075	2,072

Note: Robust standard errors, clustered at the county level, are reported in parenthesis. All regressions use county, day of the week and month fixed effects. The 1%, 5% and 10% level of significance are represented by ***, ** and * respectively.

Table A.2: Controlling for non-linearity and closeness to the elections day

	(1)	(2)	(3)	(4)
VARIABLES	2004 Election	2008 Election	2012 Election	2016 Election
Panel A - 20-day bandwidth				
\hat{eta}	0.114 (0.077)	-0.026 (0.063)	-0.111* (0.062)	0.163*** (0.056)
N	14,561	21,866	20,787	21,292
Number of Counties	1,512	1,947	1,885	1,922
Panel B - 30-day bandwidth				
\hat{eta}	0.059 (0.063)	-0.028 (0.051)	-0.087* (0.051)	0.118*** (0.045)
N	21,801	32,632	31,038	31,771
Number of Counties	1,614 2,061	1,990	2,003	
Panel C - 40-day bandwidth				
\hat{eta}	$0.065 \\ (0.054)$	-0.056 (0.044)	-0.046 (0.044)	0.098** (0.039)
N	29,350	43,977	41,897	42,778
Number of Counties	1,677	2,131	2,075	2,072

Note: Robust standard errors, clustered at the county level, are reported in parenthesis. All regressions use county, day of the week and month fixed effects. The 1%, 5% and 10% level of significance are represented by ***, ** and * respectively.