

# Voter Ideology and Changes in Trump Favorability

*Audience: This paper is intended for an academic audience.*

## Introduction

Despite a tumultuous presidency including a wide range of controversial policies, tweets, and public appearances, Donald Trump's favorability has remained remarkably stable. Since the 2016 election, Trump's favorability has stayed between 35 and 45 percent, according to polling averages.<sup>1</sup>

However, this does not mean that there have not been voters who have changed their individual opinions even as the national average has remained relatively unmoved. And while we know there have been changes of opinion, relatively little is known about the voters who have done so. This paper examines Trump voters who have changed their opinions of Trump between 2016 and 2018, detailing their ideological beliefs and how they differ from voters who have not changed their opinions of Trump.

To accomplish this, I use survey data from the Democracy Fund Voter Study Group, which surveyed the same voters in 2016, 2017, and 2018 with questions on favorability toward Trump as well as a range of political and demographic questions. I find that among four ideologically distinct groups of Trump voters, the group most likely to have changed their opinions of Trump are voters is the group with more liberal opinions on economic issues, and to a lesser extent, more liberal opinions on social and identity issues.

This analysis is relevant to politics and public policy, and can help political analysts and observers understand which voter groups are most persuadable and how stable or unstable a president's support is with certain groups. The results could potentially be extrapolated to predict how voters will respond to future presidents, although more research would be needed to determine if the results are generalizable.

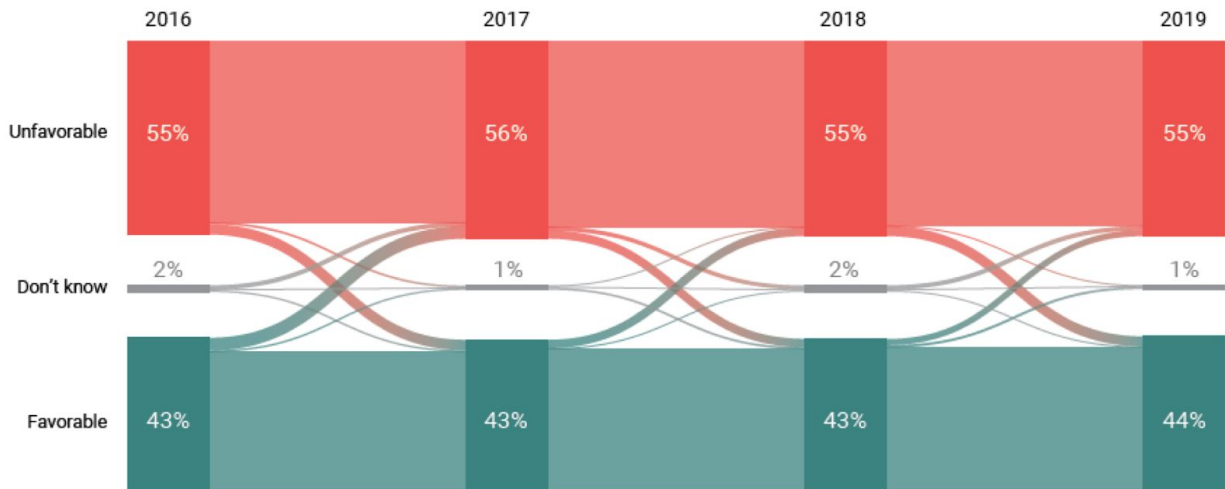
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<sup>1</sup> RealClearPolitics. Trump: Favorable/Unfavorable.  
[https://www.realclearpolitics.com/epolls/other/trump\\_favorableunfavorable-5493.html](https://www.realclearpolitics.com/epolls/other/trump_favorableunfavorable-5493.html). Retrieved 12/14/19.

## Existing Research

A previous analysis by Robert Griffin from the Voter Study Group analyzed this population using the same data, showing that most voters have not changed their opinions of Trump:<sup>2</sup>

