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# A nation divided? Regional and economic effects on evaluations of the government

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BOSTON UNIVERSITY  
GRADUATE SCHOOL OF ARTS AND SCIENCES

Thesis

**A NATION DIVIDED?  
REGIONAL AND ECONOMIC EFFECTS ON EVALUATIONS OF THE  
GOVERNMENT**

by

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B.A., Boston University, 2017

Submitted in partial fulfillment of the  
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Approved by

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*“What’s next?”- Aaron Sorkin, The West Wing*

## **DEDICATION**

I would like to dedicate this work to my grandmother, the Honorable Elaine Jackson Stack, who has made my education possible. Her work ethic, intellect, thoughtfulness, kindness- and, most of all, her incredible life- are inspiring. I love you, Gram!

## **ACKNOWLEDGMENTS**

I would like to thank Dino Christenson for his indispensable help and support, and continuing to advise me despite becoming a new father a week before this was submitted.

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I would also like to thank my parents, Claudia and Frank, my siblings, Nicolette, Andrew, and Juliana, and my boyfriend Maxwell for everything they do. Without their love and support I would probably still get this degree, but I certainly would not have enjoyed it as much. I must thank my friends here at BU for putting up with me through election years, stats classes, and game theory. I would also like to thank my dogs Troy and Aggie for keeping me company throughout this writing process.

**A NATION DIVIDED?  
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**ABSTRACT**

This paper aims to explore the role of region in economy-based assessments of the government. Both economic perception and outlook have strong effects on evaluations of the federal government, the President, and Congress. Furthermore, economic concerns are different across regions, and vary over time. Prospective evaluations of the economy differ based on region, more than retrospective evaluations of the economy. These findings suggest that people across the country react differently to the state of the national economy, and that region is an important aspect of government approval. Though more research will be necessary to explain why regional variation across economic evaluations of the government exist, this paper highlights the importance of region within government evaluations and suggests some implications of it.



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## INTRODUCTION

The economy intersects political life in a number of ways. Economies and governments have a recursive relationship: economic systems are dictated to some extent by the government, while the government exists within the context of the economy. In the United States, a great deal of emphasis is put on the state of the economy and the ability of the government to ensure that it is prosperous. My motivation for this paper is to examine more closely the relationship between evaluations of the national economy and evaluations of the government, and to explore the role that region might play in this relationship. By studying the interaction between the economy and region, I hope to find new explanations for the role that the economy plays in political life. I also hope to highlight the importance of region within the field of American politics. Finally, I hope to shed some light on the 2016 presidential election, in which the roles of the economy and region were undeniably important. By gaining a better understanding of regional differences, the ways that people think about the economy, and the impact that each of these questions has on evaluations of the government, we can answer bigger questions about the effectiveness of government democracy, make predictions about the future political climate, and make sense of turbulent political times.

### *Economic Voting and its Limitations*

Political behaviorists have often considered the state of the economy within the context of vote choice. The concept that people assess the government based off of economic concerns is, as the authors of *The American Voter Revisited* put it, “well

worn.”<sup>1</sup> Since the 1950s and the beginning of mass survey data,<sup>2</sup> academics have attempted to answer the question of “economic voting” in countless ways. At a basic level, class and economics do play a role in voting. Both evaluations and projections about the state of the economy predict vote choice.<sup>3</sup> Voters tend to think more about the national economy when evaluating the government than their own personal economic situations, but not always.<sup>4</sup> Education, occupation, party identification, and ideology all play a role in economic voting as well.<sup>5</sup> <sup>6</sup> The field of economic voting is vast and valuable. At times, however, it is also inconsistent.

Economic voting is a compelling but contested area of study within political science. The idea that Americans vote to a high extent based off of the economic status or progress of the country is certainly valid, but the actual study of economic voting can be difficult. Anderson (2007) highlights the uncertainty around the idea of economic voting, describing the lack of consensus within the literature as “contingency dilemmas.” If hypotheses about economic voting are constantly challenged and overturned, then it is possible that researchers are approaching the issue the wrong way.<sup>7</sup> Lewis-Beck (1985) studied whether the pocketbook model of economic voting was simply an “artifact produced by the proximity of the economic and political items in the survey

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<sup>1</sup> Michael Lewis-Beck, Helmut Norpoth, and William G. Jacoby, *The American Voter Revisited* (Michigan:

<sup>2</sup> C. J. Anderson, “The End of Economic Voting? Contingency Dilemmas and the Limits of Democratic Accountability” *Annual Review of Political Science* 10 (2007), 271- 296.

<sup>3</sup> Lewis-Beck et al

<sup>4</sup> Brad T. Gomez and J. Matthew Wilson, “Political Sophistication and Economic Voting in the American Electorate: A Theory of Heterogeneous Attribution.” *American Journal of Political Science* 45, no. 4 (2001) 899-914.

<sup>5</sup> Lewis-Beck et al

<sup>6</sup> Brad Lockerbie, *Who Votes For the Future?* (Ithaca: SUNY Press, 2008).

<sup>7</sup> Anderson

questionnaire.”<sup>8</sup> Erikson (2004) further argues that economic responses in surveys have an “endogenously induced partisan bias” and therefore should be studied at more of a “macro-level.”<sup>9</sup>

Despite criticism, I still believe that the way in which a person perceives the economy is one of the most important factors in political life. The media highlights the economy as an important aspect of American life; people spend much of their life in some sort of work; personal finances are a source of stress. Though the relationship between the economy and vote choice is well researched, and for good reason, I wish to broaden the conversation and shift to a discussion of evaluations, not just votes. The way people feel about the government can say much more about the current political climate than vote choice. Vote choice is restricted to actual voters, or at least to survey respondents who claim to have voted. Any citizen, however, can have a valid opinion on the government. More importantly, votes are not the only measure of a government’s success. Legitimacy matters within democracy, and just because a government has been elected does not necessarily mean it is legitimate. In order for a democracy to truly represent its citizens, the citizens must approve of their democracy. The focus on voting has diminished the importance of approval and evaluations, which are necessary aspects of a successful democracy.

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<sup>8</sup> Michael Lewis-Beck, “Pocketbook Voting in U.S. National Election Studies: Fact or Artifact?” *American Journal of Political Science* 29 no. 2 (1985) 348-356.

<sup>9</sup>R. S. Erikson, “Macro vs. Micro-level Perspectives on Economic Voting: Is the Micro-level Evidence Endogenously Induced?” Annual Meeting of the Society for Political Methodology, Stanford University, (2004).

*Affect, Feeling Thermometers, and Government Evaluations*

The study of affect and emotion is a growing subfield within political science. Often, researchers use discrete, fairly static measures of political behavior- such as party identification, family tradition, and level of education. The American Voter (and The American Voter Revisited) are masterful examples of work done with these types of variables.<sup>10</sup> However, some have argued that the use of emotion and affect- how people “feel” about groups and individuals- matter just as much in the study of political behavior. Emotion and affect are both sources of political action and opinion (see Kim 2014, Greene 1999 & 2004, Lauderdale 2010, Marcus 1988, Swim and Miller 1999, Sniderman et al 1991). Researchers have shown that within the study of a number of issues, how respondents *feel* about an issue or group can predict further political action, including vote choice. Kim (2014) found that affect played a significant role in accounting for public support of sending troops into foreign conflicts.<sup>11</sup> Norton and Herek (2013) found useful correlations between feelings towards transgender people and different demographic groups.<sup>12</sup> Lauderdale (2010) cited the importance of reputation in legislative voting, finding that “maverick” politicians were difficult to place on a spatial voting model.<sup>13</sup> Swim and Miller (1999) examined how “white guilt” affected opinions

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<sup>10</sup> Lewis-Beck et al

<sup>11</sup> Kim, Dukhong, “Affect and Public Support for Military Action.” *SAGE Open* 4:4 (2014).

