

Negative Voting Revisited: The 2020 US Presidential Election

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SUMMARY

About one third of American voters cast a vote more 'against' than 'for' a candidate in the 2020 Presidential election. This pattern, designated by negative voting, has been initially understood by rational choice scholarship as a product of cognitive dissonance and/or retrospective evaluations. This working paper revisits this concept through the affective polarization framework in the light of the rise of political sectarianism in American society. Based on an original CAWI survey fielded after the 2020 election, our regression analysis demonstrates that the predicted probability of casting a negative vote significantly increases among individuals for whom out-candidate hate outweighs in-candidate love. Negative voting is less prevalent among partisans as their higher levels of in-group affection can offset out-group contempt. By asserting the enduring relevance of negative voting in American presidential elections, we aim at stimulating further comparative research and discussion of its implications for democratic representation.

Keywords: affective polarization, anti-candidate voting, negative partisanship, political sectarianism

1. INTRODUCTION

Not unlike other presidential contests held in the last decades, also the 2020 US Presidential election was characterized by widespread negativity. Many voters used their ballot to signal opposition to the other candidate rather than support for their own. This occurrence fits with a theoretical account of rising *political sectarianism* among American voters, whereby out-party hate has progressively emerged as a stronger force than in-party love (Finkel et al., 2020). Composed by othering, aversion, and moralization, this concept describes "the tendency to adopt a moralized identification with one political group and against another" (ibid.: 533). In this working paper, we argue that negative voting is an electoral manifestation of this process.

To understand the motives underlying this aversive form of electoral participation, we revisit the notion of "negative voting" and assess it against the most recent presidential election, proposing a theoretical reassessment of the concept taking into account recent developments in American public opinion. Based on a post-election survey of American citizens eligible to vote, we find that about one third of voters cast a negative vote in the 2020 election.

Our analysis shows that negativity toward the opposing candidate (and party) is indeed linked to higher chances of casting a negative vote. While despise toward the opposition emerges as a necessary condition for voting "against", we also find that the tendency towards negative voting is compensated by positive attitudes towards one's preferred party and candidate – despite negative feelings toward their competitors, strong partisans vote disproportionally "for". Rather than looking at sympathy and hostility as explanations in isolation, we argue that the trigger of negative voting lies in voters' *comparative* assessments of the contenders. The results further confirm the notion that incumbents are the central target of negative voting.

2. NEGATIVE VOTING IN AMERICAN ELECTIONS

We conceive negative voting as an electoral choice more strongly driven by negative attitudes toward opposed parties and candidates than by positive attitudes toward one's preferred party and candidate. Following Gant and Davis (1984, p. 272) we thus rely on the expectation that "if we assume a two-candidate contest, then negative support for candidate A is defined as that state where a citizen is neutral toward A, but disliked the opposing candidate, B. A negative voter, therefore, does not like his/her preferred candidate. Rather, the negative voter is motivated by antipathy toward the opposition; he or she votes 'against', not 'for'".

The idea of negative voting is not new in political science. Over a half century ago, V.O. Key (1966, p. 60) first alluded to the journalistic supposition that "the people only vote against, never for". And indeed, the conventional wisdom that citizens are largely given to voting against was subjected to empirical scrutiny – with several confirmatory results – by American electoral research since the 1980s (Gant and Davis, 1984; Gant and Sigelman, 1985;

Sigelman and Gant, 1989). While debunking Key's coarse claim, this strand of research concluded nonetheless that citizens do not always vote for the candidate they like the most (Gant & Davis, 1984).

While relatively easy to define, negative voting proved more complicated to disentangle from an attitudinal point of view. As aptly summarized by Fiorina and Schepsle (1989, p. 424), negative voting appeared as "an observed regularity with an as-yet uncertain explanation".

At its core, rational choice scholarship conceived negative voting as a special case of retrospective voting in elections involving incumbents (Kernell, 1977). The wear and tear of holding office increases the likelihood of discontent with presidential performance among voters, leading in turn to a higher rate of votes against the incumbent. The intuitive value of this empirically testable proposition is however counterbalanced by its inability to account for negative votes cast against the challenger, nor about the very existence of negative voting in elections involving no incumbent.

Drawing from cognitive dissonance theory, a strand of psychological literature conceived negative voting as a rationalization mechanism. Facing conflicting preferences between party identification and ideology, voters are hypothesized to engage in negative voting as a strategy to reduce dissonance, by conceptualizing their vote choice not as a positive preference for a given party/candidate, but rather as a rejection of the other party/candidate (Gant & Sigelman, 1985; Sigelman & Gant, 1989).