### Most Americans Have Not Changed Their Minds About Trump



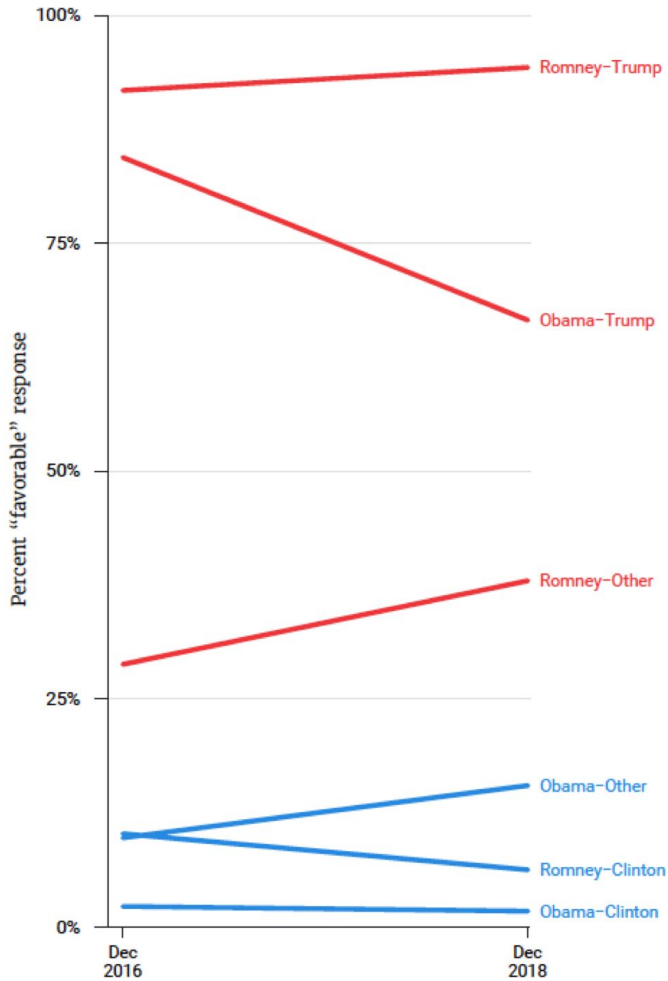
Source: Voter Study Group — 2016, 2017, 2018, and 2019 VOTER Surveys.

Griffin's analysis also segments voters according to their votes in 2012 and 2016 (Obama-Clinton, Romney-Trump, Obama-Trump, etc.) and finds that Obama-Trump voters' opinions of Trump have become less favorable, while the other voter groups showed smaller changes that were not statistically significant:

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<sup>2</sup> Griffin, Robert. *Two Year's In: How Americans' Views Have — and Have Not — Changed During Trump's Presidency*. Voter Study Group. May 2019. Available at <https://www.voterstudygroup.org/publication/two-years-in>.

## President Trump now Less Popular Among Obama-Trump Voters



Source: Voter Study Group — 2016 and 2019 VOTER Surveys.

Griffin does not investigate changes in opinions of Trump beyond splitting voters into these six groups, although the charts produced are helpful for exploring the data and showing possible graphical approaches.

### Methodology

To answer these questions, I use survey data from the Democracy Fund Voter Study Group, which describes itself as a research collaboration and conducts surveys of American voters in partnership with YouGov. The organization publishes both research and data. The data file published in 2018, which I use in my paper, contains individuals' responses to a large number of questions asked of the same individuals in 2011, 2012, 2016, 2017, and 2018. 4,052 respondents participated in all years. The 2016 survey was conducted in December (after the election, but before Trump's inauguration). The survey includes detailed demographic

and ideological questions, many of which are consistent across survey years, amounting to 1,074 variables in total.

Survey respondents are selected through random sampling of different demographic groups based on their proportion in the US population. Following this, a weight is assigned to each respondent based on Census data, including demographic and non-demographic factors, in order to make the sample as representative of the U.S. population as possible. This analysis ignores these weights, although the data used still represents a random sample of U.S. voters.

This analysis uses machine learning to cluster Trump voters based on their political ideologies, and then compares how many voters from each ideological group changed their opinions of Trump from 2016 to 2017, and separately from 2017 to 2018. There are other possible ways to go about answering the research question, such as multiple regression, although clustering by ideology has two main benefits. First, it allows for a deeper understanding of the different types of Trump voters, irrespective of changes in Trump favorability, which is interesting and useful for understanding the electorate and interpreting the results in context. Second, it accounts for a large number of ideological variables without being prone to “noise” where a single variable happens to correlate with the dependent variable.

While an analysis of Clinton voters’ changes in opinion toward Trump is also interesting, very few Clinton voters have changed their opinions, making the results less reliable and less useful. Accordingly, I focus on Trump voters in this analysis.

For measuring change in favorability, I analyze changes from 2016 to 2017 and separately from 2017 to 2018. I combine “very” and “somewhat” favorable responses, and “very” and “somewhat” unfavorable responses, and treat “don’t know” as a midpoint, resulting in three ordinal categories, “favorable”, “don’t know”, and “unfavorable”. I treat any increase from unfavorable or don’t know as “increased favorability” and any decrease from favorable or don’t know as “decreased favorability”. This results in two variables, one for 2016-2017 change in Trump favorability and one for 2017-2018 change in Trump favorability, each having five categories:

- Increased favorability
- Decreased favorability
- Remained favorable
- Remained unfavorable
- Remained don’t know

To measure political ideology, my analysis uses voters’ 2016 opinions on twelve separate political issues, with each “issue score” calculated by averaging opinions on component questions, as done by Lee Drutman in another Voter Study Group report, with the goal of

following that methodology as closely as possible based on the information provided.<sup>3</sup> Issue scores are based on as few as two or as many as six component questions; in total, 37 component questions are used.

To allow averaging, responses to the component questions are standardized along a traditional left-right political axis, with a score of -1 representing a traditionally liberal or Democrat opinion, a score of 1 representing a traditionally conservative or Republican opinion, and a score of 0 representing a centrist opinion. This is inevitably a rough approximation of ideology, as there is no assurance that a -1 represents the same degree of “liberalness” of opinion on different questions, for example.

