THE SOUTHERN SEVENTEENTH AMENDMENT SWING

by Steve Rogers

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Thesis directed by

Sarah A. Binder
Professor of Political Science

Dedication

To those women who demonstrated patience with me.

ABSTRACT OF THESIS

The Southern Seventeenth Amendment Swing

Crook & Hibbing (1997) and others argue that the Seventeenth Amendment and the institution of the direct election of Senators have made the Senate more responsive. To make this argument, previous research compares the direct and indirect election time periods before and after the Seventeenth Amendment. Instead this work creates counterfactual, indirectly elected Senates since 1918. Swing-ratio models using the actual Senate election returns are applied to the factual and counterfactual Senates to compare their levels of responsiveness. Similar to previous research, direct elections are found to be more responsive than indirect elections nationwide. However a central finding of this work is that this increased responsiveness is largely attributable to elections in the south.

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Introduction

The two chambers of Congress were intended to be elected differently. The House of Representatives has been directly elected for its entire history, but it was not until 1914 that all senators were elected by the people. Individuals such as James Madison hoped that indirect elections would "refin[e] the popular appointments by successive filtrations" through the state legislatures.[1] The Seventeenth Amendment removed these state level filters.

It has been argued that the institution of direct elections created policy changes and made the Senate more responsive to the electorate. Sara Brandes Crook and John R. Hibbing, for example, state that direct elections have made the Senate react "to the popular mood with more sensitivity and more rapidity."[2] By examining the relationship between Senate seats and presidential vote during the indirect and direct election time periods, Crook and Hibbing utilize an historical swing ratio to argue that the Senate became more responsive after the Seventeenth Amendment.

In this paper, I more deeply examine this argument and the question of indirect elections' responsiveness by employing multiple swing ratio models and regionally disaggregating Senate elections. More uniquely, instead of comparing the pre and post Amendment time periods as previous electoral research has done (Crook & Hibbing 1997, King & Ellis 1996, Wirls 1999, Ellis & King 1999, Engstrom & Kernell 2007), I create counterfactual, indirectly elected Senates based on the partisan makeup of state legislatures since 1914. Swing-ratios are generated for the directly and indirectly elected

[1] The Debates in the Federal Convention of 1787 as reported by James Madison: May 31.
[2] Crook, Sara Brandes, and John R. Hibbing. "A Not-so-distant Mirror: the 17th Amendment and Congressional Change." The American Political Science Review 91(1997): 852.

Senates to compare their levels of responsiveness. Similar to previous research, direct elections are found to be more responsive than indirect elections nationwide. However, my central finding is that this increased responsiveness is largely attributable to elections in the south.

I begin with a review of recent Seventeenth Amendment political science literature, swing ratio models, and electoral responsiveness pieces pertaining to the Senate. The next section provides a description of how the counterfactual Senates were created. Some of the assumptions and potential error sources are acknowledged. Also included is a listing every factual and counterfactual Senate with a brief discussion of policy implications found by Jeremy Walling (2005). The following section presents swing ratios calculated on both a full chamber and class levels of analyses for the directly and indirectly elected Senates. More significantly these are also presented regionally, serving as the primary evidence for my argument regarding the responsiveness of indirect elections. Before concluding, I offer a possible explanation for the differences between direct and indirect elections in south.

Previous Literature

Non-Swing Ratio Seventeenth Amendment Literature

Looking at legislative responsiveness, Sean Gailmard and Jeffrey Jenkins (2007) studied the Seventeenth Amendment's impact on senators' roll call voting as their constituencies shifted from state legislatures to voters. Treating DW-Nominate scores as their dependent variable, the authors found senators were more accountable to their respective state legislatures than voters before the Seventeenth Amendment. Meanwhile after the institution of direct elections, senators became more responsive to the preferences of voters.[3] As expected considering the lack of electoral institution change, this shift was not apparent in the House. Support was also found for the authors' hypothesis that the behavior of the members of a state's Senate delegation would be more likely to differ after the Seventeenth Amendment.

William Bernhard and Brian Sala (2006) also examined changes in senators' voting records. Their hypothesis was that prior to ratification, senators "had an incentive to move toward their own party's pole. After the Amendment, these senators would face incentives to moderate their positions to appeal to the general electorate" as elections approached.[4] To measure a party's pole, they assumed that the party's median member in the state legislature would have preferences similar to the respective national party's median voter. They generated two W-NOMINATE scores to measure each senator's behavior. The authors compared the first four years of a senator's term to his fifth and

[3] To measure state legislature and voter preferences, the authors used proxy measures. For state legislatures, they used the average partisan composition of a state's chambers. For voter preferences, they relied on presidential vote.
Gailmard, Sean and Jeffery A. Jenkins. 2007. "Agency Problems and Electoral Institutions: The 17th Amendment and Representation in the Senate." p. 16.

[4] Bernhard, William, and Brian R. Sala. "The Remaking of an American Senate: The 17th Amendment and Ideological Responsiveness." Journal of Politics 68(2006): 348.

anticipated a shift during this year. Supporting their hypothesis, it was found that when approaching an election year senators' legislative behavior tended to move towards their party median during the pre ratification period, and it moderated during the post ratification period. This effect was more apparent in Republicans than Democrats, particularly southern Democrats.[5]

Scott Meinke (2007) similarly argued that the institution of direct elections created a greater election effect. He asserted the Seventeenth Amendment helped "intensif[y] individual electoral considerations and increased the incentive for senators to make choices oriented toward mass electoral appeals."[6] Comparing directly and indirectly elected senators, he found the former were more likely to sponsor legislation, participate in floor-voting, and be less loyal to their party.[7] Additionally Crook (1992) found that directly elected senators were more likely to seek service on committees that were "electorally rewarding."[8]

Charles Stewart (1992) and Crook and Hibbing describe many characteristics of the Senate that changed following the Seventeenth Amendment. For example, Stewart found following the Amendment senators were more likely to seek return "upon

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[5] Wawro and Schickler (2006) when comparing state's House and Senate delegations W-Nominate scores before and after the Seventeenth Amendment did not find that the two chambers became more similar "with respect to voting behavior" (p. 204).

[6] Meinke, Scott R. 2007. "Institutional Change and the Electoral Connection in the Senate: Revisiting the Effects of Direct Election." Manuscript: 1.

[7] Meinke, p. 18.

