Andrew Shackelford

GOV 1535

Examining the Relationship between Congress and the Supreme Court

As part of one of the three co-equal branches of government of the United States, the Supreme Court holds immense power over American lives. Yet as the only branch of government that is not elected, many have tried to determine what factors influence the decision-making process of the Supreme Court. As we have covered throughout the class, popular models for the Supreme Court decision-making process include the legal model, the attitudinal model, and the strategic/rational choice model. The legal model is just that – a model that predicts the behavior of the Supreme Court based on previous statutory and common law. The attitudinal model is also fairly straightforward – it predicts the behavior of the Supreme Court based on the justices’ sincere policy preferences.

However, the strategic model (also known as the rational choice model) takes more factors into account. Among the factors considered by the rational choice model are the ideology of Congress, the ideology of congressional committees, the ideology of the President, public opinion, and the ideology of the Court. This makes the model both difficult to analyze and difficult to disprove. Some, such as Lee Epstein and Jack Knight in *The Choices Justices Make*, make the case that justices take into account the expected actions of Congress and the president before deciding cases that affect policy.[[1]](#footnote-1) Others, such as Segal and Spaeth, make the case that the Court gives little consideration to the opinions of other branches of government, given the Court’s willingness in the past to declare acts of Congress unconstitutional.[[2]](#footnote-2) Since the Court has a consequential status as the final decision maker on the interpretation of laws, we seek to determine if it is indeed possible to predict Supreme Court behavior through the rational choice model. Much work has been done examining how the Supreme Court votes given the policy preferences of the other branches of government, so we seek to go deeper. We plan to investigate how Supreme Court opinions change based on the partisan lean of Congress. Supreme Court opinions give the justices on the court much more leeway in expressing their true policy preferences, and thus provide a greater source of information on the Court’s policy ideal point. If we are able to ascertain a statistically significant difference in how the Court writes their opinions based on their ideological relationship with Congress, we would possibly be able to predict future Supreme Court opinions and decisions based on these factors, or at least gain insight into the Court’s decision-making process. As such, we believe research into the Supreme Court’s opinions may prove extremely fruitful for analysis of the Supreme Court decision-making process.

Before we start our testing, we will examine the current literature on the Supreme Court and the rational choice model. In *The Choices Justices Make*, Jack Knight and Lee Epstein examine the strategic model of Supreme Court decision-making in great detail. In their work, they provide both anecdotal and statistical support for their belief that the rational choice model affects the Supreme Court decision-making process. Anecdotally, they observed that the Court often refused to grant cert in cases in which they expected that other political actors would move policy away from their ideal points.[[3]](#footnote-3) For example, despite the salience of questions regarding the constitutionality of the Vietnam War, the Court never resolved any of these disputes despite many requests to do so. In addition, after its highly controversial *Brown v. Board of Education* decision, the Court only granted cert in one of six cases involving segregation from 1954 to 1957.[[4]](#footnote-4) Statistically, Knight and Epstein also observed that during the 1978 term, when a Republican Court was met with a Democratic Congress and President, the Court rejected 87% of cases regarding equal employment practices.[[5]](#footnote-5) Yet in 1982, with Ronald Reagan as president and a Republican senate, the court rejected only 72% of equal employment practice cases.[[6]](#footnote-6)

Alternatively, Segal and Spaeth have researched the strategic model and determined that the anticipated reactions of other political actors have little to no effect on the Court’s policy. In *The Supreme Court and The Attitudinal Model Revisited*, Segal and Spaeth examine how contrary to the beliefs that support the rational choice model, the Court seems completely willing to strike down federal laws. Given the Court’s decisions to strike down school prayer, the Gun Free School Zone Act, the Religious Freedom Restoration Act, and flag protection statutes among others, Spaeth and Segal argue that the Court does not appear to show much deference to laws passed by Congress.[[7]](#footnote-7) As Linda Greenhouse described the 1998 term of the Supreme Court, “The Supreme Court rules. That was the message of a term in which the Court asserted its power over every branch and level of government, few of which emerged unchanged from the encounter.”[[8]](#footnote-8) According to Walter Dellinger, an acting Solicitor General for the Clinton Administration, “This is a court that doesn’t defer to government at any level. The Court is confident it can come up with the right decisions, and it believes it is constitutionally charged with doing so.”[[9]](#footnote-9) As Segal and Spaeth have shown, the Supreme Court often rejects Congressional legislation without consideration, thus raising questions as to whether the rational choice model for Supreme Court decision-making is reliable. We seek to expand upon the previous research in this subject. To do so, we will examine the relationship between Supreme Court opinions and Congress.

