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The Effect of the Great Recession on Economic Voting: A Factor of Education and Income

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Abstract

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Introduction

Economic voting has influenced every presidential election since 1789. A fundamental part of voter calculus, economic voting is the idea that people votes are influenced by economic factors.¹ Much of this is done on a subconscious level, and many voters do not even realize they are doing it. There are also a variety of contexts and variables that affect how strong economic voting will be in any given year. Economists are just beginning to understand some of them and how they affect election outcomes.² Therefore, elusive and difficult to measure, economic voting's impact on our elections remains largely uncertain. This research is an attempt to understand what current factors might affect that impact and how economic voting has affected our presidential elections.

The Great Recession was an economic downturn from December 2007 to June 2009 that had an international impact and even drew comparisons to the Great Depression.³ The United States was largely affected, so this research is concerned with how the Great Recession has affected state voting patterns through economic voting. Current research in political economy focuses on the causes of the Great Recession or causes of economic voting, but there is little research focusing on how the Great Recession affected economic voting patterns.

¹Stegmaier, Mary, and Michael S. Lewis-Beck. "Economic Voting." *Oxford Bibliographies*, Oxford University Press, 30 Sept. 2013.

² Singer, Matthew M., and Ryan E. Carlin. "Context Counts: The Election Cycle, Development, and the Nature of Economic Voting." *The Journal of Politics*, vol. 75, no. 3, 29 May 2013, pp. 730–742. *JSTOR [JSTOR]*, doi:10.1017/s0022381613000467.

³ Temin, Peter. "The Great Recession and the Great Depression." *Daedalus*, vol. 139, Jan. 2010, pp. 115–124., doi:10.3386/w15645.

There are two types of economic voting: sociotropic voting and pocketbook voting. Sociotropic voting is defined as voting based on the overall condition of the economy and then assigning responsibility to government officials. Sociotropic voters are credited with higher levels of education because they are able to distinguish between themselves and the economy. They are able to look at macroeconomic indicators and assign blame accordingly. However, pocketbook voters do the opposite. Pocketbook voters take interest in their personal financial situation rather than the economy's performance as a whole. Pocketbook voting is defined as voting based on the current state of one's personal finances.

Literature Review

The relationship between economic factors and voting has been a topic of discussion for a long time, but its beginnings in research start in the late 1970s where econometrics is first used to analyze U.S. electoral behavior.⁴ Since then, a majority of the literature has focused on the creation of different types of economic models to measure the impact of economic voting and varying estimates of what that might be. Additionally in recent years, interest in economic voting research has only increased--crossing into other countries and different types of elections.⁵

There are two research papers that were fundamental to the final research design: Gerald Kraemer's "The Ecological Fallacy Revisited: Aggregate- versus Individual-Level Findings on Economics and Elections, and Sociotropic Voting" from 1983 and Michael Lewis-Beck and Richard Nadeau's "National Economic Voting in U.S. Presidential Elections" from 2001.

Gerald Kramer's research suggested that data used to measure economic voting was best obtained at an aggregate level rather than an individual level.⁶ Kramer suggested that at an individual level, it is difficult to determine what factors voters consider to be "politically irrelevant," and these prevent voters from placing blame on the incumbent party. But a lot of current political science research depends heavily on the use of exit polls and gathering data at the individual level. Ultimately, this meant that in studying sociotropic voting any

⁴ Monroe, Kristen R. "Econometric Analyses of Electoral Behavior: A Critical Review." *Political Behavior*, vol. 1, no. 2, 1979, pp. 137–173. *JSTOR*, JSTOR, www.jstor.org/stable/586140.

⁵ Nannestad, Peter, and Martin Paldam. "The VP-Function: A Survey of the Literature on Vote and Popularity Functions After 25 Years." *Public Choice*, vol. 79, no. 3/4, 1994, pp. 213–245. *JSTOR*, JSTOR, www.jstor.org/stable/30026875.