[8] Crook, Sara Brandes. 1992. "The Consequences of the Seventeenth Amendment: The Twentieth Century Senate." PhD. Diss., University of Nebraska: 189.
Schiller (2007) does not compare directly and indirectly elected senators, but she examines the relationship between a senator's percentage margin of victory in their state legislature's indirect election amongst variables such as bill sponsorship and committee assignments. A positive relationship between margin of victory and bill sponsorship is found (p. 75).

expiration of their terms," but reelection rates did not significantly change.[9] Also there were smaller partisan swings in the Senate. Despite this, changes in majorities were more frequent in the post-ratification time period. They became even more common than in the House. Crook and Hibbing also noted that during the transition period to direct elections, 1908 to 1918, previous incumbents survived in 56% of contests.[10] Although Gregory J. Wawro and Eric Schickler (2006) note that this finding under reported the number of cases, and "contrary to Crook and Hibbing's claim [that 'a large portion of the indirectly elected Senate was not prepared to cope with direct election'], incumbents who faced direct election coped with it just fine, experiencing lower turnover than those who were indirectly elected."[11]

Looking at individuals' demographics, other differences between directly and indirectly elected senators have been discovered. Crook and Hibbing found that directly elected senators had fewer relatives who previously served in congress or were wealthy but more had prior government experience. In earlier work, Crook discovered that directly elected senators were also more likely to be natives of their states and have Ivy League educations.[12] There was also a rise in the number of split Senate delegations and a decrease in the differences in partisanship between the House and Senate.[13]

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[9] Stewart, Charles III. 1992. "Responsiveness in the Upper Chamber: The Constitution and the Institutional Development of the Senate." In Peter Nardulli, ed., *The Constitution and* American Political Development: An Institutional Perspective. Urbana, IL: University of Illinois Press: 75 & 72.
[10] Crook and Hibbing, p. 849.
[11] Wawro, Gregory J., and Eric Schickler. Filibuster: Obstruction and Lawmaking in the U.S. Senate. Princeton, NJ: Princeton University Press, 2006: 197.
[12] Crook, p. 185.
[13] Crook, p. 167 & 174.

Swing Ratio Models

Stewart, Crook, and Hibbing presented characteristic changes, but they also looked at the relationship between seats and votes in Senate elections. To measure this relationship, they employed swing ratios. These models have been commonly used to study the responsiveness of House elections.[14] Before proceeding to a discussion of how swing ratios have been applied to the Senate, some of these models will be reviewed.

The swing ratio is considered to be "the percentage change in legislative seats associated with a 1% change in legislative votes."[15] Swing ratios can indicate how sensitive electoral outcomes are to individuals votes. The translation of votes to seats is often considered to be a measure a legislative chamber's responsiveness.[16] Higher swing ratios are thought to signify increased levels of responsiveness. For example, a swing ratio of one indicates that a one percentage difference in vote results in a one percent change in seats won. Meanwhile a swing ratio of two indicates that a one percent difference in vote will result in a two percent change in seats won. In elections with higher swing ratios, smaller numbers of votes are needed to change the same number of seats. As Cox and Katz put it, larger swing ratios "lead to even larger bonuses awarded to the vote-richer party."[17] Swing ratio models can also help political scientists discover partisan biases within electoral institutions.[18] Differences in institutional responsiveness

[14] Examples include Tufte (1973); Jacobson (1987); Ansolabahere, Brady, & Fiorina (1992), and Cox & Katz (2002).
[15] Niemi, Richard G., and Patrick Fett. "The Swing Ratio: An Explanation and an Assessment." Legislative Studies Quarterly 11(1986): 75.
[16] Tufte, Edward R.. "The Relationship between Seats and Votes in Two-Party Systems." The American Political Science Review 67(1973): 542.
[17] Cox, Gary W., and Jonathan N. Katz. Elbridge Gerry's Salamander. New York: Cambridge University Press, 2002: 34
[18] Tufte, p. 542.

or bias within elections ultimately influence who makes policy decisions. Therefore it is critical to examine electoral institutions' responsiveness.

One of the classic swing ratios is the historical model, which regresses the number of seats won by a party on the number of votes it received. [19]

$$S = \beta V + C$$

S = percentage of seats won by a party

V= percentage votes won by that party

In the above equation, β "estimates the swing ratio or the responsiveness" of a legislative body.[20] Slight modifications of this model are the biyearly and multiyear forms. Instead of looking at the percentage seats and votes won by a party in a given election, these models treat the change in seats and votes as the dependent and independent variables.[21]

Richard Niemi and Patrick Fett (1986) preferred the hypothetical swing ratio. This "is a linear regression over a number of points…The first point is the actual percentage of votes and seats won by a party in a given election; the other points reflect how many seats that party would have won if it had gained or lost votes uniformly across all districts."[22] These points are plotted, and seats are then regressed on votes. Some concerns regarding this approach are the arbitrary number of election points and its hypothetical nature. Despite this, Niemi and Fett prefer the model because it does not

[19] Tufte refers to this model as the "Linear Fit" model. Niemi and Fett refer to it as the "Historical Swing Ratio." See Tufte, p. 542 and Niemi, p. 76.
[20] Tufte, p. 542.
[21] Niemi, p. 76. The biyearly model is $\frac{\%seats_{t_2} - \%seats_{t_1}}{\%votes_{t_2} - \%votes_{t_1}}$. The multiyear model is the regression of the relationship between the change in seats and the change in votes. For a discussion of weaknesses of these models, see Niemi, p. 77.
[22] Niemi, p. 80.

depend on data from past elections. Additionally uncontested races do not present significant problems.[23]

Another difficulty encountered when applying swing ratios to elections is the differentiation in turnout across constituencies. Stephen Ansolabehere, David Brady, and Morris Fiorina (ABF) (1988) were critical of models that assumed equality in district sizes.[24] They proposed using "the average party proportion across constituencies" instead of aggregating the national vote.[25] Their swing ratio equation is presented below.[26]

$$\beta = \frac{\sum (W_t - \overline{W})(S_t - \overline{S})}{\sum (W_t - \overline{W})^2}$$

W = $\frac{1}{m} \cdot \sum D_i$ (the average party proportion across constituencies)
β = Swing ratio
D_i = Proportion of democrat vote in district i
t = Time
m = Number of districts
S = Percent of seats held by party

By using the average of proportions, the model is not influenced by varying district sizes or voter turnout. In treating the turnout of each constituency equally, this model could prove more appropriate for examining Senate contests as the state-level constituencies have different voter populations. For example, the voters of California would not wash away the voters of Delaware.

[23] Throughout the literature on swing ratio models, uncontested elections present difficulties for political scientists. For further discussion see Niemi, p. 84.
[24] Ansolabehere, Stephen, David Brady, and Morris Fiorina. N.d. "Turnout and the Calculation of Swing Ratios." Stanford University Graduate School of Business, Research Paper Series, no. 990: 8.
[25] Ansolabehere, p. 12.
[26] ABF also suggest a modified version of their model that accounts for uncontested seats. See Ansolabehere, p. 25.