Now we will specify which hypotheses we wish to test. We seek to determine if there is a statistically significant relationship between the content of Supreme Court opinions and the ideology of Congress at the time the opinion was issued. While there are many different possible ways to analyze the content of Supreme Court opinions, we will focus on each opinion’s “sentiment.” Generally, sentiment is the overall positive/negative tone of a document. However, sentiment can mean many different things to many different people, so we will use a standardized sentiment analysis tool to analyze each Supreme Court opinion. We will describe the tool later in the methods section. We consider it possible that a Supreme Court opinion may be more positive when the Supreme Court’s ideology matches Congress’ ideology, as the Court would be more likely to hear a case regarding a law it agrees with. Therefore, we state our null hypothesis to be that there is no statistically significant relationship between the sentiment of the Supreme Court’s opinions over the course of a year and the agreement between the ideology of Congress and the Supreme Court during that year. Our alternative hypothesis is that there is a positive correlation between the sentiment of the Supreme Court’s opinions and whether the Supreme Court and Congress share a similar ideology.

In order for us to test this hypothesis, we first must gather copious amounts of Supreme Court opinions in order to analyze their sentiment. Thanks to the collection of Supreme Court cases at Justia,[[10]](#footnote-10) we have access to Supreme Court opinions all the way back to John Jay’s court in 1789. However, we don’t seek to go that far back. Using a wonderful Python library called BeautifulSoup, we automatically scraped every single Supreme Court opinion from 1900 to present. Of those opinions, PDFs are only reliably available for the years 1992 to present. Once we obtained the PDFs, we converted them to text. Sadly, only the PDFs from the years 2004 to present could be reliably converted to text. However, this simplifies our analysis and removes confounding variables. We will analyze only the cases decided by the Roberts Court (2005-present), so that the ideology of the Court is not in question. Since the Roberts Court has leaned reliably conservative, we are able to keep the Court’s ideology constant and simply analyze how the Supreme Court’s opinion sentiment varies with Congress’ ideology.

Now that we have the Supreme Court opinions in text form, we must analyze their sentiment. To do so, we will use the Python Natural Language Toolkit, often abbreviated as NLTK.[[11]](#footnote-11) NLTK is an open source library for Python that provides many useful tools for analyzing language, among them sentiment analysis. First, however, we must break the text of the opinion into discrete sentences in order to analyze the sentiment. To do so, we use NLTK’s “sent\_tokenize” tool, which separates each opinion text into an array of multiple sentences. We are finally ready to analyze the sentiment of the Supreme Court opinions. We will analyze the sentiment using NLTK’s “VADER” sentiment analysis tool,[[12]](#footnote-12) a cutting edge tool designed by C.J. Hutto of Georgia Tech.[[13]](#footnote-13) Most standard sentiment analysis tools are actually surprisingly basic – each word is assigned a “score” ranging from -1.0 (completely negative) to 1.0 (completely positive), and the sentiment of a sentence is the average of the score of all words within that sentence. However, this does not account for the context and phrasing of a sentence, and does not account for punctuation at all. VADER analyzes sentiment while accounting for all of these factors, even factoring in slang, capitalization, and contrastive conjunctions. For example, the phrase “Sentiment analysis has never been good.” receives a compound score of

-0.3412, while the phrase “Sentiment analysis with VADER has never been this good.” receives a compound score of 0.5228. This complex sentiment analysis allows us to rate the sentiment of sentences remarkably accurately in a consistent way that does not require us to manually rate each sentence ourselves.

After ranking the sentiment of each sentence in every opinion, we assign each opinion an overall sentiment by averaging the sentiments over all sentences in that opinion. By doing so, we avoid giving longer opinions a higher sentiment value based solely on their length. We then average the sentiments of all opinions from a given year to get one “true” sentiment value for each year. The code for all of the text processing and sentiment analysis mentioned above is much too long to describe in complete detail, so I have made it available on my personal GitHub, linked in the footnotes below.[[14]](#footnote-14) The raw sentiment data for every single sentence of every Supreme Court opinion is also available there. While we could have tried to analyze the correlation between opinion sentiment and Congress’ ideology without averaging all cases within a year, this allows too much variation based solely on the differences from case to case. By averaging all the cases from a year, we remove the variation from case to case and get a better idea of the Court’s policy preferences overall. We now have data representing the Court’s opinion sentiment on a year-by-year basis. In order to get data representing Congress’ ideology on a year-by-year basis, we turn to the Brookings Institution. We use their collection of *Vital Statistics on Congress* to obtain ideology values for each Congress we are examining – from 2005 to 2014.[[15]](#footnote-15)

