State Unemployment & US Congressional Election Votes: Which Party Wins?

Introduction

When the economy is doing poorly, many people think the Democratic Party is more likely to receive votes in US elections. Conversely, the Republican Party is generally thought to benefit from prospering economies. Are these statements true? This research looks at House of Representatives elections from 1980 to 2012 in nine swing states. The percent of votes to either the Republican or Democratic party given to the Republican Party in each state for each election is compared to the state unemployment rate at the time of the election. The data is used in a panel format to control for fixed effects in both years and states.

Econometric Model

$$Y_{i,t} = \beta_1 + \beta_2 U_{i,t} + \beta_3 state_i + \beta_4 year_t + e_{i,t}$$

$Y_{i,t}$: % Vote given to Republicans out of votes given to either Republicans or Democrats in state i in year t
$U_{i,t}$: State unemployment rate during election month
$state_i$: Fixed effects dummy variable for state i
$year_t$: Fixed effects dummy variable for year t
$e_{i,t}$: Error term in state i in year t

Empirical Results

	Coef.	Std. Err.	t	P>|t|	[95% Conf.	Interval]
stateunempnov	-.7819381	.6129215	-1.28	0.204	-1.994799	.430923

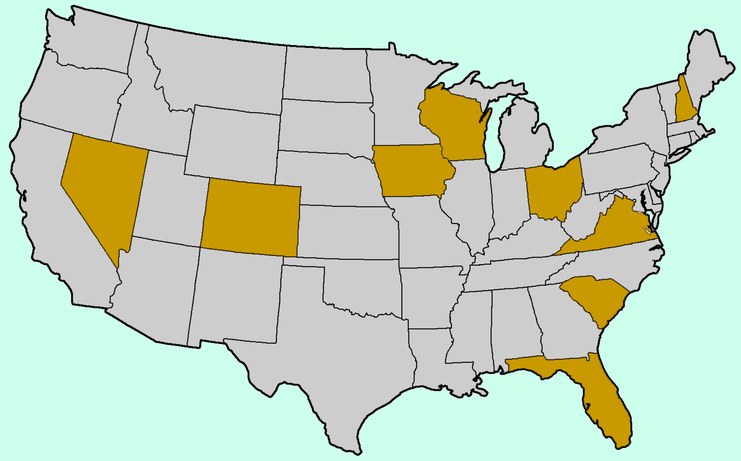
State unemployment has a coefficient estimate of -0.782 with a negative sign as was expected. Although this suggests voters in these swing states are less likely to vote Republican in times of increased unemployment, the findings are not significant. The p-value of the t-test for this parameter being significant is only 0.204.

No state indicator variables had statistical significance. P-values were particularly high for these OLS parameter estimates' significances. This is a desirable outcome. Had a state indicator been statistically significant, it would suggest that the corresponding state was not a swing state. A state that is statistically more likely to vote more or less for the Republican Party compared to the Democratic Party in these years would not fit the criteria for being a swing state.

Despite weak significance results on many regressors, the model as a whole performs well against an F-test. The model has an F-statistic of 1.83, which has a p-value of 0.0158. According to the F-statistic, the model is significant.

Presented by Brian Morin on April 26, 2013 at the University of New Hampshire

States Included



- Colorado
- Florida
- Iowa
- New Hampshire
- Nevada
- Ohio
- South Carolina
- West Virginia
- Wisconsin

These states were included because of their consideration as "swing states." These states are not traditionally tied to either the Republican or Democratic Party and therefore are more likely to have a varying vote based on factors such as the economy. Empirical evidence of these states as swing states is discussed in empirical results below.

Highest % Republican Vote

1. New Hampshire
2. Colorado
3. South Carolina
4. Iowa
5. Nevada
6. Florida
7. Virginia
8. Ohio
9. Wisconsin

Lowest % Unemployment

1. New Hampshire
2. Virginia
3. Iowa
4. Wisconsin
5. Colorado
6. Florida
7. South Carolina
8. Nevada
9. Ohio

Items to be Considered

A major drawback of the data is the sample size. Ideally, data would have been used from 1946 to 2012 after World War II, but state level unemployment is not available. House of Representatives data can be argued to be noisier and more responsive to political factors compared to the United States Senate. The two-year term might be more volatile than senator six-year terms. Further, representatives are voted for on a district level. There is some discrepancy in the model using state and national level regressors on data this is compiled first from the district level then finally to the state level. Due to the nature of Senate elections and senatorial classes, the sample size would have been smaller than the House of Representatives data.