A fourth relationship between seats and votes, the Cube Law, is almost a hundred year old concept.[27] Tufte (1973) described it as "the cube of the vote odds equals the seat odds, where the vote odds are the ratio of the share of the votes received by one party divided by the ratio of the share of the votes received by the competing party."[28]

$$\frac{S}{1-S} = \left(\frac{V}{1-V}\right)^{p}$$

In this model, displayed above, the measure of responsiveness or swing ratio is captured by *p*. In a perfectly proportional representation system *p* equals 1. Tufte was critical of the Cube Law. He argued it assumes that swing ratios do not vary over time. Tufte found "The Logit Model" somewhat more statistically satisfactory, which is the following regression equation.

$$\log_e \frac{S}{1-S} = \beta_0 + \beta_1 \log_e \frac{V}{1-V}$$

This model is better for predictions according to Tufte. Since both votes and seats are logged, a one percent shift in seat odds is associated with a β_1 percent shift in vote odds.[29] Tufte argued that it captures bias through β_0. If β_0 equals zero, the electoral system is considered unbiased.

Gary King and Robert Browning (1987) propose a modification of the cube law that also included measures for bias and responsiveness. Bias is what "makes it possible for one party to receive 50% of the vote but not necessarily 50% of the seats." [30] They

[27] Kendall, M.G., and A. Stewart. "The Law of Cubic Proportion." The British Journal of Sociology 1(1950): 183.
[28] Tufte, p. 544.
[29] Tufte, p. 546.
[30] King, Gary, and Robert X Browning. "Democratic Representation and Partisan Bias in Congressional Elections." The American Political Science Review 81(1987): 1253.

argued that every study employing the Cube Law assumed that there was no bias. They suggested the following modification to the cube law as a swing ratio measure:

$$S = D\left\{1 + \exp\left[-\ln\beta - \rho\ln\left(\frac{V}{1-V}\right)\right]\right\}^{-1}$$

In this model, β captures bias, and *p* measures responsiveness. The authors thought their model "is a more realistic version than Tufte's in that [they] allow for every possible degree of partisan bias" by using a nonlinear model.[31]

Methodological Problems when Applying Swing Ratios to the Senate

Unfortunately, the King and Browning model, which is designed to examine House elections on a state-level basis, cannot be directly applied to Senate elections. *S* in their model is the proportion of seats won by a party in a state. At-large districts would only create proportions of zero or one, which would sometimes result in undefined results. Therefore King and Browning drop at-large House districts from their analysis. Senate elections are entirely at-large districts, so this model cannot be utilized for analysis of the upper chamber's elections.

Other problems arise when applying some of these swing ratio models to the Senate. One unique question for the Senate is how changes in seats and votes should be measured. Since only approximately a third of the chamber is up for election at a time, one could measure the change in proportion of seats of classes or the whole body. Also the voting populations for Senate elections differ every two years, so it may be inappropriate to look at the change in votes over a two year period. Furthermore the constituency populations for states vary much more than House districts. These concerns

[31] King & Browning, p. 1256. In their model, D is "the total number of single-member legislative districts."

are in addition the many that arise when examining House elections, such as dealing with uncontested seats. [32]

Senate Swing Ratios

Four of the aforementioned models have been applied to Senate elections. John Alford and Hibbing (2002) used a hypothetical swing ratio; Crook, Hibbing and John Pothier (1984) employed the multiyear, historical swing ratio; Engstrom and Kernell applied a modified version of King and Browning's model; and Stewart used ABF's model.[33]

Alford and Hibbing examined Senate elections from 1914 to 1996. They found the swing ratios of the individual Senate classes were higher than their corresponding House elections. In an overwhelming majority of elections, the allocation of Senate seats was more sensitive to partisan shifts in votes than the House. Therefore when considering the seats up in an election year, a percent increase in Democratic Senate vote had a greater impact on the number of seats won than a percent increase in Democratic House vote. Only in 1948 was the House's swing ratio higher than a corresponding Senate class. However when they examined seats of the full Senate, House swing ratios were larger in all but eight of forty-two elections. Seven of these occurrences were after 1960. Therefore only having a third of the Senate being elected every two years seems to act as the primary, contemporary inhibitor of the chamber's responsiveness.

[32] Before proceeding, the author would like to advocate that more research and efforts need to be done to create a swing ratio designed for the Senate. While this work applied House models to the Senate, the considerable differences between the upper and lower chambers' elections should be accounted for in measures of responsiveness.

[33] Crook and Hibbing did not reference their measure as a swing ratio.

From these findings they argued that there has been a recent electoral convergence between the two chambers. Alford and Hibbing stated that "the House is now no more sensitive to the public mood than the Senate."[34] Although, the authors did not believe that this was entirely the responsibility of the Seventeenth Amendment. Other variables such as rising legislative professionalism and the decreasing responsiveness of the House contributed to the convergence. They noted that in the twentieth century, the House's swing ratios fell more than the Senate's swing ratios grew.

Stewart presented a similar argument. He applied ABF's model to elections from 1914 until 1980. Despite the full Senate swing ratio being 1.33 as compared to 1.35 for the House, he found higher Senate swing ratios when disaggregating by class. When only comparing seats up for election, the Senate's swing ratio increased to 2.69. This exemplifies how different the full chamber and class level analyses are with the Senate. When only the class is considered, Senate elections can be interpreted as being twice as responsive to percentage changes in vote. Stewart found Classes 1, 2, and 3 had swing ratios of 3.03, 2.06, and 3.58 respectively. He believed these findings showed that the Senate had actually "become at least as 'democratic' as the House."[35]

In 1984, John T. Pothler applied the historical swing ratio to Senate elections from 1950 to 1982. He found that elections from 1946 to 1976 showed "remarkable regularity" with a high swing ratio of 3.5.[36] Although from 1978 to 1982 there was a dramatic shift in bias towards Republicans. From 1950 to 1976, the swing ratio was 3.47 with a bias of .16 favoring Democrats, but from 1978 to 1982 the swing ratio doubled to

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[34] Alford, John R., and John R. Hibbing. 2002. "Electoral Convergence in the U.S. Congress." in Bruce I. Oppenheimer, ed., *U.S. Senate Exceptionalism.* Columbus, OH: The Ohio State University Press: 104.
[35] Stewart, p. 79.
[36] Pothler, John T. 1984. The Partisan Bias in Senate Elections. American Politics Quarterly 12(1984): 90.

6.2 with a 4.2 bias for Republicans. Although it should be noted that this latter time period is an extremely small sample.