This line of reasoning has arguably lost leverage in recent decades due to the profound transformations occurred to the American electorate. A long-term process of partisan dealignment was later followed by a realignment into almost perfectly sorted partisan groups, leading to strong affective polarization across party lines (Levendusky, 2013; Dalton, 2018). Ideological and social sorting have dramatically reduced cross-pressures among the electorate (Mason, 2015; 2018).

Recent research has demonstrated that "cold feelings toward the out-party now exceed warm feelings toward the in-party" and that this is a manifestation of the process of political sectarianism in American society (Finkel et al., 2020: 533). Since attitudes towards parties and candidates have been established as a key driver of voting behavior, particularly in American Presidential elections, the increasing weight of negative attitudes in voters' minds could motivate growing patterns of negative voting.

A strand of scholarship has tackled the electoral consequences of affective partisan polarization through the lens of *negative partisanship*. This literature moves from the social-psychological notion that hostility toward the out-group can develop independently from – and drive support for – the in-group. The existing works on the topic confirm this intuition and highlight an independent relationship between negative partisanship and vote choice even after controlling for positive identifications, both in the United States (Abramowitz & Webster, 2016; 2018; Bankert, 2020) and in comparative perspective (Medeiros & Noël, 2014; Mayer, 2017).

Negative attitudes toward the political out-group concern not only political parties but can also spill over to individual candidates (Barisione, 2017; Garzia and Silva, 2021). As the most visible party objects, especially in a Presidential system, candidates are key targets of political aversion. Such contention is supported by recent research on affective polarization, demonstrating that "when people think about the other party, they think primarily about political elites" (Druckman & Levendusky, 2019, p. 115). The electoral implications of

negativity toward candidates are made clear by the finding that "the most important factor in predicting partisan loyalty [in the 2016 American Presidential election] is how an individual feels about the opposing party's presidential candidate" (Abramowitz & Webster, 2018, p. 132). It follows that evaluations of (out-party) candidates also act as determinants of the vote, acting alongside positive (in-party) candidate evaluations.

3. DATA AND METHOD

Our analyses rely on a CAWI survey conducted by Qualtrics International Inc with the institutional, technical and methodological support of FORS. The sample is representative of the American population eligible to vote in terms of age, gender, and macro-region of residence (Northeast, Midwest, South, West) (fieldwork dates: 9-29 November 2020; total N=1064). No weights were applied and no participants were excluded from the original sample. Non-voters were not considered in the analysis.¹

Existent research has relied on two alternative measurement strategies of negative voting. Some studies resorted to *indirect* measures, by either recoding open-ended answers (Gant & Davis, 1984), presidential approval scores (Kernell, 1977), or constructing measures of negative evaluations from collapsed feeling thermometers (Maggiotto & Piereson, 1977). Others have used *direct* measures of negative voting by asking respondents whether they view their vote as more of an expression of support for their preferred candidate or against the opponent (Gant & Sigelman, 1985; Sigelman & Gant, 1989). The latter option enables placing negative voting as a dependent variable, producing an arguably more objective measurement of the concept. Our study employs such a direct measurement of negative voting. The dependent variable is thus measured through the question: "Would you say your vote is more a vote for Trump [Biden] or more a vote against Biden [Trump]?". Respondents could select one of two answer options: 1. More a vote for; 2. More a vote against. In the analyses that follow, all respondents deeming their vote as more of a vote *against* are thus considered "negative voters".

The share of negative voters in our dataset amounts to 30.2 percent of all respondents declaring to have cast a vote in the 2020 US Presidential election. This is largely in line with previous studies measuring negative voting in American Presidential elections (Gant & Sigelman, 1985). Importantly, the proportion of negative voters among Biden supporters (39 percent) widely exceeds that of negative voters among Trump supporters (18 percent) – thus confirming the notion that office holders are the main target of negative voting.