⁶ Kramer, Gerald H. "The Ecological Fallacy Revisited: Aggregate- versus Individual-Level Findings on Economics and Elections, and Sociotropic Voting." *The American Political Science Review*, vol. 77, no. 1, 1983, pp. 92–111. *JSTOR*, JSTOR, www.jstor.org/stable/1956013.

macroeconomic indicators chosen might be arbitrarily or unknowingly more or less important than the other indicators. There is no standard combination of macroeconomic factors used as a unit of measure for economic voting. (Although it is worth noting that current research is trying to achieve this.⁷) So rather than devise a combination of or operationalize macroeconomic variables that sociotropic voters might or might not depend on, this research focuses on one characteristic of sociotropic voters that is treated as fact and can be measured at an aggregate level: higher levels of education attainment. Sociotropic voters tend to have higher levels of education that allow them to assign blame to various government officials. Kraemer's research was fundamental in the research design decision to measure potential sociotropic voting by measuring levels of education attainment.

Michael Lewis-Beck and Richard Nadeau's research was also fundamental to the research design.⁸ Up until their research was published in 2001, economic voting was thought to be much simpler. It was common belief that almost all economic voting was retrospective and was highly influenced by divided government. But rather they proved that economic voting is far more complex and is highly influenced instead by the "incumbency effect;" in elections where no candidates are incumbents, economic voting is more prospective than retrospective. This meant the research would need to be designed to avoid this incumbency effect. In order to do that, heavy emphasis is placed on non-incumbent presidential election years before and after the Great Recession: 2008 and 2016. Specifically, these are the outcomes that this research tries to explain using data from the previous elections: 2004 and 2012.

⁷ Aggregate macroeconomic indicators such as the National Business Index (NBI), 2001.

⁸ Richard Nadeau and Michael S. Lewis-Beck, "National Economic Voting in U.S. Presidential Elections," *The Journal of Politics* 63, no. 1 (Feb., 2001)

Empirical Strategy

Using a longitudinal timeline, this research focuses on presidential election outcomes in the electoral college. As mentioned earlier emphasis was placed on non-incumbent presidential elections and how the population has changed since the previous incumbent election. There are two timeframes that will be studied: 2004 to 2008, 2012 to 2016. Specifically, this research focuses on states that switched all of their electoral votes from the previous election from Red to Blue or Blue to Red. For the purposes of this study, these states will be referred to as “Switcher States.” From 2004 to 2008, there were nine Switcher States that flipped their electoral votes from Red to Blue (Republican to Democrat). From 2012 to 2016, there were six Switcher States that flipped their electoral votes from Blue to Red (Democrat to Republican). From there, the research identifies underlying changes in household median income and education attainment in two populations, the Switcher States and the United States, and compares changes between them. Changes in household median income were associated with pocketbook voting because these voters cast their vote based on their median income. Similarly, changes in education attainment were associated with sociotropic voting. While this might not provide concrete evidence of sociotropic and pocketbook voting, it will provide insight as to whether or not economic voting played a substantial role in the 2008 and 2016 elections, which type of economic voting was probably most influential, and provide a starting point for further research.

Data

All of the data collected for this research was obtained from the U.S. Census Bureau's American Community Survey. While the U.S. Census is conducted every ten years for the entire U.S. population, the American Community Survey is conducted every year. The U.S. Census Bureau reaches out to 3.5 million American households to participate in the government mandated survey. To ensure the validity of the sample, the U.S. Census Bureau does not allow people to opt out of the survey or not complete it when it has been assigned to them.⁹ While originally made to ensure the proper allocation of 675 billion dollars of federal funding each year, the American Community Survey has also become a useful tool for researchers seeking to understand the United States.

There were two types of data this research focused on: education attainment and household median income. Using three year estimates from the American Community Survey, data was gathered on household median income, percentage of population 25 years and older with less than a high school education and percentage of population 25 years and older with a bachelor's degree or higher. This data was found for the nine Switcher States from the 2004¹⁰ to 2008 elections, the six Switcher States from 2012 to 2016 elections, and the United States Population in all four election years.