Some have investigated whether or not the switch to direct elections created changes in swing ratios. In "A Not-so-distant-Mirror: the 17th Amendment and Congressional Change," Crook and Hibbing analyzed the effects of the Seventeenth Amendment on responsiveness. While not referencing the measure as such, they applied a multiyear, historical swing ratio to the pre and post Amendment periods. Lacking Senate election returns before 1914, presidential vote was used as a proxy measure of voter preferences for their entire study. Therefore they observed Senate elections from 1860 to 1964 only in presidential election years.[37]

They found presidential vote was a better predictor of seats in the post Amendment period. Prior to the Amendment, a 1% shift in presidential vote would result in a .75% shift in seats. Meanwhile under direct elections, a 1% shift in presidential vote would result in a 1.09% change in seats.[38] Therefore under indirect elections, the change in percentage Republican vote exceeded the respective changes in the number of seats the party earned. After the Seventeenth Amendment, Senate elections became more responsive to presidential vote with there almost being a one to one relationship. In the House, presidential vote actually became less predictive of changes in seats. Crook and Hibbing concluded that "[p]residential elections are no more able to predict House shifts

[37] By using this technique the same classes are never compared when looking for the change in votes or seats. Therefore using this proxy measure prevented Crook & Hibbing from doing class level analysis as done by Alford, Hibbing, and Stewart. The authors also excluded elections from 1908 to 1916 to account for the "transition period" to direct elections. Therefore they only observed 12 elections before and after the Seventeenth Amendment. Furthermore, I was unable to replicate their example of calculating change in seats. See Crook & Hibbing, p. 851.

[38] Crook & Hibbing, 852. Their swing ratio for the pre amendment period was not statistically significant to the .05 level, but it was for the post amendment period.

than Senate shifts," which is generally consistent with the convergence arguments of Alford, Hibbing, and Stewart.

Some authors have looked for differences in bias between direct and indirect elections. One of these pieces was coauthored by Ronald F. King and Susan Ellis, "Partisan Advantage and Constitutional Change: The Case of the Seventeenth Amendment." They argued that the Seventeenth Amendment reduced the Republican bias created by indirect elections. For evidence, they compared the partisan proportions of a state's House and Senate delegations using regression analysis, treating the existence of direct elections as a dummy variable. They found that even if there were no Republicans in the House, the Senate would be at least 27% Republican in the pre Amendment period. However after ratification, zero Republicans in the House would only have resulted in a Senate that was 18% Republican.[39] If all Democrats were absent from the House for this latter time period, they predicted that the Senate would be 23% Democratic.[40] In the post Amendment period, there was a 5% structural advantage towards the Democrats. Prior to the Amendment, the Republicans were advantaged by 14%. Therefore there was a 19% swing in the bias of the electoral institutions.[41]

Similar to Crook and Hibbing, King and Ellis used presidential vote to compare the indirect and direct election periods. A Republican bias was again found in the pre Amendment period. Using this measure, there was a 29% structural advantage for Republicans prior to the Seventeenth Amendment. After 1914, the advantage was reduced to 1%. Meanwhile in the House, no significant change in structural advantage

[39] King, Ronald F., and Susan Ellis. "Partisan Advantage and Constitutional Change: The Case of the Seventeenth Amendment." Studies in American Political Development 10(1996): 80.
[40] King & Ellis, p. 80.
[41] King & Ellis, p. 81.

was discovered. In a later work, the findings at the class level were consistent with this argument.[42]

Their first piece sparked a debate with Daniel Wirls (1999), who thought the found Republican biases were actually caused by a Democratic bias in the House and statehood admission prior to the Seventeenth Amendment. He stated that King and Ellis' "evidence only proves one thing: the Seventeenth Amendment was roughly coincidental with a shift in the interinstitutional electoral fortunes of the two parties."[43] King and Ellis responded that indirect elections disfavored Democrats, who had less success in winning state legislatures than House and presidential contests. Therefore it was in their best interest to ratify the Seventeenth Amendment.[44]

Consistent findings with Crook and Hibbing's swing ratios and King and Ellis' bias were presented in work by Engstrom and Kernell. Using a modified version of the King and Browning's swing ratio model, they created nonsouth swing ratios using presidential vote.[45] Similar to Crook and Hibbing, they compared the direct and indirect election time periods from 1840 to 1940. The authors found direct election swing ratios to be 3.25, but indirect election swing ratios were only 2.21. Similar to King and Ellis, indirect elections displayed a bias in favor of Republicans. Before the Seventeenth Amendment, there was a 16.25 bias in favor of Republicans, but after there as a 2.25 advantage for Democrats.

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[42] Ellis, Susan, and Ronald F. King. "Inter-Party Advantage and Intra-Party Diversity: A Response to Wirls." Studies in American Political Development 13(1999): 38.
[43] Wirls, David. "Regionalism, Rotten Boroughs, Race, and Realignment: The Seventeenth Amendment and the Politics of Representation." Studies in American Political Development 13(1999): 7.
[44] Ellis & King, p. 44.
[45] The model they used was based on the one presented in Cox & Katz, p. 34.
It should be noted that Engstrom and Kernell did not include any controls for direct primaries during the indirect election period as Crook and Hibbing attempted to do.

The literature generally finds that the institution of the direct election of senators created changes in behavior, demographics, and electoral responsiveness. In examining elections, scholars have asserted that the Senate has become more responsive and similar to the House. In making this argument, two approaches have been used. Stewart, Alford, and Hibbing compare Senate and House elections after the Seventeenth Amendment. Crook, Hibbing, King, Ellis, Engstrom, and Kernell compare elections before and after the Seventeenth Amendment, but they employ proxy measures of votes to remedy the lack of election returns prior to 1914.

I instead create a proxy measure of seats and utilize the factual election returns to compare indirect and direct elections. By creating counterfactual Senates relying on the partisan makeup of state legislatures, this work can examine a consistent time period. Swing-ratios were then generated for the factual and counterfactual Senates to compare their levels of responsiveness.

The Counterfactual Senate

By creating counterfactual Senates since 1918, I examine the relationship between seats and votes using the actual Senate election returns instead of a proxy measure of preferences as done by Crook and Hibbing. It seems more logical to assume that individuals' votes for senators are a better indicator of their preferences for their Senate representation than their presidential vote. It is acknowledged that partisan consistency in voters' preferences is assumed. Voters may cast their ballots for different reasons such as candidates' policy positions, demographic variables, or personality characteristics. However the same criticisms can be made against using presidential vote as the electorate also may weigh these considerations when voting for a presidential candidate. Additionally by using a counterfactual, indirectly elected Senate, a consistent time period including midterm elections is examined, which previous research has failed to do.

