

Andrew Kim
POLI 102
Professor McDonald

POLI 102 Final Project - Senate Bipartisanship (2015-21)

Has the level of bipartisanship in the U.S. Senate changed between 2015 and 2021? Has one party been more bipartisan than the other over that period?

The data I used was published by the Lugar Center and Georgetown University's McCourt School of Public Policy. It consists of nonpartisan rankings of U.S. senators on how often they work across party lines. Specifically, I analyzed scores for two-year blocks from 2015 to 2021.

Hypotheses

My first hypothesis is that senators' bipartisanship scores will significantly decrease over time. I predict this decrease due to President Trump's inflammatory populist rhetoric creating strong polarization between his political supporters and detractors.

My second hypothesis is that Democratic senators have significantly greater bipartisanship scores than Republican senators. Though I may be biased as a liberal myself, my perception is that President Trump's leadership of the Republican party has driven a greater electoral need for partisan loyalty among its incumbents.

Statistical Results

I used fixed effects bivariate linear regressions to determine the effects of time and party on bipartisanship scores.

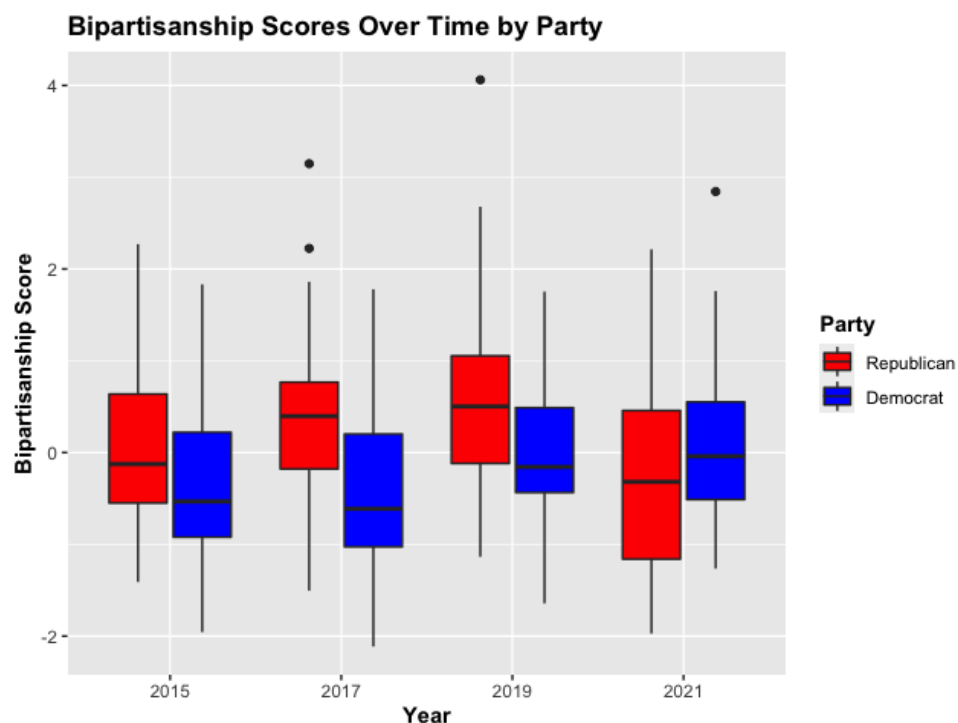
After assigning a dummy variable to political party, where 1 = Democratic senator and 2 = Republican senator, my first regression regressed year on bipartisanship scores, indexing by political party. The coefficient on year yielded a p-value of .1318, which was not significant at the 5% significance level. My first hypothesis was incorrect: senators' bipartisanship scores are not significantly different over time.

Coefficient	Estimate	Std. Error	t-value	p-value	Significant?
Year	.030727	0.020344	1.5104	.1318	No, at 5%

My second regression regressed political party on bipartisanship scores, indexing by year. The coefficient on party yielded a p-value of about 0.0006, indicating significance of political party at the 0.1% level. However, the coefficient was approximately -0.3084, indicating that a Democratic senator is estimated to receive a bipartisanship score 0.3084 points below a Republican senator. My hypothesis was incorrect—Democratic senators actually have significantly *lower* bipartisanship scores than Republican senators.

Coefficient	Estimate	Std. Error	t-value	p-value	Significant?
Party	-0.308364	.089645	-3.4399	.0006454	Yes, at 0.1%

Visualization



These boxplots demonstrate that there is no clear trend in bipartisanship scores over time—neither party exhibits substantially and consistently increasing or decreasing bipartisanship scores across the four observation periods. However, Republican senators were evidently more bipartisan over the time frame. In 2015, 2017, and 2019, Republicans consistently had substantially higher median bipartisanship scores than Democrats, as well as higher interquartile ranges, maximums, and minimums. This only changed in 2021, when Democrats had a slightly higher median and interquartile range. Still, throughout the observed period, Republican senators can be concluded to have displayed greater overall bipartisanship than Democrats.

Works Cited

Branegan, Jay, et al. "Our Work - Bipartisan Index." *Our Work: The Lugar Center*, The Lugar Center, 2021, <https://www.thelugarcenter.org/ourwork-Bipartisan-Index.html>.