What happened on November 8, 2016 ?

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"The economy, as an issue, is one of consensus. All voters want a good economy, no voters want a bad economy. No distribution of opinion occurs. Everyone values prosperity. When they see prosperity, they vote for the ruling party, otherwise not."
- Michael Steven Lewis-Beck and Richard Nadeau (2011)

Abstract

Introduction:

Three main questions: We start by analyzing the question from a party-perspective and then move to a specific candidate, in this case being Donald Trump. . . .

The first question of this paper is: - Do county-level economic conditions influence presidential election results in the US? - effect on incumbent vote-share? effect on specific party vote share.
- Did county-level economic conditions play a role in the victory for the Republican party in 2016 elections (i.e. the victory of Donald Trump)?
- Can these economic conditions be found on individual-level survey data for 2016 to substantiate or repudiate the claims made above? *depending on time, we can skip this and put it under further research possibilities at the end*

Outline section-by-section details:

Literature Review:

Economic Voting Theory (Authors, Key Variables, Main Idea):

The effect of economic factors on voteshare of a particular party in democratic countries has been widely accepted by scholars all around the world and makes the basis for economic voting theory. When it comes to the United States, this idea of economic voting has been proven time and again through various types of statistical analysis carried out over the period of multiple election years. Kramer(1971), Fair(1978), Tufte(1978), Rosenstone(1983), Hibbs(1987), Erikson(1989), and Holbrook(1991) all have showed the connection between national macroeconomic conditions and election results in the US (**???**).[1] The macro-economic variables that are widely used to determine election outcomes are economic growth, disposable income, (un)employment, job growth, economic volatility, inflation, etc. (**???**). Even in the area of election forecasting, which deals rather with the future outcome than the past, fundamental statistical model is widely used to determine which party will win the elections. The fundamental model takes a chapter from the economic voting theory in the sense that it uses various political and economic variables to determine the outcome of an election. The economic

[1] Gerald H. Kramer, 'Short-Term Fluctuations in U.S. Voting Behavior', American Political Science Review, 65 (1971), 131-43; Ray Fair, 'The Effect of Economic Events on Votes for President', Review of Economics and Statistics, 60 (1978), 159-72; Edward Tufte, Political Control of the Economy (Princeton, N.J.: Princeton University Press, 1978); Steve J. Rosenstone, Forecasting Presidential Elections (New Haven, Conn.: Yale University Press, 1983); Douglas A. Hibbs, The American Political Economy (Cambridge, Mass.: Harvard University Press, 1987); Robert S. Erikson, 'Economic Conditions and the Presidential Vote', American Political Science Review, 83 (1989), 567-73; Thomas M. Holbrook, 'Presidential Elections in Space and Time', American Journal of Political Science, 35 (1991), 91-109.

variables used in forecasting also differ and include a range of measures such as:"GDP growth (Abramowitz 2004; Campbell 2004b); GNP growth (Lewis-Beck and Tien 2004); perception of personal finances (Holbrook 2004); prospective personal finances (Lockerbie 2004); leading economic indicators (Wlezien and Erikson 2004); income growth (ibid.); job growth (Lewis-Beck and Tien 2004)" (**???**). Moreover, the realm of economic voting has expanded rapidly over the years with new variables, definitions and processes attached to it. While classical economic voting theories have viewed economy as a valence issue, Lewis-Beck and Nadeau (2011) examine positional and patrimonial economic voting (**???**). In their examination, they analyze the different preferences voters have on different economic policy issues and also the economic status of the voters (**???**). Similarly, seeing the rise of globalization all over the world and its impact on the economy, Jensen et. al (2016) claim that trade contains information that growth and employment do not explain and hence include macro-economic indicator such as U.S. trade balance as an explanatory variable for national-level voting (**???**). Some scholars see economic voting along-side other non-economic determinants of election outcome and analyze if the effect of the economy still holds true. In one example, Kayser and Wlezien (2011) claim that in the event of strong partisan effects (i.e. voters are strongly tied to a particular party), the effect of the government's performance (which can be seen as its economic performance) has little effect on vote shares (**???**).