The twelve issues are as follows. A full list of the component questions is included in the appendix.

1. Attitudes on Economic Inequality
2. Attitudes Toward Government Intervention
3. The Importance of Social Security/Medicare
4. Attitudes on Foreign Trade
5. Attitudes on Immigration
6. Feelings Toward Muslims
7. Attitudes Toward African-Americans
8. Attitudes on Moral Issues (LGBT and Abortion)
9. Attitudes On Gender Roles
10. The View That Politics is a Rigged Game
11. The Perception That “People Like Me” Are Losing Ground
12. Pride in America

For some of these twelve issues, it is not clear which responses should be coded as “liberal” or “conservative”, and additionally some readers may think the coding unfair. As I am not combining any of the twelve issue scores, this does not invalidate the methodology, although is something to be aware of in interpreting the issue scores. Notably:

- For attitudes on foreign trade, the view that free trade is beneficial is coded as conservative and the view that free trade is not beneficial is coded as liberal
- For feelings toward Muslims and attitudes toward African-Americans, less favorable opinions are coded as conservative and more favorable opinions are coded as liberal
- For the view that politics is a rigged game, agreement is coded as liberal and disagreement is coded as conservative
- For the perception that “people like me” are losing ground, agreement is coded as liberal and disagreement is coded as conservative

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<sup>3</sup> Drutman, Lee. *Political Divisions in 2016 and Beyond: Tensions Between and Within the Two Parties*. Voter Study Group. June 2017. Available at <https://www.voterstudygroup.org/publication/political-divisions-in-2016-and-beyond>.

To group Trump voters by ideology, I use k means clustering. As we have no preconceived notion of what the ideological groups are or how many there should be, this is unsupervised machine learning. Although different numbers of clusters would provide valid and interesting results, I compute four clusters on the basis of maximizing the marginal improvement in the within-sum-of-squares.

Following this, I examine the proportion of “increased favorability” and “decreased favorability” Trump voters in each of the four ideology groups, separately for 2016-2017 and 2017-2018.

To summarize, my analysis includes the following steps:

1. Filter the data to voters who responded in 2016, 2017, and 2018, and who are not missing data for Trump favorability in each year.
2. Select variables of interest, including vote in 2016, Trump favorability, and the thirty-seven component ideology questions.
3. Create variables for change in favorability from 2016-2017 and from 2017-2018.
4. Recode the responses of the questions to the standardized -1 to 1 scale, and average the component ideology questions to create the twelve issue scores.
5. Cluster Trump voters into four ideological groups using k means clustering.
6. Examine the proportion of voters who increased favorability and voters who decreased favorability within the four ideological groups.

## **Results**

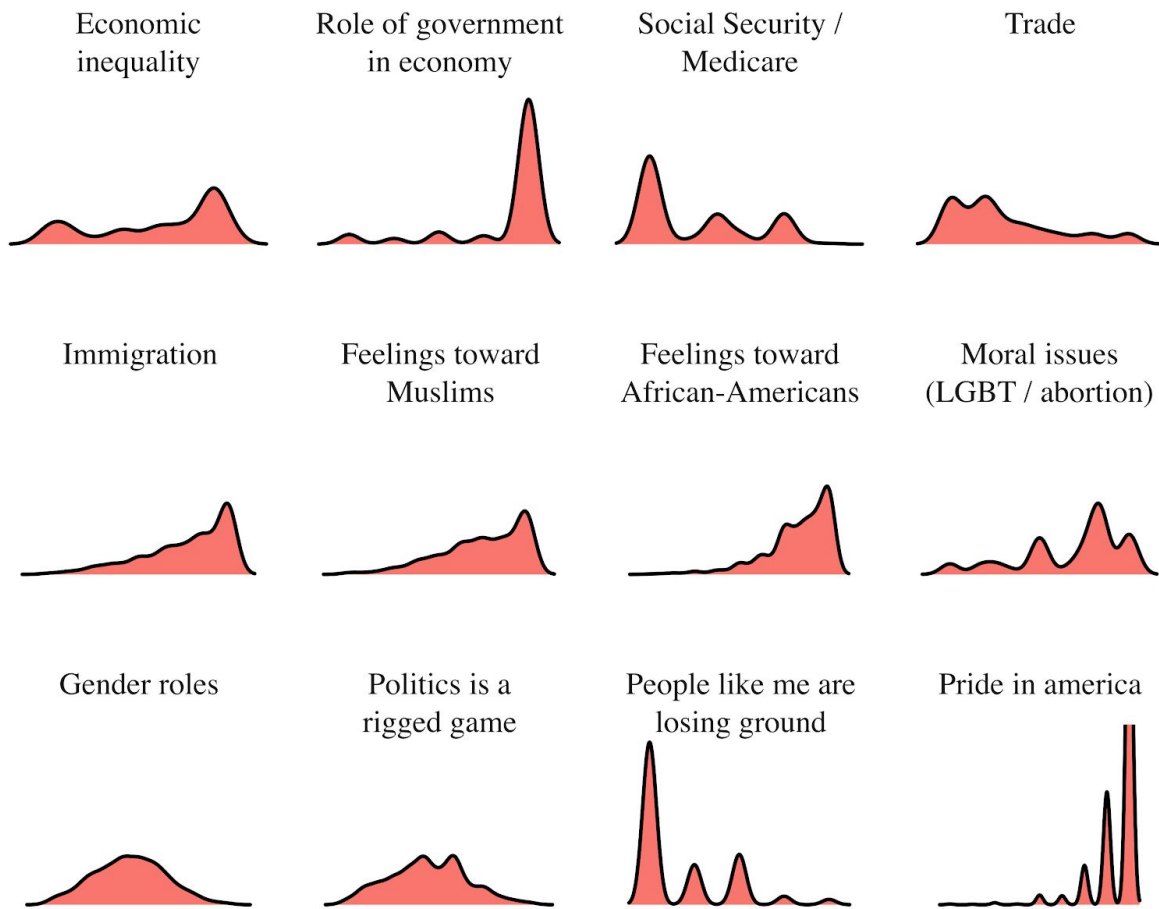
Using the above methods, I find that among four ideologically distinct groups of Trump voters, those who have increased or decreased favorability toward Trump are most likely to be found in the group with the most liberal opinions on economic issues, and to a lesser extent, with more liberal opinions on social and identity issues.