<sup>12</sup> Aaron T. Norton and Gregory M. Herek “Heterosexuals’ Attitudes Toward Transgender People: Findings from a National Probability Sample of U.S. Adults.” *Sex Roles* 68 (2013) 738-53.

<sup>13</sup> B. E. Lauderdale, “Unpredictable voters in ideal point estimation.” *Political Analysis* 18 no. 2 (2010), 151-171.

on affirmative action.<sup>14</sup> Greene (1999, 2004) found that social identification with a party led to increased the amount of partisan political behavior, even when controlling for interest and strength of partisanship. It also significantly increased the likelihood that an individual would turn out to vote.<sup>15</sup> Clearly, emotion can be an important predictor of political action.<sup>16</sup>

Feeling thermometers are useful measures of affect and emotion. They are not perfect measures, and are vulnerable to the same measurement issues found with any survey research. For example, Liu and Wang found that face-to-face respondents tended to provide systematically higher ratings than other methods of response.<sup>17</sup> Wilcox, Sigelman, and Cook (1989) found that some respondents systematically rate groups higher than others.<sup>18</sup> Still, they are used widely in studies of political behavior due to their ability to compare respondent attitudes using a single metric, and to measure levels of support, ambivalence, and opposition (Norton 2013, Buell and Sigelman 1985). Feeling thermometers allow researchers to get a comparable, stable measure of attitude, avoiding questions of support that could be misleading.<sup>19</sup> They are also useful in comparing support across groups due to their simplicity and replicability. Feeling

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<sup>14</sup> Janet K. Swim and Deborah L. Miller, "White Guilt: Its Antecedents and Consequences for Attitudes Toward Affirmative Action." *Personality and Social Psychology Bulletin* 25 no. 4 (1999), 500 - 514.

<sup>15</sup> Steven Greene, "Understanding Party Identification: A Social Identity Approach." *Political Psychology* 20 no. 2 (1999) 393- 403.

<sup>16</sup> George E. Marcus, "The Structure of Emotional Response: 1984 Presidential Candidates." *The American Political Science Review* 82 no. 3 (1988) 737-761.

<sup>17</sup> Mingnan Liu and Wang, Yichen "Data collection mode effect on feeling thermometer questions: A comparison of face-to-face and Web surveys." *Computers in Human Behavior* 48 (2015) 212-218.

<sup>18</sup> Clyde Wilcox, Lee Sigelman, and Elizabeth Cook "Some Like it Hot: Individual Differences in Responses to Group Feeling Thermometers." *The Public Opinion Quarterly*, 53 no. 2 (1989) 246-25

<sup>19</sup> E. Buell and Lee Sigelman "An Army That Meets Every Sunday? Popular Support for the Moral Majority in 1980." *Social Science Quarterly*, 66 no. 2 (1985) 426- 434.



thermometers provide valuable insight into political behavior, and allow for a systematic study of affect and emotion.

Studies in economic voting obviously use vote choice as the dependent variable. This paper, despite covering similar topics, does not focus on economic voting. At this point in time, the Congress and President that have been elected are unprecedentedly unpopular. Examining why a set of officials was elected during a certain election is valuable, but does not tell the full story. There are countless reasons for electing a candidate- on a macro level, the state of the economy, the proportion of partisans voting, or fundraising might be quite useful. On a micro level, however, there are infinitely more variables that could explain electoral outcomes. Maybe a representative has close familial ties to a small constituency. Maybe everyone happened to hate one candidate less than another. Maybe an unpredicted scandal was uncovered the day before election day, swinging the outcome in an unexpected direction. Just because the members of Congress and the Executive Branch at a given point in time were elected does not mean they were elected enthusiastically, or that the country really believes in them. Through the lens of federal government evaluations, more can be uncovered about the relationship between the populace and the government that represents them.

#### *Retrospective versus Prospective Economic Evaluations*

People assess the economy in a number of ways. Whether voters vote based on policy positions or policy outcomes, or whether respondents evaluate past economic conditions or make guesses about the future, is unclear. Theoretically, both prospective

and retrospective evaluations of the economy and of the government make sense. If a voter thinks back- that is, *retrospectively*- to the performance of a candidate or party- policy initiatives that affected her positively, an increase in jobs in her neighborhood, or simply overall improvements in her political life- she should vote for that party or evaluate it favorably. Elections, in the retrospective voting model, are an evaluation of how a candidate or party has done. A feeling thermometer is a sort of report card. Jones (2015) studied the messages used by campaigns and found that “discussions of economics tend to focus on policy positions rather than policy outcomes” that followed a retrospective time horizon. Interestingly, he also found differences between candidates of different parties; for example, Republicans focus even more often on the past than Democrats.<sup>20</sup> Lewis-Beck et. al. (2009) found that present perception of the economy and evaluations of how the government was handling the economy were significant indicators of vote choice, but relied heavily on party identification.<sup>21</sup> Though retrospective economic voting is theoretically sound, it has not been consistently supported by data.

In a prospective model, voters consider how a candidate or party will do if elected and evaluate or vote for them accordingly. Based on current knowledge about their positions, voters think forward to how they will benefit from either candidate or party in question. However, voters still use information gained retrospectively and through current events. Prospective voting is a continuation of the retrospective model. Lockerbie (2008) states "the past, while not wholly determining one's expectations, may well

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<sup>20</sup> Philip Edward Jones, “Economic Voting Appeals in Congressional Campaigns.” *Political Communication* 32 no. 2 (2015) 206-228.

<sup>21</sup> Lewis-Beck et al

influence one's forecasts. Ignoring that connection would lead us to understate the power and influence of retrospective evaluations on voting behavior."<sup>22</sup> Still, using intensive statistical modeling, prospective models are much better at predicting voting behavior than retrospective models.

Still, there are notable variations still within the prospective model- political sophistication is one factor often tested. Lacy and Christenson (2016) found that “variation among voters due to information or sophistication occurs primarily between prospective and retrospective evaluations,” with more informed voters voting prospectively more often than uninformed voters.<sup>23</sup> Alt, Lassen, and Marshall (2015), using a Danish experiment, found that sophisticated voters were more likely to correctly assess information about economic conditions as credible or not, while unsophisticated voters were still likely to consider information and update their beliefs.<sup>24</sup> The prospective model has more power to help researchers understand voting behavior, especially within the field of economic voting.

Though prospective voting has statistical significance on its side, both theories are important. When attempting to explain how people feel about the government, current opinions and projections both matter. A current opinion is fairly useless if it can be changed immediately. A retrospective evaluation of the government would be useful in explaining past events, but does little to predict future behavior. A prospective

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<sup>22</sup> Lockerbie

<sup>23</sup> Dean Lacy and Dino P. Christenson, “Who Votes for the Future? Information, Expectations, and Endogeneity in Economic Voting.” *Political Behavior* 10 (2016).

<sup>24</sup> James E. Alt, David D. Lassen, and John Marshall, “Credible Sources and Sophisticated Voters: When Does New Information Induce Economic Voting?” *The Journal of Politics* 78 no. 2 (2015) 327-342.

evaluation, however, takes into account knowledge of a current situation as well as optimism or pessimism about the future. Therefore, it has much more power in predicting behavior and outcomes. In this paper, the variable referring to a retrospective evaluation is “economic perception.” The variable referring to a prospective evaluation is “economic outlook.”