This data was then downloaded to my personal computer from the American Community Survey. All of this data was stored on Google Sheets, a web-based spreadsheet program offered by Google. The data was under password encryption, and I was the sole person with access to it

⁹ <https://www.census.gov/programs-surveys/acs/about/top-questions-about-the-survey.html>

¹⁰ The American Community Survey was not performed in 2004, so 2005 data was substituted instead.

throughout the research process. This program was also used to create the data tables below, and the graphs in the results section.

Household Median Income from the American Community Survey 3 Year Estimates				
<i>Year</i>	<i>2005 (2004)</i>	<i>2008</i>	<i>2012</i>	<i>2016</i>
United States	\$46,242	\$52,029	\$51,371	\$57,617
Switcher States	\$46,403	\$50,817	\$48,677	\$54,275

Education Attainment Data from the American Community Survey 3 Year Estimates				
<i>Year</i>	<i>2005 (2004)</i>		<i>2008</i>	
Education Attainment (% of Population)	Less than HS Diploma	Bachelor's Degree or Higher	Less than HS Diploma	Bachelor's Degree or Higher
United States	15.8%	27.2%	15.0%	27.7%
Switcher States	14.8%	25.9%	14.0%	26.6%

Education Attainment Data from the American Community Survey 3 Year Estimates				
<i>Year</i>	<i>2012</i>		<i>2016</i>	
Education Attainment (% of Population)	Less than HS Diploma	Bachelor's Degree or Higher	Less than HS Diploma	Bachelor's Degree or Higher
United States	13.6%	29.1%	12.5%	31.3%
Switcher States	10.7%	26.5%	9.7%	28.9%

Results

There are four results of this research study:

1. On average the United States and Switcher States have a trend of increasing education attainment for bachelor's degree or higher, and a decreasing trend for those who have less than a high school diploma (See Figure 1 on next page). Ultimately, the United States is becoming more educated. This should not be particularly surprising by itself. But when we consider that sociotropic voting and higher levels of education attainment are strongly correlated, this gives strong reason to believe that the amount of sociotropic voters in the United States is increasing. This relationship is stronger for the United States than Switcher States.

It is also worth noting that during the Great Recession a higher percentage of people living in Switcher States attained their high school diploma, but the percentage of people who attained their bachelor's degree or higher remained largely the same in percentage terms. This creates a dichotomy in previous research that has suggested that in response to the Great Recession many U.S. high school graduates attended college when they could not find jobs, but the Switcher States appear to be an exception.¹¹

¹¹ Long, Bridget Terry. "The Financial Crisis and College Enrollment: How Have Students and Their Families Responded?" *How the Financial Crisis and Great Recession Affected Higher Education*, edited by Jeffrey R. Brown and Caroline M. Hoxby, University of Chicago Press, 2014, pp. 209–233, www.nber.org/chapters/c12862.

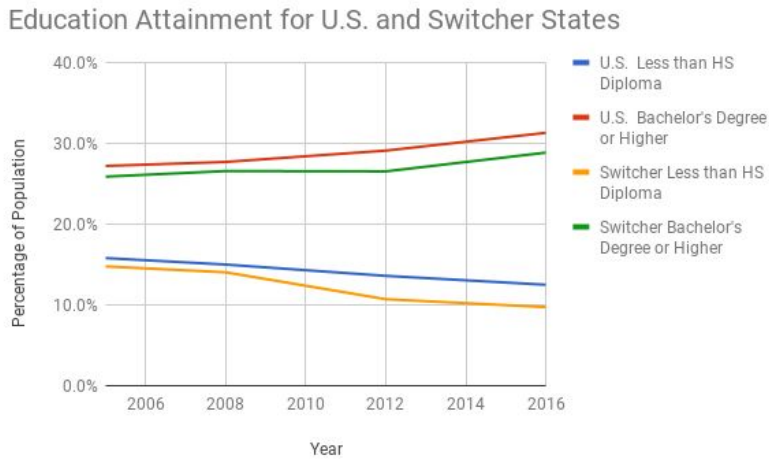


Figure 1. Sociotropic; Education Attainment, ACS 3 Year Estimates

2. During the Great Recession, the percentage of the Switcher States population that pursued a bachelor's degree or higher remained largely the same while the percentage of the United States as a whole who pursued a bachelor's degree or higher increased (Figure 2). This suggests that since the Great Recession less sociotropic voting has occurred in Switcher States compared to the rest of the country.