The theoretical relevance of retrospective considerations for negative voting is further supported by a bivariate analysis of economic performance assessments. Among negative

¹ Study participants are drawn from traditional, actively managed, double-opt-in market research panels partnering with Qualtrics International Inc. Participants received an email invitation informing them that the survey is for research purposes only and how long the survey is expected to take (8-10 minutes). All participants received a compensation based on the length of the survey, their specific panelist profile, and target acquisition difficulty. The compensation may include cash, airline miles, gift cards, redeemable points, charitable donations, sweepstakes entrance, and vouchers. Qualtrics International Inc. was responsible for the fair compensation of participants in line with relevant wage standards currently operating in the US. No deception was involved in this study.

voters, the proportion of respondents declaring that the American economy has gotten worse/much worse in the last year amounts to 61 percent. Among positive voters, the same figure amounts to almost a half (33 percent).



Figure 1. Share of negative voters by party identification (PID) (7-point scale)

Based on these findings alone, one could conclude that negative voting is merely an act of opposition to an out-party incumbent. Indeed, Democratic respondents report higher rates of negative voting than Republican respondents. Yet, it is worth noting that strength of party identification matters for negative voting regardless of its direction (see Figure 1). Among strong partisans, the proportion of negative voters is just 15 percent, which then goes up to 37 percent among weak partisans and up to over 50 percent among leaners/independents.

Inasmuch as strong partisans may feel aversion toward their opponents, they also feel more positive toward their in-party, on average. Hence, these voters are arguably less likely to cast a vote primarily against a party or candidate. While negative voting is thus at its lowest among strong supporters, it gains traction among voters with weaker party and candidate preferences. To illustrate this reasoning, Table 1 compares the mean scores of in-party/candidate love and out-party/candidate hate for positive and negative voters respectively. These measures, as developed by Finkel et al. (2020), allow for comparing the strength of in-party/candidate love relative to the neutral point of the feeling thermometer (in-party/candidate score -50) with the strength of out-party/candidate hate (50 - out-party/candidate score). Thus, In-party love/hate is calculated with reference to party thermometers, whereas in-candidate love/hate is calculated with reference to candidate feeling thermometers. A feeling thermometer is a variable gauging respondents' degree of sympathy toward a given political object, in this case parties and candidates, usually on a 0-

100 scale. Ranging from -100 to 100, above-zero values on the party and candidate differentials (in-party love – out-party hate; in-candidate love – out-candidate hate) reflect greater in-group love than out-group hate, while below-zero values reflect greater out-group hate than in-group love. For example, if a voter A gives an 80 score on the party feeling thermometer to their in-party, voter A will score 30 on in-party love. If the same voter A gives a 25 score on the candidate feeling thermometer to their out-party, it will score 25 for out-party hate. The same procedure applies for candidate feeling thermometers and in-candidate love/out-candidate hate. These comparative measures allow to perceive if the relative importance of out-party/candidate hate is stronger than in-party/candidate love.

	Positive voters		Negative voters		T-test
In-party love	27.7	(21.3)	8.5	(25.4)	***
Out-party hate	22.5	(30.9)	28.2	(22.7)	**
In-party love – Out-party hate	+5.2	(36.0)	-19.7	(32.7)	***
In-candidate love	32.9	(19.7)	9.3	(24.3)	***
Out-candidate hate	31.0	(27.8)	40.6	(16.2)	***
In-candidate love – Out-candidate hate	+1.9	(31.4)	-31.3	(28.2)	***

Table 1. Mean scores for love and hate thermometer measures, b	by positive/n	egative	voting
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Standard deviation between parentheses. *** p < .001 ** p < .01 * p < .05

Positive voters exhibit relatively high levels of in-group love and out-group hate. On average, they "love" their party and candidate more than they "hate" the opponents. On the contrary, negative voters report almost neutral feelings for their chosen party and candidate, but stronger negative feelings towards the opponent – thus well-fitting the very notion of negative voting. Interestingly, both groups of voters report a higher degree of hate towards opposing candidates than the respective parties. This finding is in line with the intuition that negative candidate evaluations (rather than party evaluations) may exert the strongest role in models of negative voting in US presidential elections (Abramowitz & Webster 2018, p. 132).

4. RESULTS

Table 2 presents the estimates from our logistic regression models of negative voting. The dependent variable is coded '0' for positive voters and '1' for negative voters. Since to be either a positive or a negative voter, one needs to have cast a vote, abstainers were excluded from the analysis. All models include standard sociodemographic variables (age, gender, macro-region of residence, educational level, employment status, race, religiousness) as well as ideology, to control for the higher propensity among liberal voters to cast an anti-Trump vote. Descriptive statistics of variables included in the analysis are presented in the Appendix (Table A2). Aside from age (measured in years), all other

variables have been rescaled to range from 0 to 1 (for details on the variables and original coding schemes see Table A1 in the Appendix).