### *Why Region?*

Whether economic voting is affected in any way by region is largely unexamined. At a societal level, differences between regions in the United States exist. Therefore, it may be interesting to see if these deep-rooted differences between regions also translate into differences in economic evaluations and outlook. The history of the country and current political climate display a tendency to divide the country politically based on region. Lieske (1993) explains that early settlers to the United States had distinctive ethoreligious and cultural traits that later translated into political cultures. Additionally, the focus on local self-government contributed to lasting “social and political expression to their [the colonists] cultural preferences within geographically defined political jurisdictions, namely towns, townships, cities, and counties.”<sup>25</sup> Cox (2016) explains that the decentralized nature of American regional development is distinct and significant. He argues that early economic development was the source of such localized politics. Even centralized, federal programs such as “opening up the West and so securing cheaper food for the cities of the East, if at the cost of agriculture in New England and the mid-Atlantic

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<sup>25</sup> Joel Lieske, “Regional Subcultures of the United States.” *Journal of Politics* 55 (1993) 888-913.

states: the land grants to railways, the land grant universities, the Homestead Act,” contributed to local and regional development of politics.<sup>26</sup> Regional politics has been an essential aspect of American politics since the beginning of America itself.

This historical and economic divergence by region has indeed established itself within the collective public mind. In a large-scale psychological study, Rentfrow, Gosling and Potter (2008) found “clear patterns of regional variation across the U.S. and strong relationships between state-level personality and geographic indicators of crime, social capital, religiosity, political values, employment, and health.”<sup>27</sup> Rogers and Woods (2010) further studied stereotypes across regions of the country and found them to be surprisingly accurate. These findings suggest that there is a relationship between region and psychology.<sup>28</sup> An increased understanding of the interaction between region and the economy, and their impact on how Americans view their government, can explain much about American political life.

## **MODELING ECONOMIC EVALUATIONS OF THE GOVERNMENT**

### *Hypotheses*

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<sup>26</sup>Kevin R. Cox, *The Politics of Urban and Regional Development and the American Exception*. (Syracuse: Syracuse University Press, 2016).

<sup>27</sup> Peter J. Rentfrow, Samuel D. Gosling, and Jeff Potter, “A Theory of the Emergence, Persistence, and Expression of Geographic Variation in Psychological Characteristics.” *Perspectives on Psychological Science* 3 no. 5 (2008) 339-369.

<sup>28</sup> Katherine H. Rogers and Dustin Wood, “Accuracy of United States regional personality stereotypes.” *Journal of Research in Personality* 44 no. 6 (2010) 704-713.

*Hypothesis 1A: The prospective model will be more powerful than the retrospective model.*

*Hypothesis 1B: Regional interaction with economic concerns will be stronger in the prospective model than in the retrospective model.*

Evaluations of the economy necessarily depend on a number of factors. A respondent's background will both shape their current opinions of and inform their projections about policies. The economy and politics are so closely weaved that economic concerns should have an effect on political opinions regardless of a timeframe. In order to get a full understanding of the interaction between region and the economy and its effect on government evaluations, I use both models. However, because the prospective model encompasses the retrospective model by definition, I predict more robust results from the prospective model.

*Hypothesis 2A: Economic concerns differ between regions.*

*Hypothesis 2B: The extent to which economic concerns affect evaluations of the government is different depending on region.*

It is evident that regional differences do exist within the United States. During election years, pundits do extensive electoral math in which they consider how each candidate might perform in different parts of the country. If regional differences did not exist, such considerations would not be necessary. The history of the United States has allowed different cultures and customs to flourish throughout different regions of the country. The East Coast, for example, was colonized by the British, while some Western

states did not become a part of the U.S. until nearly a century after the revolution. The Civil War quite literally divided the Southern Confederacy from the rest of the country. Different industries flourished in different regions; different ethnic groups immigrated to different areas; different political parties dominated different states. Though the effects of globalization and technology have brought more homogeneity to the country- as cultures and customs begin to merge- variations exist between regions of the country, and this variation translates into political differences. This explains the ability of Americans to correctly stereotype other Americans based off of region, and even distinguish similar states.<sup>29</sup>

If differences in culture and politics exist between regions of the country, then differences in political issues should also exist. I predict that the way in which people view the economy, and the way that they judge the government based on their opinions of the economy, will be influenced by the region in which they reside.

*Hypothesis 3: Despite regional differences, trends will be similar over time.*

While I predict that region plays an important role in predicting the effect of economic perception and outlook, I also predict that all regions will follow similar trends. Though the country has important regional differences, none are so drastic that there might be divergent trends across region. The national economy affects all regions- that is, national economic concerns are by definition not limited to certain regions. Though I

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<sup>29</sup> Rogers and Wood

predict variation across trends, regional politics are not so divergent that I expect drastically different results over time.

### *Data and Research Design*

For this study I used the National Election Studies Cumulative Dataset. The National Election survey is useful in that it has accumulated data that is reliable and comparable over many elections. The survey questions that I use have been asked since 1980, giving me a sizable and relevant dataset. The model uses an ordinary least squares regression, which is possible due to the large range of possible values on the dependent variable.

### *Feeling Thermometers*

Feeling thermometers are a viable measure of public opinion on groups and individuals.<sup>30 31 32</sup> Not only are they reliable and comparable across groups, they are important indicators of political opinions and beliefs. How people feel about their government is an important aspect of democracy. Feeling thermometers give a broad view of support and opposition to groups.<sup>33</sup> Because I am examining individual-level, sociotropic evaluations of the economy, it is also important that I use an individual-level evaluation variable. Though the main focus of this paper is on the broadest evaluation of

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<sup>30</sup> Marcus

<sup>31</sup> P. Sniderman, T. Piazza, P. Tetlock, & A. Kendrick, "The New Racism." *American Journal of Political Science* 35 no. 2 (1991) 423-447.

<sup>32</sup> Greene, 1999

<sup>33</sup> Buell and Sigelman



the government- the federal Government feeling thermometer- I also run tests for the President and Congress feeling thermometers. They are coded from 1 to 100. The NES groups 97 through 100 as one group.

### Economic Perception and Outlook

Because I am studying both retrospective and prospective voting, I used two economic perception survey questions. To focus on the retrospective paradigm, I used the following question:

*How about (1996-LATER: Now thinking about) the economy (1990,1994- later: in the country as a whole)? Would you say that over the past year the nation's economy has gotten better, stayed (all yrs. exc 1984: about) the same or gotten worse?*

It is coded from 1 to 3, with 1 representing "worse" and 3 "better."

*For prospective voters, I used the next survey question:*

*What about the next 12 months (1980,1982: or ALL YEARS EXC. 2000: Do you expect the (1986,1988,1992: national) worse, or stay about the same? 2000 VERSION 1: Do you expect the economy, in the country as stay about the same, or get worse? 2000 VERSION 2: Do you expect the economy, in the country as about the same, or get better?*

It is coded from 1 to 3, with 1 representing "worse" and 3 "better."

### Interaction Terms

In order to test whether the effect of the economy on federal government feeling thermometers is different depending on region, I created interaction terms by multiplying each region by the economic perception and outlook variable. I use the northeast as the baseline dummy.

#### Fixed Effects

In order to control for variation in responses across years, I dummied out each election year from 1980 through 2012 except for 1984, when the feeling thermometers were not used. Within my models, I used the 2012 dummy as a baseline.

#### Controls

I use race, gender, and party identification as controls. Much behavioral work controls for these variables because certain demographic groups tend to feel similarly about the government and public policies, potentially causing collinearity or spuriousness. Lacy and Christenson (2016) justify controls for gender and race due to the possibility that information and tendencies to vote for one party may covary with voter characteristics.<sup>34</sup> Gender is coded 1 for males and 2 for females. Race has 7 categories and is coded as follows: White, Non-Hispanic is coded as 1, Black, Non-Hispanic is coded as 2, Asian or Pacific Islander is coded as 3, American Indian or Alaska Native is coded as 4, Hispanic is coded as 5, other or multiple races is coded as 6, and non-white and non black is coded as 7. Party identification may also contribute to partisan bias. For

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<sup>34</sup> Lacy and Christenson

example, Greene (1999) found that identification with a party increased partisan behavior.<sup>35</sup> Kramer (1983) notes that vote preference may influence economic perception.<sup>36</sup> To avoid bias, controlling for party is essential. In my model, Democrats are coded as 1, independents including leaners are coded as 2, and Republicans are coded as 3.

