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Bowling with Trump: Economic Anxiety, Racial Identification, and Well-Being in the 2016 Presidential Election

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Abstract

We use well-being data from the Gallup Daily Poll and a measure of racial animus derived from Google search data to explain why racial identification became politically salient in the 2016 Presidential Election. We find that the oft-observed positive relationship between racial animus and Trump's vote share is eliminated by introducing an interaction between racial animus and a measure of the basic psychological need for relatedness. We also find that rates of worry have a strong and significant positive association with Trump's vote share, but this is offset by high levels of relatedness. Together, these two results imply that racial voting behavior in 2016 was driven by a desire for in-group affiliation as a way of buffering against economic and cultural anxiety. Such behavior is well established in laboratory studies in self-determination theory and worldview defense theory. We find no effect on Trump's performance from exposure to trade shocks. This suggests that the economic roots of Trump's success may be overstated and that the need for relatedness is a key underlying driver of contemporary political trends in the US.

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Introduction

Why did Donald Trump win the 2016 Presidential Election? Numerous reasons were canvassed in the aftermath of the result. Among them were the emergent power of social media and fake news (Allcott and Gentzkow 2017), Russian interference (Hall Jamieson 2018), the gap between low and high educated whites (Schaffner et al. 2017), lavish media attention on Trump (Sides et al. 2018), anti-incumbency (ibid.), economic anxiety (Autor et al. 2016), sexism (Valentino et al. 2019), and racism (Hooghe and Dassonneville 2018). In a prominent recent review of the literature and the evidence, Sides et al. (ibid.) acknowledge some role for all these factors but argue that the key force behind Trump's victory was "racialized economics" and Trump's willingness and ability to leverage it. Racialized economics is the tendency among some voters to consider economic issues not through an individual lens but through a racial one instead. As Sides et al. (2018, p. 8) explain:

The important sentiment underlying Trump's support was not "I might lose my job" but, in essence, "people in my group are losing jobs to that other group". Instead of pure economic anxiety, what mattered was racialized economics.

We quantitatively analyze this hypothesis using a very large dataset—the Gallup Daily Poll—and explicate the psychological roots of racialized economics. We argue that there

is a channel from economic shocks to nativist voting via psychological wellbeing. Self-determination theory (SDT, Ryan and Deci 2017), a school of clinical psychology, argues that psychological well-being is a function of three basic psychological needs: for autonomy, competence, and relatedness. When these are thwarted, people will try to compensate. As economic decline in America is substantially a function of exogenous forces of globalization and technological change, there is little individuals can do to bolster their feelings of autonomy and competence. They may therefore focus on relatedness. One way to bolster their feelings of relatedness is by affiliating with salient identity groups such as race and nation. Similarly, theories of so-called “worldview defense” (WDT) argue that when people feel worried they will double-down on their in-group affiliations (Holbrook et al. 2011). In laboratory studies these typically overlap with broad identity markers like race and nation. Both literatures imply that economic decline, through its pernicious effect on psychological wellbeing, could encourage in-group bias. We argue that Trump, with his “America First” and “Build a Wall” policies and his nativist rhetoric, fueled and harnessed these sentiments to secure the Presidency.

Honing our hypothesis, a key inference of SDT and WDT is that in-group bias is more likely to manifest as identification with a broad group like race or nation when more intimate sources of group identification, like a church group or sports club, are unavailable. Sociologists have long noted that small, local sources of in-group identity, like bowling leagues and trade unions, have declined precipitously across America in recent decades (Putnam 2000, 2015). Religious affiliation and church attendance are similarly in free-fall (Pew Research Centre 2019). In line with the inferences of SDT and WDT, qualitative studies of Trump voters have tied this cultural decay to his success (Cramer 2016). A central thesis of Carney’s (2019) *Alienated America* is that Trump had greater cut through in areas with low levels of social capital and weak social institutions. Similarly, in her study of Tea Party supporters in Louisiana, Hochschild (2016, p. 225) writes that Trump’s “supporters have been in mourning for a lost way of life”. We therefore hypothesize that Trump should be successful in counties with high levels of worry and low levels of relatedness.

We test this hypothesis by combining rich individual-level well-being and socio-economic data from the Gallup Daily Poll with county-level data on economic indicators, racial animus, social capital, and election outcomes. We find that racial animus has a strong, positive association with Trump’s vote share independent from worry and relatedness. However, when we interact relatedness with racial animus, the coefficient on racial animus loses significance. Meanwhile, the interaction term is positively and significantly associated with Trump’s vote share. This suggests that people are using racial identification to bolster their sense of relatedness, in line with our hypothesis. In further support of our hypothesis, worry has a large and significant positive association with Trump’s performance, but an interaction between worry and relatedness is negative, substantially offsetting the independent positive effects of worry and relatedness. In other words, Trump had substantial cut through in worried counties *except when* they had existing sources of relatedness. We show that our results are not driven by exposure to trade shocks using an instrumental variable for China’s entry into the world trade system following Autor et al. (2013).

Conceptual Framework

Our conceptual framework draws on three streams of literature. We begin with the political science literature on racialized economics. We then review other political science scholarship on how status threat and aversion to change contributed to Trump's success. The second part of our conceptual framework reviews existing studies that illustrate how a well-being lens can illuminate Trump's success. While powerful, this literature struggles to explain why declining well-being engendered *identity voting* rather than merely anti-incumbent sentiment. For this, we need to bring in literatures on wellbeing from the eudaimonic tradition (Fabian 2019). We turn to these in the final part of our conceptual framework where we develop our hypothesis using SDT and WDT. These theories suggest a channel from trade shocks and other sources of anxiety to identity voting via psychological wellbeing and attempts to improve it.

Racialized Economics

Donald's Trump's victory was underwritten by swings ("Obama defectors") in the "rust belt" states of Iowa, Wisconsin, Michigan, Ohio, and Pennsylvania (Farley 2019). Any explanation of Trump's win must explain this shift. These states have experienced substantial economic declines in recent decades owing predominantly to the impact of trade and technological change on manufacturing employment (Teaford 1993, McClelland 2013, Autor et al. 2013). Given this background, a natural early suspicion among analysts was that economic anxiety was a key force behind Trump's popularity in this region. However, while not dismissing it as an important factor in the 2016 election, the political science literature has found little support for a straightforward economic anxiety interpretation of the result. It instead emphasizes more nuanced explanations like racialized economics.

As Sides et al. (2018, p. 14) note, real incomes and consumer sentiment were rising rapidly for all income quintiles at the time of the election. Both unemployment and inflation were low. Moreover, in both 2012 and 2016, there was a weak statistical relationship between respondents' answers to questions about finances, job insecurity, and housing and health payments on the American National Election Survey (ANES) and their voting choices once partisanship, self-reported ideology, and views of racial inequality were accounted for. Views of trade as measured in the Views of the Electorate (VOTER) survey in 2011 had no relationship with voting in 2012 and 2016. Sides et al. (p. 173) thus argue that while economic anxiety was on people's minds, it was not "activated" in the sense that it did not influence vote choice. More salient were changing attitudes on race and immigration among white Obama voters, the focus on identity-inflected issues throughout the election campaign, and Clinton and Trump's sharply divergent positions and rhetoric on these matters. These racial and nativist issues became "activated" and gave rise to racialized economics.

Sides et al. (p. 175) define racialized economics as "the belief that undeserving groups are getting ahead while your group is left behind". These themes are stark in qualitative studies of Trump voters in Wisconsin and Louisiana (Cramer 2016, Hochschild 2016). Sides et al. review statistical evidence that preference for Trump among the white voters who defected from Obama in the rust belt was weakly related to their own job security and but strongly related to their views regarding whether minorities were taking jobs from whites (Morgan and Lee 2018). Furthermore, in a survey experiment in

December of 2016, respondents were randomly allocated to one of two questions: “Over the past few years, Blacks have gotten less than they deserve” and “Over the past few years, average Americans have gotten less than they deserve”. There is a literature showing that “average American” is synonymous with “white” (Devos and Banaji 2016). 57 per cent of Clinton voters agreed with either statement. In contrast, while 64 per cent of Trump voters agreed that average American’s had gotten less than they deserve, only 12 percent agreed that Blacks had gotten less than they deserve (Tessler 2016). In a similar experiment using 746 white respondents, Luttig et al. (2017) found that respondents favorably disposed to Trump were more opposed to a mortgage relief program when primed with a picture of a Black man standing next to a foreclosure sign than the same picture featuring a white man. In contrast, the priming had no statistically significant effect among Clinton supporters.

These findings dovetail with other evidence that race and ethnicity were more strongly related to vote choice in 2016 than in previous elections. Trends in responses to racial inflected questions in the ANES and VOTER survey show growing polarization in voter perceptions of Democrats and Republicans on race and immigration issues (Sides et al. 2018, pp. 168–171). White respondents to the surveys increasingly see Democrats as espousing the view that Black disadvantage is a function of inadequate state support whereas Republicans see it as a function of inadequate effort. Similarly, they see Democrats as believing that “illegal immigrants” contribute to the country while Republicans believe they are a net drain on the economy. The power of these questions to predict vote choice rose between 2008–2016, suggesting that racial resentment became an electoral issue in 2016. The same effect is observed for voters’ feeling about Muslims and their perception of discrimination against whites—these items became more strongly predictive of vote choice in 2016.

Sides et al.’s evidence is corroborated by Schaffner et al. (2018), who analyze data from surveys taken in October 2016 immediately before the election. They find a positive and significant relationship between dissatisfaction with one’s economic situation and Trump voting, but the impact of racism is three times as strong in their data, as is that of sexism.

Two other papers from the political science literature are important to our analysis herein. The first is Mutz’s (2018) study of status threat. Using panel data from 2012 and 2016, she finds only weak support for the economic hardship theory of Trump voting, and instead observes a strong role for perceptions of declining position among traditionally high-status Americans, notably white, male, Christians, and among those who perceive America’s global dominance as threatened.

The second is Grossman and Thaler’s (2018) study of aversion to change among elites versus members of the general public in Michigan. They measure aversion to change using two questions: “our country is changing too fast, undermining traditional American values”, and “by accepting diverse cultures and lifestyles, our country is steadily improving”. These questions correspond intuitively to the feelings of cultural decay and a “lost of way of life” identified by qualitative studies of Trump supporters (Carney 2018, Hochschild 2016, Cramer 2016). Grossman and Thaler find that the public is markedly more averse to social change than elites, and that aversion to change strongly predicts Trump support, outstripping the effect of economic attitudes, racial

resentment, authoritarianism, and college education. Only partisan identification and ethnocentrism had more predictive power.

In summary, the political science literature points to identitarian sentiments around race, nation, and cultural change as being more important than economic anxiety in determining Trump's success. A question that follows naturally from this observation is why identitarian sentiment became so powerful in 2016 when racism and sexism have been trending downwards for decades (Pinker 2011). Sides et al. (2018) emphasize Trump's willingness to activate these issues with his rhetoric and policy positions, but this leaves unexplained why these issues were heating up in the first place. This is especially puzzling given that the most important demographic in Trump's victory was voters defecting from Obama, the first Black President. In the following sections, we draw on literature from the study of well-being to find answers. We argue that racialized economics isn't specifically about race but rather in-groups and cultural identity.

Well-Being and Voting

There is a nascent literature studying the power of subjective well-being measures to predict voting behavior. Early works in this field include Liberini et al. (2017, 2019) and Ward (2019a, 2019b). This workstream has recently turned its attention to the 2016 US Presidential election (Herrin et al. 2018), inspired in part by Graham's (2017) analysis of subjective well-being (SWB) trends in America. She documented poor and declining SWB in US regions now associated with Trump support. The rust belt, for example, has high levels of anger, worry, and depression and low rates of enjoyment, smiling, and optimism compared to coastal regions. Life satisfaction as measured on 0–10 scales is also markedly lower across the rust belt states, and health outcomes are worse. These findings align with the literature on “deaths of despair” (Case and Deaton 2015), which documents worsening life expectancy in rust belt regions owing to opioid addiction, obesity, smoking, depression, and stress. In more recent work, Graham and co-authors (Pinto et al. 2019) explore the heterogeneous effect of Trump's win on the subjective well-being of Republican and Democrat voters. More relevant to our analysis here is a paper by Obschonka et al. (2018) that finds Trump performed better in counties with high levels of neuroticism, especially anxiety and depression.

We augment this emerging literature using ideas from eudaimonic perspectives on well-being (Ryan et al. 2008). While the subjective well-being lens is powerful, it struggles to get beyond anti-incumbent sentiment to explain why poor SWB led to the election of an *identitarian* President. It is intuitive that people who are unhappy with life and pessimistic about the future would seek a change of government—it's a straightforward way to put your life on a different track. What is surprising is why dissatisfied voters thought that a nativist candidate with racist and sexist rhetoric offered the best new track in 2016. Eudaimonic perspectives on well-being are built on rich accounts of human motivation that are helpful in this context.

Self-Determination and Worldview Defense Theories

SDT is a theory of human motivation that is highly influential in clinical, personality, and social psychology (Deci and Ryan 2000). It argues that humans have three basic psychological needs that underpin their motivations. These are for autonomy, relatedness, and competence. Autonomy is the sense that one's behavior is volitional, that one is not controlled by external forces, and that one is free to pursue activities that

align with and serve one's personal goals. Competence is the sense that one is skillful at activities that are necessary for one to flourish. And relatedness is the sense that one has nourishing, supportive, and reliable social connections.

Several large sample cross-cultural studies have found that nourishing the basic psychological needs improves wellbeing in terms of positive affect, life satisfaction, ease of motivation, vitality, self-esteem, and the absence of psychopathology, depression, anxiety, compartmentalisation, defensiveness and personality rigidity (Chen et al. 2015, Church et al. 2013, Sheldon et al. 2004, 2009). These results have been extended to specific domains including the workplace (Baard et al. 2004, Deci et al. 2001, Ilardi et al. 1993) and schools (Jang et al. 2009). Variation in the degree to which basic needs are nourished predicts differences in objective and subjective indicators of wellbeing between individuals, and variation in the degree to which each need is nourished predicts changes in wellbeing within individuals (Sheldon et al. 1996, Reis et al. 2000, La Guardia et al. 2000, Lynch et al. 2009).

SDT is linked to our analysis in the following manner. As discussed earlier, sociological studies have documented that sites of ongoing deindustrialization in America have experienced long term declines in economic vitality, population, quality of public services and urban amenities, civic organizations, and hope, and commensurate increases in deaths of despair, family disintegration, out-migration, and opioid addiction (Putnam 2000, 2015; Graham 2017; Hochschild 2016; Cramer 2016). These forces undermine basic needs for autonomy, competence, and relatedness. SDT predicts that people whose needs are so threatened will seek to remedy their circumstances. The drivers of decline in America—technological change and globalization—are largely exogenous to affected communities so they have little power over them (Moretti 2012). As such, we expect affected individuals to focus on improving relatedness as it is one of the few levers available to them. One associated behavioral change is to vote for identitarian candidates that give them a sense of belonging. SDT here explains the link from neuroticism and unhappiness to identity voting observed by Obschonka et al. (2018).

Theories of “worldview defense” explain why relatedness and identitarian issues are bound together, especially when people feel threatened by external forces. There are four separate theories in social psychology that engage with the notion of “worldview defense”: terror-management (Greenberg et al. 1997), uncertainty management (McGregor et al. 2001), coalition threat (Navarrete 2005), and unconscious vigilance (Holbrook et al. 2011). All of them posit that certain negative stimuli will provoke exaggerated, typically subconscious, affirmations of in-group identity and defensiveness against critiques of those groups. This response is termed “worldview defense”. Worldview defense would incline people to vote for candidates who appeal to in-group markers. However, we would expect this desire to be weaker among people whose in-groups are relatively micro, like churches or neighborhood alliances. These people would not associate national politicians speaking to broad identities like race and nation with their local, personal in-groups.

Hypotheses

Our conceptual framework brings together many streams of research but produces a relatively succinct hypothesis. We posit that, owing to the heterogeneous distribution of their impacts, negative economic shocks have harmed basic needs in some communities of America even as they have helped basic needs in others. This gives rise to *worry*, which provokes worldview defense. We further posit that communities so affected will seek to bolster their sense of relatedness to buffer themselves against the negative well-being effects associated with thwarted needs. Following both SDT and worldview defense theories, we posit that this reach for relatedness will involve deepening affiliations with in-groups. Where no such in-groups are ready to hand, because of community decline for example, individuals will seek to deepen their affiliation with more macro-level in-groups, namely race and nation. One way they can do this is through political allegiance to nativist candidates like Trump. His rhetoric plugs directly into the psychology of such voters with his emphasis on “Make America Great Again”, which speaks to identity and to rewinding change. We therefore hypothesize that *Trump’s vote share will be positively predicted by county rates of worry but that this relationship will weaken when counties also have high levels of relatedness*. This is because voters with strong sources of relatedness ready to hand do not need Trump’s nativist rhetoric to give them a sense of in-group support. We further hypothesize that racial voting in 2016 was an attempt to bolster feelings of relatedness. Therefore, the effect of an interaction between racial animus and relatedness should swamp the effect of racial animus on its own.¹

Data

To test our hypothesis, we need four kinds of data: well-being data at the individual level, some measure of racial animus, sociological and economic data at the individual and county level, and election results at the county level (see appendix A1 for summary statistics). For election results (including the Republican party primaries), we use data from Dave Leip’s (2016) Atlas of US Presidential Elections.