As suggested by the descriptive analysis, the results indicate that negative assessments of the economy and the absence of partisan ties increase the likelihood of negative voting (Model 1). Older and less religious individuals also appear more prone to cast a negative vote. High in-party love decreases the chances of casting a negative vote while out-party hate does not bear any significant effect (Model 2). In-group and out-group perceptions appear most relevant concerning presidential candidates (Model 3). Not only do in/out-candidate variables have a considerably larger coefficient: when jointly included with in/out-party variables the latter become no longer statistically significant (Model 4). The final model replaces these measures by the respective differentials (Finkel et al., 2020), confirming the preponderance of candidate-based over party-based considerations (Model 5). As suggested by the negative coefficient, the predicted probability of casting a negative vote is substantially lower among individuals for whom in-candidate love outweighs out-candidate hate (see Figure 2). These fewer respondents (circa 25% of the sample) behave quite homogeneously, as reflected by the small variance captured by confidence intervals, rendering the estimates reliable despite the fewer observations.

	(1)	(2)	(3)	(4)	(5)
Age	.02 (.01)*	.02 (.01)**	.02 (.01)**	.03 (.01)**	.02 (.01)**
Female	30 (.18)	22 (.19)	15 (.20)	16 (.20)	25 (.20)
Design (has alian North Foot)					
Region (baseline: North-East)	07 (00)*	FO (07)*	00 (00)		40 (00)
Midwest	.67 (.26)*	.53 (.27)*	.36 (.29)	.35 (.29)	.40 (.29)
South	.24 (.26)	.18 (.27)	.14 (.28)	.14 (.28)	.21 (.28)
West	.54 (.26)*	.43 (.27)	.24 (.29)	.24 (.29)	.29 (.28)
Education	57 (67)	58 (67)	37 (72)	40 (72)	44 (72)
Employed	- 29 (20)	- 34 (20)	- 44 (22)*	- 45 (22)*	- 40 (22)
White	- 00 (24)	01 (25)	04(27)	05 (27)	03(26)
Religious	- 62 (10)**	- 62 (20)**	- 58 (21)**	- 61 (22)**	- 48 (21)*
Ideology	- 13 (35)	- 39 (37)	- 54 (39)	- 53 (30)	- 15 (39)
ldeology	10 (.00)	00 (.07)	04 (.00)	00 (.00)	+0 (.00)
Retrospective economy	-1.99 (.31)***	-1.93 (.33)***	-1.67 (.36)***	-1.67 (.36)***	-1.47 (.34)***
Partisanshin (baseline: No PID)					
Weak nartisan	- 48 (21)*	- 27 (22)	- 44 (24)	- 42 (25)	- 39 (24)
Strong partisan	-1 65 (21)***	_1 10 (_23)***	-1 07 (24)***	-1 03 (25)***	-1 26 (23)***
	-1.00 (.21)	-1.10 (-20)	-1.07 (.24)	-1.00 (.20)	-1.20 (.20)
In-party love	-	-2.74 (.42)***	-	.01 (.57)	-
Out-party hate	-	.26 (.40)	-	37 (.56)	-
La construit de			F 4 4 / FO)***	F 40 (00)***	
In-candidate love	-	-	-5.14 (.52)***	-5.12 (.62)***	-
Out-candidate nate	-	-	1.99 (.60)**	2.27 (.74)**	-
In-party love-Out-party hate	-	-	-	-	1.07 (.81)
In-candidate love-Out-candidate hate	-	-	-	-	-8.83 (1.05)***
					0.00 (1.00)
Constant	14 (.58)	1.33 (.67)*	1.47 (.82)	1.45 (.84)	2.89 (.75)***
N	823	823	823	823	823
Pseudo R-squared	.19	.24	.33	.33	.31
AIC	839.99	798.70	710.10	713.68	728.93
BIC	905.97	874.10	785.51	798.51	804.34

Table 2. A multivariate assessment of the attitudinal components of negative voting

Note: Table entries are logistic regression coefficients with standard errors in parentheses. *** p < .001 ** p < .01 * p < .05

Figure 2. Predicted probabilities of casting a negative vote



The predicted probability of casting a negative vote is rather low whenever individuals hold more favorable views of the in-party candidate than unfavorable views of the out-party candidate (positive values). In the modal category of voters loving their own candidate just a little more than they hate the opponent, the estimated probability of casting a negative voting is below 20 percent. Yet, 59 percent of individuals have negative values in the differential. For them, the probability of negative voting is quite higher – casting a negative vote quickly becomes more likely as values in the independent variable approach -50.