Now, we run a regression with Congress’ ideology as the independent variable and the Court’s sentiment as the dependent variable, and examine the results to determine if there is a correlation. The results of this regression will tell us the R-squared value, or the coefficient of determination. This will tell us how much of the variability in our dependent variable is explained by our independent variable. A R-squared value of 1 suggests that all the variability in the data is explained by the independent variable, that is, the data fits regression line perfectly. A R-squared value of 0 suggests that none of the variability is explained by the independent variable, therefore we cannot use our independent variable to predict our dependent variable. If we do happen to obtain a high R-squared value, we could then use the coefficients given by the regression analysis to predict the sentiment of a Supreme Court’s opinions over the course of a year given Congress’ ideology for that year. Our data that we used for the regression analysis and the output of said regression analysis are presented in the tables below.

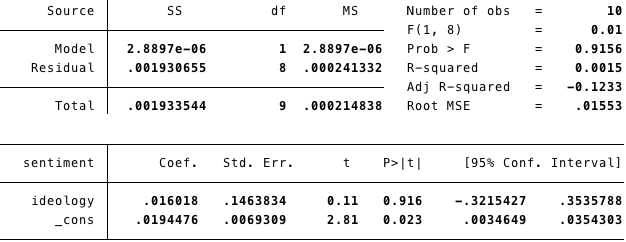
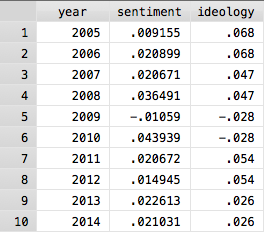


Figure 1: Data Figure 2: Regression Results

Glancing at the input data in Figure 1, there is no immediately apparent trend between the sentiment of the Supreme Court’s opinions for a given year and the ideology of Congress for that same year. Examining the regression statistics in Figure 2, we confirm that there is no trend as we obtain a R-squared value of 0.0015. This is essentially zero, and implies that there is almost no correlation between the sentiment of Supreme Court opinions and the ideology of the current Congress. As such, we fail to reject our null hypothesis that there is no relationship between Congress and Supreme Court opinions. We can conclude, at least through this method of Supreme Court opinion analysis, that there is no significant relationship between Congress’ ideology and Supreme Court opinions during the Roberts Court.

While we would have liked to find a relationship between these data, a statistically insignificant result is still a result, and an important one at that. These results lend further evidence to the assessment by Segal and Spaeth that the Supreme Court does not follow the rational choice model, and instead that each justice votes with their sincere policy preferences. Qualitatively, it is unlikely that a Court willing to overturn laws recently passed by Congress is really considering the future decisions of Congress and the President at every turn. As the final arbiter in the interpretation of United States law, the Supreme Court has almost unchecked power in putting their own policy preferences into practice.

This begs the question – are we, as Americans, okay with that? The Constitution designates the Supreme Court as one of three co-equal branches of government, not one that supersedes all others. Congress requires the President to approve its laws, and the President requires Congress to pass the laws he or she wants, but neither Congress nor the President can force the Supreme Court to interpret their laws the way they desire. In a world where neither the legal nor the rational choice model hold much water, are we okay with Supreme Court justices making decisions completely attitudinally? We leave that question to the reader.

Through our examination of Supreme Court opinions, we have determined that there is absolutely no correlation between the ideology of Congress and the sentiment of the opinions that the Supreme Court renders during that time. For better or for worse, the Court does not appear to show any consistent change in sentiment based on whether they agree with Congress’ ideology. This lends more evidence to the position that the rational choice model does not have much predictive power on Supreme Court decision-making, and should not be used to explain the Supreme Court’s decisions. We conclude that the Court, in practice, appears to give little or no deference to the possible future actions of the legislative and executive branch.

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3. Epstein, “The Choices Justices Make,” 83. [↑](#footnote-ref-3)
4. Epstein, “The Choices Justices Make,” 83. [↑](#footnote-ref-4)
5. Ibid., 84. [↑](#footnote-ref-5)
6. Ibid. [↑](#footnote-ref-6)
7. Segal, “The Supreme Court,” 112. [↑](#footnote-ref-7)
8. Ibid., 113. [↑](#footnote-ref-8)
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