For well-being and socio-economic data at the individual level, we use the Gallup Daily Poll from 2014 until election day 2016. This survey is a random, representative sample of 500 American adults taken daily by landline (40%) and mobile phone (60%), providing a large and high-quality sample. In our main analysis, our individual level variables are drawn from a sample of over 470 000 observations.

The Daily Poll contains a rich set of well-being questions including whether respondents experienced worry, stress, or pain yesterday, whether they have been treated for depression in the past month, their life satisfaction on a scale from 0-10, and what they expect their life satisfaction to be in 5 years’ time. We follow Graham (2017) and use

¹ We find some support for this hypothesis from Australia. According to data from *Australia Talks*, a representative survey of more than 50 000 Australians, 9 out of 10 supporters of Australia’s far right nativist party, One Nation, report being lonely “all the time”. In comparison, only around 2 out of 10 supporters of other parties report similar levels of loneliness (Haslam et al. 2019).

this last question as a measure of optimism. The Poll also includes a full battery of socio-economic, demographic, health, and political allegiance questions.

While the Gallup data does not include questions drawn directly from SDT's basic psychological needs (BPN) survey (Deci and Ryan 2000, Gagné 2003), several questions in the Gallup survey are close analogues. Table 1 lays out the 14 questions that make up the basic psychological needs survey. We report the analogous question from the Gallup survey in column 2. We have only poor proxies for the autonomy items and thus exclude this need from our analysis. However, we have close analogues for 4 out of 6 of the competence questions and 7 relatedness questions that effectively parallel questions in the BPN questionnaire. The individual questions all ask for a response on a 1–5 Likert scale where higher numbers indicate greater agreement with the associated statement. We create variables for “competence” and “relatedness” by summing the responses to the individual questions.

To track racism, we use Stephens-Davidowitz's (2014) measure of racial animus. This is drawn from Google searches for the n-word between 2004 and 2007 measured at the Designated Market Area (DMA) level. We crosswalk DMA's to counties using Sood (2016). Google search histories are an appealing means of capturing racial animus because they are unlikely to suffer from social censoring and can aggregate data over a large area. Using data from 2004–2007 prevents the measure from being confounded by rising dislike for Obama during his Presidency. Stephens-Davidowitz (2014) found that racial animus cost Obama roughly 4 percentage points of the national popular vote in 2008 and 2012. This estimate is 1.5 to 3 times larger than survey-based estimates.

We utilize a range of sources for county-level socio-economic data. We use US Bureau of Labour Statistics (BLS 2019) data for county-level unemployment and Bureau of Economic Analysis (BEA 2019) data for county-level GDP growth rates. Our county type data (large, medium, and small metropolitan, micropolitan, rural metro-adjacent, and rural) come from the National Centre for Health Statistics (NCHS 2019). County-level poverty rates are drawn from the American Community Survey via the US Census Bureau website (CB 2019).

Table 1: Comparison between Basic Psychological Needs Questionnaire and Gallup Survey

Basic Psychological Need Questionnaire	Gallup Daily Poll
<i>COMPETENCE</i>	<i>COMPETENCE (4-20)</i>
Often, I do not feel very competent	N/A
People I know tell me that I am good at what I do	N/A
I have been able to learn interesting new skills recently	1-5 Scale: I learn or do something interesting every day
Most days I feel a sense of accomplishment from what I do	1-5 Scale: I felt active and productive in the last week
In my life I do not get much of a chance to show how capable I am	1-5 Scale: I get to use my strengths to do what I do best everyday
I often do not feel very capable	1 - 5 Scale: In the last 12 months, I have reached most of my goals
<i>RELATEDNESS</i>	<i>RELATEDNESS (7-35)</i>
I really like the people I interact with	1-5 Scale: I cannot imagine living in a better community 1-5 Scale: Community Pride
I get along well with people I come into contact with	1-5 Scale: The city/area where I live is perfect for me
I pretty much keep to myself and don't have a lot of social contacts	1-5 Scale: Always make time for vacations with family and friends
I consider the people I regularly interact with to be my friends	1-5 Scale: My relationship with my partner is stronger than ever
People in my life care about me	1-5 Scale: My friends and family give me energy every day
There are not many people that I am close to	N/A
The people I interact with regularly do not seem to like me much	N/A
People are generally pretty friendly towards me	1-5 Scale: I have been given recognition for improvements I have made to the neighborhood

We draw data on social capital at the county level from the Joint Economic Committee's Social Capital Project (JEC 2018). This index is composed of the following variables: registered non-profits, religious congregations, an informal civil-society sub-index, voter turnout rates, mail-back responses to the 2010 census, a confidence in institutions sub-index, violent crime rates, marriage rates, out of wedlock births, and children in single parent homes. Social capital is similar but distinct from relatedness. Succinctly, where relatedness concerns immediate interpersonal relationships, social capital concerns community cohesion. The two variables have a modest correlation of 0.29 (see appendix figure A1.5). We utilize social capital as a control variable in the first instance but are interested in how its effects differ from or complement those of relatedness.

We obtain data on trade shocks at the commuting zone level, including industrial heritage control variables, from Dorn (2019). These data were developed for Autor et al. (2013), a study of the impact of China's entry into the world trading system on US labor markets. There are 722 CZs in the United States, typically comprised of several counties. CZs are designed to reflect a local labor market based on where people in a region transit to on a regular basis for employment. Autor et al.'s data includes industrial heritage variables for the education level of the labor force in each CZ in 1990, the share of jobs there that could be easily outsourced or automated, the share of workers who were female, the share who were foreign born, and the share of the labor force employed in manufacturing.

Autor et al. also use UN Commtrade data to develop a variable capturing rising exposure to import competition from China per worker in commuting zones from 1990–2007, where imports are apportioned to the commuting zone according to its share of national industrial employment. It is important to note that this variable is not imports to a commuting zone. The variable instead captures rising competitive pressure on industries in commuting zones that produce goods that are increasingly imported cheaper from China over the 1990–2007 period. Formally:

$$\Delta IPW_{ui1990-2007} = \sum_j \frac{L_{ij1990}}{L_{uj1990}} \frac{\Delta M_{ucj1990-2007}}{L_{i1990}}$$

Where ΔIPW is the change in imports per worker in US (subscript u) commuting zone i over the period 1990–2007, L_{ij} is the start of period employment in 1990 in commuting zone i and industry j , and ΔM_{ucjt} is the observed change in US (subscript u) imports from China (subscript c) in industry j between the start and end of the period 1990–2007.

L_{uj1990} is the start of period employment in 1990 at the national level. The difference in ΔIPW_{uit} across commuting zones thus stems from variation in local industrial structure at the start of period t . Intuitively, commuting zones with more manufacturing industries will be more affected by rising competition from imports, especially if they themselves do not utilize imported components.

To overcome issues of endogeneity, Autor et al. (2013, p. 2129) employ an instrumental variables strategy. They instrument for growth in Chinese imports to the United States using the contemporaneous composition and growth of Chinese imports in eight other developed countries. We make use of this same instrument in our analysis. Autor et al. (2013) measure the impact of pressure from imports on the level of wages and employment across commuting zones. In contrast, our election analysis takes place at the county level. We therefore crosswalk commuting zones to counties using US Department of Agriculture codes (USDA 2019).

Empirical Strategy

We create county-level averages using individual-level responses in the Gallup poll and estimate OLS models at the county level of the following form:

$$EO_c = (KI_c \times R_c) + R_c + C_c + KI_c + X_c + Z_c + W_c + e_c$$

EO_c is an election outcome at the county level, typically Trump's vote share. KI_c is a vector of 2 key indicator variables. The first is the average level of worry in a county,

which runs from 0–1. The second is racial animus at the county level, normalized to run from 0–1. R_c is the average level of relatedness in county c . We again normalize this variable to run from 0–1 instead of 7–35. C_c is the average level of competence county c , also normalized to run from 0–1. Having all the key variables run from 0–1 aids comparability.

X_c , Z_c and W_c are vectors of control variables. X_c and Z_c correspond to county-level socio-economic and industrial heritage items that we have already discussed, and state dummies. W_c includes controls derived from individual level data for the following variables (see appendix table A2 for a full specification): life satisfaction, optimism, depression, pain, stress, inequality sensitivity, income, unemployment, underemployment, out of labor force status, race, union membership, age, gender, marital status, educational attainment, church attendance, and party identification. We apply sampling weights supplied by the Gallup organization.

An alternative estimation strategy would be to estimate this equation at the level of the individual (subscript i), but there is no variation in the dependent variable across individuals within county. An individual-level regression will thus misrepresent the true variation in the data, giving standard errors that are overly precise. It will also be (approximately) equivalent to the above county-level regression weighted by within-county sample sizes. Neither of these outcomes seems desirable. We return to discuss these issues in greater detail below in a discussion of the ecological fallacy.

If our hypotheses are correct, then we should see two sets of results. First, the interaction between racial animus and relatedness should be a more powerful predictor of Trump’s success than racial animus on its own. This is because Trump’s victory was driven by more people trying to get their relatedness from racial identification. Second, the coefficient on worry should be positive and significant, whereas the interaction between worry and relatedness should be negative. This would suggest that high levels of relatedness work against the tendency of worried individuals to vote for Trump to bolster their feelings of in-group identification.

Main Results

Table 2 reports selected coefficient estimates from our regression analyses (see appendix table A2 for the full results) for Trump’s vote share in 2016. Column 1 reports results from an OLS model featuring only worry, relatedness, and the worry–relatedness interaction, with social capital as a control variable. Each of these variables is highly significant. Worry is strongly and positively related to Trump’s vote share, while the relatedness–worry interaction is negative. This result supports our hypothesis. Relatedness and social capital are positively associated with Trump’s vote share, which seems counterintuitive; more on this in a moment. We find no effect for competence in any of our regressions.

Racial animus is positively associated with Trump’s vote share in column 1, as is commonly found in the literature. However, when we introduce an interaction between racial animus and relatedness in column 2, racial animus becomes statistically insignificant. This implies that relatedness (rather than prejudice per se) is the underlying driver of rising racial animus in the 2016 election—*people use racial identification to bolster their feelings of relatedness*.

A puzzle for the results in columns 1 & 2 is why social capital and relatedness are positively associated with Trump voting. Our literature review suggested that cohesive communities should be less inclined to vote for a nativist candidate. Our suspicion is that rural and religious communities tend to be more cohesive *and* tend to vote Republican. We thus need to find a way to separate Trump's popularity from being a Republican candidate from the effect of his nativism. We begin in column 3 by adding interactions between social capital and racial animus, and between social capital and worry. Our hypothesis is that placating worry requires relatedness rather than social capital. People need relatively close connections at the immediate interpersonal level to address anxiety. In contrast, people will not need to identify with a racial *group* if their community has other groups available. This availability is measured by social capital.

Table 2: Well-Being and Trump's Vote Share in 2016

VARIABLE/MODEL	(1) OLS	(2) OLS	(3) OLS	(4) IV
Relatedness	0.1905** (0.0590)	0.1610* (0.0722)	0.1026 (0.0755)	0.0514 (0.0896)
Experienced WORRY yesterday	0.3186** (0.1042)	0.3327** (0.1061)	0.2949** (0.1130)	0.2673^ (0.1523)
Worry* Relatedness	-0.5512** (0.1710)	-0.5747*** (0.1742)	-0.5925*** (0.1771)	-0.5388* (0.2213)
Racial Animus	0.0695*** (0.0155)	-0.0106 (0.1141)	0.1380 (0.1193)	0.0493 (0.1247)
Social Capital	0.1525*** (0.0238)	0.1524*** (0.0238)	0.2693*** (0.0495)	0.2740*** (0.0550)
Racial_Animus* Relatedness		0.1366 (0.1928)	0.3568^ (0.2021)	0.4317^ (0.2300)
Social_Capital* Worry			0.0755 (0.0957)	0.0685 (0.1118)
Social_Capital* Racial_Animus			-0.4871*** (0.1167)	-0.4712*** (0.1430)
Trade Exposure				-0.0012 (0.0081)
Trade_Exposure* Relatedness				0.0016 (0.0136)
R ²	0.759	0.759	0.761	0.775
N	2864	2864	2864	2864

^. Sig. 10% *: Sig. 5% **: Sig 1% ***: Sig. 0.1%

See Appendix table A2 for the full specification and regression results

The results in column 3 support these auxiliary hypotheses and bolster our central claims. Worry remains positively and significantly associated with Trump's vote share, whereas the worry-relatedness interaction is negative (swamping the independent positive effects of worry and relatedness). Racial animus remains statistically insignificant whereas the interaction between racial animus and relatedness becomes significant at the 10 per cent level. This accords with the analysis of Grimmer and Marble (2019). They find that Trump received fewer votes than Romney from whites with the highest levels of racial resentment. Trump's success stemmed from rising racial

identification among more moderate white voters. Our results suggest that this trend is driven by worsening psychological well-being rather than rising prejudice, specifically a thwarted need for relatedness in the face of economic and cultural decay.

Social capital remains a strong, positive, and significant predictor of Trump's vote share in column 3. However, the interaction between social capital and racial animus is strongly negative, swamping the independent positive effects of racial animus and social capital. This suggests that the independent social capital effect reflects rural and religious communities breaking Republican. Our theories of cohesive communities rejecting racial identification are supported by the negative interaction term. Finally, the interaction between social capital and worry is insignificant. This supports our hypothesis that worry (and associated worldview defense) takes relatedness to placate.

Our results in columns 1 through 3 might be biased by the omission of trade exposure. Autor et al. (2016) found that greater exposure to import competition from China was positively associated with Trump's electoral performance. To control for this, we follow their instrumental variable strategy and re-estimate our model using a two-stage least squares regression procedure. We include Autor et al.'s (ibid.) industrial heritage control variables and cluster at the commuting zone level.

We also include an interaction between trade exposure and relatedness to test whether economic anxiety leads to Trump voting through the channel of worldview defense. A positive coefficient on trade exposure and a negative coefficient on the interaction term would suggest that relatedness is offsetting worldview defense triggered by economic anxiety.

The results are reported in column 4. Neither trade exposure nor the interaction term is statistically significant. Our results do not support the hypothesis that trade shocks were a substantial driver of Trump's electoral success. Other estimates are identical between column 3 and 4, though worry is now only significant at the 10 per cent level.

Our other results, reported in Appendix table A2, are broadly in line with the literature. We find that Trump's vote share is positively associated with rural electorates, low-middle class incomes, non-hispanic whites, less educated voters, and Republican partisans. Our results provide mixed support for an economic anxiety hypothesis. On the one hand, a negative assessment of the state of the economy has a strong, positive association with Trump's vote share. On the other hand, underemployment and poverty rates at the county level have a negative association. The large coefficient on worry despite our inclusion of a long (but not exhaustive) list of controls for economic issues suggests that people are at least also anxious about non-economic matters. We speculate that at least some of this is cultural anxiety, which includes status threat and aversion to change, but we do not have the means to test this suspicion with the data available to us.

We report further robustness checks in Appendixes A3 through A5. We were concerned that our results might be driven by variation in worry and relatedness in the middle of America (see heatmaps in appendix figures A1.4 and A1.5) and that this variation might in turn be driven by under-sampling. We apply Gallup's sampling weights in our main regressions to address this. The pattern of results for the unweighted sample is the same but significance falls across the board (see appendix table A3). In a further robustness check, we remove all counties from our sample with fewer than 20

observations between 2014–2016 in the Gallup data. Our sample size falls substantially from 2864 to 2328 counties, but the size and significance of most coefficients increases (see appendix table A4). Finally, we were concerned about bias arising from including party affiliation as explanatory variables. Appendix table A5 reports results from regressions where these variables are removed. They are meaningfully unchanged from our main analysis, but coefficient sizes increase in general.

The interaction terms in the regression model make it difficult to interpret the coefficients in isolation. Specifically, the marginal effect of worry and racial animus from the regression output captures the overall impact of changes in those variables, but this marginal effect will vary with relatedness and social capital. As shown in figures 1, 2, and 3, the marginal effects of racial animus and worry clearly switch sign depending on the value of relatedness or social capital. For example, consider two counties, one with a relatedness of 0.53 and the other with relatedness of 0.68. These scores are, respectively, the cutoffs for the bottom and top deciles of relatedness across counties. The average marginal effect of worry in the bottom decile county is to increase Trump’s vote share by 3 percentage points. In contrast, the average marginal effect of worry in the top decile county is to decrease Trump’s vote share by 4 percentage points. It is worth noting in this context that relatedness is short tailed, sitting largely between 0.4 and 0.8 with a strong central tendency (see appendix figure A1.1). This makes figures 1 and 2 slightly misleading. Notably, the marginal effect of racial animus is almost always positive because negative coefficients only begin below relatedness less than 0.55, which is rare.

