

4-25-2017

# The Retirement Strategy of Supreme Court Justices: An Economic Approach

Kayla M. Joyce

*University of Connecticut*, [kayla.m.joyce8@gmail.com](mailto:kayla.m.joyce8@gmail.com)

Follow this and additional works at: [https://opencommons.uconn.edu/srhonors\\_theses](https://opencommons.uconn.edu/srhonors_theses)

 Part of the [Behavioral Economics Commons](#), [Econometrics Commons](#), [Law and Economics Commons](#), and the [Supreme Court of the United States Commons](#)

---

## Recommended Citation

Joyce, Kayla M., "The Retirement Strategy of Supreme Court Justices: An Economic Approach" (2017). *Honors Scholar Theses*. 529.  
[https://opencommons.uconn.edu/srhonors\\_theses/529](https://opencommons.uconn.edu/srhonors_theses/529)

# **The Retirement Strategy of Supreme Court Justices: An Economic Approach**

**Kayla M. Joyce**

Thesis Advisors: Dr. Thomas Miceli and Dr. Metin Cosgel

University of Connecticut

## **Abstract**

Previous research has identified strategic behavior in the nomination, confirmation, and retirement processes of the Supreme Court, each independently. This paper analyzes the interaction between the justices, the president, and the Senate in these processes. I constructed a game theoretic model to consider the nomination and approval process of Supreme Court justices and the change in dynamics that might result from an impending election. I hypothesize that sitting justices take into account the party affiliations of the president and the Senate when they are deciding whether it is the optimal time to retire to achieve their own strategic objectives. The results from testing my econometric model provided evidence in support of my hypothesis – justices are more likely to retire under a same party president, and they are more likely to retire in the first two years of a president's term.

## Introduction

The Judiciary Act of September 24, 1789 established the Supreme Court in accordance to Article III of the United States Constitution. The Supreme Court is composed of the Chief Justice and several Associate Justices. Congress determines the set number of Associate Justices, which is currently fixed at eight. The Constitution states that justices "shall hold their Offices during good Behaviour." Thus, Supreme Court justices serve on the court for as long as they choose unless they are removed through impeachment. Associate Justice Samuel Chase is the only Supreme Court justice to be impeached, and he was acquitted by the Senate. Although Supreme Court justices have life tenure, some choose to resign, retire, or take senior status (A Brief Overview of the Supreme Court, 2017).

Article II of the Constitution outlines the process by which Supreme Court justices are appointed: the president "shall nominate, and by and with the Advice and Consent of the Senate, shall appoint ... Judges of the supreme Court." In practice, when there is a vacancy on the Supreme Court, the president nominates an individual and the nomination is sent to the United States Senate. The Senate Judiciary Committee then holds a hearing where the individual gives testimony and answers questions. The Committee votes and traditionally refers the nomination to the Senate for consideration (The Supreme Court of the United States). A majority vote in the Senate is required to confirm the nominee. After the Senate confirms a justice, the president issues a commission and the nominee must take the Constitutional Oath and the Judicial Oath before being sworn in as a Supreme Court justice (Supreme Court Nomination Process). In rare cases, the president might make a recess appointment to the Court when the Senate is not in session. These appointments are temporary and expire at the end of the next Senate session (McMillion, 2017).

Over time, the process by which the Senate considers Supreme Court nominations has changed. During the time period of 1789 through 1834, Supreme Court nominations were considered by the Senate the day after they were received. The period of 1835 to 1867 saw the beginning of the Committee on the Judiciary's involvement in referring nominees to the Senate. After 1867, rule changes established a more formal process for considering nominees. From 1922 to 1967, the Senate used the Calendar Call, while from 1968 to the present day, the process involves roll-call votes on confirmation (Beth & Palmer, 2011). The filibuster allowed for the Senate minority to influence the debate on nominees until this procedure was removed by Senate Republicans in order to confirm Associate Justice Neil Gorsuch in 2017.

From the time the Senate confirmed the first Supreme Court justices in 1789 to the current confirmation of Associate Justice Neil Gorsuch in 2017, the Senate has confirmed 125 out of the 162 nominations it received. Seven confirmed justices declined to serve, and five Associate Justices were later nominated and confirmed as Chief Justice. There have been a total of 113 unique justices that have served on the Supreme Court (Supreme Court Nominations: present-1789). Of the 37 nominations that were not confirmed, only eleven were explicitly rejected by the Senate in roll-call votes. The other nominations that faced opposition were either withdrawn by the president, postponed, tabled, or never voted on by the Senate. However, six of these unconfirmed nominees were later re-nominated and confirmed (McMillion, 2015).

Previous research concerning politics and the Supreme Court has been divided into three categories that have largely been treated independently: the president's decision in selecting a Supreme Court nominee, the Senate's decision to confirm, reject, or take no action on a nominee, and Supreme Court justices' ideology and decisions to retire. The literature surrounding these topics has found evidence of strategic behavior in each category. This paper expands on prior

research by analyzing the relationship among these decisions rather than treating them independently. I created a game theoretic model to analyze the interaction between the president and the Senate in nominating and approving Supreme Court justices and consider how this interaction affects sitting justices' strategic retirement decisions.

In their article, "The Politics of Supreme Court Nominations: A Theory of Institutional Constraints and Choices," Dr. Bryon Moraski and Dr. Charles Shipan analyze the effects of regime change on presidential nominations to the Supreme Court. They observe that "the Senate almost always approves Supreme Court nominees" and therefore, the significant question is how the president decides what type of nominee to choose (Moraski & Shipan, 1999). Moraski and Shipan assert that presidents nominate Supreme Court justices in accordance with their desire to shift the balance of the court towards their ideology while also trying to ensure that the Senate confirms the nominee. The president, therefore, must consider the preferences of the Senate and the current ideology of the Court when making their decision. Moraski and Shipan use Segal-Cover scores and ADA scores to operationalize ideology (Moraski & Shipan, 1999).

Moraski and Shipan's model accounts for three different regimes where the president is either unconstrained, semi-constrained, or fully constrained by the Senate. Regime 1, the unconstrained president, represents a situation where the president and senate have similar views on the direction of ideological shift they would like to see on the Court, but the Senate would prefer a larger shift than the president. Regime 2 is similar to Regime 1, but the president would prefer the larger ideological shift. In contrast, Regime 3, the fully constrained president, represents a situation where the president and senate have conflicting views on how the ideological composition of the Court should change. Moraski and Shipan's empirical results support their model: presidents are likely to select a nominee with a similar ideology to

themselves in Regime 1 and a nominee with views closer to the median Court ideology in Regime 3. The empirical analysis faces a few challenges such as a relatively small sample size and collinearity among variables. The authors ultimately conclude that presidents act strategically to select their optimal nominee so that they are likely to be confirmed (Moraski & Shipan, 1999).

