Predicting political partisanship from beer preferences

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Abstract

This study establishes a non-linear connection between individuals’ choice of beer and their political preferences. In contrast to earlier studies that provide contradictory evidence about whether Republican partisanship increases or decreases with the average price of consumed beer, I find a split between individuals who drink either very cheap or very expensive beer—who tend to be Democratic partisans—and those who drink average priced beer—who tend to be Republican partisans.

Introduction

Political operators have long used the term “Joe Six-Pack” to refer to the average voter, but as campaign staff target ever smaller and smaller voter niches, they want to know what’s in that six-pack. Beer choice may be a useful indicator of individuals’ political leanings, but unfortunately, previous studies about this link offer contradictory results. This study builds on earlier research to answer the question of what beer choice predicts about partisanship. Based on an analysis of the BS 2005 dataset, I argue that beer choice and partisanship have a non-linear relationship: those who drink beer at the extreme ends of the price spectrum vote Democratic, and those in the middle tend to vote Republican.

Previous research is divided into two camps. Schlitz’s (1982) pioneering survey of Wisconsin drinkers found a strong correlation between the price of Joe’s six-pack and his likelihood of voting Republican, and Blatz’s (1996) follow-up study confirmed this result in a national sample. Their model postulated beer choice as a proxy for income, suggesting that their result paralleled the well-known propensity of fat cats to vote Republican. On the other hand, more recent studies (e.g. Maytag: 2000, Redhook: 2001; Adams: 2004) have found the opposite correlation. In their studies of urban beer drinkers, they find that those who prefer costly brews tend to vote Democratic. Their results could be summarized as the “microbrew model:” beer snobbery is another example of Democratic voters’ tendency to look down on common folk.
Clearly, both of these cannot be right, leaving political operators with no reliable guide to target their beer-related advertising budgets. This study aims to fill that gap.

Methodology

In contrast to earlier studies that assume beer and partisanship have a linear relationship (i.e. as beer price rises, individuals’ likelihood of supporting one political party rises a corresponding amount), this study divides respondents into three groups, and makes comparisons across the groups. I use Leinenkugel’s (2005) Beer-drinking Survey (referred to as BS 2005) with one important modification.

I created a new variable beer preference that categorizes respondents by beer preference into one of three groups. Those who prefer swill beer, which I defined as under $9.99 a case (e.g. Pfieffer) fell into group 1; those who preferred beer snob beer, which I define as anything over $6.99 a six-pack (e.g. Sam Adams) fell into group 3, and everyone in-between was categorized as a 2. In this study I refer to group one as Just Plain Folks (JPF), group 2 as Normal People (NP) and group 3 as Beer Snobs (BS). The study also asked respondents for their political partisanship. This arranges them on a scale of 1 to 5, where one is strongly Democratic and five is strongly Republican. Table 1 offers descriptive statistics for these variables. The NP group is roughly twice as large as either of the two smaller groups, but all three are large enough samples to generalize from.¹ The mean political partisanship matches that found in the national NES studies, increasing our confidence in these results.

To test the correlation between beer preference and political partisanship, I conduct a series of difference of means tests. This procedure involves comparisons between the mean partisanship of each group, testing whether any observed

<table>
<thead>
<tr>
<th>Table 1: Descriptive Statistics</th>
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<tr>
<td>Beer Preference</td>
</tr>
<tr>
<td>N=</td>
</tr>
<tr>
<td>Political Partisanship</td>
</tr>
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</tbody>
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¹ More information about the BS 2005 dataset can be found at www.chippewa.edu/~leinenkugel/BS2005codebook.pdf.
differences are large enough to be statistically significant. This is done by creating a ratio of the difference to the standard deviation, adjusted for sample size. The study includes three tests, each of the groups against the other two.

Results

The results of this analysis, shown in Table 2, strongly supports the hypothesis of a non-linear connection: those in the middle vote Republican, and those on either side vote Democratic. A first glance at the means for each group provides initial confirmation. Normal people have a higher partisanship score than either of the other two groups.

Table 2: Difference of Means Test Results

<table>
<thead>
<tr>
<th>Group means</th>
<th>Difference</th>
<th>t-score</th>
<th>significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>NP vs. JFP</td>
<td>3.1 vs. 2.8</td>
<td>0.3</td>
<td>1.91</td>
</tr>
<tr>
<td>NP vs. BS</td>
<td>3.1 vs. 2.7</td>
<td>0.4</td>
<td>2.71</td>
</tr>
<tr>
<td>JFP vs. BS</td>
<td>2.8 vs. 2.7</td>
<td>0.1</td>
<td>1.32</td>
</tr>
</tbody>
</table>

This result is borne out by the statistical analysis. There is a statistically significant difference between Normal People and Just Plain Folks (t=1.91, p=.09), showing that individuals who drink moderately priced beer are more likely to vote Republican than those who drink swill. There is an even clearer difference (in the same direction) between Normal people and Beer Snobs (t=2.71, p=.02). On the other hand, there does not appear to be a statistically significant difference between Just Plain Folks and Beer Snobs, suggesting that they are equally likely to vote Democratic.

Discussion

These results suggest that both sides of the literature are partially correct. Schlitz and Blatz are right that swill drinkers are less likely to vote Republican than most people who drink higher priced beer. On the other hand, the results bear out the microbrewery thesis as well—high priced beer drinkers tend to vote more Democratic than their less spendthrift counterparts.

This study’s particular contribution is to show that both theories must be modified to account for a humped distribution of political preferences, as shown in Figure 1.
Republican sentiment increases with beer price until the individual approaches the upper end of large-brewery range and the microbrew range. At that point, increasing price signals increased support for the Democratic party, instead.

Admittedly, the lack of appropriate statistical controls is problematic. These results do not assess whether beer preference itself produces political partisanship, or both variables are functions of a third, unmeasured variable, such as education or occupation. Unfortunately, the difference of means technique does not allow us to control for these variables, suggesting that more sophisticated analysis may be a fruitful place for future research. In defense of this study, however, finding that beer preference is a consistent and easily identifiable indicator of political preference is a useful result, especially to campaign practitioners.

Bibliography

Adams: 2004
Blatz: 1996
Leinenkugel: 2005
Maytag: 2000
Redhook: 2001
Schlitz: 1982