Figure 1: Marginal effect of worry on Trump vote share by relatedness (0–1)

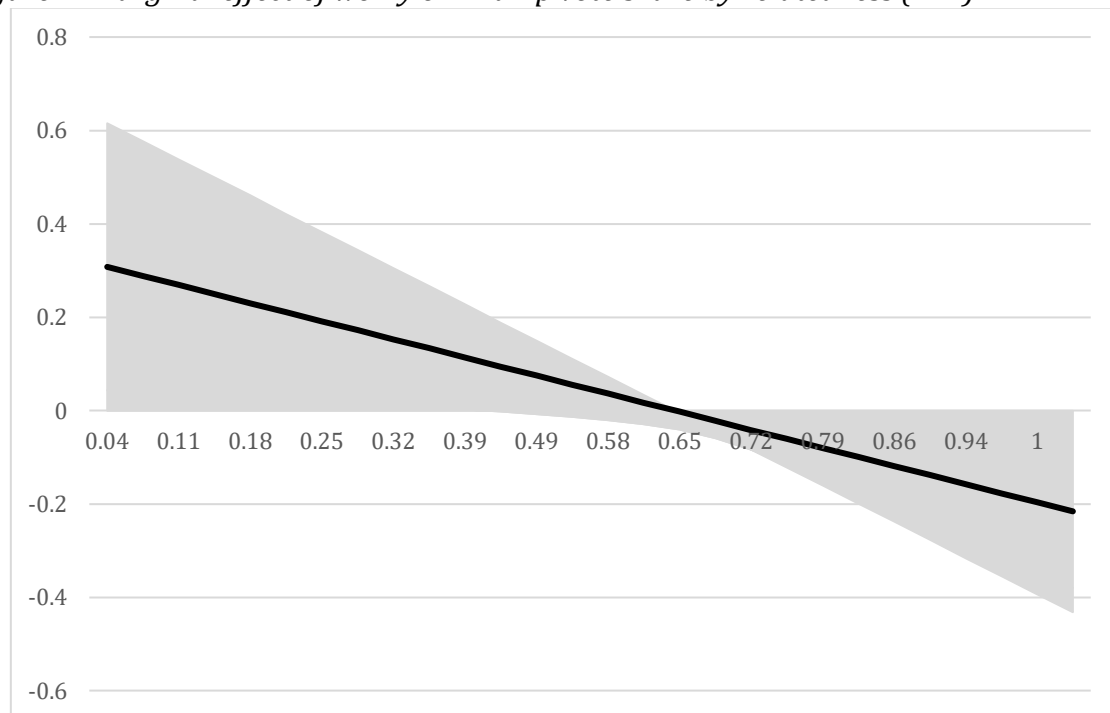


Figure 2: Marginal effect of racial animus on Trump vote share by relatedness (0–1)

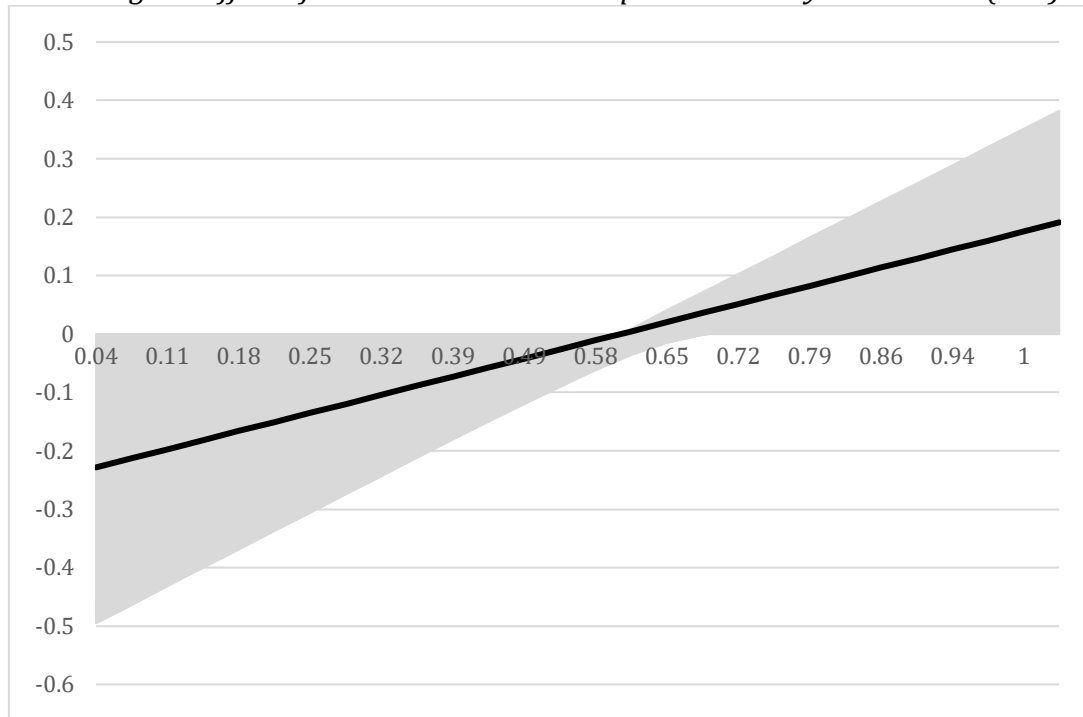


Figure 3: Marginal effect of racial animus on Trump vote share by social capital (0–1)

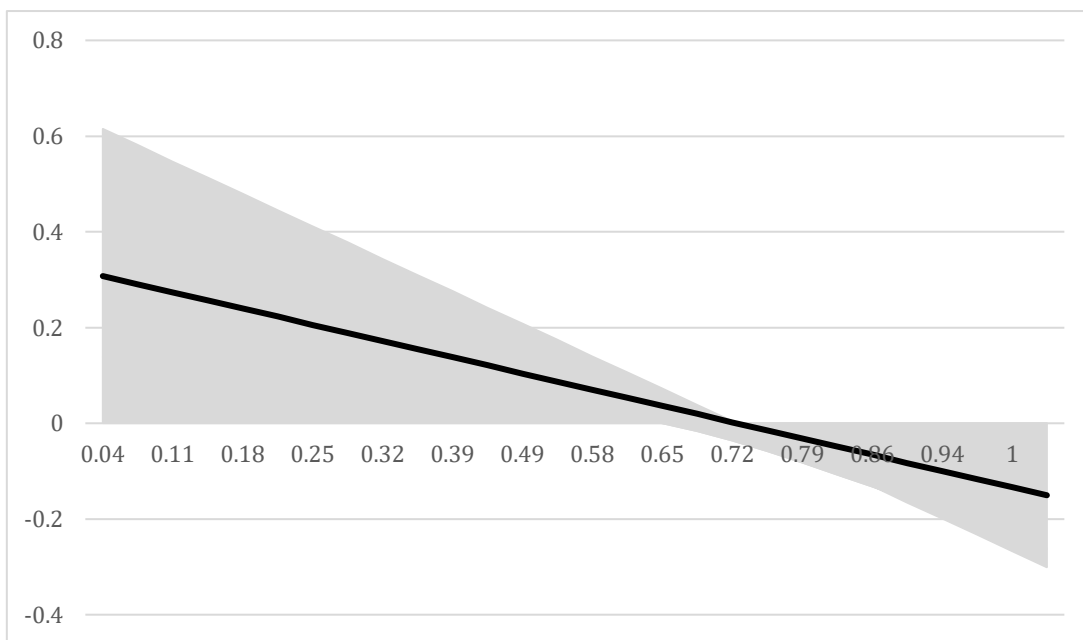


Table 3 attempts to aid interpretation by summarizing the marginal and total effects of worry and racial animus at different levels of relatedness and social capital. The marginal effect row reports the average marginal effect of the corresponding variable, while the total effect row reports the average marginal effect multiplied by the mean level of the corresponding variable.

Table 3: Effects at top and bottom deciles of relatedness and social capital

VARIABLE	Effect Type	R = bottom SC = bottom	R = bottom SC = top	R = top SC = bottom	R = top SC = top
Worry	Marginal	0.01	0.03	-0.07	-0.04
	Total	0.0029	0.0087	-0.02	-0.01
Racial Animus	Marginal	0.08	-0.08	0.14	-0.02
	Total	0.02	-0.02	0.04	-0.006

Total effects are calculated at the mean of worry (0.29) and racial animus (0.28)

These calculations are a crude aid to interpretation, but they make broad conclusions clear enough. Worry switches from positively associated with Trump's vote share at low levels of relatedness and social capital to negative at high levels. This is driven by relatedness and only partially offset by the Republican partisan effect of high social capital. Racial animus similarly goes from positive at low levels of relatedness and social capital to negative at high levels, but here the switch is driven by social capital.

The main focus of our quantitative estimation is to disentangle and distinguish between competing hypotheses. Our results suggest that resurgent racial sentiment in the 2016 US Presidential election was driven by worry and the attendant need for relatedness and worldview defense rather than prejudice (though rising prejudice is a likely second order effect). This is why worry is positively associated with Trump, but the worry-relatedness interaction is negative (and stronger than worry alone). It is also why racial animus loses significance once an interaction with relatedness is introduced: racism in 2016 is about moderate whites starting to rely on racial identification for a sense of relatedness. Voters in areas of high social capital get their worldviews from identifying with groups other than race, and so the effect of racial animus in areas of high social capital is negative. While our results give us confidence in these conclusions, we would hesitate to apply the precise point estimates of our study as the causal impacts of worry or racial anxiety on voting. We use observational data; there is no exogenous or random assignment of these variables.

Republican Party Primaries

To further tease apart Trump's nativist appeal from his appeal to Republican partisans in the general election we follow Carney (2019) and analyze Trump's performance in the Republican party primaries. In those contests, Trump was competing against other Republican party politicians for the votes of only Republican partisans. As such, if worry, relatedness, and racial animus but not social capital predict Trump's performance in the primaries then it suggests that these variables are associated specifically with *Trump's* success rather than that of any Republican Presidential candidate.

One challenge that we face in this analysis is that the Gallup data contain few individuals who self-identify as Republicans and thus could effectively proxy for primary voters. Appendix table A6 reports results from regressions using a sub-sample of only these individuals. While some estimates here mirror those in table 2, they are all highly imprecise. To garner a bigger sample while preserving a focus on people who vote Republican, we estimate regressions on a sub sample that excludes people who say that they vote or lean Democrat. The results are reported in table 4.

These results suggest that social capital plays no significant role in Trump's vote share in the Republican party primaries, either independently or in interactions. If anything, social capital is *negatively* associated with Trump's performance. In contrast, worry has a strong and highly significant positive association with his vote share, and the worry-relatedness interaction has even stronger and equally significant negative relationship. Racial animus is initially a highly significant positive covariate of Trump's vote share but again collapses into insignificance once an interaction with relatedness is introduced. These results support the hypothesis that Trump's base is among the anxious seeking to bolster relatedness through racial identification. They also support the claim that the positive coefficient on social capital in our results for Presidential election reflects Republican partisanship in healthy religious and rural communities.

Table 4: Trump's Vote Share in the 2016 Republican Party Primaries (Democrats excluded)

VARIABLE/MODEL	(1) OLS	(2) OLS	(3) OLS	(4) IV
Relatedness	0.1447*** (0.0415)	0.1631** (0.0544)	0.1602** (0.0570)	0.1123^ (0.0649)
Experienced WORRY yesterday	0.3671*** (0.0795)	0.3609*** (0.0804)	0.3622*** (0.0824)	0.3181** (0.1093)
Worry* Relatedness	-0.5414*** (0.1181)	-0.5321*** (0.1194)	-0.5295*** (0.1237)	-0.4495** (0.1600)
Racial Animus	0.0437*** (0.0130)	0.1033 (0.1146)	0.1066 (0.1175)	0.0632 (0.1294)
Social Capital	-0.0410* (0.0169)	-0.0411* (0.0169)	-0.0356 (0.0352)	-0.0447 (0.0403)
Racial_Animus* Relatedness		-0.0910 (0.1739)	-0.0817 (0.1814)	-0.0220 (0.1993)
Social_Capital* Worry			-0.0050 (0.0647)	-0.0157 (0.0720)
Social_Capital* Racial_Animus			-0.0165 (0.0997)	-0.0205 (0.1177)
Trade Exposure				-0.0012 (0.0059)
Trade_Exposure* Relatedness				0.0016 (0.0083)
R ²	0.889	0.889	0.889	0.894
N	2702	2702	2702	2702

^. Sig. 10% *: Sig. 5% **: Sig 1% ***: Sig. 0.1%

Change in Republican Vote Share

In a final effort to assess whether Trump's popularity came from relatedness rather than mere Republican loyalty, we use our model to analyze the change in Republican vote share between the 2012 and 2016 Presidential elections. If our hypothesis is correct, then we would expect to see significant effects in the relatedness, worry, and racial animus nexus, but not for social capital. This would imply that our significant

results for social capital in table 2 reflects Republican party loyalty that was present for Romney, while the worry, relatedness, and racial animus effects reflect a new phenomenon unique to Trump. The results are reported in table 5 and lend support to these theories. Social capital and its interactions have no statistically significant effects. In contrast, worry and the worry-relatedness interaction are both significant, with the same inverse signs as in our main results. Furthermore, introducing the interaction between racial animus and relatedness once again eliminates the significance of racial animus.

Table 5: Well-Being and the Change in Republican Vote Share 2012–2016

VARIABLE/MODEL	(1) OLS	(2) OLS	(3) OLS	(4) IV
Relatedness	0.1435* (0.0676)	0.0453 (0.0811)	0.0086 (0.0851)	-0.0300 (0.1005)
Experienced WORRY yesterday	0.2142 (0.1195)	0.2639* (0.1216)	0.2951* (0.1301)	0.2830 (0.1762)
Worry*	-0.3895* (0.1963)	-0.4717* (0.1997)	-0.4378* (0.2036)	-0.4141^ (0.2468)
Relatedness				
Racial Animus	0.0791*** (0.0180)	-0.1973 (0.1274)	-0.1620 (0.1340)	-0.1981 (0.1606)
Social Capital	0.0035 (0.0272)	0.0026 (0.0272)	0.0734 (0.0562)	0.0868 (0.0603)
Racial_Animus* Relatedness		0.4712* (0.2150)	0.5734* (0.2262)	0.5831* (0.2586)
Social_Capital* Worry			-0.0820 (0.1104)	-0.0829 (0.1267)
Social_Capital* Racial_Animus			-0.1672 (0.1323)	-0.1688 (0.1449)
Trade Exposure				-0.0035 (0.0086)
Trade_Exposure* Relatedness				0.0070 (0.0143)
R ²	0.606	0.606	0.607	0.621
N	2921	2921	2921	2921

^. Sig. 10% *: Sig. 5% **: Sig. 1% ***: Sig. 0.1%

Comparison with the 2012 Election

It is possible that worry and relatedness are predictive of elections *in general* and not associated in some special way with Trump's electoral appeal. To this test hypothesis, we replicate our analysis for the 2012 election contest between Mitt Romney and Barack Obama. We use Obama's vote share and the change in Democratic vote share as outcome variables. We face tighter data limitations in this exercise than in our main analysis as the relatedness variables do not appear in the Gallup data until after the election in 2013 and half of them arrive in 2014.

Despite these concerns, the results, summarized in table 5, are encouraging for our story. The effect signs are all reversed from our main analysis, as Democrat vote share is now the dependent variable. We see significant effects for worry and the worry–

relatedness interaction. However, these coefficients are less than half the size of those in our main analysis and these differences are statistically significant. Racial animus is significant, negatively associated with Obama's vote share, and much stronger than in our main results. The difference in size is again statistically significant. Furthermore, in contrast to our main analysis, the interaction between racial animus and relatedness is insignificant and seems to have no effect on the independent effect of racial animus. This suggests that racial animus in 2012 was prejudicial rather than associated with relatedness and racial identification (Piston 2010).

Social capital has a strong and significant negative association with Obama's vote share. This reflects Republican partisans in rural and religious counties. The interaction between social capital and racial animus is positive and significant. This is an odd result because it suggests that places with a high degree of racism and social capital voted for a black President. However, the coefficient must be interpreted in the context of the independent effects of racial animus and social capital. Against that background, the large positive coefficient on the social capital and racial animus interactions implies that *partisan Republican counties* are generally not prejudicially racist.

Table 5: Well-Being and Obama's Vote Share in the 2012 Presidential Election

VARIABLE/MODEL	(1) OLS	(2) OLS	(3) OLS	(4) IV
Relatedness	-0.0840** (0.0309)	-0.0798 (0.0462)	-0.0565 (0.0468)	-0.0668 (0.0429)
Experienced WORRY yesterday	-0.0647 (0.0479)	-0.0652 (0.0481)	-0.0799 (0.0565)	-0.1075^ (0.0554)
Worry* Relatedness	0.1067 (0.0751)	0.1074 (0.0754)	0.1058 (0.0765)	0.1549* (0.0757)
Racial Animus	-0.0469** (0.0170)	-0.0372 (0.0813)	-0.2593** (0.0993)	-0.1978^ (0.1042)
Social Capital	-0.2741*** (0.0248)	-0.2742*** (0.0249)	-0.4148*** (0.0464)	-0.4053*** (0.0543)
Racial_Animus* Relatedness		-0.0161 (0.1317)	-0.0893 (0.1328)	-0.0890 (0.1285)
Social_Capital* Worry			0.0249 (0.0611)	0.0226 (0.0636)
Social_Capital* Racial_Animus			0.4657*** (0.1191)	0.4313*** (0.1295)
Trade Exposure				0.0005 (0.0038)
Trade_Exposure* Relatedness				0.0002 (0.0063)
R ²	0.670	0.670	0.671	0.698
N	2883	2883	2883	2883

^: Sig. 10% *: Sig. 5% **: Sig. 1% ***: Sig. 0.1%

While open to debate, our interpretation of these results is that voter dynamics were somewhat similar but meaningfully different in the 2016 election compared to 2012. Worry was weaker, triggering less worldview defense. Sources of relatedness other than racial identification also appear to have been stronger and better able to placate

worry than in 2016. The seeds of racialized economics were ready for further economic and cultural decay and Trump's candidacy to germinate them. We provide further supportive evidence for this conclusion in appendix table A7, which reports results for the change in Democrat vote share between 2008 and 2012. Only social capital and racial animus are significant, and racial animus always hurts Obama. This suggests that the power of worry and relatedness only emerges leading into the 2016 election.