To begin with, we can look at how many Trump voters have changed their favorability toward Trump. From 2016 to 2017, 12% of voters either increased or decreased favorability. From 2017 to 2018, 9% of voters either increased or decreased, and a larger proportion of voters remained unfavorable.

<b>2016-2017</b>		
Total	1,612	100%
Increased favorability	74	5%
Decreased favorability	106	7%
Remained favorable	1,378	85%
Remained unfavorable	53	3%
Remained don't know	1	0%

<b>2017-2018</b>		
Total	1,612	100%
Increased favorability	62	4%
Decreased favorability	74	5%
Remained favorable	1,375	85%
Remained unfavorable	98	6%
Remained don't know	3	0%

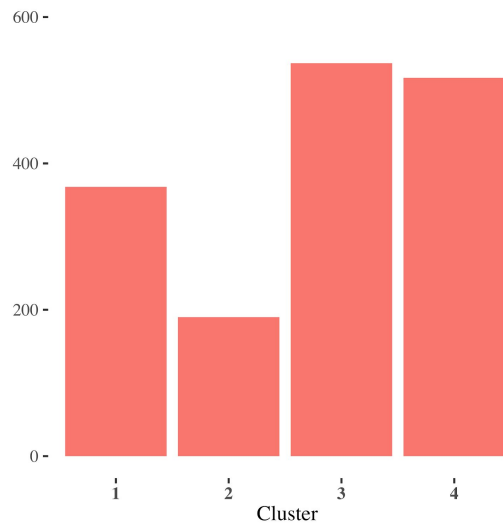
Next, we can see how all Trump voters fall on the left-right spectrum for each of the twelve issues. We can plot this using multiple density plots, where the x-axis represents political opinion from liberal to conservative, and the y-axis represents the proportion of Trump voters with that ideology.