Dr. Charles Shipan's article, "Partisanship, Ideology, and Senate Voting on Supreme Court Nominees," considers the effects of partisanship, controlling for ideology, on individual Senator's confirmation votes. Shipan notes that previous research has demonstrated that Senators' votes are affected by the strength of the president, whether the senator and president are of the same party, and whether the nominee is viewed as highly qualified. Shipan finds that Senators are more likely to vote for a President's nominee if they are both of the same political party and that this effect was greater in recent years. Therefore, partisanship has become more influential over time while Supreme Court confirmations have grown more contentious (Shipan, 2008).

Dr. Robert McGrath and Dr. James Rydberg consider individual senator's votes, similar to Shipan (2008), but they hypothesize that the previously identified variables – ideological distance, same party, and qualifications – are conditional on the senator's electoral safety. They record electoral safety by considering the smallest vote share won in each senator's recent election. McGrath and Rydberg provide evidence that some of the changing dynamics in the confirmation of Supreme Court nominees might be explained by an increase in the number of uncompetitive Senate elections. They propose that senators who are electorally safe may weigh ideology more heavily than qualifications in voting decisions in comparison to senators who face competitive elections (McGrath & Rydberg, 2016).

In their study on ideological drift, Epstein, Martin, Quinn, & Segal challenge the common assumption that Supreme Court justices' ideology does not change significantly over the course of their tenure. The authors' results reveal that there is a relationship between a nominee's perceived ideology and their ideology during their first few terms on the Supreme Court. In the long-term, though, they find that ideological drift to the right or the left is the norm (Epstein, Martin, Quinn, & Segal, 2007).

Another theory concerning ideology and Supreme Court justices is the Political Departure Hypothesis, which states that justices will wait to retire until they are likely to be replaced by a similar-minded justice. This hypothesis indicates that justices may strategically delay retirement until their political party has a strong influence on the Supreme Court nomination process (Bodderly, 2016). Dr. Ross Stolzenberg and Dr. James Lindgren test the Political Departure Hypothesis with a demographic model in their article, "Retirement and Death in Office of U.S. Supreme Court Justices." They use data from all Supreme Court justices who served between 1789 to 2006 and consider variables such as age, tenure, pension eligibility, future longevity, same party, year 1 or 2 (of the president's term), and year 3 or 4 (Stolzenberg & Lindgren, 2010).

In their study, Stolzenberg and Ross found that age, health, tenure, and pension benefits affect retirement strategy for Supreme Court justices similar to how they affect other populations in previous literature. Their results were also consistent with the Political Departure Hypothesis. Justices were 2.6 times more likely to retire when the incumbent president is in the first two years of their term and is of the same political party as the president who nominated the justice. In the reverse scenario, justice's death-in-office odds tripled in comparison. Stolzenberg and Ross were most interested in how their results could be applied to the general retirement process,



rather than thoroughly investigating the political nature of retirement from the Supreme Court (Stolzenberg & Lindgren, 2010).

In this paper, I created and analyzed a game theoretic model of the Supreme Court appointment process. I considered the differences associated with a nominating president in the early years of his term and a lame duck president who faces an impending election. This model helped form the basis for my hypothesis on Supreme Court justices' retirement strategy.

Expanding on previous literature, I added a variable that factors in the majority party controlling the Senate and consider all Supreme Court justices confirmed between 1789 and 2017. I also break down the president's term year into 4 dummy variables for each year, rather than grouping year 1 with year 2 and year 3 with year 4, to try to identify if year 3 and year 4 have differing effects.

It is hypothesized that Supreme Court justices make strategic retirement decisions to influence which president is able to nominate their successor. According to my game theoretic model, if the president is in the early years of his term, then their political party should be the main factor to influence a judge's decision to retire. If there is a lame duck president in the late years of their term, then the judge's strategic retirement decision should depend on both the political party of the president and the majority party in the Senate.

### **Game Theoretic Models**

I constructed a game theoretic model to analyze the interaction between the president and the Senate in nominating and approving Supreme Court justices. The first game tree model, Figure 1, represents a simple interaction between the president and the Senate where the president is in the early years of his term. Figure 1.1 accounts for a situation where the president and the Senate are of the same party, either President A and Senate A or President B and Senate

B, while Figure 1.2 accounts for a situation where the president and the Senate are of different parties, either President A and Senate B or President B and Senate A. In both cases, the Senate party represents the majority party in control. The second game tree model, Figure 2, accounts for the effects of an impending election when there is a Lame Duck President who is in the last year of his term.

In both models, the president has the choice to nominate either a same party justice (A or B) or a moderate justice (M). It is assumed that the President would not intentionally nominate a justice of a different party. The Senate then has the choice to approve or not approve (abbreviated as APPD and NA in the subgame) the Supreme Court nominee. I chose to use approve and don't approve, rather than confirm and reject, as the possible choices for the Senate, because in some cases the Senate does not convene to vote on a nominee and instead takes no action. With this language, the Senate's decision to take no action falls under the choice of not approving the nominee.

In the first model, Figure 1, the Senate's decision to approve or not approve a nominee leads to a terminal node. In the second model, Figure 2, if the nominee is approved, the node is terminal, but if the nominee is not approved, there is an election. The subgame shows the possible outcomes of the election in extensive form. After the election, there are two new players interacting – a new president and a new senate. The party of the newly elected president is indicated by the top row on the election nodes, while the majority party of the new senate is indicated by the bottom row on the election nodes. These players have the same choices. In fact, each of the subgame outcomes represents one of the combinations of the binary model, Figure 1.

To determine each player's payoffs, I ranked the outcomes. It is assumed that both the president and the Senate would prefer a same party justice to a moderate justice and a moderate

justice to a different party justice. Thus, in outcomes where a same party justice is approved, the payoff is 20. If a moderate justice is approved, the payoff is 10, and if a different party justice is approved, the payoff is 0. I also assume, for the simple model, that if the Senate refuses to approve a justice, there is a large negative payoff, -100, for all players. This model is representative of a President during the earlier years of his term. The longest time period where a Supreme Court seat has remained vacant is 841 days, so it is reasonable to assume that three or four years of the Senate blocking a president's nominations would be unprecedented and highly inefficient (DeSilver, 2016). However, this large negative payoff does not account for a situation in which the Senate finds one individual justice unsuitable but would be willing to approve a different individual of the same party. In this case, one justice's nomination might be rejected but another shortly after might be approved. The payoffs for this case would be different, without high negative payoffs for rejecting one justice, but in general, the proposed model is expected to be more representative of the typical nomination and approval actions and payoffs. This model also does not account for the Senate minority party's ability to filibuster a nomination. However, the only nomination ever successfully filibustered was the nomination of sitting Associate Justice Abe Fortas to Chief Justice. The ability of the majority party to invoke the nuclear option and remove the filibuster, as Senate Republicans did in order to confirm Associate Justice Neil Gorsuch, also makes the exclusion of the filibuster insignificant (Filibuster Derails Supreme Court Appointment).