While counterfactuals are speculative, they can help uncover interesting historical insights. For example when examining statehood admission in the nineteenth century, Charles Stewart and Barry Weingast (1992) showed statehood admission strategies could have altered partisan control of the presidency and congress. Counterfactuals have also been used in the Seventeenth Amendment literature (Ellis & King 1999, Walling 2005).[46] Similarly this project shows how Senate compositions would have been different if

[46] Briefly discussed in Ellis and King's *Inter-Party Advantage and Intra-Party Diversity* was a counterfactual Senate created by the authors. They applied the coefficients on state legislature proportions from the pre amendment period onto the proportions from the post amendment period "to predict the counterfactual party composition of each class elected to the Senate, as if indirect election had remained in force." They also executed the reverse procedure to the indirect election period. From 1887-1913, seven of fifteen Senates changed majorities. While there was only one change from 1915 to 1953, many Democratic majorities were weakened. The authors asserted that this supported their thesis that indirect elections created biased Republican results. See Ellis and King, p. 39. Unfortunately no specific, counterfactual Senate compositions were provided by the authors upon request.

indirect elections were maintained. The following will outline the criteria for the construction of counterfactual, indirectly elected Senates since 1918. Additionally there will be discussion of the methodological weaknesses of the counterfactual.

Creating the Indirectly Elected Senate

The primary assumption used to create the counterfactual, indirectly elected Senates relies on consistent choice by state legislators. I assume that the party controlling the state legislature would have indirectly elected a senator of the same party. While not always the case before the Seventeenth Amendment, this assumption has empirical and legal founding.

In addition to the face validity that a Democratic legislature would appoint a Democrat to the Senate, Engstrom and Kernell (2003) provide empirical evidence to support the consistent choice assumption. They found that from 1840 to 1912, "[w]hen Democrats controlled both branches they elected a fellow Democrat 93 percent of the time, and Republican controlled legislatures elected a Republican Senator in 97 percent of the contests."[47] Jeremy Walling in his dissertation found the correlation between state legislature control and senator appointments to be .88 from 1870 to 1914.[48] While none of these authors found a perfect relationship, the probability that a state legislature of one party would appoint a senator of the same party is high.

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[47] Engstom, Erik and Samuel Kernell. 2003. "The Effect of Presidential Elections on Party Control of the Senate under Direct and Indirect Elections." Presented at the 2003 History of Congress Conference, University of California, San Diego: 13.
In a later work (2007), the same authors stated "96 and 98 percernt of Democratic- and Republican-controlled legislatures, respectively, elected a member of their party" (2007), p. 49.

[48] Walling, Jeremy. 2005. "Original Design, Popular Usurpation, and the Seventeenth Amendment: The Effect of Constitutional Change on the United States Senate, 1870 – 1945." PhD. Diss., University of Kansas: 45.
The definition of "control," whether unified or majority a legislators, for Walling is unknown.

From a legal perspective, a law passed in 1866 created circumstances that simplify how to account for state governments with divided legislatures. Hoping to prevent gridlocks, the U.S. Congress passed *An Act to Regulate the Times and Manner of Holding Elections for Senators in Congress.* It required in circumstances where the two state legislative chambers could not agree on an appointed senator, members of both chambers would convene in a joint assembly. All legislators would then vote each day of session until a candidate received a majority.[49] The hope was that this would prevent gridlocks, but Engstrom and Kernell noted that they actually seemed to increase after the passage of this law.[50] Although in a later work, the same authors found that after the 1866 law there was an even greater likelihood of consistent choice assumption being true.[51] Considering this Act, it is assumed that if the majority of state legislators in a state were of a one party a U.S. senator of the same party would be appointed due to party consistency.

There are other limitations to the consistent choice assumption. For example, Minnesota had a non-partisan legislature from 1914 to 1948 and Nebraska has had a non-partisan legislature since 1936. Therefore I omit these states during those time periods in creating counterfactual Senates. [52] Another limitation is that between 1914 and 2006,

[49] *An Act to Regulate the Times and Manner of Holding Elections for Senators in Congress* in Select Statutes and Other Documents Illustrative of the History of the United States, 1861-1898 By William MacDonald: 152.
[50] Engstrom & Kernell (2003), Endnote 35. For a more extensive discussion of the impact of this law within the state legislatures, see Schiller, Wendy and Charles Stewart III. "U.S. Senate Elections before 1914." (2004) and Schiller (2007).
[51] Engstrom & Kernell (2007), p. 51.
[52] If any election from a state was omitted in the factual or counterfactual Senate, it was omitted from both.

there were eighteen ties within state legislatures when they were put into a simulated joint assembly.[53] These observations were also omitted from the analysis.

Similar to the indetermination of how these ties would have voted, it is also unknown how long it would have taken for the state legislatures to decide on a senator. My counterfactual assumes that parties would agree on their selections immediately and appoint a senator of the majority state legislative party. This again was not always the case under indirect elections. For example Delaware went from 1901 to 1903 without any representation in the U.S. Senate.[54] Additionally Wendy J. Schiller briefly noted that "if the legislature was under divided party control, deadlock was more likely" (2007).[55] Therefore the simulated indirect elections operate much more smoothly than the indirect elections before 1914.

The creation of the counterfactual Senates also assumes all states would have maintained indirect elections. States before the Seventeenth Amendment instituted direct primaries starting in 1888 or the "Oregon System" in 1904, where state legislators could pledge to vote for the direct primary victor.[56] Eleven states adopted the Oregon System, but this project does not account for this. This work's interest is in the comparison of indirect and direct elections. It will be assumed all states maintained indirect elections for the counterfactual Senate. Another circumstance that cannot be accounted for are party switches, deaths, or resignations. For both Senates, it is assumed that the senator

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[53] These eighteen ties are West Virginia (1916), Delaware (1916, 1988, 2006), Missouri (1926), Nevada (1926), Rhode Island (1946), Pennsylvania (1958), Alaska (1972), Arizona (1974, 2000), Indiana (1976), Utah (1976), Montana (1988), Iowa (1992), Ohio (1992), Michigan (1996), and Oregon (2004).

[54] Rossum, Ralph. Federalism, the Supreme Court, and the Seventeenth Amendment: The Irony of Constitutional Democracy. Lanham, MD: Lexington Books, 2001: 187.
Schiller and Stewart (2004) note that Delaware "stands out as the only state with multiple deadlocks" (p. 5).

[55] Schiller, p. 68. This work only looked at ten states from 1884 to 1913.