An alternate interpretation is that the patterns for 2016 are the result of a gradual but continuous change towards worry and relatedness increasingly affecting voting for the Republican party. However, given our results for the Republican party primaries, where worry and relatedness alone predicted Trump's success, we feel that the data suggests that worry and relatedness are uniquely associated with Trump's nativist appeal and not Republicans more generally.

Addressing the Ecological Fallacy

A concern for our methodology is the "ecologically fallacy". This is where inferences about individuals are drawn from characteristics of the groups that they belong to. In our case, our conceptual framework is founded on the psychology of *individuals*, but our outcome variable of interest is voting at the county level. More generally, our models combine items measured at the individual level, like relatedness and worry, with items measured at different scales, notably social capital and racial animus. Unfortunately, while Gallup conducts surveys of voting intention, these do not include the relatedness questions.

We undertake two robustness checks on the potential role of the ecological fallacy in biasing our results. First, we use our model to predict whether someone says that they are a Republican or lean Republican between 2014–2016 in the Gallup data. The pattern of results, reported in Appendix table A8, mirrors those of our main analysis. However, the coefficients do not attain statistical significance. In any case, this model is not ideal because we are interested in understanding the motivations of swing voters, not just Republicans.

Second, we estimate our model using variables measured either at the individual *or* county level. The results from the individual level regressions mirror our main results, but this is because the models are very similar (see appendix table A9). The quasi county-level analysis is more reasonable. If one wanted to obtain a measure of relatedness and worry at the county level, one would take a representative sample of voters from each county and measure their worry and relatedness. One would then aggregate these to arrive at a county-level measure. This is effectively what the Gallup Daily Poll does. We replace the control variables for age, race, education, and income derived from the Gallup data in our main regressions with county-level measures from the US Census Bureau (CB 2018) and US Department of Agriculture (USDA 2018a, 2018b). Other control-variables derived from the Gallup Data are dropped (see Appendix table A10 for a full specification). The results, summarized in table 6, mirror those from our primary analysis in the sign and significance of effects.

Table 6: Trump's Vote Share in the 2016 Presidential Election (County Variables Only)

VARIABLE/MODEL	(1) OLS	(2) OLS	(4) OLS	(5) IV
Relatedness	0.0444 (0.0368)	-0.0158 (0.0475)	-0.0635 (0.0488)	-0.1000^ (0.0512)
Experienced WORRY yesterday	0.1112 (0.0680)	0.1424* (0.0697)	0.1612* (0.0700)	0.1159 (0.0768)
Worry* Relatedness	-0.2171 (0.1125)	-0.2675* (0.1152)	-0.3056** (0.1164)	-0.2353^ (0.1269)
Racial Animus	0.0476*** (0.0124)	-0.1210 (0.0850)	-0.2621** (0.0885)	-0.3675*** (0.0863)
Social Capital	0.0152*** (0.0028)	0.0150*** (0.0028)	0.0331*** (0.0053)	0.0293*** (0.0057)
Racial_Animus* Relatedness		0.2873* (0.1433)	0.5089*** (0.1484)	0.6605*** (0.1465)
Social_Capital* Worry			0.0105 (0.0098)	0.0087 (0.0108)
Social_Capital* Racial_Animus			-0.0740*** (0.0124)	-0.0671*** (0.0137)
Trade Exposure				0.0049 (0.0049)
Trade_Exposure* Relatedness				-0.0107 (0.0083)
R ²	0.845	0.846	0.848	0.857
N	2929	2929	2929	2929

*: Significant at the 5% level

**: Significant at the 1% level

***: Significant at the 0.1% level

While encouraging, these results do not fully address the ecologically fallacy because the theory we apply concerns individuals and we never measure individual voting intention. However, it is worth underlining that while Sides et al. (2018) establish racialized economics using individual-level data, racialized economics could only have swung the election as they suggest if it were salient at the county level. In that case, our conjectured underlying drivers of racialized economics should also be salient at the county level.

General Discussion

An obvious question to ask is whether the relationships we observe around relatedness and voting behavior are causal in nature. Our empirical methods certainly do not provide causal identification. This is unfortunate, but our research question is highly resistant to causal analysis. It is arguably impossible to experimentally allocate worry, racial animus, or relatedness to people. The 2016 election also only occurred once, which rules out most causal identification methods. Instrumental-variable methods are feasible, but it is hard to imagine something that varies with worry or community health but does not affect people's voting decisions. As such, we adopt a cautious perspective. The theories that form the core of our conceptual framework—SDT and WDT—are grounded in extensive experimental evidence. We have good data on individual well-being and a large sample size, and we employ an extensive suite of control variables.

Our findings parallel results from qualitative studies of voters in districts associated with support for Trump. Our study can thus be thought of as a quantitative falsification test for these studies, one that they pass. We feel that our results call for greater quantitative inquiry into the effect of cultural identity, community, and relatedness on political behavior.

There are multiple lines of research that could complement our analysis, but they all face data challenges. To support the view that the decline of relatedness lies behind the rise of identity politics, it would be helpful to study the popularity of identitarian candidates over time in counties with higher and lower levels of relatedness. For this, researchers would need data on relatedness going back earlier than 2013. Alternatively, researchers could examine elections to offices other than President in the years since 2013. We suspect that there would be some challenges with respect to sample size in many cases, but state elections might be worth looking into as a starting point. Additionally, it would be helpful to examine identity voting trends on the political left.

Our results suggest that subjective measures of relatedness might be a useful complement to objective measures of social capital. Skepticism remains around whether things that are commonly included in social capital indexes, like voter turnout rates and NGO numbers, capture networks of reciprocity and other central forms of social capital (JEC 2018). While subjective, questions about community pride, time with friends and family, and the like could capture whether people themselves feel part of a social network. Someone living in an area with little organized community might nonetheless have a few close friends they can rely on, for example.

One last point to raise is the implications of our results. We wonder whether deep structural issues affecting worry and relatedness drive politicians or vice versa. Pundits have repeatedly noted that Trump made his campaign team listen to hundreds of hours of talkback radio to get a sense for the electorate (Sides et al. 2018). This suggests that he is responding to realities on the ground. Yet much has also been made of Russian attempts to ferment polarization and anxiety during the 2016 campaign (Hall Jamieson 2018). Even greater volumes of ink have been spilled lamenting the influence of Fox News, MSNBC, and talkback radio in engendering similar feelings (Rosenwald 2019). Political actors might be creating these feelings of anxiety and promoting racial identification rather than responding to cultural shifts. The source of these feelings determines how one should act if one wants to restore liberal norms in America.

Conclusion

This paper extends the literature on the causes of Trump's victory in the 2016 US Presidential election by explaining the psychological roots of racialized economics. Worldview defense theories argue that a natural, often subconscious response to anxiety is to bolster feelings of in-group affiliation. Self-determination theory similarly predicts that people feeling mentally unwell will seek to improve their sense of relatedness. People with local, ready-to-hand sources of relatedness will be buffered against anxiety. However, those without immediate access to in-groups that can provide relatedness may reach for salient and accessible but broader in-groups, such as racial and national identity. Trump might appeal to such individuals with his America First, pro-white, and anti-immigrant rhetoric and policy positions. We therefore hypothesize that Trump should be more electorally successful in counties with high rates of worry

and low rates of relatedness. We further hypothesize that an interaction between racial animus and relatedness should swamp the effect of racial animus alone, as this would indicate that rising racial sentiment reflected people seeking relatedness.

Our results support this hypothesis and evidenced distinct roles for relatedness and social capital. We find a strong, positive relationship between rates of worry and Trump's vote share, and a negative relationship between an interaction of worry with relatedness and Trump's vote share. Furthermore, introducing an interaction between relatedness and racial animus reduces the significance of racial animus and typically reverses its sign. This supports the view that Trump's success was driven by rising racial identification among moderate white voters looking for relatedness. Challenging our claims about cohesive communities rejecting Trump, we found that social capital had a strong, positive relationship with Trump's vote share. We hypothesized that this was because rural and religious communities tend to be more cohesive and traditionally vote Republican. In support of this, we found that Trump's vote share in the Republican party primaries was only associated with relatedness and worry, not social capital. The same was true of the change in Republican vote share between 2012–2016. In further support of our central claims, we found that an interaction between social capital and racial animus was strongly negative. While cohesive communities might tend Republican, voters there have no need for racial identification to feel part of a group. We found no effect for trade shocks but some evidence for economic anxiety as a driver of Trump's success.

While our methods do not allow for causal identification, our results provide suggestive evidence for the importance of worldview defense and relatedness in Trump's victory. Racialized economics might be less about outright prejudice—a charge that struggles to stick to Obama defectors—and more about meeting needs for relatedness to support psychological well-being.

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Appendix Section 1

Summary Statistics for Key Variables

Table A1.1: Summary Statistics for Key Variables

Variable	Obs	Mean	S.D.	Min	Max
Worry	3092	0.29	0.11	0	0.87
Relatedness (normalized)	3092	0.6	0.066	0	1
Racial Animus (normalized)	3092	0.277	0.137	~0	~1
Social Capital (normalized)	2921	0.592	0.138	0	1
Can't Imagine living in a better community (1-5)	3092	3.54	0.39	1	5
Community Pride (1-5)	3092	3.85	0.37	1	5
The city/area where I live is perfect for me (1-5)	3092	3.84	0.37	1	5
My relationship with my partner is strong (1-5)	3092	4.18	0.29	2	5
Make time for vacations with family/friends (1-5)	3092	3.26	0.39	1	5
Recognition for improvements to neighborhood (1-5)	3092	2.22	0.40	1	5
My friends and family give me energy (1-5)	3092	4.14	0.27	2	5
Competence (4-20)	3091	15.13	1.00	4	19.48

Figure A1.1: Histogram of relatedness by county (0–1)

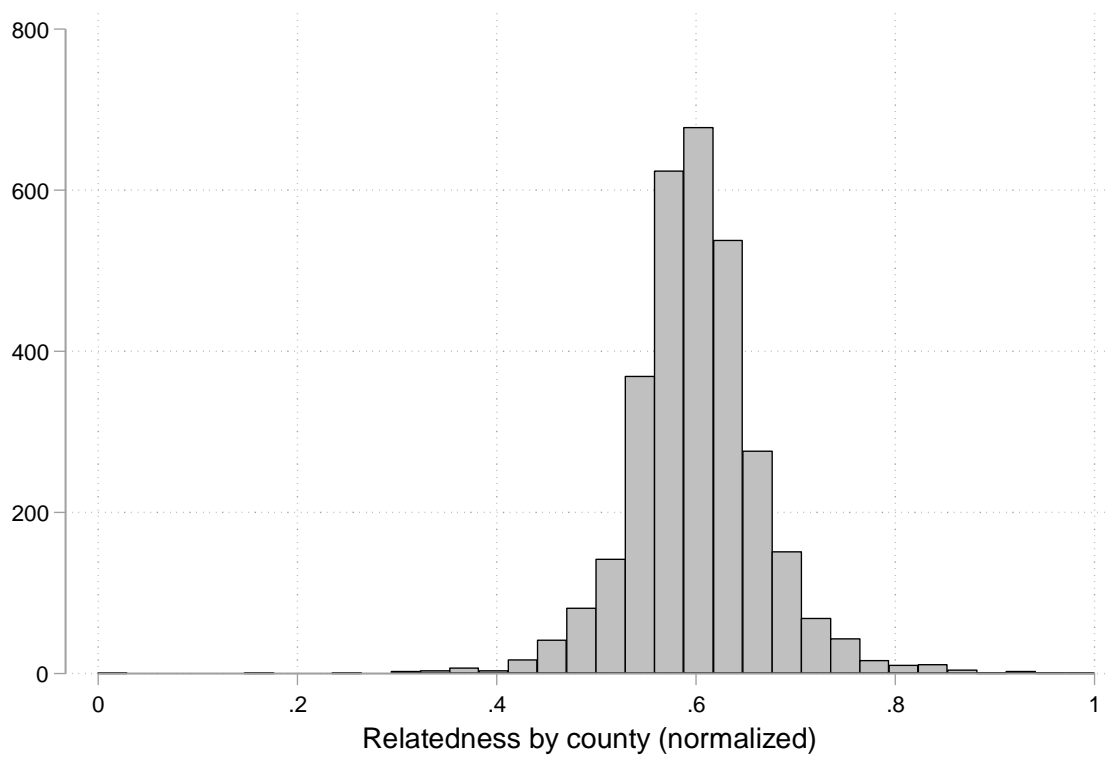


Figure A1.2: Histogram of rates of worry by county (0–1)