The assumption of high negative payoffs for not approving a justice changes for the second model which considers a lame duck president in the last year of his term. In this case, the Senate's refusal to approve a justice leads to an election where new players will determine the

outcome in the near future. If no justice is approved after the election, we can again assume large negative payoffs, because the election approval process is the same situation as the first model.

**Figure 1 – Binary Model of Supreme Court Justice Nominations**

Figure 1.1 – Same Party President and Senate

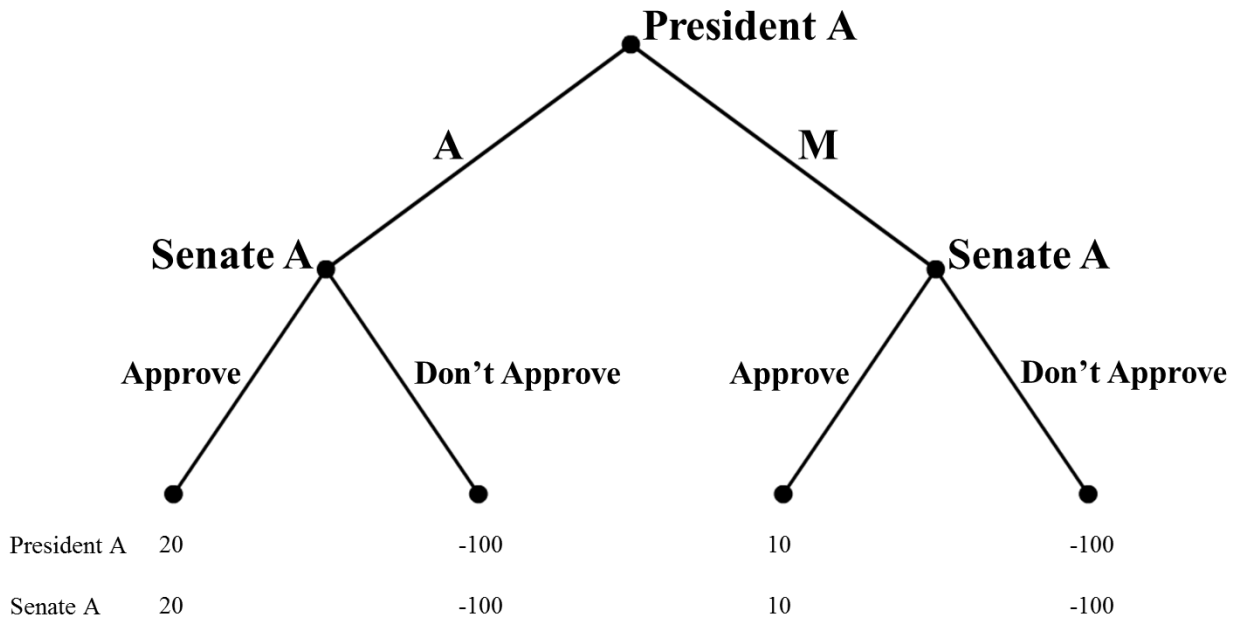
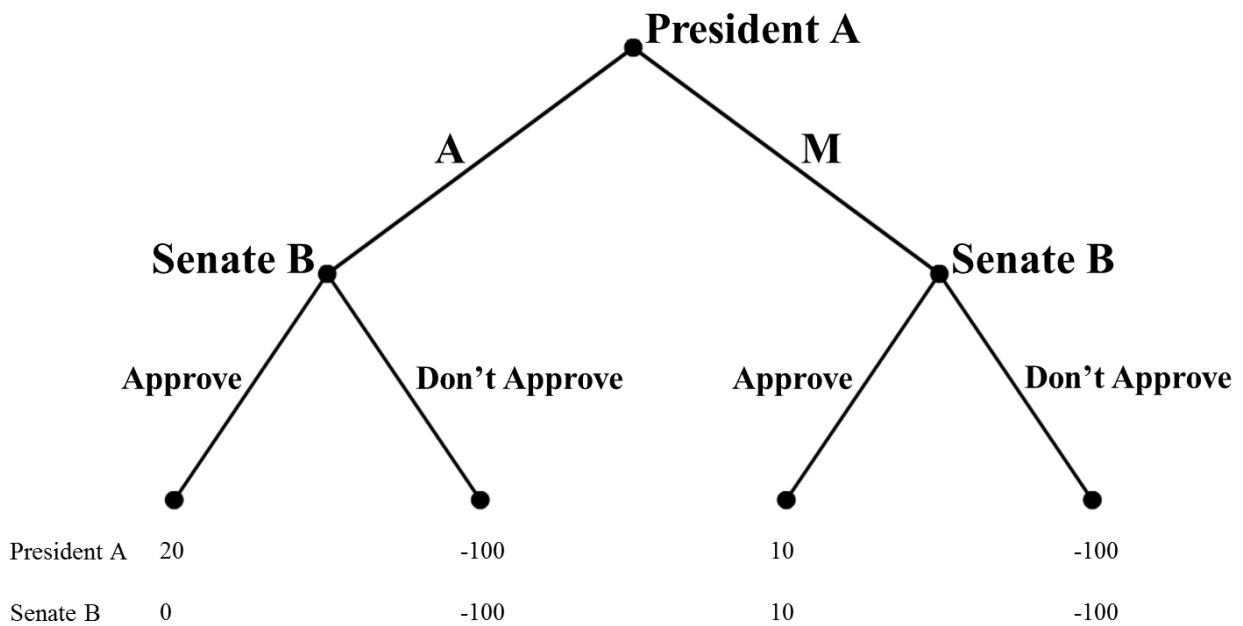


Figure 1.2 – Different Party President and Senate



Solving Figure 1.1 through backward induction gives a subgame perfect Nash equilibrium strategy of {A, Approve} and payoffs of {20, 20}. In a situation where there is a president in the early years of their term and the Senate of the same party, we can expect a same party justice to be nominated and approved. Solving Figure 1.2, when the president and the Senate are of differing parties, we reach the same outcome with equilibrium strategy {A, Approve} but different payoffs, {20, 0}. Since the president is in the early years of his term, any threats by the Senate to not approve the President's nominee if he selects a same party justice are non-credible.