The proponents of economic voting agree and disagree with each other on a few aspects. Some of the main questions that still float around in the area of voting behavior were clearly laid out by Abrams back in 1980 in what he called the main research questions of 'political business cycle'; and he outlined the following three questions as the ones that needed clarification:

> (1) to determine which politicians, if any, are held responsible by the electorate for changes in general economic conditions; (2) to identify which general economic conditions influence the electorate's voting; and (3) to establish the time period that the electorate uses to assess economic policies. (Abrams, 1980) (p. 1)

Over the years many political scientists have agreed to the idea of analyzing the economic vote through the perspective of an incumbent. The main idea behind economic voting is that voters assess the performance of the incumbent party or candidate and use their vote as a means to determine either to reelect them or to choose the opposition candidate or party. Key's (1970) retrospective model uses bounded rationality theory to claim that voters use their vote as either a reward or a punishment depending on how the incumbent government performed (**???**). One key question that arises here is: which time period do voters have in mind when they decide to reward or punish the incumbent. The answer to this question depends on several factors: theory, availability of data, actual economic performance vs perception of the economy, and media's effect, to name a few. Ebeid and Rodden (2006) claim that relevant academic literature operationalize real per capita income (RPCI) as a one-year growth rate, and unemployment as an absolute level or first difference when constructing economic voting models (**???**). What this means is that voters compare the economic condition of the election year to that of the previous year. Eisenberg and Ketcham (2004) carry out a scientific examination of each of the four years in a presidential term against vote share and conclude that the most recent year explains a vast majority of the impact of economic performance (**???**). A lot of this also depends on the availability of the data. While more recent academic papers have been able to utilize the plethora of data available via various government and private agencies to carry out in-depth analyses, past papers lack such privelege. *This is evident in the fact that XXXX in year XXXX uses the absolute unemployment level while YYYY in year YYYY uses something else, to do the exact same type of analysis.* Another factor that is worth noting is that due to the growing influence of partisan media on voters, there is a possibility that voters may not even base their preference based on actual economic performance but rather on their perception or forced perception of the economy. _ cite something from the article about fox news effect_.Both the candidates and the media put strong emphasis campaigns, advertisements, conventions, debates, controversies, all with the hope of generating a late swing in their favor. This suggests that the absolute or relative, or actual or perceived, economic effects can shape a voter's behavior much nearer to the election date. However, this is a debated topic because Gelman and King (1993) claim that voters cast their votes based on their "enlightened preference." (**???**) They assert that voters do have incomplete information and that their knowledge does get expanded over time through different campaign events leading up to the election day, however, throughout this period they inform themselves with the true values of the fundamental variables and their appropriate weights (**???**). While analyzing whether people vote correctly, Lau and Redlawsk place "correct" voting as a middle ground between individual choice and social choice and therefore define it as the individual choice made under conditions of full information (**???**). They also conclude, through their analysis of US presidential elections, that most of time citizens do vote correctly. Combining Gelman's analysis with Lau and Redlawsk's gives a premise for this paper to analyze the US Presidential elections through the angle of economic voting.

Economic voting theory also brings forward the question of whether voters reward/punish incumbent parties or incumbent candidates. Tufts's (1978) "election-as-a-referendum-on-the-government" idea and Norpoth's (2010) "cost of ruling" idea showcase that incumbency is seen with skeptic lenses and an unavoidable time-induced bias. *cite Tuft here, although this is taken from Lewis-beck2005* (**???**). However, they don't explain whether the effects fall on the shoulders of an incumbent party or an incumbent candidate. While most studies place candidates and parties under the same umbrella, Eisenberg and Ketcham separate the two entities and claim that voters do not hold incumbent candidates "additionally"" accountable although they hold incumbent parties responsible (**???**). This seems contrary to the idea that economic voting is more significant for incumbent candidates than for incumbent parties with new candidates *cite Nadeau and Lewis-Beck 2001 from Eisenberg2004*. The question that arises next is if voters "always" assign their economic vote for or against the incumbent or they do so based on a specific party, regardless of the incumbency. This happens under issue-priority theory, where voters relate certain economic policies with certain parties and vote for the party that is concerned with solving that issue even if the country is not performing so well under that party in that particular issue (**???**). *give example* In this paper, we will follow Kim's theory in analyzing if voters in the Unites States take certain economic indicators into account when voting for the Republican party. We, will nevertheless, keep incumbency as a dummy control variable to check if it affects the way voters vote for the specific party. Since, the purpose of the paper is to see from the perspective of not just a voter but a Republican voter, this route makes more sense for the analysis.