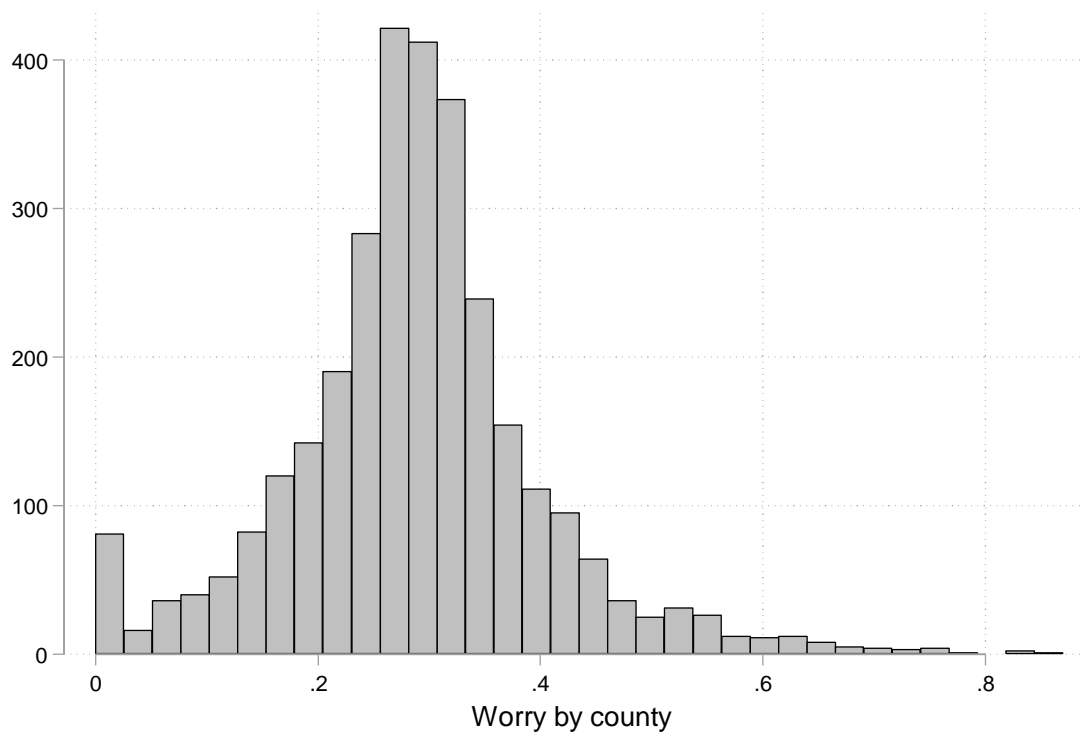


Figure A1.3: Histogram of rates of racial animus by county

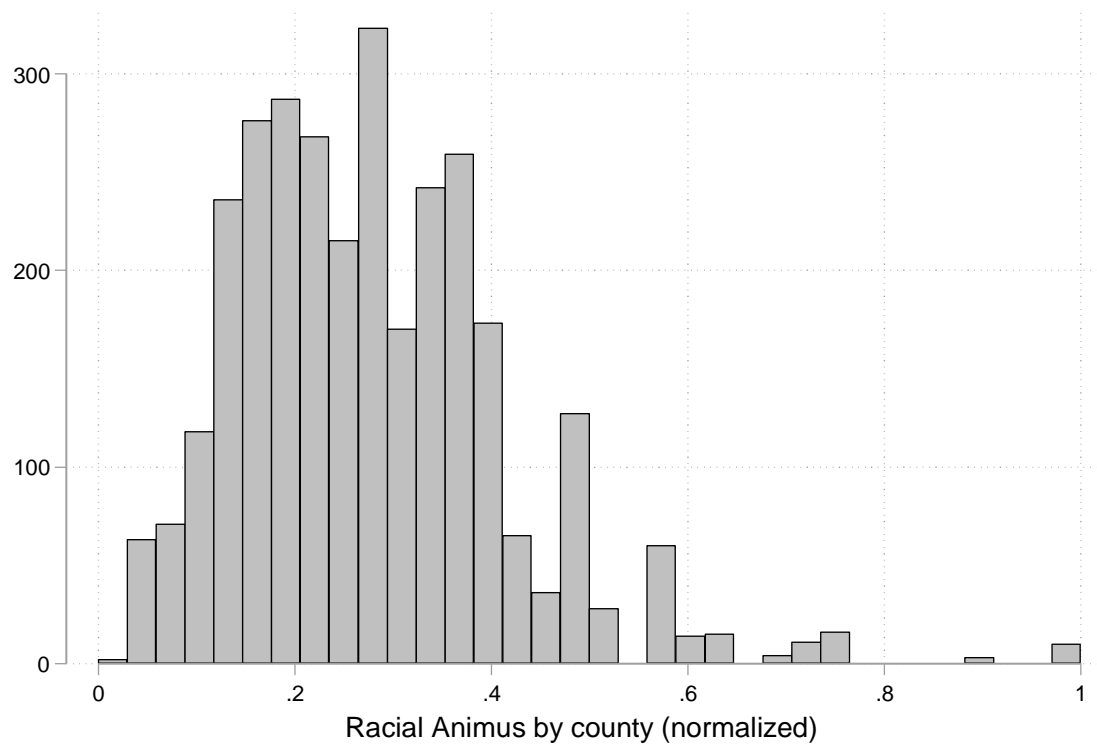


Figure A1.4: Histogram of social capital by county

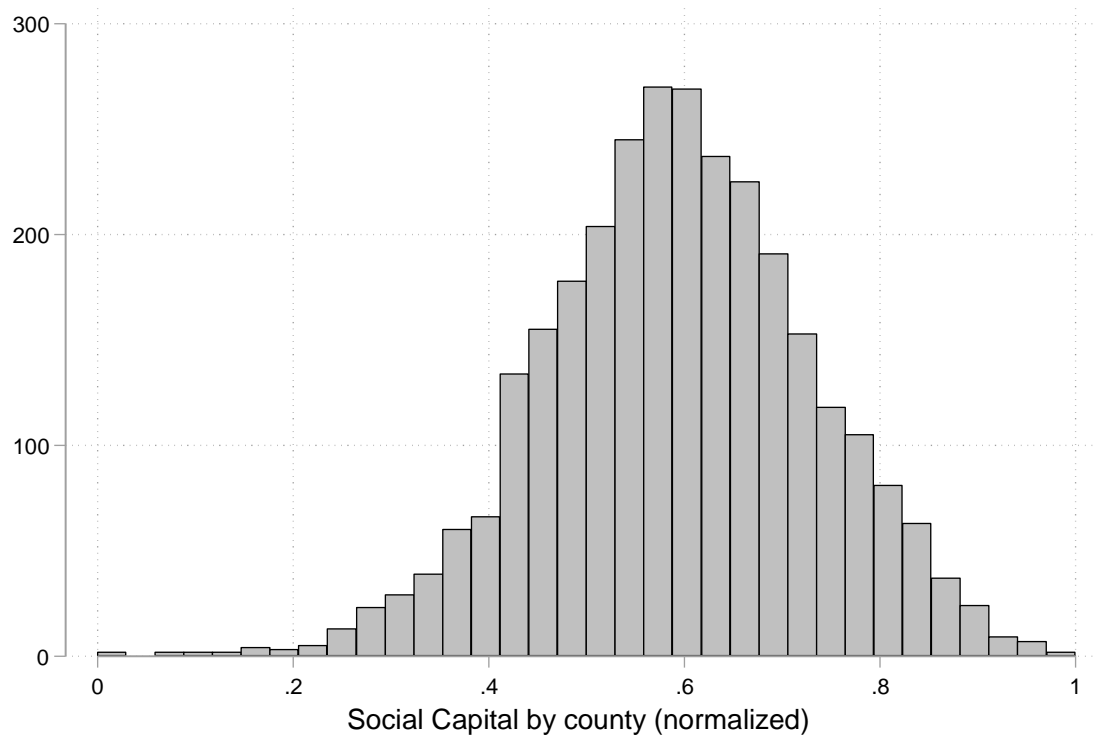


Figure A1.5: Scatterplot of relatedness and social capital (raw correlation: 0.29)

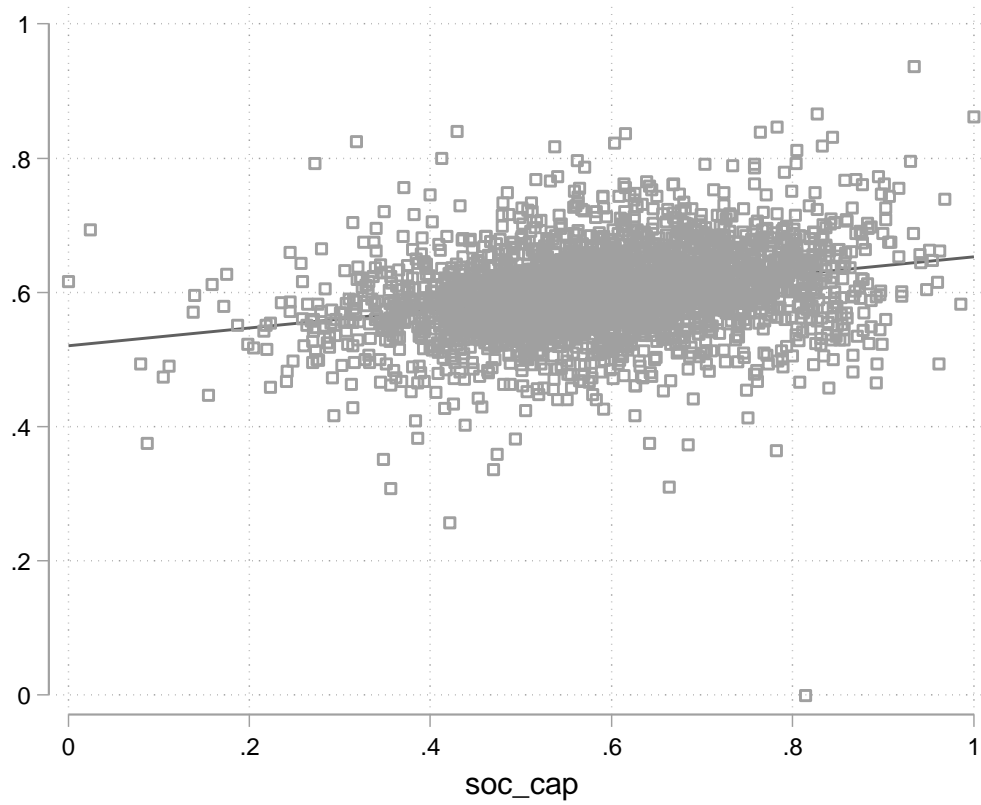


Figure A1.4: Relatedness across US counties 2014–2016 (darker = more relatedness; white = missing values)

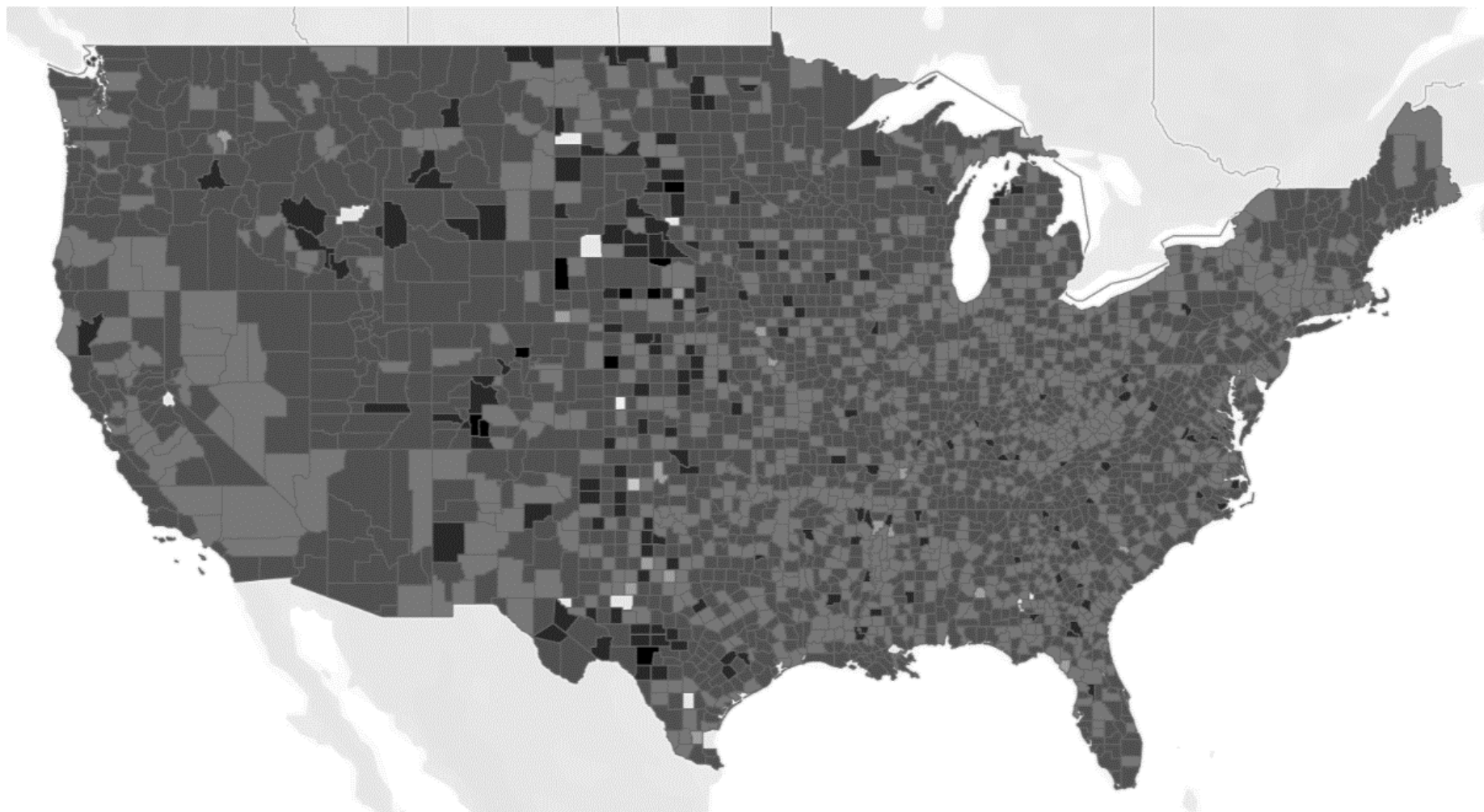


Figure A1.5: Rates of worry across US counties 2014–2016 (darker = more worry; white=missing values)

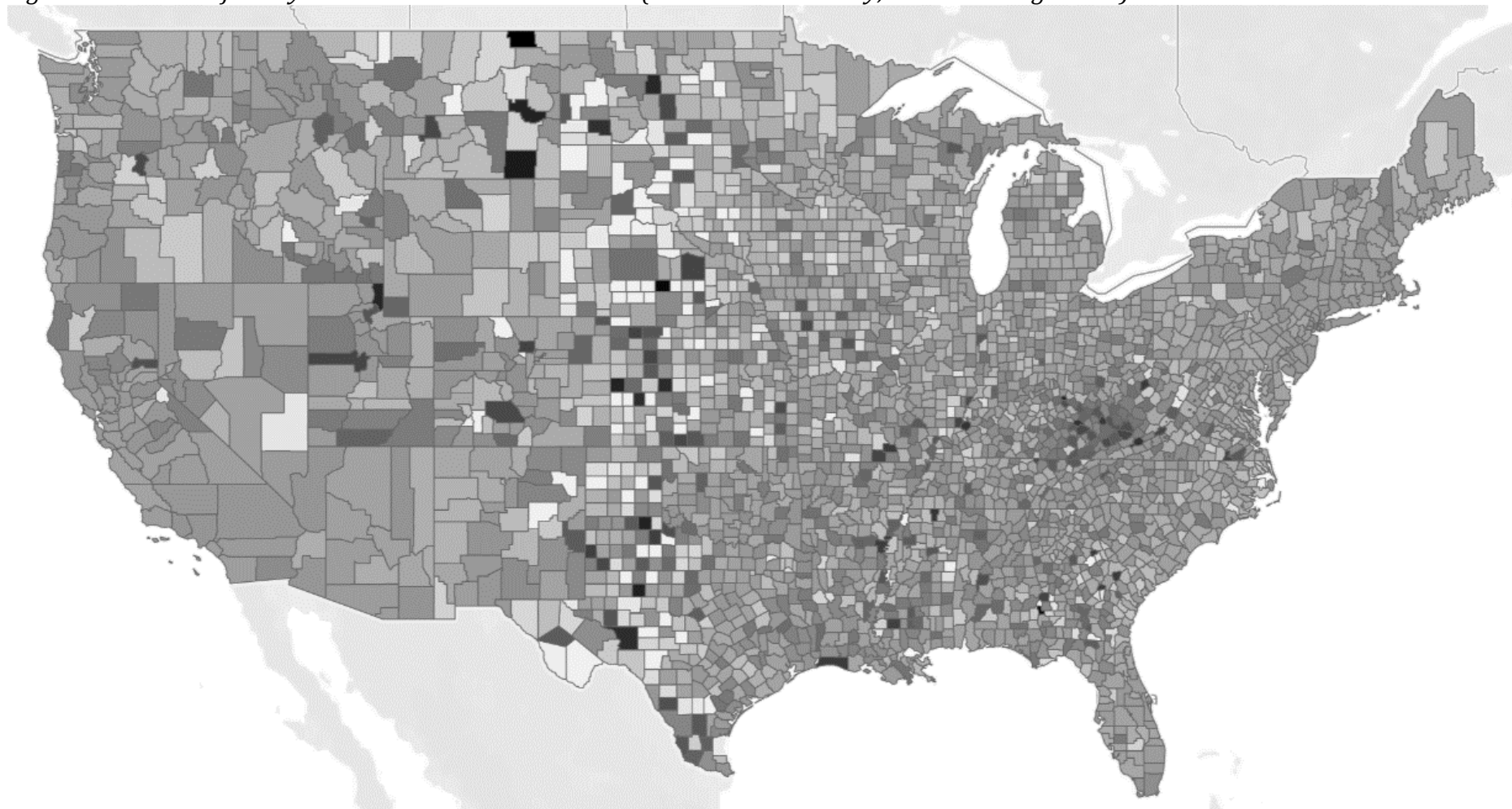


Figure A1.6: Racial animus across US counties 2004–2007 (darker = more racist searches; white=missing values)