When considering the effects of an impending election, Figure 2, the election subgame introduces an element of chance. I assigned each of the possible election outcomes {A, A}, {A, B}, {B, A}, and {B, B} a corresponding probability  $\alpha$ ,  $\beta$ ,  $\gamma$ , and  $(1 - \alpha - \beta - \gamma)$ . Solving the subgame by backward induction, the same strategies found in Figure 1 apply – the Senate, regardless of whether it is the same party or a different party than the President, will approve the newly elected President's nominee. Therefore, a same party justice will be approved.

Assuming that each of the possible election outcomes have equal probabilities of 1/4, the expected payoffs for both Lame Duck President A and Senate B are 10. This is the same payoff as approving a moderate justice. In this case, Senate B should be indifferent to approving or not approving a moderate justice. If Lame Duck President A nominates a same party justice, however, Senate B should never approve the nominee, because approving a different party justice would result in a payoff of 0 for Senate B, while an election would give an expected payoff of 10. Lame Duck President A should also be indifferent to nominating a same party or a moderate justice. However, the President should know that if they nominate a same party justice,

the nomination will not be approved thus leading to an election. If the President nominates a moderate justice, the nomination may or may not be approved.

If we can assume that the election probabilities are not equal, we can determine all players' strategies. Since we have determined that after an election the Senate will approve the new President's nomination regardless of whether the Senate is of the same or a different majority party, we can conclude that the final outcome only depends on the party of the President who is elected. Thus if the newly elected President is party A, a party A justice will be approved, and if the newly elected President is party B, a party B justice will be approved. Therefore when considering the election outcomes, we only need to compare probabilities ( $\alpha + \beta$ ) and ( $1 - \alpha - \beta$ ).

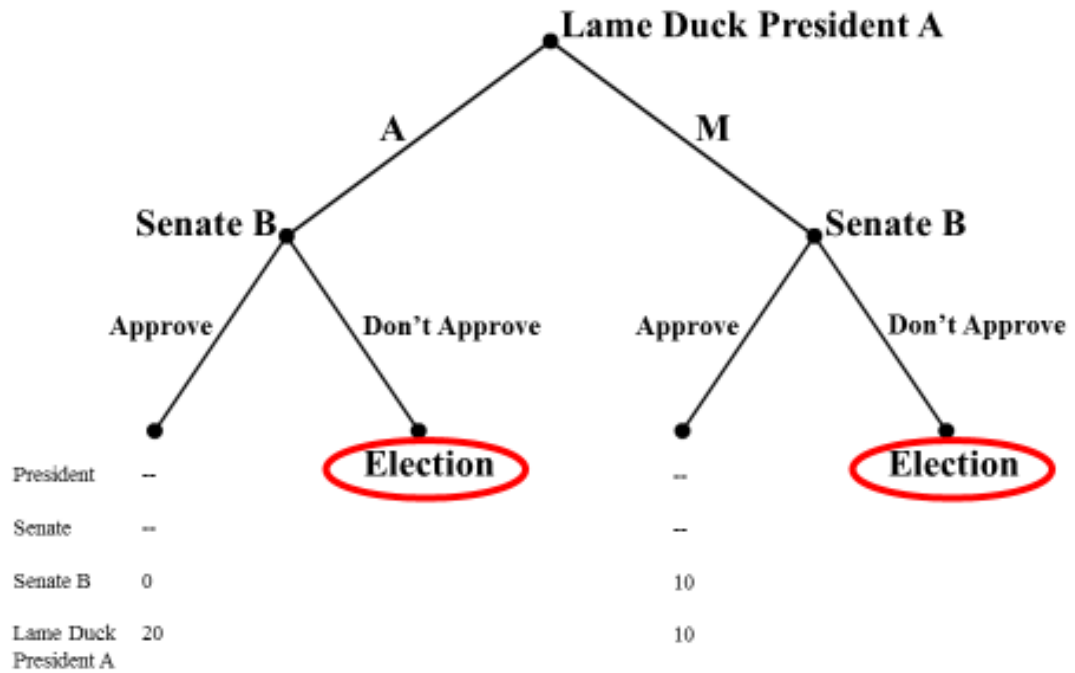
If there is a greater probability that a candidate of party A will be elected President than a candidate of party B then ( $\alpha + \beta$ ) is greater than ( $1 - \alpha - \beta$ ). The change in probabilities changes the expected payoffs from an election. Now that it is more likely that a candidate from party A will be elected President, the Lame Duck President A has an expected payoff greater than 10 from the election and Senate B has an expected payoff less than 10. The new equilibrium strategy is {A, don't approve}. Lame Duck President A knows that if they nominate a moderate justice, the Senate will approve the nomination. However, expected payoffs from the election are greater than the payoff of 10 from approving a moderate, so the President will appoint a same party justice with the knowledge that the Senate will not approve the nomination.

Conversely, if there is a greater probability of a candidate of party B being elected President, ( $1 - \alpha - \beta$ ) is greater than ( $\alpha + \beta$ ), then the Lame Duck President A has an expected payoff less than 10 from an election and Senate B has a payoff of greater than 10. Since the payoffs from the election are greater than the payoff of approving a moderate justice, Senate B

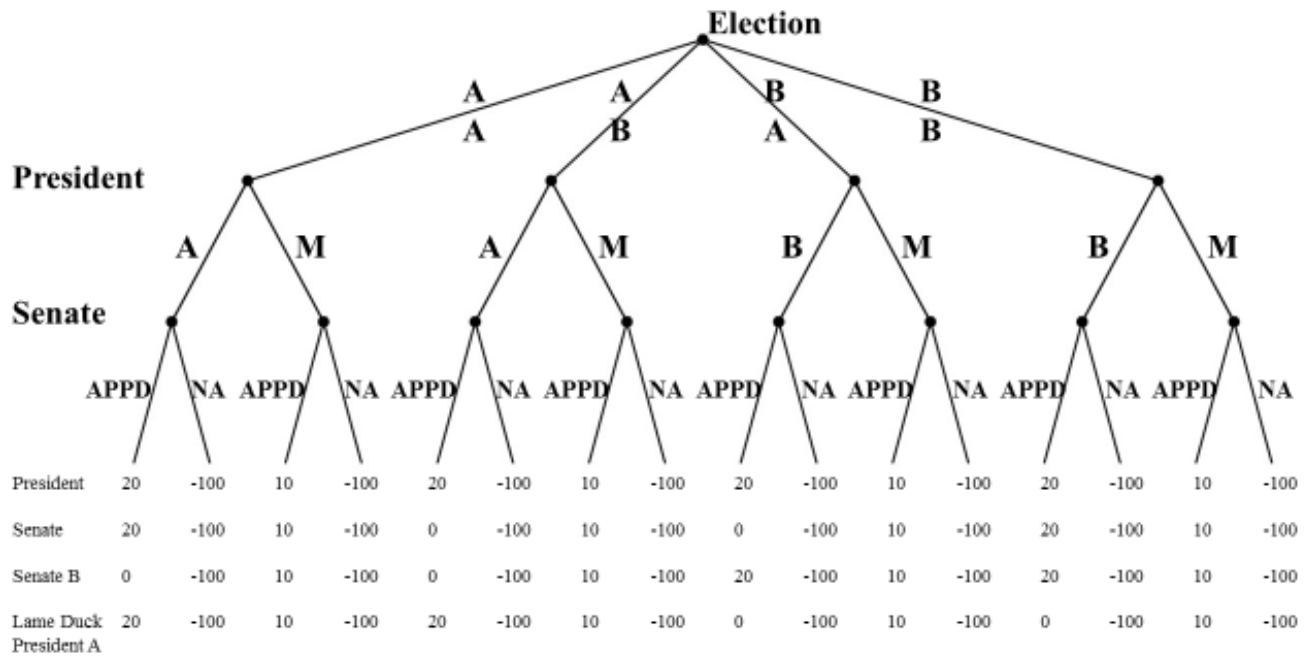
has a dominant strategy to never approve any of Lame Duck President A's nominations. They perceive that their chances of a party B candidate winning the Presidential election are greater than 50% so there is a better chance if they wait for an election that they can get a party B justice confirmed. In this situation, Lame Duck President A's actions do not matter, because the Senate will never approve. However, the president might be more likely to nominate a moderate justice to maintain some semblance of hope for confirmation. See Figure 3 for a summary of the game theory results.