Macro-level analysis vs Regional Analysis (States and Counties):

Study of voting behavior at national level has been the main course of analysis for political scientists for decades now. Through surveys such as the American National Election Survey (ANES), a lot of voting behavior studies have been translated into individual level. However, a barely chartered territory is the subnational analysis at county-level. O'Laughlin et al. (1994) and Owens and Wade (1988) provide some evidence of sub-national level economic voting scenario in Germany and the United Kingdom, while in terms of the United States Archer and Taylor (1981) has sought to shed some light on the role of sectionalism in American politics (**???**). Abrams (1980) presents the rationality behind the idea of testing whether state-level economic conditions are used by voters to assess presidential policies and if they influence electoral outcomes at the national level (Abrams, 1980). He validates the disaggregation hypothesis - which suggests the disaggregation of the economic-conditions variables - and claims that state-level economic conditions impact voting outcomes (Abrams, 1980). Abrams and Butkiewicz provide further evidence through a separate study of the 1992 U.S. Presidential election underlying the significance of state-level economic conditions in the defeat of George W. Bush (**???**). While these studies do not make any claims on the county-level, they do provide the basis to further disaggregate the economic-conditions variable at a more lower geographical level and study the resulting impacts. Following up Abrams work, Blackley and Shepard's study of the 1992 U.S. Presidential election provides evidence that local economic conditions have significant effects on presidential voting and therefore are consistent with both the self-interest and local altruism hypothesis (**???**). Moreover, what is considered as the self-interest of an individual can often encompass the welfare of others (**???**). Besides, it is safe to assume that such self-interest is stronger at a smaller geographical concentration than at a national-level where connection between individuals is more complex and less tangible.

Sartorius (2015) claims that the large number of observations available from more than 3000 counties of the United States and their unique economic and electoral characteristics make for an intriguing analysis of voting behavior at a sub-national level (**???**). In addition to this, Kim et al. (2003) further argue on behalf of county-level analysis by saying,

> not only is the problem of ecological fallacy much less severe with county-level than state-level

> data, but from a practical standpoint, the county may be the smallest spatial unit of analysis for testing the partisanship thesis that requires the availability of macroeconomic variables such as unemployment rate (**???**) pg.744.

The electoral college phenomenon that exists in the United States and the effects of gerrymandering in allowing various counties to exert a bigger weight on the outcome of the Presidential election also suggest that studying elections from county-level perspective can shed light on many questions that have been answered unsatisfactorily in the past. Kim et al. go a step further in their analysis of the effect of spatial patterns in American politics by suggesting that increasing concentrations of geographical support for the parties will mean more ideological polarization and more demographic distinction between them (**???**). Their analysis seems nothing less than prophetic in the aftermath of the 2016 Presidential election that saw an extremely polarized and divided America fall into to the spatial crevaces of electoral college system. Jensen et al. (2016) also use U.S. county-level measures of economic indicator such as employment in order to assess the effect of trade on presidential voting (**???**). The study by Wright (2012) uses county-level employment data to claim that Democratic vote share at gubernatorial and presidential elections is directly proportional to unemployment rate regardless of the incumbency (**???**). All these studies provide a perfect premise for this paper as it aims to understand the effects of the economy at a regional level over the years and more specifically in the recent election of 2016. The paper follows the framework by Eisenberg and Ketcham (2004) who claim to present "the first county-level analysis of economic voting in presidential elections (**???**)." This type of county-level analysis becomes even more relevant in analyzing the recent elections, most importantly the one in 2016, since the changing demographics and economics of many counties of the United States have more than often been credited by scholars, and news media for the way presidential elections have shaped.