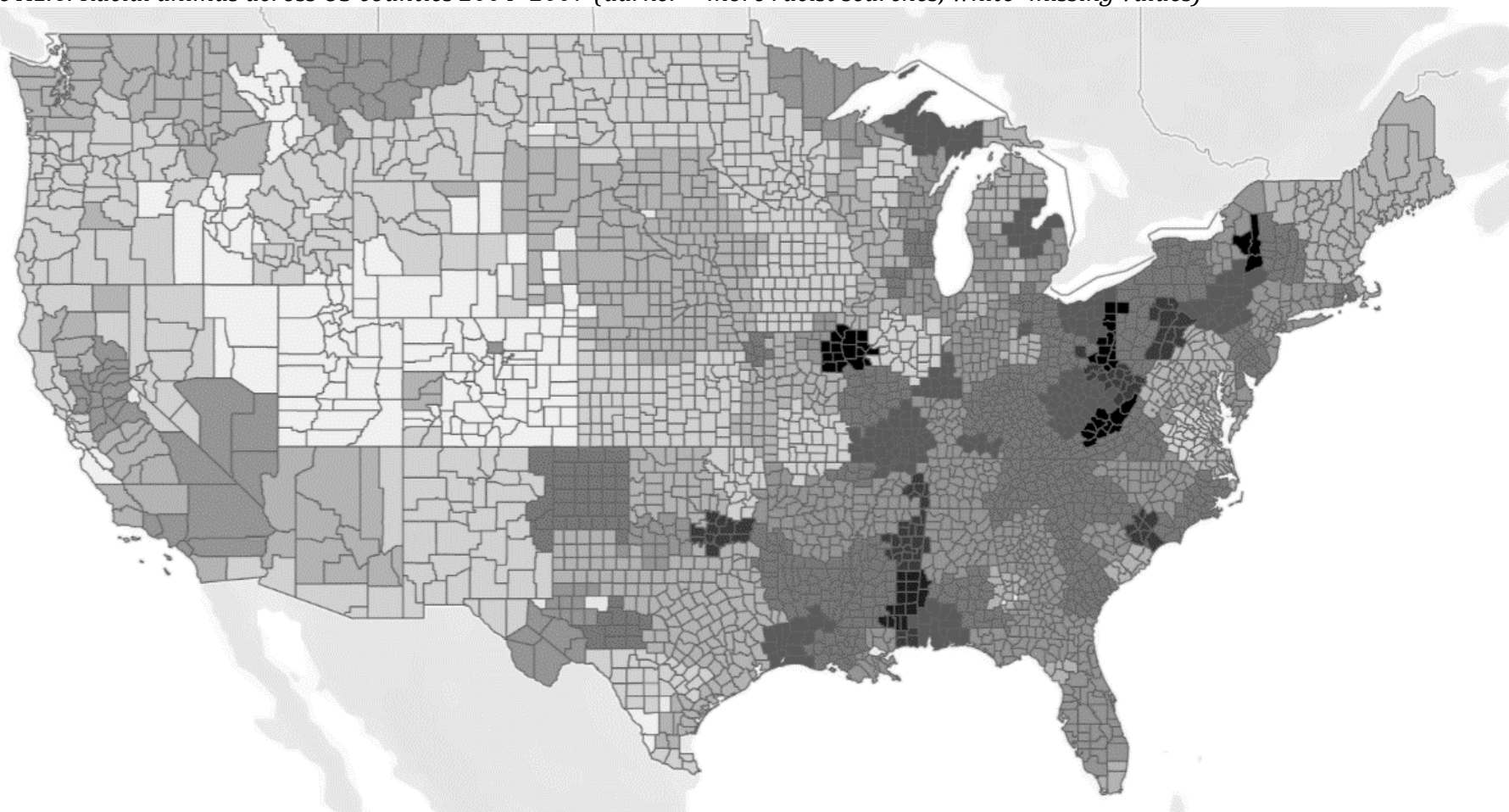
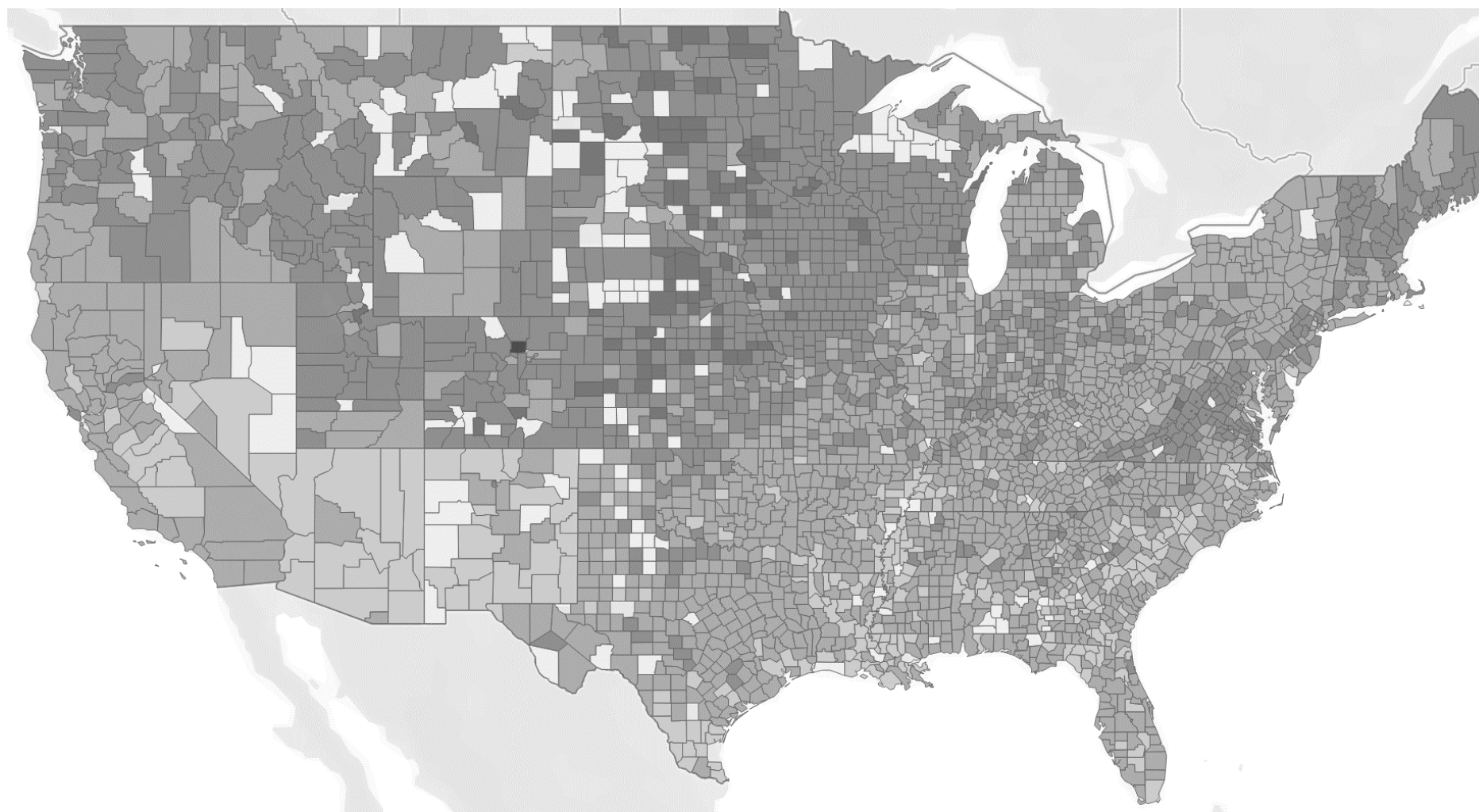


Figure A1.7: Social Capital across US counties 2016 (darker = more social capital; white=missing values)



Appendix Section 2

Full Results—Trump Vote Share 2016

VARIABLE/MODEL	OLS Trump Vote	OLS Trump Vote	OLS Trump Vote	IV Trump Vote
Obs	2864	2864	2864	2864
R ₂	0.759	0.759	0.761	0.775
Relatedness	0.1905** (0.0590)	0.1610* (0.0722)	0.1026 (0.0755)	0.0514 (0.0896)
Experienced WORRY yesterday	0.3186** (0.1042)	0.3327** (0.1061)	0.2949** (0.1130)	0.2673 (0.1523)
Worry*Relatedness	-0.5512** (0.1710)	-0.5747*** (0.1742)	-0.5925*** (0.1771)	-0.5388* (0.2213)
Racial Animus	0.0695*** (0.0155)	-0.0106 (0.1141)	0.1380 (0.1193)	0.0493 (0.1247)
Social Capital	0.1525*** (0.0238)	0.1524*** (0.0238)	0.2693*** (0.0495)	0.2740*** (0.0550)
Racial_Animus*Relatedness		0.1366 (0.1928)	0.3568 (0.2021)	0.4317 (0.2300)
Social_Capital*Worry			0.0755 (0.0957)	0.0685 (0.1118)
Social_Capital*Racial_Animus			-0.4871*** (0.1167)	-0.4712*** (0.1430)
Trade Exposure				-0.0012 (0.0081)
Trade_Exposure*Relatedness				0.0016 (0.0136)
Competence	-0.0017 (0.0025)	-0.0018 (0.0025)	-0.0017 (0.0025)	-0.0017 (0.0030)
Optimism	-0.0040 (0.0035)	-0.0037 (0.0035)	-0.0036 (0.0035)	-0.0033 (0.0037)
Life Satisfaction	0.0077 (0.0042)	0.0076 (0.0042)	0.0081 (0.0042)	0.0080 (0.0044)
Satisfied with life quality relative to peers	-0.0028 (0.0082)	-0.0031 (0.0082)	-0.0036 (0.0082)	-0.0049 (0.0090)
Experienced PAIN yesterday	0.0370* (0.0173)	0.0372* (0.0173)	0.0401* (0.0174)	0.0367 (0.0205)
Experienced STRESS yesterday	-0.0042 (0.0169)	-0.0040 (0.0169)	-0.0053 (0.0168)	-0.0120 (0.0182)
Treated for depression in past month	-0.0229 (0.0192)	-0.0229 (0.0192)	-0.0224 (0.0192)	-0.0261 (0.0205)
Large metro	-0.1057*** (0.0116)	-0.1058*** (0.0116)	-0.1046*** (0.0115)	-0.0686*** (0.0119)
Medium metro	-0.0507*** (0.0061)	-0.0506*** (0.0061)	-0.0499*** (0.0061)	-0.0235*** (0.0066)
Small metro	-0.0515*** (0.0054)	-0.0515*** (0.0054)	-0.0511*** (0.0054)	-0.0351*** (0.0064)
Micropolitan	-0.0287*** (0.0053)	-0.0287*** (0.0053)	-0.0284*** (0.0053)	-0.0206*** (0.0052)
Rural, metropolitan-adjacent	-0.0156*** (0.0043)	-0.0156*** (0.0043)	-0.0142*** (0.0043)	-0.0123** (0.0044)
Income1	0.2156** (0.0707)	0.2149** (0.0707)	0.2116** (0.0706)	0.1987** (0.0745)
Income2	0.1860** (0.0570)	0.1864** (0.0570)	0.1967*** (0.0569)	0.1784** (0.0635)
Income3	0.1297** (0.0408)	0.1298** (0.0408)	0.1288** (0.0407)	0.1250* (0.0499)
Income4	0.1304*** (0.0334)	0.1301*** (0.0334)	0.1296*** (0.0334)	0.1077** (0.0379)
Income5	0.1464*** (0.0310)	0.1459*** (0.0310)	0.1468*** (0.0310)	0.1350*** (0.0363)

Income6	0.1090** (0.0339)	0.1089** (0.0339)	0.1119*** (0.0338)	0.0987** (0.0353)
Income7	0.0649 (0.0360)	0.0642 (0.0360)	0.0655 (0.0360)	0.0501 (0.0401)
Income8	0.0745* (0.0318)	0.0742* (0.0318)	0.0765* (0.0317)	0.0604 (0.0339)
Income9	0.0528 (0.0405)	0.0527 (0.0405)	0.0517 (0.0404)	0.0416 (0.0420)
Income missing	0.1398*** (0.0279)	0.1394*** (0.0279)	0.1405*** (0.0278)	0.1297*** (0.0348)
Unemployed	-0.0075 (0.0386)	-0.0072 (0.0386)	-0.0054 (0.0385)	0.0025 (0.0394)
Underemployed	-0.0677* (0.0285)	-0.0672* (0.0285)	-0.0679* (0.0284)	-0.0695* (0.0316)
Out of Labor Force	0.0108 (0.0233)	0.0113 (0.0233)	0.0146 (0.0233)	0.0116 (0.0268)
County unemployment 2014	-0.0048 (0.0035)	-0.0046 (0.0035)	-0.0047 (0.0034)	-0.0036 (0.0048)
County unemployment 2015	-0.0036 (0.0058)	-0.0037 (0.0058)	-0.0039 (0.0058)	-0.0030 (0.0070)
County unemployment 2016	0.0055 (0.0036)	0.0055 (0.0036)	0.0060 (0.0035)	0.0026 (0.0046)
County_GDP_2014	-0.0002 (0.0003)	-0.0002 (0.0003)	-0.0001 (0.0003)	-0.0001 (0.0003)
County_GDP_2015	0.0004 (0.0002)	0.0004 (0.0002)	0.0004 (0.0002)	0.0004 (0.0002)
County poverty rate 2014	-0.0012 (0.0010)	-0.0012 (0.0010)	-0.0013 (0.0010)	-0.0017 (0.0010)
County poverty rate 2015	-0.0025* (0.0010)	-0.0025* (0.0010)	-0.0025* (0.0010)	-0.0029** (0.0010)
County poverty rate 2016	-0.0001 (0.0010)	-0.0001 (0.0010)	-0.0002 (0.0010)	-0.0005 (0.0011)
Race missing	-0.0888 (0.0744)	-0.0886 (0.0744)	-0.0997 (0.0743)	-0.0578 (0.0891)
Race other	-0.1803*** (0.0361)	-0.1814*** (0.0361)	-0.1742*** (0.0361)	-0.1803*** (0.0548)
BLACK	-0.4302*** (0.0196)	-0.4298*** (0.0196)	-0.4394*** (0.0197)	-0.4189*** (0.0248)
HISPANIC	-0.2704*** (0.0174)	-0.2707*** (0.0174)	-0.2662*** (0.0174)	-0.2227*** (0.0337)
ASIAN	-0.7657*** (0.1132)	-0.7648*** (0.1132)	-0.7663*** (0.1129)	-0.6622*** (0.1525)
Male	0.0059 (0.0139)	0.0056 (0.0139)	0.0069 (0.0139)	0.0055 (0.0171)
Age 25–34	0.0647* (0.0264)	0.0647* (0.0264)	0.0672* (0.0264)	0.0569* (0.0285)
Age 35–44	0.0750** (0.0271)	0.0748** (0.0271)	0.0723** (0.0270)	0.0660* (0.0299)
Age 45–54	0.0263 (0.0271)	0.0259 (0.0271)	0.0247 (0.0271)	0.0137 (0.0288)
Age 55–64	0.0122 (0.0268)	0.0117 (0.0269)	0.0116 (0.0268)	0.0092 (0.0309)
Age 65–100	-0.0243 (0.0288)	-0.0242 (0.0288)	-0.0234 (0.0287)	-0.0252 (0.0339)
Health problems	0.0028 (0.0181)	0.0025 (0.0181)	0.0002 (0.0180)	0.0005 (0.0225)
State of economy is very bad	0.1439*** (0.0199)	0.1435*** (0.0199)	0.1433*** (0.0198)	0.1364*** (0.0234)
State of economy is bad	0.0637*** (0.0192)	0.0635*** (0.0192)	0.0631** (0.0192)	0.0583* (0.0233)
State of economy is good	0.0275 (0.0489)	0.0277 (0.0489)	0.0239 (0.0488)	0.0044 (0.0604)
State of economy is very good	0.0201 (0.1417)	0.0194 (0.1417)	0.0073 (0.1415)	0.0700 (0.1309)
Divorced or separated	-0.0461* (0.0229)	-0.0459* (0.0229)	-0.0502* (0.0229)	-0.0476 (0.0256)
Single	-0.0905***	-0.0909***	-0.0908***	-0.0858***

	(0.0200)	(0.0200)	(0.0200)	(0.0236)
Widowed	-0.0173 (0.0313)	-0.0175 (0.0313)	-0.0252 (0.0313)	-0.0264 (0.0304)
Marital status unknown	0.0323 (0.1112)	0.0285 (0.1113)	0.0332 (0.1110)	0.0312 (0.0934)
High school drop out	0.0895*** (0.0206)	0.0896*** (0.0206)	0.0870*** (0.0206)	0.0859*** (0.0244)
High school completed	0.0419* (0.0173)	0.0421* (0.0173)	0.0392* (0.0173)	0.0434* (0.0187)
Some tertiary (technical college)	0.0232 (0.0332)	0.0236 (0.0332)	0.0178 (0.0332)	0.0053 (0.0316)
University	-0.1722*** (0.0256)	-0.1718*** (0.0256)	-0.1725*** (0.0255)	-0.1670*** (0.0341)
Postgrad	-0.3069*** (0.0314)	-0.3068*** (0.0314)	-0.3136*** (0.0313)	-0.2872*** (0.0559)
Education unknown	-0.1150 (0.1157)	-0.1141 (0.1157)	-0.1149 (0.1154)	-0.1107 (0.1101)
Union member	0.0256 (0.0175)	0.0256 (0.0175)	0.0253 (0.0175)	0.0281 (0.0201)
Almost never attend church	0.0223 (0.0700)	0.0232 (0.0701)	0.0123 (0.0699)	0.0185 (0.0759)
Attend church occasionally	0.0223 (0.0833)	0.0240 (0.0833)	0.0145 (0.0831)	0.0224 (0.0826)
Attend church monthly	0.0795 (0.0816)	0.0816 (0.0816)	0.0576 (0.0816)	0.0490 (0.0852)
Attend church weekly	0.1128 (0.0632)	0.1139 (0.0632)	0.1069 (0.0631)	0.0939 (0.0689)
Church missing	0.0857 (0.0547)	0.0867 (0.0547)	0.0772 (0.0546)	0.0614 (0.0590)
AL	0.0796*** (0.0159)	0.0785*** (0.0160)	0.0813*** (0.0160)	0.0835*** (0.0208)
AR	0.0310* (0.0154)	0.0300 (0.0154)	0.0327* (0.0154)	0.0308 (0.0158)
AZ	-0.0167 (0.0241)	-0.0175 (0.0241)	-0.0088 (0.0241)	0.0477 (0.0355)
CA	-0.0854*** (0.0174)	-0.0863*** (0.0174)	-0.0835*** (0.0174)	-0.0149 (0.0289)
CO	Omitted for collinearity	Omitted for collinearity	Omitted for collinearity	Omitted for collinearity
CT	-0.1155*** (0.0301)	-0.1165*** (0.0301)	-0.1141*** (0.0300)	-0.0612*** (0.0180)
DC	-0.1110 (0.0786)	-0.1124 (0.0786)	-0.1013 (0.0784)	-0.0380 (0.0243)
DE	-0.0590 (0.0462)	-0.0597 (0.0462)	-0.0590 (0.0460)	-0.0460 (0.0385)
FL	0.0545*** (0.0156)	0.0535*** (0.0157)	0.0552*** (0.0157)	0.0945*** (0.0202)
GA	0.0983*** (0.0144)	0.0971*** (0.0145)	0.0995*** (0.0145)	0.1067*** (0.0169)
IA	-0.1065*** (0.0158)	-0.1069*** (0.0158)	-0.1135*** (0.0158)	-0.0918*** (0.0198)
ID	-0.0331 (0.0181)	-0.0332 (0.0181)	-0.0374* (0.0181)	-0.0063 (0.0241)
IL	-0.0488*** (0.0148)	-0.0500*** (0.0149)	-0.0486** (0.0148)	-0.0209 (0.0195)
IN	-0.0280 (0.0150)	-0.0290 (0.0151)	-0.0261 (0.0150)	-0.0121 (0.0169)
KS	0.0089 (0.0159)	0.0087 (0.0159)	0.0015 (0.0160)	0.0331 (0.0201)
KY	0.0254 (0.0144)	0.0243 (0.0144)	0.0279 (0.0144)	0.0277 (0.0164)
LA	0.0975*** (0.0157)	0.0962*** (0.0158)	0.0918*** (0.0158)	0.0917*** (0.0148)
MA	-0.1794*** (0.0257)	-0.1804*** (0.0258)	-0.1795*** (0.0257)	-0.1336*** (0.0324)
MD	-0.0359 (0.0203)	-0.0370 (0.0203)	-0.0340 (0.0203)	-0.0097 (0.0202)