[56] Crook, p. 192. Riker (1955) notes that 28 states had primary elections laws that "provided in one way or another for the nomination of party candidates for the Senate at the party primary" (p. 466).

elected would serve his full six year term with the party for he was a caucus member at the beginning of his term.

These assumptions are some of the costs of using counterfactuals. Counterfactuals are useful for estimating what might have occurred in the absence of an identifiable intervention, but they certainly have drawbacks that ultimately limit the extent of their reliability and validity as measures of what might have happened. Common counterfactual problems include omission of relevant independent variables or the correlation of explanatory variables and error terms.[57] In this research for example, I assume that voters' preferences would have remained consistent across worlds with direct and indirect elections.[58] State legislative elections may have differed after 1914 if the legislatures were still responsible for senatorial appointments. Limitations such as these should be taken into account and acknowledged before drawing conclusive casual inferences from counterfactual research.

Considering these assumptions and omissions, factual and counterfactual Senates were constructed. The factual class election schedule was used for the elections in both. Only general elections since 1914 were considered. For the factual Senate, partisan control of a seat was determined by the actual election returns in a state.[59] For the counterfactual Senate, elections were determined by the consistent choice assumption. Full Senate analysis starts in 1918 as this is the first instance in history with a fully directly elected Senate. Class level analysis starts in 1914.

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[57] Fearon, James D. "Counterfactuals and Hypothesis Testing in Political Science." World Politics 43(1991): 169-195.

[58] In future research, it may be beneficial to create simulated election returns based on demographic and other voter criteria.

[59] If a third party won the election, the party who the candidate caucused with once in the Senate was considered the victor.

Data Sources

Two primary data sources were used for constructing these Senates. Senate election returns for the two parties were determined from the *CQ Voting and Elections Collection*.[60] For House election comparisons, a data set was created using data provided by this collection and Gary King.[61] State legislatures' partisan make ups were taken from *Party Affiliations in the State Legislatures* by Michael Dubin.[62]

I then merged the partisan compositions of each state legislature since 1914 and Senate election results into a single dataset. I also created variables to capture each election years' class number and whether a state was considered southern.[63] Using these data sources, factual and counterfactual Senates were constructed, and swing ratios calculated using actual Senate election returns as the measure of votes.[64]

Application of Swing Ratio Models

The swing ratios presented will primarily follow the research of Crook, Hibbing, and Stewart, who used the historical and ABF models. For the historical model, the change in aggregate proportion of Democratic vote received in an election year was used.[65] For full chamber analysis, the change in vote proportion over two years was the independent variable, and the change in proportion of seats held by Democrats in the full

[60] Some data was found to be missing from this collection. CQ lists the 1938 Alabama Special U.S. Senate election result but not the general election. The election result was found in Van der Veer Hamilton, Virginia . Lister Hill : statesman from the South. Chapel Hill: University of North Carolina Press, 1987. Additionally the 1960 and 1966 Arkansas Senate election returns were unavailable, so these were omitted.
[61] Gary King, 1994, "Elections to the United States House of Representatives, 1898-1992", hdl:1902.1/TQDSSPRDDZ UNF:3:tD8SznMFjKIxWxOqTQaamQ== Murray Research Archive [Distributor]
[62] Dubin, Michael J. Party Affiliations in the State Legislatures: A Year by Year Summary, 1796-2006. Jefferson, NC: McFarland & Company, Inc., Publishers, 2007.
[63] The following states were considered southern: Alabama, Arkansas, Florida, Georgia, Louisiana, Mississippi, North Carolina, South Carolina, Texas, Tennessee, and Virginia.
[64] Since there is no way to indicate that a counterfactual Senate will have an uncontested seat, no corrections will be made for uncontested elections in any model.
[65] Crook & Hibbing used Republican vote for their measures.

chamber over two years was treated as the dependent variable. When doing aggregated class level analysis, the independent variable was the same, but the dependent variable was in the change in proportion of seats allocated to Democrats from one election to the next, a two-year period. For individual classes, such as Class 1 or 2, of senators, the change in seats and votes was examined over a six year period. In this, Class 1 seats and votes were only compared to the preceding or following Class 1 election. With the ABF model, a W term, the average proportion of votes won by Democratic candidates in a year, was calculated for each election year. The dependent variable for the ABF model was either the Democratic proportion of the examined Senate or class.

Factual & Counterfactual Senates

Given the aforementioned omissions, the results comparing the factual and counterfactual Senates will be presented as the proportion of the Senate that was Democratic.[66] As can be seen in Table 1, there are a number of instances in which the majority party differs between the directly and indirectly elected Senates. There are ten in which Democrats had a majority in the factual Senate but not the counterfactual. All of these occurred before 1959. Then there are another seven instances in which Republicans would have been the majority party in the factual Senate but not the counterfactual. All of these occurred after 1981. There six five instances under changed majorities in which a party would have achieved three-fifths control under the opposite election method. It happened twice for the Democrats in the 73rd and 79th Congresses, and four times for the Republicans in the 97th, 98th, 99th, and 105th Congresses.

[66] The author hopes this makes it easier for readers to tell who has majority status or enough votes for cloture when considering the omissions and statehood of Alaska and Hawaii in the 20th Century. Changes in majority are bolded and changes in 3/5 status are italicized.

Table 1: Democratic Proportions of Directly Elected and Indirectly Elected Senates

Congress	Directly Elected Senate	Indirectly Elected Senate	Congress	Directly Elected Senate	Indirectly Elected Senate
66	**0.51**	**0.40**	88	0.71	0.66
67	0.39	0.36	89	0.72	0.68
68	0.45	0.33	90	0.65	0.63
69	0.43	0.34	91	0.60	0.60
70	0.50	0.37	92	0.56	0.54
71	0.41	0.34	93	0.58	0.58
72	0.49	0.34	94	0.64	0.70
73	***0.63***	***0.46***	95	0.64	0.78
74	0.73	0.62	96	0.60	0.80
75	0.80	0.74	**97**	***0.48***	***0.73***
76	0.74	0.70	**98**	***0.45***	***0.70***
77	0.73	0.63	**99**	***0.47***	***0.72***
78	*0.63*	*0.53*	*100*	*0.55*	*0.76*
79	***0.62***	***0.48***	*101*	*0.55*	*0.77*
80	**0.51**	**0.43**	*102*	*0.56*	*0.77*
81	**0.58**	**0.46**	*103*	*0.56*	*0.79*
82	**0.52**	**0.46**	*104*	*0.50*	*0.70*
83	**0.53**	**0.46**	***105***	***0.46***	***0.62***
84	**0.52**	**0.45**	**106**	**0.45**	**0.56**
85	**0.54**	**0.48**	107	0.50	0.55
86	0.68	0.61	**108**	**0.49**	**0.53**
87	0.66	0.66	109	0.45	0.50
			110	**0.49**	**0.52**

These changes in majority are worth noting as they could have had policy implications. In Walling's dissertation, he speculated about some of the possible policy changes. This research was limited to the 64th through 79th Congresses. Notably the changes in partisan composition in the 73rd Congress could have impacted the vote to end the gold standard, the Gold Reserve Act, and the National Industry Recovery Act.[67] While these individual votes may have changed, larger policy implications may have gone overlooked. For example, it is unknown if a Republican majority in the 73rd or other Congresses may have changed who set the policy agenda.[68] It is unfortunate

[67] Walling, p. 64.
[68] Cox, Gary, and Mathew McCubbins. Setting the Agenda. Cambridge: Cambridge University Press, 2005.