5. ROBUSTNESS

A split sample re-estimation of Model 5 across Biden and Trump voters yields very similar results (see Figure 3), specifically concerning the coefficient of the "In-candidate love–out-candidate hate" variable ($b_{\text{Biden}} = -.04^{***}$; $b_{\text{Trump}} = .06^{***}$). The akin results across party supporters suggest that negative voting operates in very similar ways across distinct types of voters, hinging on the extent to which voters hate the opponent more than they love their own candidate.



Figure 3. The effect of candidates' love-hate differential by candidate choice

While previous studies have often relied on feeling thermometer scores to measure negative partisanship, it could be argued that such measures suffer from differential item functioning, since individuals may interpret values of the scale differently (Osterlind & Everson, 2009). Moreover, as explained by Bankert (2020, p. 6), measures of negative partisanship drawn from feeling thermometers "are not equivalent to the identity-based conceptualization and measurement of partisanship that has gained popularity in the U.S., making it hard to accurately compare and contrast the effects of negative and positive partisanship". Feeling thermometers have also been criticized as measures of candidate assessments (Fiorina, 1981). To address these issues, model 5 was re-estimated using multi-item positive and negative partisan identity scales (Bankert, 2020) and an additive index of four politically relevant perceived personality traits (i.e., honesty, competence, empathy, leadership). Rescaling the variables, we have mimicked the original in-party/candidate love and outparty/candidate hate measures. The model estimation with these refined measures – which, to the best of our knowledge were unavailable simultaneously in previous studies -, yields similar results (see Figure 4). Yet in this specification, party-based considerations appear to have a small significant effect, possibly explainable by the identity-based measures of (negative) partisanship used instead of feeling thermometers.



Figure 4. Positive and Negative partisan identity, and candidate trait assessments as

predictors of negative voting

6. DISCUSSION AND CONCLUSIONS

This revisitation of negative voting in American elections provides a new insight into the concept, while speaking to its relevance to understand present-day presidential contests. The results of this working paper link negative voting to the climate of political aversion in American society, demonstrating that comparative candidate evaluations are the main factor associated with negative voting in the 2020 Presidential election. The likelihood of negative voting is higher whenever out candidate-hate outweighs in-candidate love, while party-based considerations appear less related – an indication supported by recent studies (Abramowitz & Webster, 2018). Importantly, the results also suggest that higher degrees of in-party/in-candidate love among partisans may help shielding them from negative voting. Along with recent studies, this finding shares the "positive message that strong partisans are not condemned to demonize the other party" (Bankert, 2020, P. 1), at least to the point of motivating patterns of voting *against*.

On these bases, the consequences of polarization and growing negativity in American society and politics do not fall exclusively upon partisans. Independents are similarly vulnerable to negativity, yet with the aggravation of this not being counterbalanced by ingroup affect. The higher rates of negative voting among independents resonate with previous accounts portraying them as more cynical than the average voter (Dalton, 2004). Recent scholarship has shown that the rise of extremely negative feelings for presidential candidates represents a genuine unappreciation of their profile rather than a mere byproduct of the overreaching process of affective partisan polarization (Christenson & Weisberg, 2019). By this token, the problem may lay in the supply rather than in the demand: mediocre candidates have been increasingly struggling to collect support among their ranks, let alone conquer independents. If parties are unresponsive to their discontent, independents are left with an exit or voice choice: either abstain or vote against. While the 70 percent of voters in our sample who still are not negative voters may offer some comfort, we remain in the dark as to the number of abstainers who choose not to participate because their negative views of parties or candidates outweighs their positive views. The conceptualization of the measurement of negativity among abstainers could be a potential research path into understanding how these dynamics affect levels of electoral participation beyond our analyses focused exclusively on voters.

Suggestions for further research also include the exploration of panel data to disentangle the causal mechanisms at the core of negative voting. Issues and performance perceptions, particularly regarding the COVID-19 crisis, are an immediate clue to answer this question.