ME	-0.1968*** (0.0236)	-0.1974*** (0.0236)	-0.1994*** (0.0236)	-0.1747*** (0.0201)
MI	-0.0890*** (0.0158)	-0.0902*** (0.0159)	-0.0877*** (0.0158)	-0.0661*** (0.0180)
MN	-0.1323*** (0.0166)	-0.1328*** (0.0166)	-0.1441*** (0.0168)	-0.1210*** (0.0203)
MO	0.0266 (0.0145)	0.0257 (0.0146)	0.0291* (0.0145)	0.0426* (0.0174)
MS	0.0718*** (0.0161)	0.0702*** (0.0162)	0.0711*** (0.0162)	0.0792*** (0.0191)
MT	-0.0623*** (0.0180)	-0.0628*** (0.0181)	-0.0666*** (0.0180)	-0.0376 (0.0209)
NC	-0.0021 (0.0144)	-0.0033 (0.0145)	-0.0021 (0.0145)	0.0186 (0.0186)
ND	-0.0513** (0.0185)	-0.0513** (0.0185)	-0.0625*** (0.0187)	-0.0380 (0.0246)
NE	0.0035 (0.0167)	0.0029 (0.0167)	-0.0040 (0.0168)	0.0190 (0.0203)
NH	-0.1904*** (0.0279)	-0.1913*** (0.0280)	-0.1948*** (0.0279)	-0.1638*** (0.0260)
NJ	-0.0540* (0.0212)	-0.0550** (0.0212)	-0.0527* (0.0212)	-0.0057 (0.0238)
NM	-0.0370 (0.0202)	-0.0377 (0.0203)	-0.0275 (0.0203)	-0.0038 (0.0384)
NV	0.0226 (0.0256)	0.0215 (0.0256)	0.0288 (0.0256)	0.0812** (0.0250)
NY	-0.0928*** (0.0155)	-0.0934*** (0.0156)	-0.0932*** (0.0155)	-0.0494* (0.0210)
OH	-0.0528*** (0.0149)	-0.0535*** (0.0149)	-0.0493*** (0.0149)	-0.0377* (0.0173)
OK	0.0808*** (0.0156)	0.0800*** (0.0157)	0.0811*** (0.0156)	0.1024*** (0.0166)
OR	-0.0974*** (0.0192)	-0.0979*** (0.0192)	-0.1018*** (0.0192)	-0.0768** (0.0285)
PA	-0.0547*** (0.0152)	-0.0558*** (0.0153)	-0.0537*** (0.0153)	-0.0427* (0.0171)
RI	-0.1658*** (0.0370)	-0.1668*** (0.0370)	-0.1611*** (0.0369)	-0.1200*** (0.0213)
SC	0.0186 (0.0168)	0.0175 (0.0169)	0.0147 (0.0169)	0.0301 (0.0205)
SD	-0.0432* (0.0179)	-0.0437* (0.0179)	-0.0454* (0.0179)	-0.0200 (0.0206)
TN	0.0735*** (0.0144)	0.0724*** (0.0145)	0.0722*** (0.0145)	0.0726*** (0.0161)
TX	0.1016*** (0.0146)	0.1007*** (0.0147)	0.1034*** (0.0146)	0.1286*** (0.0179)
UT	-0.0810*** (0.0205)	-0.0801*** (0.0206)	-0.0887*** (0.0206)	-0.0598 (0.0369)
VA	-0.0403** (0.0148)	-0.0414* (0.0148)	-0.0389** (0.0148)	-0.0268 (0.0183)
VT	-0.3237*** (0.0246)	-0.3242*** (0.0246)	-0.3275*** (0.0246)	-0.2939*** (0.0263)
WA	-0.1057*** (0.0180)	-0.1064*** (0.0180)	-0.1085*** (0.0180)	-0.0696** (0.0270)
WI	-0.1668*** (0.0168)	-0.1676*** (0.0168)	-0.1689*** (0.0168)	-0.1447*** (0.0210)
WV	Omitted for collinearity	Omitted for collinearity	Omitted for collinearity	Omitted for collinearity
Independent	0.0187 (0.0311)	0.0180 (0.0311)	0.0151 (0.0311)	0.0199 (0.0335)
Democrat	-0.0803*** (0.0235)	-0.0796*** (0.0235)	-0.0765** (0.0235)	-0.0630 (0.0341)
Leans Democrat	-0.0915** (0.0353)	-0.0917** (0.0353)	-0.0873* (0.0352)	-0.0821* (0.0387)
Republican	0.1520*** (0.0195)	0.1521*** (0.0195)	0.1492*** (0.0195)	0.1444*** (0.0217)
Leans Republican	0.1071***	0.1075***	0.1075***	0.1121***

	(0.0271)	(0.0271)	(0.0270)	(0.0247)
l_shind_manuf_cbp				0.0206 (0.0308)
l_sh_popedu_c				-0.0015*** (0.0005)
l_sh_empl_f				-0.0018** (0.0007)
l_sh_popfborn				-0.0041*** (0.0012)
l_task_outsource				0.0107 (0.0099)
l_sh_routine33				-0.0022 (0.0013)
Constant	0.3336*** (0.0885)	0.3514*** (0.0920)	0.3246*** (0.0929)	0.6462*** (0.1157)

* Significant at the 5% level

** Significant at the 1% level

*** Significant at the 0.1% level

Appendix Section 3

Trump Vote Share 2016 Presidential Without Sample Weights

VARIABLE/MODEL	(1) OLS	(2) OLS	(3) OLS	(4) IV
Relatedness	0.1328 (0.0689)	0.0687 (0.0810)	-0.0009 (0.0857)	-0.0451 (0.1137)
Experienced WORRY yesterday	0.2505 (0.1367)	0.2908* (0.1393)	0.2560 (0.1465)	0.2039 (0.2027)
Worry* Relatedness	-0.4475* (0.2211)	-0.5125* (0.2252)	-0.4885* (0.2294)	-0.4218 (0.2965)
Racial Animus	0.0539*** (0.0149)	-0.1364 (0.1276)	-0.0210 (0.1318)	-0.0693 (0.1515)
Social Capital	0.1379*** (0.0225)	0.1378*** (0.0225)	0.2554*** (0.0495)	0.2534*** (0.0529)
Racial_Animus* Relatedness		0.3173 (0.2113)	0.5473* (0.2213)	0.5701* (0.2582)
Social_Capital* Worry			0.0266 (0.1159)	0.0404 (0.1265)
Social_Capital* Racial_Animus			-0.4434*** (0.1091)	-0.4337*** (0.1279)
Trade Exposure				-0.0010 (0.0089)
Trade_Exposure* Relatedness				0.0011 (0.0145)
R ²	0.783	0.783	0.784	0.795
N	2921	2921	2921	2921

*: Significant at the 5% level

**: Significant at the 1% level

***: Significant at the 0.1% level

Appendix Section 4

Trump Vote Share 2016 Presidential Without Under Sampled Counties

VARIABLE/MODEL	(1) OLS	(2) OLS	(3) OLS	(4) IV
Relatedness	0.1797 (0.1000)	0.0621 (0.1086)	-0.0227 (0.1190)	-0.0590 (0.1237)
Experienced WORRY yesterday	0.5863** (0.1850)	0.6940*** (0.1888)	0.6991*** (0.1899)	0.6780*** (0.1810)
Worry* Relatedness	-1.0319*** (0.3061)	-1.2058*** (0.3121)	-1.1368*** (0.3360)	-1.0839*** (0.3233)
Racial Animus	0.0471** (0.0155)	-0.3147* (0.1321)	-0.2751* (0.1337)	-0.2554 (0.1472)
Social Capital	0.1236*** (0.0270)	0.1209*** (0.0269)	0.2405*** (0.0670)	0.2475*** (0.0722)
Racial_Animus* Relatedness		0.6175** (0.2239)	0.8579*** (0.2423)	0.7792** (0.2611)
Social_Capital* Worry			-0.0789 (0.1655)	-0.0878 (0.1711)
Social_Capital* Racial_Animus			-0.3248* (0.1293)	-0.3250* (0.1420)
Trade Exposure				-0.0084 (0.0067)
Trade_Exposure* Relatedness				0.0137 (0.0116)
R ²	0.811	0.811	0.812	0.821
N	2328	2328	2328	2328

*: Significant at the 5% level

**: Significant at the 1% level

***: Significant at the 0.1% level

Appendix Section 5

Trump Vote Share 2016 Presidential Without Partisanship Controls

VARIABLE/MODEL	(1) OLS	(2) OLS	(3) OLS	(4) IV
Relatedness	0.1656** (0.0603)	0.0865 (0.0722)	0.0254 (0.0756)	-0.0304 (0.0931)
Experienced WORRY yesterday	0.3255** (0.1067)	0.3657*** (0.1086)	0.3176** (0.1159)	0.2891^ (0.1553)
Worry* Relatedness	-0.5761** (0.1753)	-0.6426*** (0.1784)	-0.6563*** (0.1812)	-0.6045** (0.2264)
Racial Animus	0.0646*** (0.0161)	-0.1591 (0.1137)	0.0070 (0.1192)	-0.0842 (0.1353)
Social Capital	0.1700*** (0.0242)	0.1693*** (0.0242)	0.2928*** (0.0499)	0.2902*** (0.0559)
Racial_Animus* Relatedness		0.3813* (0.1919)	0.6152** (0.2011)	0.6867** (0.2474)
Social_Capital* Worry			0.0867 (0.0983)	0.0819 (0.1126)
Social_Capital* Racial_Animus			-0.5308*** (0.1177)	-0.5066*** (0.1495)
Trade Exposure				-0.0023 (0.0079)
Trade_Exposure* Relatedness				0.0031 (0.0133)
R ²	0.744	0.744	0.746	0.761
N	2921	2921	2921	2921

*: Significant at the 5% level

**: Significant at the 1% level

***: Significant at the 0.1% level

Appendix Section 6

Trump Vote Share in Republican Party Primaries with Only Self-Identified Republicans in Sample

VARIABLE/MODEL	(1) OLS	(2) OLS	(3) OLS	(4) IV
Relatedness	0.0183 (0.0194)	-0.0129 (0.0323)	-0.0130 (0.0325)	-0.0120 (0.0332)
Experienced WORRY yesterday	-0.0127 (0.0275)	-0.0135 (0.0275)	-0.0204 (0.0341)	-0.0225 (0.0330)
Worry* Relatedness	0.0174 (0.0410)	0.0192 (0.0410)	0.0172 (0.0414)	0.0084 (0.0404)
Racial Animus	0.0548*** (0.0140)	-0.0294 (0.0708)	-0.0195 (0.0868)	0.0103 (0.0899)
Social Capital	-0.0345 (0.0177)	-0.0344 (0.0177)	-0.0332 (0.0332)	-0.0471 (0.0392)
Racial_Animus* Relatedness		0.1259 (0.1037)	0.1273 (0.1048)	0.0685 (0.1013)
Social_Capital* Worry			0.0135 (0.0388)	0.0220 (0.0401)
Social_Capital* Racial_Animus			-0.0193 (0.1060)	-0.0210 (0.1245)
Trade Exposure				-0.0026 (0.0036)
Trade_Exposure* Relatedness				0.0033 (0.0047)
R ²	0.885	0.885	0.885	0.890
N	2457	2457	2457	2457

*: Significant at the 5% level

**: Significant at the 1% level

***: Significant at the 0.1% level

Appendix Section 7

Change in Democrat Vote Share 2008–2012

VARIABLE/MODEL	(1) OLS	(2) OLS	(3) OLS	(4) IV
Relatedness	-0.0028 (0.0074)	-0.0087 (0.0110)	-0.0066 (0.0112)	-0.0004 (0.0117)
Experienced WORRY yesterday	0.0011 (0.0114)	0.0018 (0.0114)	0.0004 (0.0135)	-0.0032 (0.0151)
Worry* Relatedness	0.0014 (0.0179)	0.0004 (0.0179)	0.0002 (0.0182)	0.0078 (0.0193)
Racial Animus	-0.0141*** (0.0040)	-0.0277 (0.0193)	-0.0476* (0.0237)	-0.0420 (0.0388)
Social Capital	-0.0569*** (0.0059)	-0.0568*** (0.0059)	-0.0695*** (0.0111)	-0.0699*** (0.0158)
Racial_Animus* Relatedness		0.0225 (0.0313)	0.0160 (0.0317)	0.0211 (0.0447)
Social_Capital* Worry			0.0023 (0.0146)	0.0021 (0.0172)
Social_Capital* Racial_Animus			0.0419 (0.0284)	0.0380 (0.0473)
Trade Exposure				0.0014 (0.0013)
Trade_Exposure* Relatedness				-0.0029 (0.0020)
R ²	0.578	0.578	0.578	0.593
N	2883	2883	2883	2883

*: Significant at the 5% level

**: Significant at the 1% level

***: Significant at the 0.1% level

Appendix Section 8

Predicting Self-Identification as a Republican Voter

VARIABLE/MODEL	(1) OLS	(2) OLS	(3) OLS	(4) IV
Relatedness	0.0906 (0.0593)	0.1328 (0.0710)	0.1182 (0.0745)	0.1288 (0.1214)
Experienced WORRY yesterday	0.1823 (0.1048)	0.1608 (0.1067)	0.1122 (0.1142)	0.0904 (0.1621)
Worry* Relatedness	-0.2788 (0.1722)	-0.2433 (0.1753)	-0.2731 (0.1786)	-0.2422 (0.2788)
Racial Animus	-0.0283 (0.0158)	0.0909 (0.1117)	0.1707 (0.1175)	0.1207 (0.1512)
Social Capital	0.0204 (0.0238)	0.0207 (0.0238)	0.0525 (0.0492)	0.0473 (0.0625)
Racial_Animus* Relatedness		-0.2033 (0.1885)	-0.1234 (0.1982)	-0.0418 (0.2781)
Social_Capital* Worry			0.1041 (0.0968)	0.1085 (0.1554)
Social_Capital* Racial_Animus			-0.2213 (0.1160)	-0.2180 (0.1275)
Trade Exposure				0.0061 (0.0078)
Trade_Exposure* Relatedness				-0.0126 (0.0131)
R ²	0.209	0.209	0.211	0.213
N	2921	2921	2921	2921

*: Significant at the 5% level

**: Significant at the 1% level

***: Significant at the 0.1% level

Appendix Section 9

(Ecological Fallacy Robustness Check) Trump Vote Share 2016 Presidential with Only Variables Measured at the Individual Level

VARIABLE/MODEL	OLS Trump Vote	OLS Trump Vote	OLS Trump Vote
Obs	2943	2943	2943
R ₂	0.580	0.582	0.583
Relatedness	0.3613*** (0.0745)	0.1951* (0.0885)	0.1670 (0.0934)
Experienced WORRY yesterday	0.4726*** (0.1313)	0.5622*** (0.1335)	0.5798*** (0.1355)
Worry*Relatedness	-0.8136*** (0.2155)	-0.9612*** (0.2193)	-1.0000*** (0.2243)
Racial Animus	0.1023*** (0.0157)	-0.3749** (0.1385)	-0.4538** (0.1470)
Social Capital	0.0148*** (0.0027)	0.0151*** (0.0027)	0.0197** (0.0070)
Racial_Animus*Relatedness		0.8058*** (0.2324)	0.9400*** (0.2470)
Social_Capital*Worry			0.0157 (0.0168)
Social_Capital*Racial_Animus			-0.0365* (0.0176)
Competence	-0.0007 (0.0031)	-0.0011 (0.0031)	-0.0012 (0.0031)
Optimism	-0.0015 (0.0044)	-0.0001 (0.0044)	0.0000 (0.0044)
Life Satisfaction	-0.0029 (0.0053)	-0.0031 (0.0053)	-0.0028 (0.0053)
Satisfied with life quality relative to peers	0.0097 (0.0104)	0.0080 (0.0104)	0.0077 (0.0104)
Experienced PAIN yesterday	0.0670** (0.0220)	0.0677** (0.0219)	0.0716** (0.0220)
Experienced STRESS yesterday	-0.0092 (0.0216)	-0.0077 (0.0215)	-0.0084 (0.0215)
Treated for depression in past month	-0.0593* (0.0246)	-0.0586* (0.0246)	-0.0578* (0.0246)
Income1	0.2517** (0.0863)	0.2539** (0.0862)	0.2469** (0.0862)
Income2	0.2061** (0.0696)	0.2186** (0.0696)	0.2179** (0.0695)
Income3	0.1504** (0.0504)	0.1539** (0.0503)	0.1502** (0.0503)
Income4	0.1357*** (0.0410)	0.1379*** (0.0410)	0.1356*** (0.0410)
Income5	0.1431*** (0.0385)	0.1427*** (0.0384)	0.1392*** (0.0385)
Income6	0.0693 (0.0427)	0.0705 (0.0426)	0.0699 (0.0426)
Income7	0.0483 (0.0449)	0.0482 (0.0448)	0.0443 (0.0449)
Income8	0.0852* (0.0400)	0.0855* (0.0399)	0.0861* (0.0399)
Income9	0.0856 (0.0516)	0.0851 (0.0515)	0.0846 (0.0515)
Income missing	0.1658*** (0.0347)	0.1654*** (0.0347)	0.1639*** (0.0347)
Unemployed	-0.0672 (0.0495)	-0.0672 (0.0494)	-0.0650 (0.0494)
Underemployed	-0.1302*** (0.0363)	-0.1294*** (0.0362)	-0.1295*** (0.0362)
Out of Labor Force	-0.0401	-0.0384	-0.0350