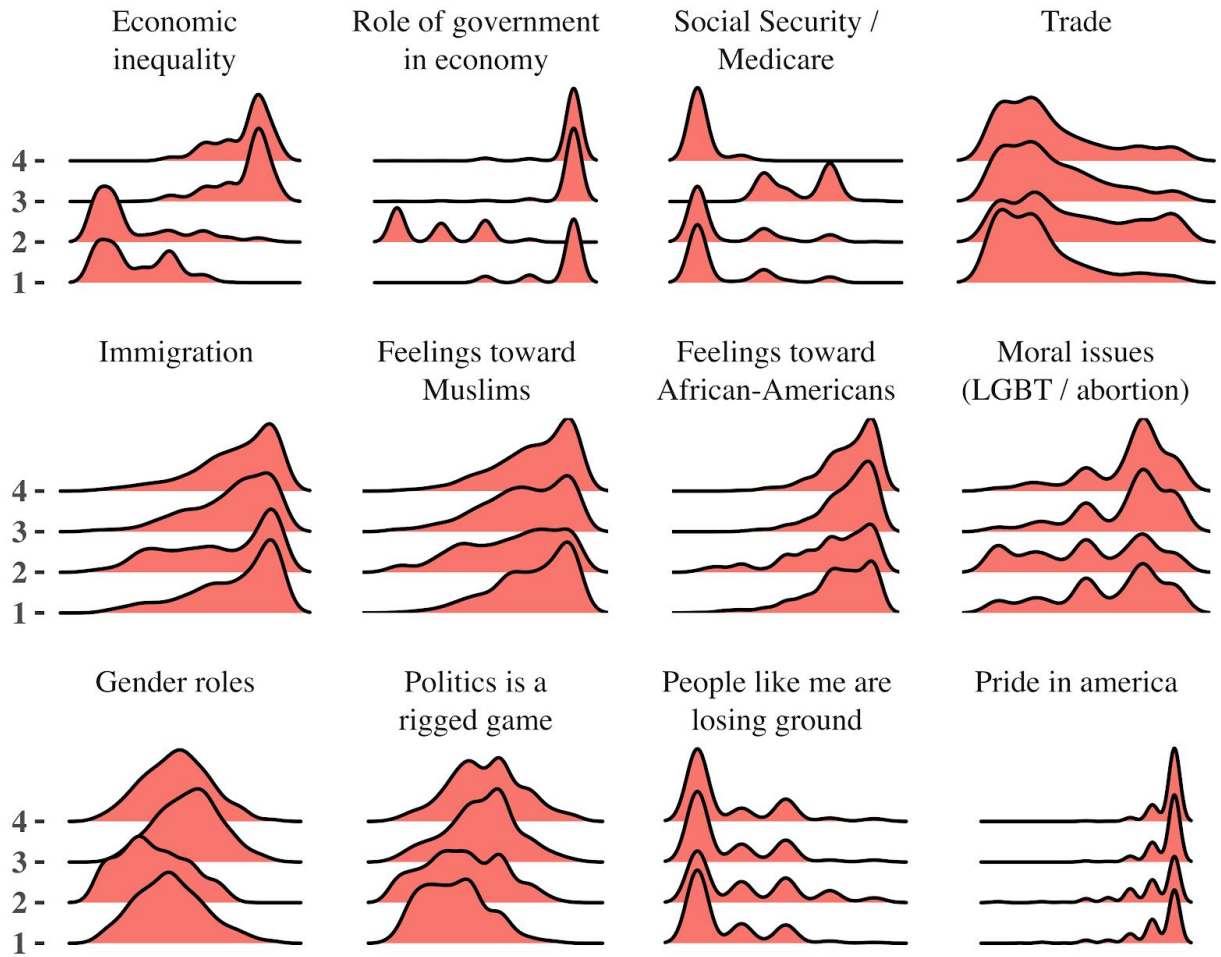
We can see that Trump voters are split on economic inequality and Social Security / Medicare, to the right on the role of government in the economy, to the left on trade, almost entirely to the right on immigration, racial attitudes, and LGBT and abortion issues, relatively centrist on gender roles and feeling politics is rigged, to the left on feeling that “people like me” are losing ground, and to the right on pride in America. Clearly, there are significant divisions among Trump voters, particularly in economic issues and somewhat on gender and politics being rigged. However, there is relative uniformity on immigration and racial views.

Clustering Trump voters into groups based on their opinions on these twelve issues results in four groups of varying size:





We can split the previous charts apart by ideological group to see how each group's voters are distributed on each issue. In the below graphic, all groups are sized equally for proportional comparison.



Immediately, we can see that groups are primarily divided by economic issues, and relatively uniform on social issues. More specifically, we can identify the defining characteristics of each group, along with their sizes:

Group	Size	Distinguishing characteristics
1	368	Liberal on economic inequality and feeling that politics is rigged, but still conservative on social and racial issues
2	190	Liberal on economic inequality and the role of the government in the economy, and somewhat liberal on social and identity issues
3	537	The most conservative Trump voters, the only group to the right on Social Security and Medicare
4	517	The most “typical” Trump voters, with the most common position on each issue

Finally, we can look at the percentage of voters within each group that had positive or negative changes in favorability toward Trump in each time span:

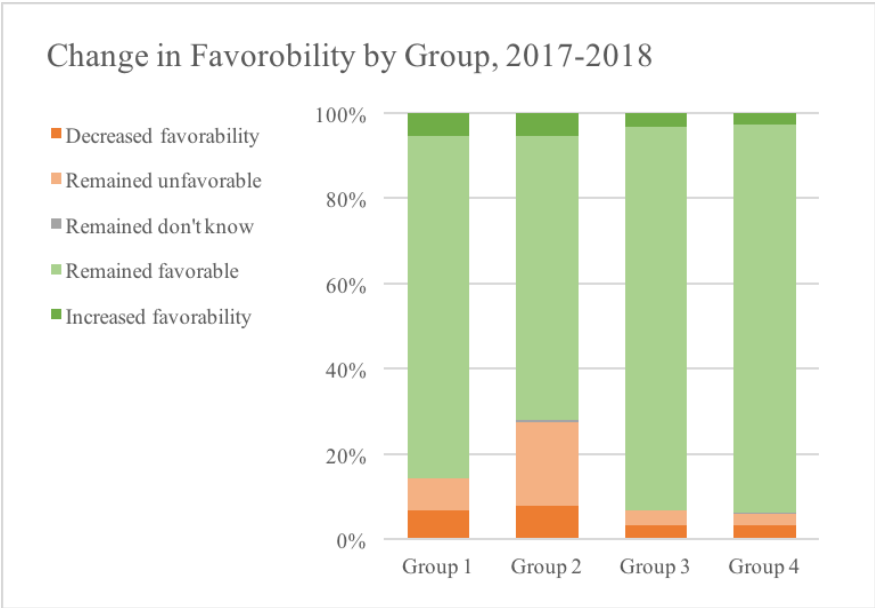
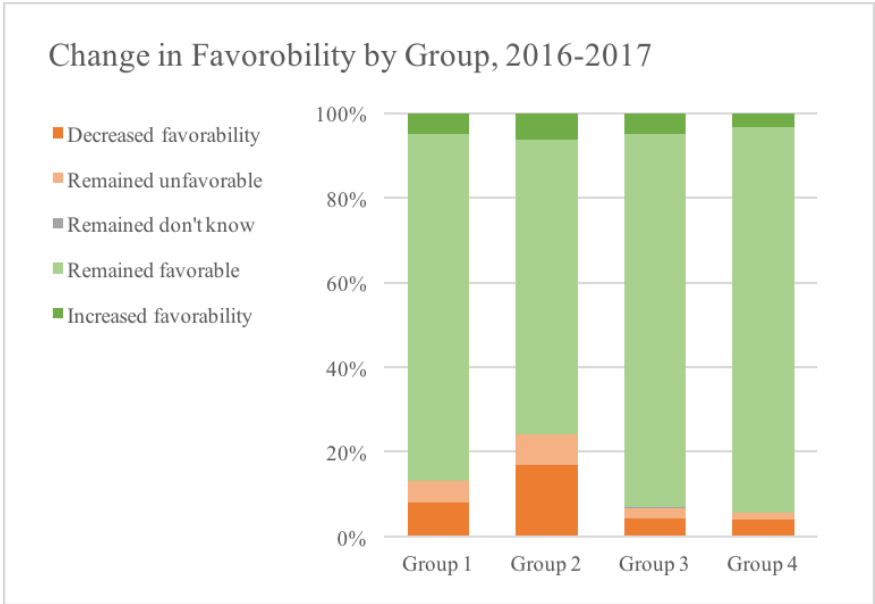
<b>2016-2017</b>					
<b>Group</b>	<b>Decreased favorability</b>	<b>Increased favorability</b>	<b>Remained favorable</b>	<b>Remained unfavorable</b>	<b>Remained don't know</b>
1	8%	5%	82%	5%	0%
2	17%	6%	69%	7%	0%
3	4%	5%	88%	2%	0%
4	4%	3%	91%	2%	0%

From 2016 to 2017, voters in group 2 (the most economically liberal Trump voters) were by far the most likely to have decreased favorability toward Trump, with 17% of group 2 decreasing favorability. They were also the most likely to have increased favorability, with 6% increasing favorability, although only by a slight margin. Group 1 (the next most economically liberal Trump voters) were the next most likely to decrease favorability, with 8% of voters decreasing favorability.

<b>2017-2018</b>					
<b>Group</b>	<b>Decreased favorability</b>	<b>Increased favorability</b>	<b>Remained favorable</b>	<b>Remained unfavorable</b>	<b>Remained don't know</b>
1	7%	5%	80%	8%	0%
2	8%	5%	67%	19%	1%
3	3%	3%	90%	4%	0%
4	3%	3%	91%	3%	0%

From 2017 to 2018, we see a similar although less pronounced pattern. Group 2 voters were the most likely to decrease favorability, at 8%, although only slightly. A similar proportion of group 1 voters decreased favorability as in 2016 to 2017 (7%).

Charting these numbers shows these patterns more clearly:



Groups 1 and 2 are the smallest, and when we look at absolute numbers rather than percentages this is apparent - in absolute terms, a somewhat similar number of voters from each group decreased favorability:

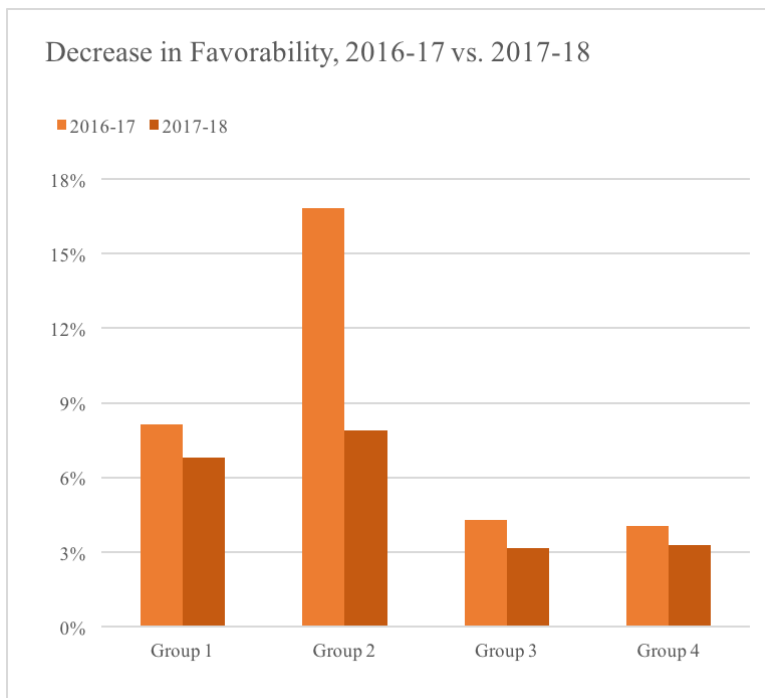
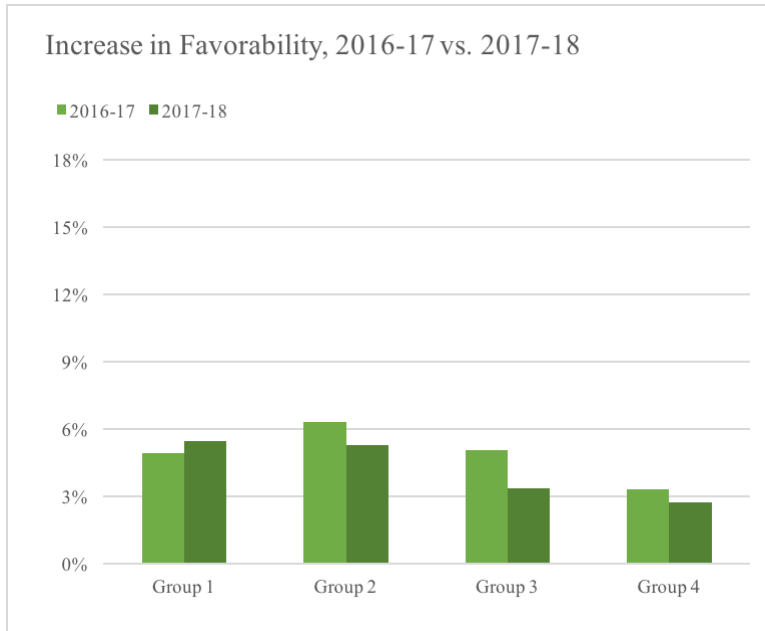
<b>2016-2017</b>					
<b>Group</b>	<b>Decreased favorability</b>	<b>Increased favorability</b>	<b>Remained favorable</b>	<b>Remained unfavorable</b>	<b>Remained don't know</b>
1	30	18	302	18	0
2	32	12	132	14	0
3	23	27	473	13	1
4	21	17	471	8	0

<b>2017-2018</b>					
<b>Group</b>	<b>Decreased favorability</b>	<b>Increased favorability</b>	<b>Remained favorable</b>	<b>Remained unfavorable</b>	<b>Remained don't know</b>
1	25	20	295	28	0
2	15	10	127	37	1
3	17	18	482	19	1
4	17	14	471	14	1

Overall, while relatively similar numbers of voters from each group changed favorability, the voters most likely to show a change in favorability toward Trump - either positive or negative - were groups 1 and 2, which are distinguished by being much more economically liberal than other Trump voters, particularly on inequality, and somewhat more moderate on some social and identity issues. The Trump administration's economic policies could have been a deciding factor in leading these voters to change their opinions, although it is impossible to attribute causality without a deeper analysis.

Broadly, this is compatible with Griffin's finding that Obama-Trump voters exhibited a larger decrease in favorability than other voter groups. It seems possible that group 2 voters are not party-line Republicans, given their views on a number of issues but especially the role of government in the economy, where the component questions are very general (see appendix).

Another noteworthy finding is that for each group, the changes in favorability are almost identical across both time periods - in all cases but one, there is virtually no difference between 2016-2017 and 2017-2018. This is notable because the 2016 survey was conducted in December, after Trump had won the election but before his inauguration, so in 2016 voters still did not know exactly how Trump would govern.



The one exception is group 2, where 17% of voters decreased favorability from 2016-2017, while only 8% decreased favorability from 2017-2018. One explanation is that many group 2 voters had a favorable opinion of Trump in 2016 based on the campaign but decided they did not like him sometime in 2017 after realizing how conservative his administration was going to be.

The fact that we see this difference between the time periods for group 2 but not for group 1 is significant, and suggests that this “realization” in 2017 may have been a reaction to the differentiating issues between the groups. Both groups are liberal on economic inequality, but they differ starkly in their views of the role of the government in the economy, where group 2 is far more liberal, and also differ somewhat in views on gender roles, moral issues, and immigration and racial issues, where group 2 is somewhat more moderate. This suggests that the large number of group 2 voters who decreased favorability from 2016-2017 may have been “surprised” by a number of ideological factors in Trump’s governance, although economic issues are the most likely to have been surprising. This seems plausible given that the Trump administration’s policies on economic issues have sometimes not matched his campaign rhetoric, particularly on issues such as taxes, although we cannot know for certain from this analysis.

Another possible explanation is that Trump benefited from a post-election “bounce” in 2016 that temporarily increased favorability among this group, although if this were true then we might expect to see a similar pattern in other groups.