### *Defining Regions*

Though most Americans could recognize that different regions of the country exist- and, as psychologists have explained, even identify stereotypes about different regions,<sup>37</sup> actually defining regions of the United States is difficult. The ANES uses four classifications- Northeast, North Central, South, and West. The Census uses nine classifications: New England, Middle Atlantic, East North Central, West North Central, South Atlantic, East South Central, West South Central, Mountain, and Pacific. If the ANES classification is too broad, the census classification may be overly selective. Lieske (1993), using factors including religion, ethnicity, and social structure and behavior, attempts to define and map regional subcultures. Though his results are helpful in seeing the rich diversity of the United States, they do not give a macro-level distinction of region.<sup>38</sup> Morgan and England (1987) use a number of measures to place states into

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<sup>35</sup> Green, 1999

<sup>36</sup> Gerald Kramer, "The Ecological Fallacy Revisited: Aggregate vs. Individual Level Findings on Economics and Elections, and Sociotropic Voting." *American Political Science Review* 77 (1983) 92-111.

<sup>37</sup> Rogers and Wood

<sup>38</sup> Lieske

five classifications: Southern, Northeast Industrial, Midwest Industrial, Plains, and Growth. Though statistically compelling, their “growth” classification does not seem to fit because of its cultural and geographical variation: Texas and New Hampshire- two objectively different states- are both in this category.<sup>39</sup>

I chose to use five regions so that my results are broad enough to make legitimate and substantial claims, but still thorough enough to show significant differences. I defined my regions using basic geography and census classifications, Rogers and Wood's psychological stereotype connections, Morgan and England's classifications, and Melcher's suggestions. Though the census classifications make geographic sense, from a political standpoint, some states belong in different groupings. For example, Maryland, Delaware, and Washington D.C. are more similar to northern states than southern ones. Morgan and England classify neither Maryland nor Delaware as Southern, and they are stereotyped differently than Southern states in Rogers and Wood's study. James Melcher, an American Midwestern scholar, defines the Midwest according to Carolyn Lieberg's book *Calling the Midwest Home* and uses this definition in courses on regional politics.<sup>40</sup> Due to the small size of the Southwest and West regions I considered combining them, but decided instead to separate them according loosely to Rogers and Wood's state pairings. My main motivation was to keep California and Texas separate due to their

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<sup>39</sup> David R. Morgan and Robert E. England, “Classifying the American States: An Update.” *Social Science Quarterly* 68 no. 2 (1987) 405-417.

<sup>40</sup> James P. Melcher, “Bringing It All Back Home: The Issues Involved in Teaching a U. S. Regional Politics Course.” *Political Science and Politics* 32 no. 1 (1999) 77-82.

large sizes and differing social and political makeups. The region variable is coded as follows:

*Northeast:* Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont, New Jersey, New York, Pennsylvania, Delaware, District of Columbia, Maryland

*Southeast:* Florida, Georgia, North Carolina, South Carolina, Virginia, West Virginia, Alabama, Kentucky, Mississippi and Tennessee

*Midwest:* Illinois, Indiana, Michigan, Ohio, Wisconsin, Iowa, Kansas, Minnesota, Missouri, Nebraska, North Dakota, South Dakota

*Southwest:* Arkansas, Louisiana, Oklahoma, Texas, Arizona, New Mexico, Nevada

*West:* Utah, Wyoming, Alaska, California, Hawaii, Oregon, Washington, Colorado

## RESULTS

### *Overall Effects of the Economy of Government Evaluations*

As the literature predicts, perception of the national economy does have a significant effect on feelings towards the federal government. When controlling for year, gender, race, and party identification, each additional level of the economic perception variable increases feelings towards the government by about 8 “degrees” This suggests that Americans who feel increasingly better about the state of the economy do in fact feel

better about the government as well, despite the overall low ratings of the federal government.

To see if this trend continues for specific groups within the federal government, I ran the same test for Congress and the President. The coefficient is still positive when looking at Congress controlling for year, though the magnitude is smaller: each additional value of economic perception corresponds with a 3.5 degree increase. When looking specifically at the president, controlling for year, the magnitude is greater- each additional value of the economic perception variable corresponds with a 22 degree increase in the president's feeling thermometer. These results are hardly surprising- researchers, history, and common sense all support a retrospective theory of voting and support for the government. People happy with the way things are going should be pleased with the officials in power.

Results are similar for the prospective model. Controlling for year, gender, race, and party identification, increases in economic outlook increase feeling thermometer ratings of the Federal Government, Congress, and the President. Though the coefficients in the prospective model are smaller than in the retrospective model, they are all significant. Whether the differences in magnitude are substantial is unclear. It is possible that respondents feel more strongly about the present than the future, and therefore tend to reward elected officials more positively for present economic conditions than future ones. Regardless, the definitively positive effect of economic perception and outlook on feeling thermometers indicates that the economy does play an important role in how

citizens feel about their government. Results can be found and compared in the table below.

*Overall Effects of Economic Perception and Outlook on the Government*

Variable	Economic Perception			Economic Outlook		
	Coefficient (Std. Error)					
	Federal Government	Congress	President	Federal Government	Congress	President
Economic Perception	8.256 *** (.417)	3.565*** (.390)	22.790*** (.547)	-	-	-
Economic Outlook	-	-	-	6.089*** (.246)	3.264*** (.233)	11.640*** (.340)
1980	9.420*** (.927)	13.252*** (.868)	10.344*** (1.217)	11.873*** (.683)	17.853*** (.649)	3.404*** (.945)
1988	11.266*** (.796)	14.808*** (.745)	2.522* (1.045)	16.247*** (.609)	19.920*** (.579)	8.175*** (.843)
1992	5.955*** (.714)	7.517*** (.669)	3.737*** (.938)	6.838*** (.546)	10.688*** (.519)	-2.289** (.756)
1996	5.908*** (.867)	11.057*** (.811)	-3.758** (1.138)	11.987*** (.621)	15.763*** (.590)	4.699*** (.860)
2000	7.318*** (.782)	11.177*** (.731)	-7.354*** (1.026)	13.968*** (.629)	17.076*** (.597)	.833 (.870)
2004	11.045*** (1.005)	12.071*** (.940)	-1.613 (- 1.613)	15.415*** (.726)	17.173*** (.689)	.748 (1.004)
2008	9.019*** (.715)	10.211*** (.669)	-8.061*** (.938)	8.597*** (.715)	12.568*** (.679)	-18.391*** (.989)
Gender	4.022*** (.429)	4.144*** (.401)	3.246 *** (.563)	3.401*** (.341)	4.095*** (.325)	2.070*** (.473)
Party Identification	-3.645*** (.234)	-2.311*** (.219)	-2.968*** (.308)	-3.757*** (.187)	-1.806*** (.178)	-6.202*** (.259)
Race	2.062*** (.151)	1.682*** (.142)	1.355*** (.199)	2.203*** (.124)	1.993*** (.118)	1.324*** (.172)
Intercept	27.654*** (1.238)	33.924*** (1.159)	12.592*** (1.625)	26.871*** (.975)	27.515*** (.926)	36.342*** (1.350)

\* p < .10 \*\*p < .05 \*\*\*p < .001

**Table 1**

*Effects of Region and Economic Perception on Government Evaluations*

Overall, each additional value of economic perception corresponds with an increase in feeling thermometer ratings. Coefficients were similar for each feeling

thermometer in both models- without and with region. The federal government feeling thermometer increases by about 8 degrees with each additional value of economic perception; the Congress feeling thermometer increases by about 4.5; the President by about 24. There is an undeniable relationship between economic factors and ratings of the government, consistent with economic voting literature.