Walling's policy research ended with the 79th Congress because he missed many other instances of partisan control change. While this work will ultimately focus on electoral responsiveness of indirect elections, the policy implications of the direct elections should be explored further. [69]

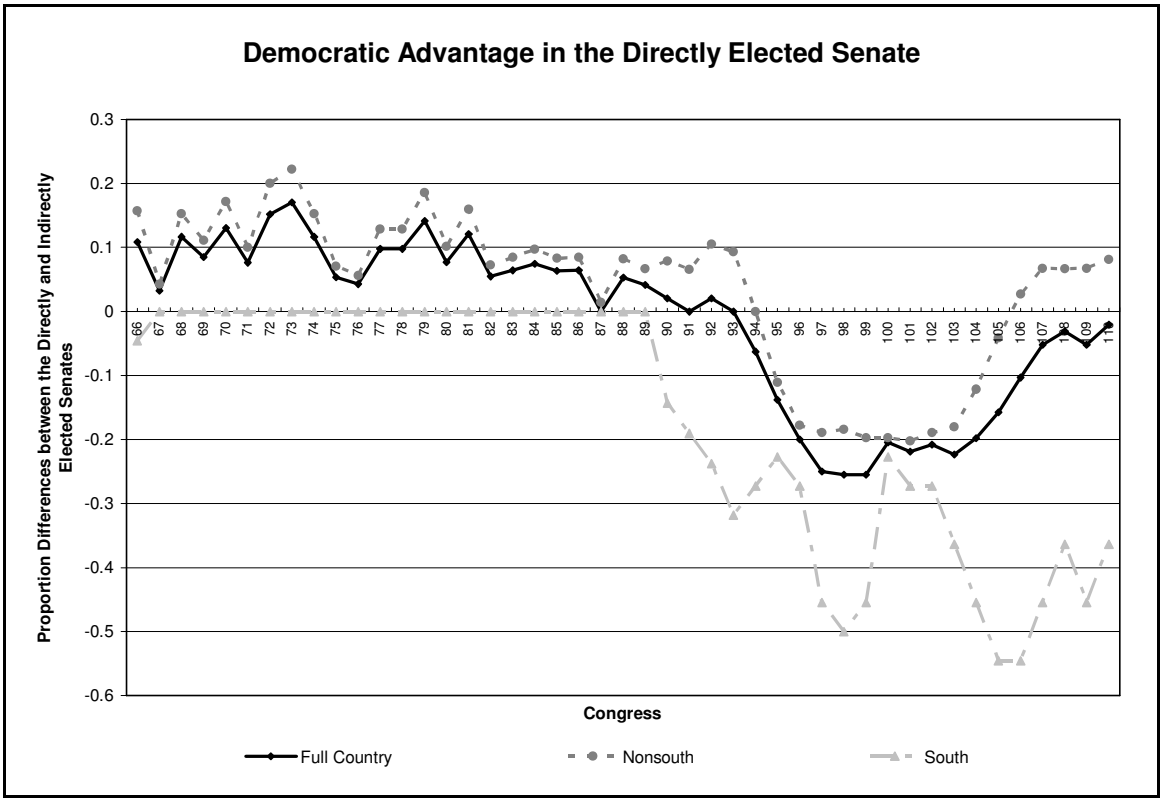
Before interpreting the data, the change in Democratic advantages between the Senates should be noted. Figure 1 shows that until the 93rd Congress, there was generally a Democratic advantage in seat allocation in the directly elected Senate. However since the 93rd Congress, there has consistently been a Republican advantage. This reached greater levels from the 96th to 104th Congresses than ever achieved by the Democrats before the 93rd Congress.[70] Some may attribute these Republican advantages to the south becoming less Democratic but even when omitting the south a similar Republican bias appears. Although in this circumstance, Democrats regain their advantage in the factual Senate following the 1998 elections. In the south however after being uniformly Democratic, direct elections seem to consistently favor Republicans starting in the 1960s. Considering these declines in Democratic advantages, one may want to revisit and expand upon the bias findings of King, Ellis, Engstrom, and Kernell's research. They presented evidence that indicated that the institution of direct elections helped Democrats,

[69] An unmentioned example of where this has been explored is Romero (2007). She found that the Senate became less progressive after direct elections. However it should be noted that the author only examined a sixteen year period in which some of the pre-Amendment senators were already directly elected through direct primaries. Also Wawro and Schickler (2006) found the institution of direct elections seemed to have little effect on Senate rule changes.

[70] The 87th Congress elected in 1960 was the first instance where there was no notable advantage for either party. It is interesting to note this when considering the Hibbing & Alford found that before 1960, there were no instances of the Senate's swing ratio exceeding that of the House. Also as discussed this author found that there were no instances of unique counterfactual Democratic majorities following 1960. Highton (2000) found that the incumbency advantage for senators started to grow just before this time period in 1950. Interestingly, Babich (1934) noted the reelection rates within the state legislatures dropped in the 1910 and 1912 indirect elections. He attributed this to the foreseen institution of direct elections.

but their samples respectively ended in 1942 and 1940. This is prior to the declines in Democratic advantage shown in Figure 1.

Figure 1: Difference between the Democratic Proportions of the Directly and Indirectly Elected Senates



The Responsiveness of Direct and Indirect Elections

Existing studies make two key arguments regarding the responsiveness of Senate elections after the ratification of the Seventeenth Amendment. First, Crook, Hibbing, Alford, and Stewart found direct Senate elections to be indiscernible from and sometimes more responsive than House elections.[71] The second compared direct and indirect elections, which is the focus of this research. Crook and Hibbing argued that following the Seventeenth Amendment the Senate "reacted to the popular mood with more sensitivity and more rapidity."[72] As measured by swing ratios of the full country, my findings similarly show that partisan Senate seat allocations are more sensitive to changes in votes under direct elections. However, by disaggregating elections by geographic region I find that this increased responsiveness can be largely attributed to changes within south. Meanwhile the responsiveness levels of direct and indirect elections in the nonsouth are relatively unchanged.