How can we estimate the probabilities of the different election outcomes? This process is made simpler by the fact that a flip in the majority party of the Senate does not affect outcomes after the election. One can assess presidential election polls to try to estimate each candidate's likelihood of winning, but it's important to note that polls do not always accurately predict election outcomes. Another confounding factor is the fact that the presidential election outcome depends on the Electoral College, and sometimes a candidate can win the presidential election without winning the popular vote.

Figure 2 – Model Accounting for the Effects of an Impending Election



**Subgame**





**Figure 3 – Summary of Game Theory Predictions**

MODEL	SITUATION	PRESIDENT'S DECISION	SENATE'S DECISION
<b>Figure 1.1</b> – early years of the term	Same party President and Senate	Nominate a same party justice	Approve a same party justice
<b>Figure 1.2</b> – early years of the term	Different party President and Senate	Nominate a same party justice	Approve a different party justice
<b>Figure 2</b> – late years of the term	Lame Duck President with a different party Senate, <i>President's party is favored in the upcoming election</i>	Nominate a same party justice	Don't approve the different party justice
<b>Figure 2</b> – late years of the term	Lame Duck President with a different party Senate, <i>Senate's party is favored in the upcoming election</i>	Nominate a moderate justice	Don't approve a moderate justice
<b>Figure 2 Subgame</b> – post- election	Same situation as either Figure 1.1 or Figure 1.2, depending on the election outcome	Nominate a same party justice	Approve same or different party justice

### Data

The data utilized for this study was drawn from the Federal Judicial Center's Biographical Directory of Article III Federal Judges. This publicly available data set was narrowed down to include all Supreme Court justices, from 1789 to 2017. This list totaled 113 justices, of which nine are currently serving on the Court and 104 previously served. Therefore, there are 104 justice observations for retirement and death outcomes. I modified the data to account for the most pertinent information and added additional variables, as described below.

President George Washington did not have a political party recorded in the data set, but since the Federalist party formed in support of his ideals, I utilized this as a proxy for his party affiliation. For justices who served as Associate Justices and were later confirmed as Chief

Justice in a continuous term, I used the commission data from their service as an Associate Justice and their retirement or termination data from their service as Chief Justice. Justice Charles Evans Hughes had a gap in service between his time as an Associate Justice and as Chief Justice. In this instance, I utilized the data from his time as Chief Justice, because he resigned from his position as an Associate Justice in order to run for president.

A number of justices received recess appointments to the Court and were later re-nominated and confirmed. For these cases, I only used data from when they were nominated and confirmed by the Senate. Justice John Rutledge was nominated and confirmed as an Associate Justice and then received a recess appointment as Chief Justice. Following the recess appointment, he was nominated but not confirmed by the Senate. Therefore, I only utilized data from his time as Associate Justice.

In some cases, justices have a different retirement date than the date of termination. These cases represent when a justice takes senior status. When a justice takes senior status, their seat becomes vacant even though they continue to work, typically with a lighter case load. Since their seat can be filled after they take senior status, I use the retirement date rather than the date of termination.

The United States Senate's website lists the Senate's Party division in different years, and this information was utilized to code the variables for the Senate's majority party (Party Division). To add information for the president's party and which year of the term they were in at each justice's termination, I utilized information already supplied from the Federal Judicial Center and information from *ipl2* (Summers, 2008). In coding both the Senate majority party and the president's party at termination, I had to account for the change in the start of presidential and senate terms under the 20<sup>th</sup> Amendment which was ratified in February of 1933. Thus prior

to this date, newly elected presidents and senators began their terms on March 4<sup>th</sup> after the election year. After this date, senate terms began on January 3<sup>rd</sup> and presidential terms began on January 20<sup>th</sup>. This information was also taken into account when coding the year of the president's term (Dove, 1984).

As a result of the 20<sup>th</sup> Amendment, President Franklin D. Roosevelt's first term in office was cut short. He was inaugurated on March 4<sup>th</sup>, 1933 and his first term in office concluded on January 20<sup>th</sup>, 1937. The period from March 4<sup>th</sup>, 1933 to January 20<sup>th</sup>, 1934 was treated as the first year of his term even though the calendar date does not reflect an entire year. In other instances where presidents did not complete their full term in office, I continued the calculations for their successor in accordance with the year in the term it would be if they had completed four years in office since the successor only serves until the end of the elected president's term (Summers, 2008).

Another unique case affecting the coding of variables was the Great Senate Deadlock of 1881. The 47<sup>th</sup> Congress consisted of thirty-seven Republicans, thirty-seven Democrats, and two independents who balanced the scales. With votes tying thirty-eight to thirty-eight, the Republican Vice President would cast the deciding vote for a Republican majority. However, on May 16<sup>th</sup>, 1881, two Republican senators tactically resigned to send a message of disagreement to the Republican president. After the senators resigned, Democrats had a two-vote majority in the Senate. To accurately reflect the majority party in the Senate, I coded the start of the 47<sup>th</sup> Congress up till May 16<sup>th</sup>, 1881 as a Republican majority in the Senate and after May 16<sup>th</sup> to the conclusion of the 47<sup>th</sup> Congress as a Democratic majority. All other cases where senators may have died or resigned in the middle of a term were treated as insignificant, because these cases did not significantly alter the majority party in control (The Great Senate Deadlock of 1881).