Region appears to have a direct impact on government feeling thermometer scores, but not an interactive effect on the impact of the economy in government feeling thermometer scores. Region may be a factor in how people rate the government generally, but it does not appear to impact economic ratings of the government. This suggests that regional differences that do occur in federal government feeling thermometers are not explained by economic perception. Coefficients are virtually the same between direct and interactive models, further indicating that interactions between region and economic perception are negligible. The three feeling thermometers are similarly impacted by the controls. The presidential feeling thermometer does differ from the other models, probably due to the variability of presidential approval. Ratings of the president may be more personal and less generalizable than ratings of Congress of the federal government as a whole. The President is a single person, susceptible to personal opinions that might be different than opinions of the rest of the government. However, the results for the three models generally show the same trends, suggesting that there is a significant relationship between economic perception and ratings of the government, and, to an extent, region and ratings of the government. Direct and interactive effects for each feeling thermometer can be compared in the following tables.



*Federal Government Feeling Thermometer, Economic Perception, and Region- Direct and Interactive*

*Effects*

Direct		Interactive	
Variable	Coefficient (Std. Error)	Variable	Coefficient (Std. Error)
-		Southeast * Economic Perception	1.438 (1.120)
-		Midwest * Economic Perception	.667 (1.118)
-		Southwest * Economic Perception	2.197* (1.222)
-		West * Economic Perception	1.192 (1.150)
Economic Perception	8.160*** (.416)	Economic Perception	7.096*** (.850)
Southeast	2.235** (.662)	Southeast	-.115 (1.927)
Midwest	-1.059 (.656)	Midwest	-2.150 (1.938)
Southwest	2.283** (.745)	Southwest	-1.286 (2.121)
West	-2.431*** (.680)	West	-4.380* (1.990)
1980	9.524*** (.925)	1980	9.466*** (.925)
1988	11.515*** (.795)	1988	11.564*** (.796)
1992	6.022*** (.713)	1992	5.974*** (.713)
1996	5.923*** (.865)	1996	5.920*** (.865)
2000	7.557*** (.780)	2000	7.598*** (.781)
2004	11.309*** (1.001)	2004	11.318*** (1.002)
2008	8.777*** (.714)	2008	8.865*** (.716)
Gender	3.916*** (.428)	Gender	3.932*** (.428)
Party Identification	-3.629*** (.234)	Party Identification	-3.627*** (.234)
Race	2.012*** (.156)	Race	2.008*** (.157)
Intercept	27.833*** (1.304)	Intercept	29.541*** (1.788)
N=10459, R2=.172		N=10459, R2=.171	
* p < .10 **p < .05 ***p < .001			

**Table 2**

*Congress Feeling Thermometer, Economic Perception, and Region- Direct and Interactive Effects*

Direct		Interactive	
Variable	Coefficient (Std. Error)	Variable	Coefficient (Std. Error)
-		Southeast * Economic Perception	.643 (1.039)
-		Midwest * Economic Perception	-.136 (1.047)
-		Southwest * Economic Perception	1.797 (1.145)
-		West * Economic Perception	.636 (1.076)
Economic Perception	3.475*** (.389)	Economic Perception	2.947*** (.796)
Southeast	2.314*** (.619)	Southeast	1.259 (1.804)
Midwest	-.189 (.614)	Midwest	.031 (1.815)
Southwest	2.734*** (.698)	Southwest	-.182 (1.986)
West	-1.584*** (.652)	West	-2.627 (1.863)
1980	13.351** (.866)	1980	13.294*** (.866)
1988	15.021*** (.744)	1988	15.086*** (.745)
1992	7.578*** (.667)	1992	7.550*** (.668)
1996	11.051*** (.809)	1996	11.074*** (.810)
2000	11.376*** (.730)	2000	11.413*** (.731)
2004	12.301*** (.938)	2004	12.317*** (.938)
2008	9.963*** (.669)	2008	10.048*** (.670)
Gender	4.051*** (.401)	Gender	4.070*** (.401)
Party Identification	-2.311*** (.219)	Party Identification	-2.307*** (.219)
Race	1.623*** (.146)	Race	1.623*** (.147)
Intercept	33.676*** (1.220)	Intercept	34.489*** (1.674)
N=10459, R2=.142		N=10459, R2=.142	
* p < .10 **p < .05 ***p < .001			

**Table 3***President Feeling Thermometer, Economic Perception, and Region- Direct and Interactive Effects*

Direct		Interactive	
Variable	Coefficient (Std. Error)	Variable	Coefficient (Std. Error)
-		Southeast * Economic Perception	-.175 (1.460)
-		Midwest * Economic Perception	-.406 (1.471)
-		Southwest * Economic Perception	.936 (1.608)
-		West * Economic Perception	-.607 (1.512)
Economic Perception	22.766*** (.546)	Economic Perception	22.867*** (1.118)
Southeast	1.610* (.870)	Southeast	1.892 (2.534)
Midwest	-.338 (.863)	Midwest	.323 (2.550)
Southwest	.013 (.980)	Southwest	-1.498 (2.789)
West	-2.512** (.916)	West	-1.537 (2.618)
1980	10.369*** (1.216)	1980	10.345*** (1.217)
1988	2.599* (1.045)	1988	2.651** (1.047)
1992	3.739*** (.937)	1992	3.738*** (.938)
1996	-3.783** (1.136)	1996	-3.760** (1.138)
2000	-7.130*** (1.034)	2000	-7.096*** (1.027)
2004	-1.440 (1.318)	2004	-1.431 (1.318)
2008	-8.073*** (.940)	2008	-8.028*** (.942)
Gender	3.167*** (.563)	Gender	3.180*** (.563)
Party Identification	-2.931*** (.307)	Party Identification	-2.713*** (.307)
Race	1.446*** (.206)	Race	1.450*** (.206)
Intercept	12.677*** (1.714)	Intercept	12.464*** (2.352)
N=10459, R2=.229		N=10459, R2=.171	
* p < .10 **p < .05 ***p < .001			

**Table 4**

Clearly, there are some differences between regions in economic ratings of the government. All regions have a similar relationship between economic perception and

federal government feeling thermometers, but it is not the same. This suggests that there is some unexplained difference between regions. Compared to the northeast, the other regions do indeed see different relationships. For example, compared to the Northeast (the baseline), the Southwest has the strongest relationship between economic perception and ratings of the federal government. The Midwest, on the other hand, has a smaller effect, rating the government lower than the Northeast even at positive levels of economic perception. However, as displayed in the tables, the interactive variables are not statistically significant. Therefore, these results may or may not be substantive.

#### *Effects of Region and Economic Outlook on Government Evaluations*

The effect of economic *outlook* is different than the effect of economic perception. When considering the future of the economy, each increasing value of the economic outlook variable corresponds with an increase of about 6 degrees on the feeling thermometer without interactions and 4.7 with interactive effects. The Congress feeling thermometer increased by about 3 degrees with and without interaction, and the President feeling thermometer increased by about 11 with and without interactions, consistent with earlier findings. This indicates that people assess the government both retrospectively and prospectively- that is, both economic perception and outlook have an effect on feelings towards the government.

Region has a significant direct effect on the federal government feeling thermometer, a somewhat significant direct effect on the Congressional feeling thermometer, and no significant direct effect on the Presidential feeling thermometer. The

only significant interactive effects exist in the federal government feeling thermometer, suggesting that individuals rate the government differently across region only at a general level. Region informs political behavior in a personal way, but individuals tend to rate the government based on national trends. Therefore, regional differences may only be significant for the most general feeling thermometer, but not more specific feeling thermometers. Furthermore, because people may associate individuals with Congress and the Presidency, there may be more factors at play in their ratings of these offices. However, the federal government feeling thermometer is a nonspecific measure of the government, so individual factors will not come into play as often.