## **Conclusion**

Although Trump’s overall favorability has remained relatively stable throughout his presidency, many Trump voters have changed their opinion of him. Using survey data from the Voter Study Group reflecting responses in 2016, 2017, and 2018, this analysis groups Trump voters by ideology in order to determine the proportion of each group who changed their views of Trump during the time periods analyzed. K means clustering is used to group Trump voters based on their views on twelve political issues, each calculated from component questions, revealing four groups primarily differentiated by their economic views, although there are differences on social and identity issues as well.

I find that the groups most likely to change their views of Trump in both 2016-2017 and 2017-2018 are the more economically liberal groups. In particular, the group with liberal views on the role of government in the economy, and to a lesser extent, on social and identity issues, was much more likely than other groups to exhibit decreased favorability from 2016-2017.

Future research could test these findings by analyzing changes from 2018 to 2019, which would help to understand how these patterns are evolving over time and also help to mitigate the modest sample sizes in this analysis. It could also be fruitful to explore how

voters differ in terms of personal demographics, or to look at smaller changes in opinion rather than grouping “very” and “somewhat” favorable responses together.

Overall, this analysis suggests that those who wish to persuade voters ahead of the 2020 election may be wise to focus on economic issues rather than social or racial issues. While economic issues can make for less exciting news than other contentious issues, it seems that the Trump voters who are mostly likely to be persuadable are relatively more liberal on economic issues. Given the small margin of victory in 2016, this is an important question and further research is needed.

## **Appendix:**

*Political issues and component survey questions:*

### **1. Attitudes on Economic Inequality**

- Feeling that our economic system is biased in favor of the wealthiest Americans
- Do you favor raising taxes on families with incomes over \$200,000 per year?
- Do you feel that the distribution of money and wealth in this country is fair, or do you feel that the money and wealth in this country should be more evenly distributed among more people?

### **2. Attitudes Toward Government Intervention**

- Feeling that we need a strong government to handle today's complex economic problems, or that people would be better able to handle today's problems within a free market with less government involvement
- In general, do you think there is too much or too little regulation of business by the government?

### **3. The Importance of Social Security/Medicare**

- The importance of Social Security
- The importance of Medicare

### **4. Attitudes on Foreign Trade**

- Do you think free trade agreements with other countries generally increase or decrease each of the following, or don't make much difference either way?
  - The number of jobs available to American workers
  - The wages of American workers
  - The prices of products available for sale
  - The quality of products



- The amount of products businesses sell

#### **5. Attitudes on Immigration**

- Overall, do you think illegal immigrants make a contribution to American society or are a drain?
- Do you favor or oppose providing a legal way for illegal immigrants already in the United States to become U.S. citizens?
- Do you think it should be easier or harder for foreigners to immigrate to the US legally than it is currently?

#### **6. Feelings Toward Muslims**

- Do you favor or oppose temporarily banning Muslims from other countries from entering the United States?
- Feeling thermometer toward Muslims

#### **7. Attitudes Toward African-Americans**

- Here are a few statements about race in America. Please tell us whether you agree or disagree with each statement.
  - Over the past few years, blacks have gotten less than they deserve
  - Irish, Italian, Jewish, and many other minorities overcame prejudice and worked their way up. Blacks should do the same without any special favors.
  - It's really a matter of some people not trying hard enough; if blacks would only try harder they could be just as well off as whites.
  - Generations of slavery and discrimination have created conditions that make it difficult for blacks to work their way out of the lower class.

#### **8. Attitudes on Moral Issues**

- Do you think abortion should be legal in all cases, legal/illegal in some cases, or illegal in all cases?
- Do you favor or oppose allowing gays and lesbians to marry legally?
- Which of the following comes closest to your view? Should be allowed to use the restrooms of the gender with which they currently identify, or should be required to use the restrooms of the gender they were born into

#### **9. Attitudes On Gender Roles**

- Please indicate whether you agree, disagree, or neither agree nor disagree with each statement.
  - Women should return to their traditional roles in society
  - When women demand equality these days, they are actually seeking special favors
  - Women often miss out on good jobs because of discrimination

- Women who complain about harassment often cause more problems than they solve
- Sexual harassment against women in the workplace is no longer a problem
- Increased opportunities for women have significantly improved quality of life in the United States

**10. The View That Politics is a Rigged Game**

- Please tell us whether you agree or disagree with each of the following statements:
  - Elections today don't matter; things stay the same no matter who we vote in
  - People like me don't have any say in what the government does
  - Elites in this country don't understand the problems I am facing

**11. The Perception That “People Like Me” Are Losing Ground**

- In general, would you say life in America today is better, worse, or about the same as it was fifty years ago for people like you?
- In America today, do you feel the values and culture of people like you are generally becoming more widespread and accepted, holding steady, or generally becoming rarer and less accepted?

**12. Pride in America**

- How proud are you of America in its history?
- How much do you agree or disagree with the following statement? I would rather be a citizen of America than any other country in the world

*Code used is included in the attached files.*