Of the 113 justices who have served or are serving on the Supreme Court of the United States, 109 are males and four are females. The first female justice to be appointed to the Supreme Court was Associate Justice Sandra Day O'Connor in 1981. There have only been two African American justices and one Hispanic justice. Since this analysis seeks to analyze retirement strategy, our econometric model only used data from the 104 justices who have died or retired from the Court. When looking at this population, there is only one female justice and one African American justice. The rest of the justices are white men. As a result, I did not include gender or race/ethnicity as controls, because there is not sufficient variability in the data set. The mean age at termination from the court is 70 years. The mean number of years that justices served on the Court is 16.9 years. Please note that termination age and years service were calculated using years rather than exact dates, so there might be slight variations in these numbers.

Considering the 104 justices who are no longer serving on the Supreme Court, 51.92% retired, resigned, or took senior status and 48.08% died in office. Looking at the timing of justices' terminations from the Court, there is a clear pattern of increased termination frequency in the early years of the term that declines in the later years. The data showed that 33.65% of terminations occurred in year 1 of a presidency, 27.88% in year 2, 23.08% in year 3, and 15.38% in year 4. An exact 50% of justices terminated service under a president of the same political party as the president who nominated them, while 51.92% terminated service under a same party senate. The party of the president who nominated the justice is used to approximate the justice's political party or leanings. See Figure 4 for a complete list of summary statistics.

**Figure 4 – Summary Statistics**

<b>Supreme Court Justices</b>	
<i>Males</i>	109
<i>Females</i>	4
<i>White</i>	110
<i>African American</i>	2
<i>Hispanic</i>	1
<i>Total</i>	113

<b>Summary Statistics</b>				
Variable	Mean	Standard Deviation	Minimum	Maximum
terminationage	70.0962	9.8469	48	91
years-service	16.8558	9.9673	1	36

***Variable Descriptions***

<i>retirement</i>	= 1 if the justice resigned, retired, or took senior status
<i>death</i>	= 1 if the justice's death resulted in termination of service
<i>Ti</i>	= 1 if the president is in year <i>i</i> of a 4-year term
<i>D1</i>	= 1 if the president at termination was in the 1st or 2nd year of their term
<i>D2</i>	= 1 if the president at termination was in the 3rd or 4th year of their term
<i>samepartyP</i>	= 1 if the president's party at termination is the same as the nominating president's party
<i>D1samepartyP</i>	= 1 if the president at termination is in the 1st or 2nd year of their term and is of the same party as the nominating president
<i>samepartyS</i>	= 1 if the Senate's party at termination is the same as the nominating president's party
<i>D1samepartyS</i>	= 1 if the president at termination is in the 1st or 2nd year of their term and the Senate is of the same party as the nominating president
<i>samepartyPS</i>	= 1 if the president and senate's party at termination is the same as the nominating president's party
<i>D1samepartyPS</i>	= 1 if the president at termination is in the 1st or 2nd year of their term and is of the same party as the Senate at termination and the nominating president
<i>terminationage</i>	termination year minus birth year
<i>years-service</i>	termination year minus commission year

<b>Summary Statistics</b>			
Variable	Fraction/Mean	Variable	Fraction/Mean
retirement	0.5192	death	0.4808
samepartyP	0.5	T1	0.3365
samepartyS	0.5192	T2	0.2788
samepartyPS	0.3846	T3	0.2308
D1samepartyP	0.2981	T4	0.1538
D1samepartyS	0.2981	D1	0.6154
D1samepartyPS	0.25	D2	0.3846

## Econometric Model

To test my game theoretic model, I proposed the following econometric models. Each equation represents a logistic regression where  $y = 1$  if the justice retires, resigns, or takes senior status and  $y = 0$  if the justice's death resulted in termination of service.  $P(y)$  is the probability that  $y = 1$  and  $\Omega$  is the odds that  $y = 1$ . Thus  $\Omega = \frac{P}{(1-P)}$ .

$$1. \ln(\Omega) = \beta_0 + \beta_1 \text{sameparty}P$$

$$2. \ln(\Omega) = \beta_0 + \beta_1 \text{sameparty}P + \beta_2 D1$$

$$3. \ln(\Omega) = \beta_0 + \beta_1 \text{sameparty}P + \beta_2 D1 + \beta_3 D1 \text{sameparty}P$$

$$4. \ln(\Omega) = \beta_0 + \beta_1 \text{sameparty}P + \beta_2 D1 + \beta_3 D1 \text{sameparty}P + \beta_4 \text{sameparty}S$$

$$5. \ln(\Omega) = \beta_0 + \beta_1 \text{sameparty}P + \beta_2 D1 + \beta_3 D1 \text{sameparty}P + \beta_4 \text{sameparty}S + \beta_5 D1 \text{sameparty}S$$

$$6. \ln(\Omega) = \beta_0 + \beta_1 \text{sameparty}P + \beta_2 D1 + \beta_3 D1 \text{sameparty}P + \beta_4 \text{sameparty}S + \beta_5 D1 \text{sameparty}S + \beta_6 \text{sameparty}PS$$

The key explanatory variables for retirement ( $y$ ) are *samepartyP*, *D1*, and *samepartyS*. It is expected that a justice is more likely to retire under a same party president or when the president is in the first two years of his term, or under a same party senate. The interaction variables we include are *D1samepartyP*, *D1samepartyS*, and *samepartyPS*. All of these variables are dummy variables. Therefore, when interpreting results, it is important to realize that each result is relative to the baseline where the dummy variable is equal to zero.

## Results

I ran a logistic regression in STATA for each of the econometric models, 1 – 6, listed in the previous section. The results in Figure 5 report the odds ratios for each variable. Two variables, *samepartyP* and *D1*, stand out across regressions as significantly greater than one.

Since the results are reported as odds ratios, any number greater than one indicates a positive correlation between the independent and dependent variables (i.e. there is a higher probability of the dependent variable success). In contrast, any number less than one indicates a negative correlation between the independent and dependent variables (there is a lower probability of success). According to Analysis 6, if there is a same party president, a justice is 7.266 times more likely to retire than if there is a different party president. This result is statistically significant ( $p < 0.05$ ). Additionally, if there is a president in the first or second year of their term, a justice is 4.228 times more likely to retire than if the president is in their third or fourth year. This result is also statistically significant ( $p < 0.1$ )

SamepartyS and D1samepartyS also consistently have odds ratios greater than one, although to a lesser extent than samepartyP and D1. The positive correlation between samepartyS and retirement makes sense, because as noted in the game theoretic models, the Senate plays an influential role in the nomination of a justice's successor but not to the same extent as the president. According to Analysis 6, a justice is 2.658 times more likely to retire under a same party Senate than a different party Senate and 1.260 times more likely to retire if there is a same party Senate and the president is in the first two years of their term.