For the Federal Government feeling thermometer, the Southeast has the strongest effect, meaning that at the highest levels of economic outlook, people in the Southeast rate the federal government higher than in other regions. With each increase on the economic outlook variable, the Southeast's federal government feeling thermometer rating increases by 2.041, compared to other regions. The Southwest has the smallest effect, meaning that at the highest levels of economic outlook, people in the Southwest rate the government lower than in other regions. With every one point increase on the economic outlook variable, the Southwest's federal government feeling thermometer rating only increases by 1.008. The Midwest also has a small effect, with an increase of 1.251 on the feeling thermometer with each increase in economic outlook. For the West, each increase of economic outlook corresponds with a 1.569 increase on the federal government feeling thermometer compared to the other regions. This indicates that the relationship between economic outlook and ratings of the government are indeed

different depending on region. The coefficient for economic outlook alone is smaller in the interactive model, indicating that regional interactions do have a significant effect on federal government feeling thermometers.

For the Congress feeling thermometer, region has a much smaller effect. The interactions between region and economic outlook have small effects on the feeling thermometer- only the West region closely approaches 1. This suggests that people in the West rate Congress higher than other regions at high levels of economic outlook, but not by much. As economic outlook increases, the differences in Congressional feeling thermometer scores are very similar across regions. Furthermore, the interactions were statistically insignificant.

Results for the Presidential feeling thermometer were similar- the West has the strongest effect of economic outlook on the President, while the Southeast has the smallest effect. This means that at a given level of economic outlook, the West has the highest ratings of the President while the Southeast has the lowest. Again, however, the interactions in this model were statistically insignificant. Results are displayed in the tables below:

*Federal Government Feeling Thermometer, Economic Outlook, Region- Direct and Interactive Effects*

Direct		Interactive	
Variable	Coefficient (Std. Error)	Variable	Coefficient (Std. Error)
-		Southeast * Economic Outlook	2.041** (.745)
-		Midwest * Economic Outlook	1.251* (.741)
-		Southwest * Economic Outlook	1.008 (.836)

-		West * Economic Outlook	1.569** (.771)
Economic Outlook	6.002*** (.245)	Economic Outlook	4.777*** (.556)
Southeast	1.649** (.528)	Southeast	-2.803 (1.709)
Midwest	-.978* (.518)	Midwest	-3.688** (1.670)
Southwest	1.670** (.603)	Southwest	-.497 (1.929)
West	-1.956*** (.555)	West	-5.340** (1.747)
1980	11.974*** (.682)	1980	11.966*** (.682)
1988	16.413*** (.609)	1988	16.413*** (.609)
1992	6.891*** (.545)	1992	6.900*** (.545)
1996	11.945*** (.620)	1996	11.951*** (.620)
2000	14.079*** (.628)	2000	14.093*** (.628)
2004	15.641*** (.725)	2004	15.621*** (.725)
2008	8.434*** (.715)	2008	8.441*** (.715)
Gender	3.337*** (.341)	Gender	3.346*** (.341)
Party Identification	-3.748*** (.187)	Party Identification	-3.753*** (.187)
Race	2.168*** (.128)	Race	2.161*** (.128)
Intercept	27.153*** (1.026)	Intercept	29.813*** (1.492)
N=14848, R2=.156		N=14848, R2=.156	
* p < .10 **p < .05 ***p < .001			

**Table 5**

*Congress Feeling Thermometer, Economic Outlook, Region- Direct and Interactive Effects*

Direct		Interactive	
Variable	Coefficient (Std. Error)	Variable	Coefficient (Std. Error)
-		Southeast * Economic Perception	.354 (.708)
-		Midwest * Economic Perception	.347 (.704)
-		Southwest * Economic Perception	.163 (.732)
-		West * Economic Perception	.917 (.732)

Economic Perception	3.190*** (.233)	Economic Perception	2.820*** (.528)
Southeast	1.843*** (.501)	Southeast	1.077 (1.624)
Midwest	-.023 (.492)	Midwest	-.777 (1.587)
Southwest	2.504*** (.573)	Southwest	2.162 (1.832)
West	-1.238** (.527)	West	-3.206* (1.660)
1980	17.960*** (.648)	1980	17.960*** (.648)
1988	20.080*** (.578)	1988	20.086*** (.578)
1992	10.739*** (.518)	1992	10.746*** (.518)
1996	15.697*** (.589)	1996	15.698*** (.589)
2000	17.167*** (.597)	2000	17.179*** (.597)
2004	17.374*** (.688)	2004	17.370*** (.688)
2008	12.366*** (.679)	2008	12.378*** (.679)
Gender	4.031*** (.324)	Gender	4.031*** (.324)
Party Identification	-1.814*** (.178)	Party Identification	-1.820*** (.178)
Race	1.941*** (.122)	Race	1.938*** (.122)
Intercept	27.305*** (.975)	Intercept	28.118*** (1.418)
N=10459, R2=.142		N=10459, R2=.142	
* p < .10 **p < .05 ***p < .001			

**Table 6**

*President Feeling Thermometer, Economic Outlook, Region- Direct and Interactive Effects*

Direct		Interactive	
Variable	Coefficient (Std. Error)	Variable	Coefficient (Std. Error)
-		Southeast * Economic Outlook	.614 (1.032)
-		Midwest * Economic Outlook	1.003 (1.027)
-		Southwest * Economic Outlook	.996 (1.158)
-		West * Economic Outlook	1.915* (1.068)
Economic Outlook	11.597*** (.340)	Economic Outlook	10.692*** (.770)



Southeast	.905 (.731)	Southeast	-.415 (2.369)
Midwest	-.122 (.718)	Midwest	-2.291 (2.673)
Southwest	.156 (.836)	Southwest	-2.003 (1.929)
West	-2.034** (.769)	West	-6.149** (2.421)
1980	3.438*** (.945)	1980	3.428*** (.946)
1988	8.231*** (.844)	1988	8.238*** (.844)
1992	-2.230** (.756)	1992	-2.287** (.756)
1996	4.660*** (.859)	1996	4.665*** (.859)
2000	.959 (.870)	2000	.979 (.871)
2004	.883 (1.004)	2004	.864 (1.004)
2008	-18.378*** (.991)	2008	-18.348*** (.991)
Gender	2.026*** (.473)	Gender	2.024*** (.473)
Party Identification	-6.182*** (.259)	Party Identification	-6.191*** (.259)
Race	1.392*** (.178)	Race	1.387*** (.178)
Intercept	36.514*** (1.422)	Intercept	38.500*** (2.068)
N=14848, R2=.156		N=14848, R2=.156	
* p < .10 **p < .05 ***p < .001			

Table 7

*Economic Perception and Outlook by Region Over Time*

Regardless of how respondents use economic evaluations in government evaluations, there do appear to be regional differences in economic evaluation over time. The following graphs show that in both the retrospective and prospective model, economic evaluations follow the national average but do show slightly different degrees of regional variation.