Individual-level analysis (Survey Questions, variables used in the past):

do later only when we are sure we will deal with ANES data

Background:

US Election Peculiarities:

electoral college swing states term limits media debates difficult to incorporate all of them, but in this paper, we will take on a few of them such as swing and non-swing states and other demographic variables that we will discuss later. After looking at the ANES survey data we can decide which of the other peculiarities we can incorporate into our model, for now no need to worry about it, since the main focus is on economic voting and hence economic variables.

Methodology:

Describe what key processes will be used. *see below fo key processes*

Model Specification

Hypothesis

Regression Equation

Data sources and cleaning:

The data necessary to carry out the quantitative analysis in this paper were obtained from multiple sources and cleaned and merged together using open source software R studio. The election data consisting of the republican vote-share in the presidential election between 1992 and 2016 came from Dave Leip's Atlas of U.S. Presidential Elections and was obtained from a third party, i.e. Çilek Agaci's github repository (Source: https://github.com/cilekagaci/us-presidential-county-1960-2016). The repository data was matched and confirmed with Dave Leip's data, which is often used by researchers in academia to carry out election related analysis. The data on unemployment from 1992 to 2015 was obtained from the Bureau of Labor Statistics (BLS). The data on other economic variables such as Per Capita Income, Per Capita Current Transfer, and Adjustment in Residence, and the population of each county from 1992 to 2015 were called from the Bureau of Economic Affairs (BEA) API directly into R studio. Data used to construct the incumbency dummy was created manually based on common knowledge and merged into the final dataframe. Similarly, data used to construct the swing state dummy was based on *show based on what* and merged into the final dataframe. Data used to create the urban/rural dummy was obtained from the United States Census Bureau (2010 Census, Summary File 1, Table P2). Demographic data on educational attainment and proportion of population based on race from 1992 to 2015 were obtained from *mention from.* All the dataframes were then merged together. Due to inconsistent nomenclature of counties and county-equivalents and incomplete observations over various data sources, all the counties of Alaska and Puerto Rico were removed from the final dataset. Due to inconsistency in the nomenclature and grouping of various counties in Virginia, they were also removed from the final dataframe. For the first part of the paper, the final panel dataframe consisted of *number* number of counties over a period of 6 election years from 1992 to 2012 with election, economic, demographic, and dummy variables for those years. For the second part of the paper, the final cross-sectional dataframe consisted of *number* of counties with election data from 2012 and 2016 and economic and demographic data from 2015.

Dependent Variable:

vote.percent:
Total presidential vote share of the Republican Party in a county in a given election year is the dependent variable used in the first part of the paper. Different scholars have used different versions of this variable in their analysis. Some scholars use the voteshare of the incumbent party while others use the voteshare of the Republican or a Democratic party. In the case of this paper, the main question circles around republican party and Donald Trump and hence the inclusion of republican voteshare seems logical. Eisenberg and Ketcham (2004), for example, use the Democratic party's two-party voteshare. In this paper, we use a overall voteshare and not the two-party voteshare *justify why* or just find a way to do *two party vote share.*

vote.diff:
In the second part of the paper, however, I use the difference in voteshare of the Republican party in 2012 and 2016 Presidential election in a county as the dependent variable.

Independent Variable:

-Education (replace this with the data from census API) -Demographic Data from Census (male, female, ethnicity, religion, education) -Unemployment -Per capita income -Employment in industry -Current Transfer Receipts -Adjustment for Residence -Dummy for incumbent party -Rural or urban county

Key Processes:

-Descriptive summary, inferential statistics(using OLS, fixed effects, etc.) -Discussion of Different Biases and ways to resolve them -Robustness Discussion

Analysis:

First Question:

Second Question:

Third Question:

Conclusion:

Appendix:

(Test results of all the tests, graphs, tables, plots, etc. that don't go in the main body of the paper.)