Finally, these findings speak against the commonsensical idea that the 2020 Presidential election was spectacularly negative or distinctive. Despite Trump and the pandemic, levels of negative voting in the 2020 election were not significantly different than in the past, as identified, for example, by Gant and Sigelman (31%) (1985). American presidential elections have a long history of convulsive momentousness, which some trace back to the as-of-today unparalleled election of 1800 (Larson, 2007). While negative voting is a lasting feature of Presidential elections, understanding its changing dynamics will likely remain as pressing in the future.

REFERENCES

- Abramowitz, A. I., & Webster, S. (2016). The rise of negative partisanship and the nationalization of US elections in the 21st century. *Electoral Studies*, 41(1), 12-22.
- Abramowitz, A. I., & Webster, S. (2018). Negative partisanship: Why Americans dislike parties but behave like rabid partisans. *Political Psychology*, 39(1), 119-135.
- Bankert, A. (2020). Negative and Positive Partisanship in the 2016 US Presidential Elections. *Political Behavior*, online first.
- Barisione, M. (2017). The partisan gap in leader support and attitude polarization in a campaign environment: the cases of Germany and Italy. *International Journal of Public Opinion Research*, 29(4), 604-630.
- Christenson, D. P., & Weisberg, H. F. (2019). Bad characters or just more polarization? The rise of extremely negative feelings for presidential candidates. *Electoral Studies*, online first.
- Dalton, R. J. (2004). *Democratic Challenges, Democratic Choices.* Oxford: Oxford University Press.
- Dalton, R. J. (2018). *Political Realignment: Economics, Culture, and Electoral Change.* Oxford: Oxford University Press.
- Druckman, J. N., & Levendusky, M. S. (2019). What do we measure when we measure affective polarization? *Public Opinion Quarterly*, 83(1), 114-122.
- Finkel, E. J., Bail, C. A., Cikara, M., Ditto, P. H., Iyengar, S., Klar, S., Mason, L., et al. (2020). Political sectarianism in America. *Science*, 370(6516), 533-536.
- Fiorina, M. P. (1981). *Retrospective Voting in American National Elections*. New Haven: Yale University Press.
- Fiorina, M. P., & Shepsle, K. A. (1989). Is negative voting an artifact? *American Journal of Political Science*, 33(2), 423-439.
- Gant, M. M., & Davis, D. F. (1984). Negative voter support in presidential elections. *Western Political Quarterly*, 37(2), 272-290.
- Gant, M. M., & Sigelman, L. (1985). Anti-candidate voting in presidential elections. *Polity*, 18(2), 329-339.
- Garzia, D. & Silva, F. F. (2021). Negative personalization and voting behaviour in 14 parliamentary democracies. *Electoral Studies*, 71, 102300
- Kernell, S. (1977). Presidential popularity and negative voting: An alternative explanation of the midterm congressional decline of the president's party. *American Political Science Review*, 71(1), 44-66.
- Key, V. O. (1966). *The Responsible Electorate: Rationality in Presidential Voting, 1936–1960.* Harvard: Harvard University Press.
- Larson, E. J. (2007). A Magnificent Catastrophe: The Tumultuous Election of 1800, America's First Presidential Campaign. New York: Free Press.

- Levendusky, M. S. (2013). *The Partisan Sort: How Liberals Became Democrats and Conservatives Became Republicans.* Chicago: University of Chicago Press.
- Maggiotto, M. A., & Piereson, J. E. (1977). Partisan identification and electoral choice: The hostility hypothesis. *American Journal of Political Science*, 21(4), 745-767.
- Mason, L. (2015). 'I disrespectfully agree': the differential effects of partisan sorting on social and issue polarization. *American Journal of Political Science*, 59(1), 128-145.
- Mason, L. (2018). *Uncivil Agreement: How Politics Became our Identity*. Chicago: University of Chicago Press.
- Mayer, S. J. (2017). How negative partisanship affects voting behavior in Europe: Evidence from an analysis of 17 European multi-party systems with proportional voting. *Research & Politics*, 4(1), 1-7.
- Medeiros, M., & Noël, A. (2014). The forgotten side of partisanship: Negative party identification in four Anglo-American democracies. *Comparative Political Studies*, 47(7), 1022-1046.
- Osterlind, S. J., & Everson, H. T. (2009). *Differential Item Functioning.* Thousand Oaks, CA: SAGE Publications.
- Sigelman, L., & Gant, M. M. (1989). Anticandidate voting in the 1984 Presidential election. *Political Behavior*, 11(1), 81-92.