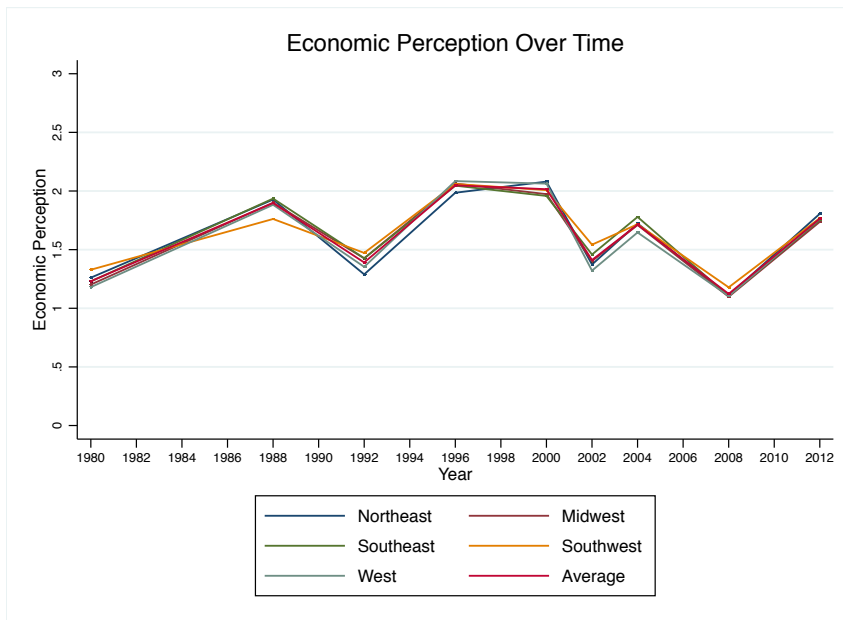


Figure 1

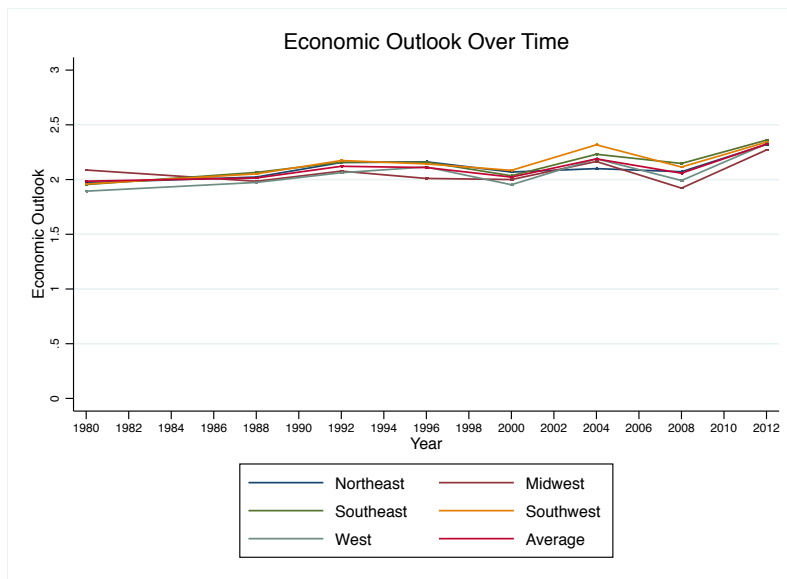


Figure 2

No single region tends to vary from the others significantly. All regions were most positive and optimistic in the late nineties, for example, which makes sense

considering the economic prosperity of the Clinton administration. All regions were most negative and pessimistic in 2008, at the start of the Great Recession. No region deviated from these national trends, supporting the idea that Americans think about the economy sociotropically.<sup>41</sup> Despite the lack of an outlier, there is some variation between regions in the retrospective graph. All regions cluster around the national average.

The prospective graph, however, shows much more variation between regions. Though all regions generally follow the national average for most years, they cluster less around the average. For example, in the retrospective model, the regions had virtually the same negative perception of the economy in 2008. In the prospective model, there is a greater difference between the maximum and minimum values.

#### *Variation Within Economic Outlook*

There is an interesting dichotomy between economic perception and outlook. Economic perception as a trend has varied greatly. However, region does not tend to vary within economic perception. Levels of economic perception have been notably high at some points, such as the late nineties, and quite low, such as in 2008. On the other hand, economic outlook as a trend has not varied much, though there is significantly more regional variation within economic outlook. Despite regional variation, economic outlook tends to hover around values indicating indifference or optimism, aside from some times—such as 2008—when all regions tended to be pessimistic. This is interesting, considering

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<sup>41</sup> Donald R. Kinder and D. Roderick Kiewiet, “Sociotropic Politics: The American Case.” *British Journal of Political Science* 11 no. 2 (1981) 129-161.

the significant differences in how regional economic outlook impact evaluations of the government. I believe that culture is the origin of economic variation, and the mechanism that translates this variation into significant political differences. Regions are politically different to begin with, due to history. As regions developed their own economies, their outlook on the economy became somewhat independent. When considering the government in terms of economic outlook, therefore, regions react differently. Regional differences have an important and lasting impact on political life, including overall evaluations of the government.

## **DISCUSSION**

### *Hypotheses Revisited*

Hypothesis 1A is not proven, as both retrospective and prospective results are significant. However, Hypothesis 1B is indeed supported as prospective federal government ratings are impacted by the interaction between region and the economy. It is possible that because economic *perception* refers to the present and recent past state of the economy, there is not too much variation in perception across the nation. That is, it is fairly clear what the state of the national economy is at any given time. On the other hand, economic *outlook* allows respondents to be informed by a number of other factors. There is no single way to interpret a hypothetical economy.

Furthermore, Hypotheses 2A and 2B are supported, as economic concerns are significantly different in most models. Therefore, region is an important factor in a

respondent's outlook on the economy, and this contributes to ratings of the government. In the prospective federal government feeling thermometer model, economic outlook does indeed impact feeling thermometer ratings differently depending on region.

Hypothesis 3 is also supported. In the retrospective model, evaluations of the economy by region do not vary very much. However, in the prospective model, they vary slightly more. Overall, all regions follow a national trend, indicating that although region has an impact on economic evaluations of the government, regions do not have massive underlying differences in economic evaluations.

Though some of these findings are limited, they are important. More research must be done to determine the causes of regional differences, and to further determine the implications of regional differences. However, the relationship between region, the economy, and evaluations of the government has not been explored previously. Clearly, there are important aspects of political life explained by this relationship.

### *Why Does This Matter?*

The implications of this paper are vast. If feeling thermometer scores do indeed predict other aspects of political life, such as ratings of other groups, association with political parties, or voting, then variables impacting feeling thermometer scores matter.

Region is often discussed in politics. During presidential elections, it is clear that candidates understand regional differences. "Electoral math" dictates where candidates spend money, give major speeches, and canvass. Candidates might play up values in the conservative South, speak about environmental concerns on the West Coast, or pander to

blue collar workers about manufacturing and outsourcing in the Midwest. However, after the election, these appeals seem to go away. This may be due to a number of reasons- the most salient policies are often the result of state governments and not the federal government, or maybe candidates worry less about pleasing specific regions once in office. However, region clearly matters more than elected officials realize. A better understanding of how different policies might affect individuals across the country could improve policy, not just increase vote share. Regional differences are not necessarily negative, and the United State's rich array of cultures should be celebrated. When it comes to the economy, these differences matter. If an entire region's outlook on the economy has a stronger or weaker effect on its perception of the government, then it is worth addressing the underlying causes of that relationship.

*The Economy, Region, and Trump: the 2016 Election*

Though this paper does not focus on elections, it may be useful to explore the electoral implications of this paper. If economic concerns, both prospective and retrospective, have an affect on evaluations of the federal government, and if people in different regions interpret these effects differently, then regional politics could have important effects on the national political stage. One major example was the most recent political election, in which political cleavages seemed to shift historically.

This paper could explain some aspects of the most recent election. While Hillary Clinton had name recognition, a plausible policy agenda, and the support of a popular president, Donald Trump's populist, headline-grabbing campaign won out electorally. I

argue that he achieved this victory primarily by gaining the support of states not thought to be in question, somewhat disregarded by the Clinton campaign. One explanation for the dramatic turn of states like Michigan and Wisconsin from blue to red is the priority of economic concerns to voters in those states. In each model, the Midwest clearly has low ratings of the federal government at the highest levels of economic outlook and perception. If voters in the Midwest rate the government systematically lower than in other regions, and if voters in the Midwest are displeased overall with the state of the economy, then the Midwest can be expected to have significantly lower ratings of the federal government and potentially vote for challengers.

Region is a factor that originates from history and experience. Citizens, informed by their culture, past experiences, and knowledge, make decisions about the government and projections about the future. Furthermore, the culture in which an individual lives impacts the way that they perceive public policy. People in different regions relate public policy to their own lives in different ways.