D1samepartyS most likely has a smaller magnitude of effect, because it is compared not only to situations with a different party Senate, but also to the situation where there is a same party Senate and a president in the third or fourth year of their term.

Variables D1samepartyP and SamepartyPS had negative correlations with retirement and odds ratios less than one, though the coefficients of these variables were insignificant. While each component of these variables had a positive correlation by itself, the multiplication of these variables into a dummy variable interaction term means that they were compared against three

other situations. The dummy variable for D1samepartyP compares the likelihood of a judge retiring under a same party president in the first year of his term against all other possible outcomes. Thus, the possibility of a judge retiring under a same party president in year three or four of a president's term would counteract this variable's significance. Similarly, the samepartyPS variable is counteracted by situations where one of the conditions is true (i.e. same party president or same party senate) but not both simultaneously. The effect of these variables on the model is mostly insignificant.

**Figure 5 – Odds Ratios for a Logistic Regression Analysis of Supreme Court Retirement in Comparison to Death in Office, 1789 – 2017**

VARIABLES	(1) retirement	(2) retirement	(3) retirement	(4) retirement	(5) retirement	(6) retirement
samepartyP	2.182* (0.873)	2.251** (0.911)	4.550** (3.130)	4.174** (2.905)	4.230** (2.947)	7.266** (6.892)
D1		1.656 (0.688)	2.975* (1.864)	3.696** (2.449)	3.395* (2.508)	4.228* (3.464)
D1samepartyP			0.328 (0.280)	0.237 (0.215)	0.214 (0.213)	0.188 (0.193)
samepartyS				1.823 (0.907)	1.608 (1.129)	2.658 (2.451)
D1samepartyS					1.286 (1.283)	1.260 (1.291)
samepartyPS						0.406 (0.419)
Constant	0.733 (0.206)	0.530 (0.208)	0.357** (0.186)	0.263** (0.156)	0.281** (0.181)	0.212** (0.162)
Observations	104	104	104	104	104	104
Adjusted $R^2$	0.027	0.037	0.049	0.060	0.060	0.066
Chi-squared	3.88	5.37	7.11	8.58	8.65	9.43

Standard errors in parentheses

\*\*\* p<0.01, \*\* p<0.05, \* p<0.1



## Discussion and Conclusion

The econometric analysis provides support for the hypothesis that Supreme Court justices engage in strategic retirement practices. Justices were significantly more likely to retire under a same party president or in the first two years of a president's term. This evidence supports the Political Departure Hypothesis that justices will delay retirement until they can expect that they will be replaced with a similar-minded justice. The fact that the first two years of a president's term are significant indicates some implications of support for my game theoretic analysis of the nomination process. My model suggested that when a president is in the later years of their term and there is an impending election, it is much more challenging to successfully appoint a Supreme Court justice. If judges are aware of the tension in the appointment process when there is an impending election, they might be inclined to accelerate or delay retirement in order to retire in the early years of a presidency. It also appears that justices may take into account the majority party in control of the Senate; however, a differing majority party in the Senate might not be influential enough to deter a justice from retiring under a same party president or a same party Senate might not be influential enough to induce retirement under a different party president.

One potential limitation of the game theoretic model is the assumption of a large negative payoff for all players if no justice is approved in the early years of a presidency. If this condition does not hold, then the model's results would change, and it is entirely possible that a differing party senate might refuse to approve a president's Supreme Court nominees. Some people argue that the recent situation where Senate Republicans suggested that they would refuse to consider any nomination that Former President Obama would put forth for the Supreme Court set a dangerous precedent by breaking from the procedural norms of considering nominees. Since

President Obama's nomination of Merrick Garland was successfully derailed, some predict that in the future, when there the president and the Senate are of different parties, no Supreme Court nominations will be approved (Klein, 2017). I disagree with this train of thought, because an extended period of time with an empty seat on the Court would lead to high levels of inefficiency and potentially high costs politically to those involved with obstructing the appointment process, hence my argument for high negative payoffs. If another seat opens up on the Court in the near future, the results will be quite interesting. The game theoretic model proposed here may need to be modified to account for the actual turnout of events.

Some critics of life tenure for Supreme Court justices believe that there is too much at stake for the president and the Senate when appointing justices to the Court. Once a justice is appointed, they have considerable impact for what can amount to an extensive amount of time, 17 years on average. Each appointee also has the potential to drastically shift the ideological balance of the court depending on its current make-up. These critics argue that the increasingly politicized nature of the appointment process is evidence of presidents and senators weighing the lasting impact of these justices on the Court and treating the nomination process with an appropriate amount of concern considering the high stakes of the decision. Thus, the only way to de-escalate the process is to set term limits for justices (Calabresi & Lindgren, 2006).

Another challenge that arose while conducting this research was the difficulty in where to draw the line for the game theory model of the lame duck president. When does the Senate have sufficiently low enough costs to block a president's nominations to the Supreme Court? Is it in the fourth year of the president's term? Is it part of the way through the third year or at the start of the third year? While we examined each individual year in the president's term, there were not enough observations in years three and four to run the regression with each year separately.

Therefore, I found significant difference between the first half of the presidency and the second half of the presidency but was unable to clarify the line more accurately.

Working with Supreme Court data in particular is challenging, because there are relatively few observations (113) that span a large period of time (228 years). Since justices have life tenure and tend to serve for a long-period of time on the Court, there is infrequent turnover. As a result, the Supreme Court can lag behind the presidency and the Senate in some ways. For example, if the influence of the Senate in the appointment process has become more significant in recent years, the retirement data will be very slow to react to this change, because sitting justices will need to exit the court in order to provide new data. The presidency and the Senate, on the other hand, have much higher turnover rates since they serve for shorter defined term-lengths.

The use of the `samepartyP` term as a proxy for justices' political parties or ideologies might also create some challenges to the econometric model. This variable is limited in that there is no way to account for a moderate justice who might not care about what party president appoints their successor. The model also does not account for ideological drift – the process by which justices' ideologies change over the course of the time they serve on the Court. In some instances, the nominating president was severely disappointed with their Supreme Court choice when later on that justice didn't end up voting in a way they found favorable or expected at the time of nomination. In these unique cases, it is possible that a justice who was nominated by one party may actually prefer to retire under a different party.

In this paper, I was only able to test one aspect of my game theoretic model for Supreme Court nominations. In the future, it would be beneficial to test the other nodes of the game tree. In order to do so, one would need to consider all nominations to the Supreme Court, rather than

just those who ended up being confirmed as Supreme Court justices. If possible, it would also be helpful to get a more accurate indicator of a justice's political party or ideology and to consider moderate justices. One needs to be careful, however, that potential measures are not too subjective or biased. In the future, I would also suggest testing the econometric model with more variables that might prove influential to retirement decisions. Justices certainly might retire for non-strategic reasons such as health-complications or family emergencies or in a rare instance, as noted and accounted for in this paper, to run for president.