	(0.0296)	(0.0296)	(0.0296)
Race missing	-0.3157*** (0.0958)	-0.3160*** (0.0956)	-0.3220*** (0.0956)
Race other	-0.2114*** (0.0438)	-0.2155*** (0.0437)	-0.2126*** (0.0437)
BLACK	-0.3530*** (0.0196)	-0.3546*** (0.0196)	-0.3629*** (0.0200)
HISPANIC	-0.1815*** (0.0186)	-0.1839*** (0.0186)	-0.1797*** (0.0187)
ASIAN	-1.1295*** (0.1405)	-1.1293*** (0.1402)	-1.1206*** (0.1402)
Male	-0.0241 (0.0178)	-0.0263 (0.0177)	-0.0266 (0.0177)
Age 25–34	0.0325 (0.0337)	0.0321 (0.0336)	0.0327 (0.0336)
Age 35–44	0.0472 (0.0347)	0.0448 (0.0346)	0.0426 (0.0346)
Age 45–54	-0.0262 (0.0345)	-0.0279 (0.0345)	-0.0292 (0.0345)
Age 55–64	-0.0768* (0.0338)	-0.0792* (0.0338)	-0.0801* (0.0338)
Age 65–100	-0.0775* (0.0359)	-0.0778* (0.0358)	-0.0775* (0.0358)
Health problems	0.0067 (0.0232)	0.0050 (0.0231)	0.0041 (0.0231)
State of economy is very bad	0.1958*** (0.0247)	0.1934*** (0.0247)	0.1946*** (0.0247)
State of economy is bad	0.0610* (0.0244)	0.0601* (0.0244)	0.0610* (0.0244)
State of economy is good	0.1312* (0.0623)	0.1339* (0.0622)	0.1288* (0.0622)
State of economy is very good	-0.0610 (0.1830)	-0.0672 (0.1826)	-0.0819 (0.1827)
Divorced or separated	-0.0437 (0.0291)	-0.0431 (0.0290)	-0.0450 (0.0291)
Single	-0.1909*** (0.0251)	-0.1922*** (0.0251)	-0.1921*** (0.0251)
Widowed	-0.0242 (0.0396)	-0.0261 (0.0396)	-0.0312 (0.0396)
Marital status unknown	0.0190 (0.1442)	0.0003 (0.1441)	0.0008 (0.1441)
High school drop out	0.1334*** (0.0256)	0.1330*** (0.0256)	0.1324*** (0.0256)
High school completed	0.0815*** (0.0216)	0.0824*** (0.0216)	0.0814*** (0.0216)
Some tertiary (technical college)	0.0280 (0.0416)	0.0290 (0.0415)	0.0230 (0.0416)
University	-0.1978*** (0.0320)	-0.1944*** (0.0320)	-0.1951*** (0.0320)
Postgrad	-0.3733*** (0.0387)	-0.3735*** (0.0386)	-0.3741*** (0.0386)
Education unknown	-0.2442 (0.1489)	-0.2392 (0.1486)	-0.2370 (0.1486)
Union member	-0.1583*** (0.0203)	-0.1566*** (0.0202)	-0.1574*** (0.0202)
Almost never attend church	0.1304 (0.0886)	0.1335 (0.0885)	0.1300 (0.0885)
Attend church occasionally	0.1905 (0.1039)	0.2008 (0.1038)	0.1979 (0.1038)
Attend church monthly	0.2884** (0.1023)	0.2956** (0.1021)	0.2839** (0.1022)
Attend church weekly	0.3922*** (0.0778)	0.3929*** (0.0777)	0.3919*** (0.0777)
Church missing	0.2289*** (0.0672)	0.2322*** (0.0671)	0.2290*** (0.0670)
Independent	-0.0877* (0.0396)	-0.0918* (0.0395)	-0.0959* (0.0396)

Democrat	-0.1811*** (0.0292)	-0.1756*** (0.0292)	-0.1733*** (0.0292)
Leans Democrat	-0.2581*** (0.0448)	-0.2587*** (0.0447)	-0.2568*** (0.0447)
Republican	0.2747*** (0.0244)	0.2762*** (0.0243)	0.2751*** (0.0243)
Leans Republican	0.1041** (0.0346)	0.1067** (0.0346)	0.1072** (0.0346)
Constant	0.1088 (0.1065)	0.2089 (0.1101)	0.2298* (0.1111)

*: Significant at the 5% level

**: Significant at the 1% level

***: Significant at the 0.1% level

Appendix Section 10

(Ecological Fallacy Robustness Check) Trump Vote Share 2016 Presidential with Only Variables Measured at the County Level

VARIABLE/MODEL	OLS Trump Vote	OLS Trump Vote	OLS Trump Vote	IV Trump Vote
Obs	2929	2929	2929	2929
R ₂	0.845	0.846	0.848	0.857
Relatedness	0.0444 (0.0368)	-0.0158 (0.0475)	-0.0635 (0.0488)	-0.1000^ (0.0512)
Experienced WORRY yesterday	0.1112 (0.0680)	0.1424* (0.0697)	0.1612* (0.0700)	0.1159 (0.0768)
Worry*Relatedness	-0.2171 (0.1125)	-0.2675* (0.1152)	-0.3056** (0.1164)	-0.2353^ (0.1269)
Racial Animus	0.0476*** (0.0124)	-0.1210 (0.0850)	-0.2621** (0.0885)	-0.3675*** (0.0863)
Social Capital	0.0152*** (0.0028)	0.0150*** (0.0028)	0.0331*** (0.0053)	0.0293*** (0.0057)
Racial_Animus*Relatedness		0.2873* (0.1433)	0.5089*** (0.1484)	0.6605*** (0.1465)
Social_Capital*Worry			0.0105 (0.0098)	0.0087 (0.0108)
Social_Capital*Racial_Animus			-0.0740*** (0.0124)	-0.0671*** (0.0137)
Trade Exposure				0.0049 (0.0049)
Trade_Exposure*Relatedness				-0.0107 (0.0083)
Large metro	-0.0239* (0.0113)	-0.0243* (0.0113)	-0.0237* (0.0112)	-0.0032 (0.0117)
Medium metro	-0.0256*** (0.0053)	-0.0257*** (0.0053)	-0.0244*** (0.0053)	-0.0092 (0.0059)
Small metro	-0.0314*** (0.0045)	-0.0314*** (0.0045)	-0.0309*** (0.0045)	-0.0179** (0.0057)
Micropolitan	-0.0163*** (0.0043)	-0.0163*** (0.0043)	-0.0158*** (0.0043)	-0.0092* (0.0044)
Rural, metropolitan-adjacent	-0.0136*** (0.0035)	-0.0134*** (0.0035)	-0.0118*** (0.0035)	-0.0088* (0.0037)
Median Household Income 2018	0.0000*** (0.0000)	0.0000*** (0.0000)	0.0000*** (0.0000)	0.0000*** (0.0000)
County unemployment 2014	-0.0140*** (0.0027)	-0.0137*** (0.0027)	-0.0134*** (0.0027)	-0.0103** (0.0036)
County unemployment 2015	0.0088* (0.0045)	0.0085 (0.0045)	0.0080 (0.0044)	0.0082 (0.0054)
County unemployment 2016	-0.0017 (0.0028)	-0.0017 (0.0028)	-0.0010 (0.0028)	-0.0055 (0.0039)
County_GDP_2014	0.0001 (0.0002)	0.0001 (0.0002)	0.0002 (0.0002)	0.0002 (0.0002)
County_GDP_2015	0.0008*** (0.0002)	0.0008*** (0.0002)	0.0008*** (0.0002)	0.0008*** (0.0002)
County poverty rate 2014	-0.0006 (0.0008)	-0.0006 (0.0008)	-0.0007 (0.0008)	-0.0005 (0.0008)
County poverty rate 2015	-0.0015 (0.0008)	-0.0015 (0.0008)	-0.0015 (0.0008)	-0.0017 (0.0009)
County poverty rate 2016	0.0004 (0.0008)	0.0004 (0.0008)	0.0003 (0.0008)	-0.0002 (0.0010)
Total Population	0.0000 (0.0000)	0.0000 (0.0000)	0.0000 (0.0000)	0.0000 (0.0000)
WHITE	0.3741*** (0.0268)	0.3770*** (0.0269)	0.3609*** (0.0270)	0.3790*** (0.0504)
BLACK	-0.2712*** (0.0274)	-0.2678*** (0.0275)	-0.2938*** (0.0277)	-0.2695*** (0.0497)
ASIAN	-0.0384 (0.0813)	-0.0398 (0.0813)	-0.0548 (0.0809)	0.0203 (0.1036)

HISPANIC	-0.5380*** (0.0174)	-0.5394*** (0.0174)	-0.5279*** (0.0174)	-0.5214*** (0.0383)
Age 25–34	-0.3008** (0.1131)	-0.3018** (0.1130)	-0.2496* (0.1129)	-0.2866* (0.1369)
Age 35–44	0.3509* (0.1654)	0.3528* (0.1653)	0.3240* (0.1644)	0.1702 (0.1949)
Age 45–54	-0.4301* (0.1670)	-0.4389** (0.1670)	-0.3676* (0.1665)	-0.1433 (0.1800)
Age 55–64	-0.7441*** (0.1291)	-0.7275*** (0.1293)	-0.7270*** (0.1286)	-0.8152*** (0.1435)
Age 65–100	0.0602 (0.0620)	0.0548 (0.0620)	0.0524 (0.0617)	0.0536 (0.0718)
Less than high school	-0.0318 (0.0197)	-0.0309 (0.0197)	-0.0326 (0.0195)	-0.0332 (0.0191)
High school completed	-0.0358 (0.0197)	-0.0349 (0.0197)	-0.0365 (0.0195)	-0.0369 (0.0191)
Some tertiary (technical college)	-0.0327 (0.0197)	-0.0318 (0.0197)	-0.0335 (0.0195)	-0.0342 (0.0191)
University	-0.0430* (0.0197)	-0.0421* (0.0197)	-0.0436* (0.0195)	-0.0441* (0.0191)
AL	0.1095*** (0.0129)	0.1072*** (0.0130)	0.1107*** (0.0129)	0.1243*** (0.0128)
AR	0.0394** (0.0123)	0.0372** (0.0123)	0.0407*** (0.0123)	0.0487*** (0.0124)
AZ	0.0374 (0.0204)	0.0359 (0.0204)	0.0453* (0.0203)	0.0787** (0.0253)
CA	-0.0340* (0.0156)	-0.0360* (0.0156)	-0.0319* (0.0155)	0.0034 (0.0268)
CO	0.0278 (0.0152)	0.0279 (0.0152)	0.0154 (0.0152)	0.0318 (0.0211)
CT	-0.0331 (0.0243)	-0.0354 (0.0243)	-0.0325 (0.0242)	0.0038 (0.0132)
DC	0.0230 (0.0635)	0.0193 (0.0635)	0.0317 (0.0632)	0.0688** (0.0229)
DE	0.0045 (0.0370)	0.0029 (0.0370)	0.0044 (0.0368)	0.0142 (0.0189)
FL	0.0871*** (0.0129)	0.0850*** (0.0129)	0.0875*** (0.0128)	0.1088*** (0.0139)
GA	0.1290*** (0.0116)	0.1264*** (0.0117)	0.1299*** (0.0116)	0.1426*** (0.0116)
IA	-0.1256*** (0.0129)	-0.1264*** (0.0129)	-0.1321*** (0.0129)	-0.1060*** (0.0158)
ID	-0.0137 (0.0151)	-0.0143 (0.0151)	-0.0176 (0.0150)	0.0028 (0.0196)
IL	-0.0418*** (0.0121)	-0.0446*** (0.0122)	-0.0419*** (0.0121)	-0.0124 (0.0134)
IN	-0.0373** (0.0120)	-0.0392** (0.0121)	-0.0355** (0.0120)	-0.0090 (0.0128)
KS	0.0387** (0.0133)	0.0380** (0.0133)	0.0303* (0.0133)	0.0575*** (0.0160)
KY	0.0066 (0.0116)	0.0044 (0.0116)	0.0090 (0.0116)	0.0160 (0.0114)
LA	0.1316*** (0.0126)	0.1288*** (0.0127)	0.1249*** (0.0126)	0.1264*** (0.0110)
MA	-0.1258*** (0.0207)	-0.1282*** (0.0208)	-0.1265*** (0.0206)	-0.0935** (0.0347)
MD	0.0287 (0.0166)	0.0263 (0.0166)	0.0309 (0.0165)	0.0415* (0.0172)
ME	-0.1584*** (0.0190)	-0.1603*** (0.0190)	-0.1627*** (0.0189)	-0.1430*** (0.0136)
MI	-0.0596*** (0.0129)	-0.0624*** (0.0130)	-0.0592*** (0.0130)	-0.0355** (0.0127)
MN	-0.1356*** (0.0138)	-0.1364*** (0.0138)	-0.1475*** (0.0139)	-0.1215*** (0.0163)
MO	0.0283* (0.0116)	0.0265* (0.0116)	0.0304** (0.0116)	0.0483*** (0.0121)
MS	0.1046***	0.1015***	0.1037***	0.1279***

	(0.0132)	(0.0133)	(0.0132)	(0.0136)
MT	0.0031 (0.0149)	0.0017 (0.0150)	-0.0023 (0.0149)	0.0132 (0.0165)
NC	0.0317** (0.0121)	0.0290* (0.0121)	0.0315** (0.0121)	0.0612*** (0.0122)
ND	-0.0639*** (0.0156)	-0.0640*** (0.0156)	-0.0749*** (0.0156)	-0.0606** (0.0226)
NE	0.0073 (0.0140)	0.0062 (0.0141)	0.0003 (0.0140)	0.0193 (0.0176)
NH	-0.1556*** (0.0225)	-0.1578*** (0.0225)	-0.1614*** (0.0224)	-0.1357*** (0.0241)
NJ	0.0398* (0.0173)	0.0378* (0.0173)	0.0406* (0.0172)	0.0682* (0.0278)
NM	0.0855*** (0.0175)	0.0839*** (0.0175)	0.0929*** (0.0175)	0.1059*** (0.0296)
NV	0.0675** (0.0210)	0.0651** (0.0210)	0.0744*** (0.0209)	0.0925*** (0.0179)
NY	-0.0624*** (0.0127)	-0.0640*** (0.0127)	-0.0635*** (0.0126)	-0.0329 (0.0197)
OH	-0.0477*** (0.0119)	-0.0491*** (0.0119)	-0.0439*** (0.0118)	-0.0221 (0.0140)
OK	0.1181*** (0.0131)	0.1169*** (0.0131)	0.1169*** (0.0130)	0.1413*** (0.0133)
OR	-0.0819*** (0.0163)	-0.0833*** (0.0163)	-0.0861*** (0.0162)	-0.0662** (0.0253)
PA	-0.0049 (0.0122)	-0.0072 (0.0123)	-0.0057 (0.0122)	0.0110 (0.0110)
RI	-0.1034*** (0.0297)	-0.1061*** (0.0297)	-0.0998*** (0.0296)	-0.0639*** (0.0168)
SC	0.0714*** (0.0138)	0.0691*** (0.0138)	0.0675*** (0.0137)	0.0881*** (0.0142)
SD	-0.0291* (0.0145)	-0.0299* (0.0145)	-0.0317* (0.0144)	-0.0175 (0.0204)
TN	0.0633*** (0.0115)	0.0609*** (0.0115)	0.0606*** (0.0114)	0.0743*** (0.0116)
TX	0.1592*** (0.0122)	0.1575*** (0.0122)	0.1600*** (0.0122)	0.1766*** (0.0131)
UT	-0.0909*** (0.0176)	-0.0894*** (0.0176)	-0.0952*** (0.0175)	-0.0684* (0.0268)
VA	0.0069 (0.0122)	0.0046 (0.0123)	0.0080 (0.0122)	0.0234 (0.0137)
VT	-0.2848*** (0.0197)	-0.2865*** (0.0197)	-0.2899*** (0.0196)	-0.2608*** (0.0157)
WA	-0.0783*** (0.0154)	-0.0798*** (0.0154)	-0.0802*** (0.0153)	-0.0521* (0.0254)
WI	-0.1625*** (0.0137)	-0.1641*** (0.0137)	-0.1649*** (0.0136)	-0.1383*** (0.0208)
WV	Omitted for collinearity	Omitted for collinearity	Omitted for collinearity	Omitted for collinearity
l_shind_manuf_cbp				-0.0311 (0.0273)
l_sh_popedu_c				-0.0011** (0.0004)
l_sh_empl_f				-0.0010 (0.0006)
l_sh_popfborn				-0.0018 (0.0012)
l_task_outsource				0.0137 (0.0084)
l_sh_routine33				-0.0044*** (0.0012)
Constant	4.0941* (1.9670)	4.0419* (1.9661)	4.2396* (1.9548)	4.5374* (1.9163)

*: Significant at the 5% level

**: Significant at the 1% level

***: Significant at the 0.1% level