APPENDIX

Variable	Coding scheme
Age	Numeric
Female	0. Male; 1. Female 1. Less than 1st grade; 2. 1st, 2nd, 3rd or 4th grade; 3. 5th or 6th
Education	grade; 4. 7th or 8th grade; 5. 9th grade; 6. 10th grade; 7. 11th grade; 8. 12th grade no diploma; 9. High school graduate; 10. Some college but no degree; 11. Associate degree in college – occupational/vocational program; 12. Associate degree in college – academic program; 13. Bachelor's degree; 14. Master's degree; 15. Professional School degree; 16. Doctorate degree; 17. Other
Employed	0. Not employed; 1. Employed
White	0. Not white; 1. White
Religious	0. Does not attend religious services; 1. Attends religious services
Ideology	1. Extremely liberal; 2. Liberal; 3. Slightly Liberal; 4. Moderate, middle of the road; 5. Slightly conservative; 6. Conservative; 7. Extremely conservative
Retrospective economic assessments relative to the past year	1. Much better off; 2. Somewhat better off; 3. About the same; 4. Somewhat worse off; 5. Much worse off
Party identification	1. Democrat; 2. Republican; 3. Independent; 4. Other
Weak partisan	0. Not a weak partisan; 1. Weak partisan
Strong partisan	0. Not a strong partisan; 1. Strong partisan
In-party love	-50. Minimum in-party love; 50. Maximum in-party love
Out-party hate	-50. Minimum out-party hate; 50. Maximum out-party hate
In-party love – Out-party hate	-100. Only out-party hate; 100. Only in-party love
In-candidate love	-50. Minimum in-candidate love; 50. Maximum in-candidate love
Out-candidate hate	-50. Minimum out-candidate hate; 50. Maximum out-candidate hate
In-candidate love – Out-candidate hate	-100. Only out-candidate hate; 100. Only in-candidate love
Positive partisan identity (In-party)	0. Minimum positive partisan identity; 100. Maximum positive partisan identity
Negative partisan identity (Out-party)	0. Minimum negative partisan identity; 100. Maximum negative partisan identity
Positive partisan identity (PPID) – Negative partisan identity (NPID) (In-party – Out-party)	-100. Only negative partisan identity; 100. Only positive partisan identity
Trait index (In-candidate)	Traits describe [candidate] 0. Not well at all; 25. Slightly well; 50. Moderately well; 75. Very well; 100. Extremely well
Trait index (Out-candidate)	Traits describe [candidate] 0. Not well at all; 25. Slightly well; 50. Moderately well; 75. Very well; 100. Extremely well
In-candidate traits – Out-candidate traits	-100. Only out-candidate hate; 100. Only in-candidate love

Table A1. Variables and coding scheme

Variable	Ν	Mean	St. Dev.	Min	Max
Vote: Biden	823	0,58	0,49	0	1
Vote: Trump	823	0,42	0,49	0	1
Negative Vote	823	0,30	0,46	0	1
Age	823	48,34	17,63	18	87
Female	823	0,48	0,50	0	1
Region: Northeast	823	0,23	0,42	0	1
Region: Midwest	823	0,23	0,42	0	1
Region: South	823	0,28	0,45	0	1
Region: West	823	0,26	0,44	0	1
Education	823	11,99	2,37	2	17
Employed	823	0,49	0,50	0	1
White	823	0,79	0,40	0	1
Religious	823	0,43	0,49	0	1
Ideology	823	-0,00	1,84	-3	3
Economy	823	2,95	1,32	1	5
Party identification	823	-0,10	2,35	-3	3
Weak partisan	823	0,25	0,43	0	1
Strong partisan	823	0,49	0,50	0	1
In-party love	823	22,29	24,15	-50	50
Out-party hate	823	24,14	28,82	-50	50
In-party love – Out-party hate	823	-1,85	36,74	-100	100
In-candidate love	823	26,38	23,38	-50	50
Out-candidate hate	823	33,69	25,42	-50	50
In-candidate love – Out-candidate hate	823	-7,30	33,90	-100	100
PPID (In-party)	823	37.89	28.65	0	100
NPID (Out-party)	823	39.45	30.12	0	100
PPID – NPID (In-party – Out-party)	823	-1.55	30.53	0	100
Trait index (In-candidate)	823	71 71	25.32	0	100
Trait index (Out-candidate)	823	19.20	28.04	0 0	100
In-candidate – Out-candidate	823	-9,09	36,53	-100	100

Table A2. Descriptive statistics for variables included in the regression analyses