In an interview with *Elle* magazine, Associate Justice Ruth Bader Ginsburg was asked whether she would retire during Obama's presidency. She is quoted as responding:

“Who do you think President Obama could appoint at this very day, given the boundaries that we have? If I resign any time this year, he could not successfully appoint anyone I would like to see in the court. [The Senate Democrats] took off the filibuster for lower federal court appointments, but it remains for this court. So anybody who thinks that if I step down, Obama could appoint someone like me, they're misguided. As long as I can do the job full steam.... I think I'll recognize when the time comes that I can't any longer. But now I can” (Weisberg, 2014).

In the past, other Supreme Court justices have also verbally expressed opinions or intentions for strategic retirement. As some of the foremost intellectuals in our country, it should not be too much of a surprise that these justices carefully think out and plan how their retirement can influence the future of the Court. Likewise, it is not shocking to hear that Associate Justice Ginsburg considered both the dynamics of the current president and senate in her decision regarding the optimality of retiring or continuing to serve on the Supreme Court.

## References

- A Brief Overview of the Supreme Court (2017). *Supreme Court of the United States*. Retrieved from <https://www.supremecourt.gov/about/briefoverview.aspx>
- Beth, R. & Palmer, B. (2011). Supreme Court Nominations: Senate Floor Procedure and Practice, 1789-2011. *Congressional Research Service*. Retrieved from <https://fas.org/sgp/crs/misc/RL33247.pdf>
- Bodderly, S. (2016). Why are the deaths of sitting Supreme Court justices so rare? *The Washington Post*. Retrieved from [https://www.washingtonpost.com/news/monkey-cage/wp/2016/02/18/why-are-the-deaths-of-sitting-supreme-court-justices-so-rare/?utm\\_term=.062e33fbba76](https://www.washingtonpost.com/news/monkey-cage/wp/2016/02/18/why-are-the-deaths-of-sitting-supreme-court-justices-so-rare/?utm_term=.062e33fbba76)
- Calabresi, S. & Lindgren, J. (2006). Term Limits for the Supreme Court: Life Tenure Reconsidered. *Harvard Journal of Law and Public Policy*, 29(3). Retrieved from [https://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=701121](https://papers.ssrn.com/sol3/papers.cfm?abstract_id=701121)
- DeSilver, D. (2016). Long Supreme Court vacancies used to be more common. *Pew Research Center*. Retrieved from <http://www.pewresearch.org/fact-tank/2016/02/26/long-supreme-court-vacancies-used-to-be-more-common/>
- Dove, R. (1984). The Term of a Senator – When does it begin and end? *United States Senate*. Retrieved from <https://www.senate.gov/reference/resources/pdf/termofasenator.pdf>
- Epstein, L., Martin, A., Quinn, K. & Segal, J. (2007). Ideological Drift among Supreme Court Justices: Who, When, and How Important. *Northwestern University Law Review*. Retrieved from <http://scholarship.law.berkeley.edu/facpubs/1999>

Federal Judicial Center. *Biographical Directory of Article III Federal Judges* [data file].

Retrieved from <https://www.fjc.gov/history/judges/biographical-directory-article-iii-federal-judges-export>

Filibuster Derails Supreme Court Appointment. *United States Senate*. Retrieved from

[https://www.senate.gov/artandhistory/history/minute/Filibuster\\_Derails\\_Supreme\\_Court\\_Appointment.htm](https://www.senate.gov/artandhistory/history/minute/Filibuster_Derails_Supreme_Court_Appointment.htm)

Klein, E. (2017). How to Fix the Supreme Court. *Vox Media*. Retrieved from

<http://www.vox.com/platform/amp/policy-and-politics/2017/4/14/15295474/how-to-fix-supreme-court>

McGrath, R. & Rydberg, J. (2016). The Marginality Hypothesis and Supreme Court

Confirmation Votes in the Senate. *Congress & The Presidency*, 43(3), 324-351.

<http://dx.doi.org/10.1080/07343469.2016.1196267>

McMillion, B. (2017). Supreme Court Appointment Process: President's Selection of a Nominee.

*Congressional Research Service*. Retrieved from <https://fas.org/sgp/crs/misc/R44235.pdf>

McMillion B. (2015). Supreme Court Appointment Process: Senate Debate and Confirmation

Vote. *Congressional Research Service*. Retrieved from

<https://fas.org/sgp/crs/misc/R44234.pdf>

Moraski B. & Shipan C. (1999). The Politics of Supreme Court Nominations: A Theory of

Institutional Constraints and Choices. *American Journal of Political Science*, 43(4),

1069-1095. doi: 10.2307/2991818

Party Division. *United States Senate*. Retrieved from

<https://www.senate.gov/history/partydiv.htm>

Savani, R. & von Stengel, B. (2015). Game Theory Explorer – Software for the Applied Game Theorist. *Computational Management Science*, 12, 5-33.

Shipan, C. (2008). Partisanship, Ideology, and Senate Voting on Supreme Court Nominees. *Journal of Empirical Legal Studies*, 5(1), 55-76. doi: 10.1111/j.1740-1461.2007.00118.x

Stolzenberg, R. & Lindgren, J. (2010). Retirement and Death in Office of U.S. Supreme Court Justices. *Demography*, 47(2), 269-298. Retrieved from [www.jstor.org/stable/40800813](http://www.jstor.org/stable/40800813)

Summers, R. (2008). Presidents of the United States. *ipl2*. Retrieved from <http://www.ipl.org/div/potus/>

Supreme Court Nomination Process. *American Bar Association*. Retrieved from [http://www.americanbar.org/publications/preview\\_home/supremecourtnomination.html](http://www.americanbar.org/publications/preview_home/supremecourtnomination.html)

Supreme Court Nominations: present-1789. *United States Senate*. Retrieved from <https://www.senate.gov/pagelayout/reference/nominations/Nominations.htm>

The Great Senate Deadlock of 1881. *United States Senate*. Retrieved from [https://www.senate.gov/artandhistory/history/common/briefing/Senate\\_Deadlock\\_1881.htm](https://www.senate.gov/artandhistory/history/common/briefing/Senate_Deadlock_1881.htm)

The Supreme Court of the United States. *Committee on the Judiciary*. Retrieved from <https://www.judiciary.senate.gov/nominations/supreme-court>

Weisberg, J. (2014). Supreme Court Justice Ruth Bader Ginsburg: I'm Not Going Anywhere. *Elle*. Retrieved from <http://www.elle.com/culture/career-politics/interviews/a14788/supreme-court-justice-ruth-bader-ginsburg/>