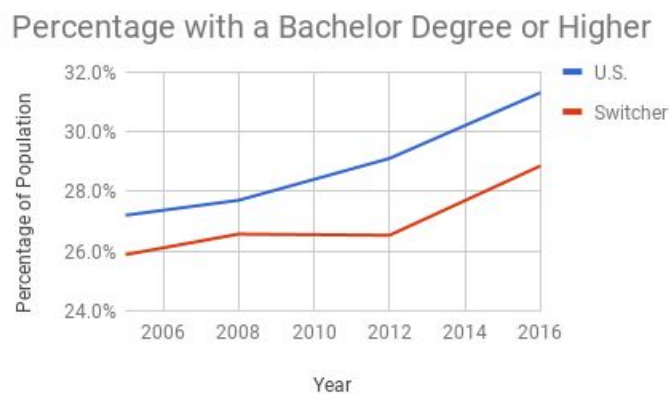


Figure 2. Sociotropic; Bachelor Degree or Higher, ACS 3 Year Estimates

3. During the Great Recession, Switcher States experienced a lower household median income than the United States as a whole (Figure 3). This suggests that Switcher States were hit harder by the recession than the United States on average. Therefore voters would also be more likely to vote according to this significant decrease in the pocketbook. This makes it highly likely voters incentivized by their decrease in median income would become pocketbook voters.

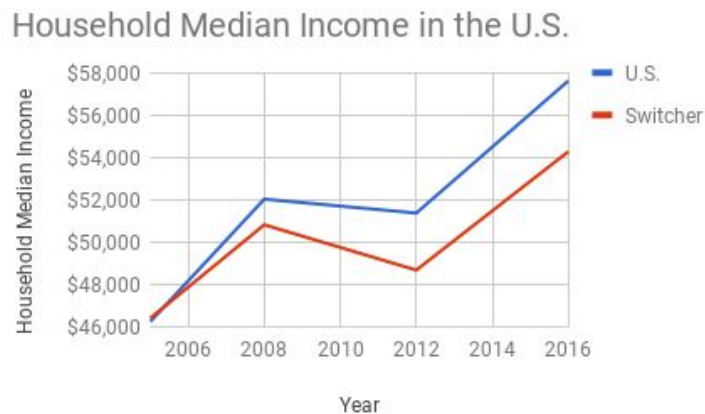


Figure 3. Pocketbook; Household Median Income, ACS 3 Year Estimates

4. This disproportionate decrease in household median income for Switcher States compared to the U.S. caused a gap in median income between the two populations (Figure 3). In 2005, Switcher States and the rest of the United States had similar figures for household median income. But we see that once the Great Recession hits, the Switcher States begin to have a lower household median income compared to the rest of the country. And when the recession ends and the economy begins to stabilize, the median income gap continues to persist between the Switcher States and the rest of the country. The data also suggests that this gap has continued to exist even in 2016 providing an area for future research.

Conclusion

While economic voting was not directly measured, this research gives reason to believe that pocketbook voting and sociotropic voting played a substantial role in the 2012 and 2016 presidential elections after the Great Recession. The household median income gap that formed during the Great Recession and still persists today will be an interesting point of further study. Further research could explore the reasons for this gap and what happens to its size as we get farther from the Great Recession. As the field of political economy develops new ways to measure and estimate the effects of economic voting, this research suggests that the Great Recession will be an interesting case study for new research and the application of new models.