The voteshare of an incumbent presidential candidate in a state is regressed against the general economic conditions of the state, which can be measured by the change in a state's unemployment rate and the percentage changes in real per capita personal income (Abrams, 1980). Previous vote share for the incumbent party is also introduced as an independent variable (Abrams, 1980). He claims that voters hold presidents accountable for changes in state-level economic conditions therefore cutting certain programs in strongly dominated states and moving them to closely contested states may improve the chances of reelection for the incumbent (Abrams, 1980). He also claims that abolishing the electoral college and permitting popular votes to determine presidential outcomes can outweigh the efforts of such state-level redistributive policy (Abrams, 1980). The fact that Donald Trump's victory was highly dependent on the electoral college, since he lost the popular vote by almost XXXXXXXXX votes, and driven by a few contested states in the Rust Belt, show with even more significance the effect of regional economic conditions on vote share. *can this model be applied at a county level, since it is simply a smaller geographical setting and more representative since it is closer to the individual level a dummy for Southern States was taken* (Abrams, 1980).

Curry (**???**) suggests that a lagged dependent variable would not be appropriate in this case since the relationship between the economy and the vote for president is not theorized as dynamic. He writes, "the data points are four years apart so it is unlikely that the performance of the economy at time t would be strong enough to significantly influence the vote for president four years in the future at time t + 1 or eight years in the future at time t + 2" (**???**).

In economic voting, incumbents are given utmost importance because people often relate economic performance with the incumbent party or candidate. Hence, if the economy is doing well, it helps the incumbent party or candidate and if it is doing bad it hurts them. *it would be interesting to see how people assign blame for their economic conditions on the President even if their regional governor or majority representation in the house may be from the non-incumbent's party.* Moreover, Curry (**???**) writes that economic influence on the vote for president has been continuous and is not necessarily dependent on federal government control over the economy.

Three main inferences made by Bartels(Bartels, 2005) are: - The white working class has not abandoned the Democratic Party. - The white working class has not become more conservative. - Working class moral values do not trump economics.

Bartels (Bartels, 2005) uses family income levels to categorize voters in terms of their economic status. He places families with incomes in the bottom third of the income distribution under "low income" or "working class" thus differentiating them from the middle and upper class families. *how do we operationalize this is terms of county-level economic data.*

Bartels (Bartels, 2005) illustrates the Democratic share of the two-party presidential vote among white voters in the bottom third of the income distribution and in the top third of the income distribution. He attributes the loss of support from white voters to Democratic candidates to the middle and upper income groups, while claiming that support for Democratic candidates has increased among low-income white voters. *see what happens when we see the actual county-level economic data on family income alongside Democratic or Republican voteshare see what happens when we see the actual county-level economic data on family income, in areas with majority whites vs majority non-white, and see what happens see what happens when we see the actual county-level economic data on family income, in areas with majority whites, in rural vs urban counties, and see what happens*

While survey data is useful in forecasting, the actual data we use can give a better picture of voter behavior since it captures the reality of after the election has taken place. However, based on the actual data, we are not able to measure party identification, since there is no way to know the individual preferences of voters. Nevertheless, based on how the result in a certain county turned out, we can get an idea about the actual preference of the majority of voters of that county.

Bartels (Bartels, 2005) argues that "Democratic identification declined by 18% among low-income whites (from 22% in 1952 to 4% in 2004) and by 29% among high-income whites (from 11% to ???18%)." But he mentions that "However, it seems odd to attribute the Democrats' problems to the white working class when the corresponding decline among more affluent whites is so much larger."

Although one individual has one vote, the value of that vote may be different. *can we see if the 18 percent decline among low-income whites (and seeing where they are concentrated) has more impact on the electoral outcome than the 29 percent decline among high-income whites who may be concentrated in bigger cities and urban areas and democratic states.*

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