## APPENDIX

### Summary of Variables

<b>Variable</b>	<b>Observations</b>	<b>Mean</b>	<b>Std. Dev.</b>	<b>Min.</b>	<b>Max.</b>
Federal Government Feeling Thermometer	17644	50.52	22.40	0	97
Congress Feeling Thermometer	17644	51.73	21.22	0	97
President Feeling Thermometer	17644	55.16	31.24	0	97
Economic Perception	10511	1.62	0.60	1	3
Economic Outlook	14912	2.16	0.71	1	3
Gender	17644	1.54	0.50	1	2
Race	17562	1.75	1.43	1	6
Year	17644	2001.13	10.10	1980	2012
Party Identification	17644	1.86	0.93	1	3
Region	17642	2.91	1.38	1	5
Northeast	17642	0.19	0.40	0	1
Southeast	17642	0.23	0.42	0	1
Midwest	17642	0.24	0.43	0	1
West	17642	0.19	0.39	0	1
Southwest	17642	0.15	0.36	0	1
Northeast Interaction- Retrospective	10509	0.30	0.68	0	3
Southeast Interaction- Retrospective	10509	0.37	0.74	0	3
Midwest Interaction- Retrospective	10509	0.39	0.75	0	3
West Interaction- Retrospective	10509	0.31	0.68	0	3
Southwest Interaction- Retrospective	10509	0.25	0.63	0	3
Northeast Interaction- Prospective	14910	0.41	0.91	0	3
Southeast Interaction- Prospective	14910	0.50	0.98	0	3
Midwest Interaction- Prospective	14910	0.52	0.97	0	3
West Interaction- Prospective	14910	0.41	0.90	0	3
Southwest Interaction- Prospective	14910	0.32	0.83	0	3



**BIBLIOGRAPHY**

- Alt, James E., David D. Lassen, and John Marshall (2015). "Credible Sources and Sophisticated Voters: When Does New Information Induce Economic Voting?" *The Journal of Politics* 78:2, 327-342.
- Anderson, C. J. (2007). "The End of Economic Voting? Contingency Dilemmas and the Limits of Democratic Accountability." *Annual Review of Political Science*, 10, 271-296.
- Books, John, and Charles Prysby (1999). "Contextual Effects on Retrospective Economic Evaluations: The Impact of the State and Local Economy." *Political Behavior* 21:1, 1-16.
- Buell, E., and Lee Sigelman (1985). "An Army That Meets Every Sunday? Popular Support for the Moral Majority in 1980." *Social Science Quarterly*, 66:2, 426-434.
- Cox, Kevin R. "The Politics of Urban and Regional Development and the American Exception." Syracuse: Syracuse University Press, 2016.
- Erikson, R. S. (2004). "Macro vs. Micro-level Perspectives on Economic Voting: Is the Micro-level Evidence Endogenously Induced?" Annual Meeting of the Society for Political Methodology, Stanford University.
- Gomez, Brad T., and J. Matthew Wilson (2001). "Political Sophistication and Economic Voting in the American Electorate: A Theory of Heterogeneous Attribution." *American Journal of Political Science*, 45:4, 899-914.

- Greene, Steven (1999). "Understanding Party Identification: A Social Identity Approach." *Political Psychology* 20:2, 393- 403.
- Greene, Steven (2004). "Social Identity Theory and Party Identification." *Social Science Quarterly*, 85: 136-153.
- Hicks, Timothy, Alan M. Jacobs, J. Scott Matthews (2016). "Inequality and Electoral Accountability: Class-Biased Economic Voting in Comparative Perspective." *The Journal of Politics* 78:4, 1076-1093.
- Iyengar, Shanto, and Donald R. Kinder. "News That Matters: Television and American Opinion." Chicago: University of Chicago, 1987.
- Jones, Philip Edward (2015). "Economic Voting Appeals in Congressional Campaigns." *Political Communication*, 32:2 206-228.
- Kim, Dukhong (2014). "Affect and Public Support for Military Action." *SAGE Open* 4:4.
- Kinder, Donald R, and D. Roderick Kiewiet (1981). "Sociotropic Politics: The American Case." *British Journal of Political Science*, 11:2, 129-161.
- Kiewiet, D. Roderick & Michael S. Lewis-Beck (2011). "No Man is an Island: Self-interest, the Public Interest, and Sociotropic Voting." *Critical Review*, 23:3, 303-319.
- Kramer, Gerald (1983). "The Ecological Fallacy Revisited: Aggregate vs. Individual Level Findings on Economics and Elections, and Sociotropic Voting." *American Political Science Review*, 77, 92-111.

- Lacy, Dean and Dino P. Christenson (2016). "Who Votes for the Future? Information, Expectations, and Endogeneity in Economic Voting." *Political Behavior*, 10:1007.
- Lauderdale, B. E. (2010). "Unpredictable voters in ideal point estimation." *Political Analysis*, 18:2, 151-171.
- Lewis-Beck Michael (1985). "Pocketbook Voting in U.S. National Election Studies: Fact or Artifact?" *American Journal of Political Science* 29:2, 348-356.
- Lewis-Beck, Michael S., Helmut Norpoth, and William G. Jacoby. "The American Voter Revisited." Michigan: University of Michigan Press, 2009.
- Lieske, Joel (1993.) "Regional Subcultures of the United States." *Journal of Politics*, 55, 888-913.
- Liu, Mingnan and Wang, Yichen (2015). "Data collection mode effect on feeling thermometer questions: A comparison of face-to-face and Web surveys." *Computers in Human Behavior*, 48, 212-218.
- Lockerbie, Brad. "Who Votes for the Future?" Ithaca, US: SUNY Press, 2008.
- Marcus, George E. (1988). "The Structure of Emotional Response: 1984 Presidential Candidates." *The American Political Science Review*, 82:3, 737-761.
- Markus, Gregory B. (1988). "The Impact of Personal and National Economic Conditions on the Presidential Vote: A Pooled Cross-Sectional Analysis." *American Journal of Political Science*, 32:1, 137-154.
- Melcher, James P. (1999). "Bringing It All Back Home: The Issues Involved in Teaching a U. S. Regional Politics Course." *Political Science and Politics*, 32:1, 77-82.

- Morgan, David R., and Robert E. England (1987). "Classifying the American States: An Update." *Social Science Quarterly*, 68:2, 405-417.
- Norton, Aaron T., and Gregory M. Herek (2013). "Heterosexuals' Attitudes Toward Transgender People: Findings from a National Probability Sample of U.S. Adults." *Sex Roles* 68:11-12, 738-53.
- Rogers, Katherine H, and Dustin Wood (2010). "Accuracy of United States regional personality stereotypes." *Journal of Research in Personality*, Vol.44:6, 704-713.
- Rentfrow, Peter J, Samuel D. Gosling, and Jeff Potter (2008). "A Theory of the Emergence, Persistence, and Expression of Geographic Variation in Psychological Characteristics." *Perspectives on Psychological Science*, 3:5, 339-369.
- Schattschneider, E.E. "The Semisovereign People." Boston: Wadsworth, 1960.
- Sniderman, P., Piazza, T., Tetlock, P., & Kendrick, A. (1991). "The New Racism." *American Journal of Political Science*, 35:2, 423-447.
- Swim, Janet K. and Deborah L. Miller (1999). "White Guilt: Its Antecedents and Consequences for Attitudes Toward Affirmative Action." *Personality and Social Psychology Bulletin*, 25:4, 500 - 514.
- Wilcox, Clyde, Sigelman, Lee, and Elizabeth Cook (1989). "Some Like it Hot: Individual Differences in Responses to Group Feeling Thermometers." *The Public Opinion Quarterly*, 53:2, 246-25

**CURRICULUM VITAE**