Direct & Indirect Elections: The Full Country

I turn now to the calculation of swing ratios for factual and counterfactual Senates. Consistent with previous work, the findings presented in Table 2 provide supportive evidence for the argument that direct elections are more responsive than indirect elections nationwide. In no instance when treating the full Senate or classes as

[71] For comparisons to House elections, copies of all swing ratio tables are provided in the Appendix with House election findings. From these findings, it is agreed that the Senate has at least converged with the House in regards to responsiveness.
It should be additionally noted that Crook (1992) argued that "the direct election of senators has contributed to the growing similarity between the Senate and the House of Representatives in terms of partisan composition" (p. 191).
Engstrom and Kernell (2007) stated "the highly responsive Senate elections after direct election confirm the observation (Crook and Hibbing 1997; Wirls 1999) that the 17th Amendment effectively nationalized Senate elections" p. 38.
[72] Crook & Hibbing, p. 852.

the dependent variable did direct elections produce smaller swing ratios.[73] Within the classes, the ABF swing ratio doubled from indirect to direct elections. For both the full Senate and within the classes, the historical swing ratio was larger for direct elections. Therefore the partisan allocation of Senate seats was more sensitive to changes in votes under direct than indirect elections, which is logical considering that direct elections institutionally link votes to seats. This is consistent with Crook and Hibbing's argument.

Table 2: Historical and ABF Swing Ratios for Directly and Indirectly Elected Senates: Full Senate and Class Levels of Analysis

Senate	Swing Ratio Model	Seat Level of Analysis	Swing Ratio
Directly Elected	Historical	Full Senate	0.517***
Indirectly Elected	Historical	Full Senate	0.246*
Directly Elected	Historical	Class	2.73***
Indirectly Elected	Historical	Class	1.60***
Directly Elected	ABF	Full Senate	1.18***
Indirectly Elected	ABF	Full Senate	-.043
Directly Elected	ABF	Class	2.11***
Indirectly Elected	ABF	Class	0.901**

* $p \leq .15$ ** $p \leq .05$ *** $p \leq .001$

Following Stewart's work, elections were disaggregated by Senate class. As presented in Table 3 across all of the historical swing ratios, direct elections produced higher swing ratios than indirect elections, consistent with Crook and Hibbing's argument. However fewer differences were found when using ABF's model. Similar to Stewart's findings, Class 2 had a notably lower historical and ABF swing ratio than either of the other classes. It was also the only class to exhibit statistical significance problems.

[73]The indirectly elected, full senate, the historical swing ratio was only statistically significant to the .105 level, and the ABF swing ratio was not statistically significant. Crook and Hibbing similarly did not achieve statistical significance to the .10 level for their indirect election swing ratios.

Table 3: Historical and ABF Swing Ratios for Directly and Indirectly Elected Senates: Individual Senate Classes

		Swing Ratios		
Senate	**Swing Ratio Model**	**Class 1**	**Class 2**	**Class 3**
Directly Elected	Historical	3.88*	2.37*	3.45*
Indirectly Elected	Historical	3.58*	2.03*	2.60*
Directly Elected	ABF	2.87*	1.54*	2.76*
Indirectly Elected	ABF	2.92*	-.385	1.59*

* $p \leq .05$

Direct & Indirect Elections: Nonsouth and South

One possible reason for this Class 2 difference is its number of southern elections: ten. In comparison, five and seven senators are elected in Classes 1 and 3 respectively. Taking this into account, a control was instituted for whether or not an election occurred in the south.[74]

When removing southern elections, Class 2's historical swing ratio increases from 2.37 to 3.22. For all of the classes in both the factual and counterfactual Senate, the nonsouth ABF swing ratios were larger than the southern swing ratios. These results lead to a refined distinction regarding direct and indirect elections. The southern swing ratios at least double in each comparison of direct and indirect elections. Meanwhile there are

[74] The south did not elect a Republican until 1966 in the directly elected Senate, and the counterfactual Senate did not have a Republican until 1984. This lack in variation contributed to creating statistical significance problems. In replicating the presented categories from Table 4 with the historical swing ratio model, statistical significance to the .05 level was achieved less than half of the time. A copy of Table 4 with historical swing ratios is presented in the appendix. There were more increases in the nonsouth historical swing ratios than ABF swing ratios, but statistical significance problems prevent any comparisons to changes in the south.
Highton (2000) also found a southern difference in Senate electoral competition. He therefore excluded it from his analysis of the incumbency advantage and effect of national partisan tides in Senate elections. Engstrom and Kernell (2003) actually graphed a comparison of Senate elections and presidential vote from 1840 to 1936 of the nonsouth. From this they claimed agreement with findings of Crook and Hibbing for the whole country (2007), p. 39. In 2007, these authors created direct and indirect election swing ratios exclusively for the nonsouth.

less notable differences in the nonsouth. Also the increases in swing ratios in the south across all subsets were of greater magnitude and in a consistent direction.[75]

Table 4: ABF Swing Ratios for Factual and Counterfactual Senates: Full Senate and Class Levels of Analysis

Seats Sample	Senate	Nonsouth Swing Ratio	South Swing Ratio
Full Senate	Directly Elected	1.99***	1.25***
Full Senate	Indirectly Elected	2.22***	.292***
All Classes	Directly Elected	3.55***	1.43***
All Classes	Indirectly Elected	3.69***	.413***
Class 1	Directly Elected	3.01***	1.48***
Class 1	Indirectly Elected	4.16***	.546**
Class 2	Directly Elected	3.70***	1.52***
Class 2	Indirectly Elected	2.65***	.230*
Class 3	Directly Elected	4.15***	1.17***
Class 3	Indirectly Elected	3.81***	.518***

***p≤.05; ** p ≤ .1; *p ≤ .2

It should be again acknowledged that Engstrom and Kernell's swing ratios disaggregated the country geographically by only looking at nonsouth, direct elections for the first 26 years of direct elections. For this region and time period, they found the swing ratio for direct elections to be 3.25. For a similar time period, this work found the nonsouth swing ratio to be 3.30.[76] Under indirect elections during this time with my counterfactual Senate, the swing ratio is 3.22. This .08 difference between direct and indirect elections for the nonsouth is much smaller than the 1.04 difference found by Engstrom and Kernell when comparing the 1840 – 1912 and 1914 – 1940 time periods. When looking at elections from 1942 to 2006, difference between the directly and indirectly elected, nonsouth Senates falls to .05. This evidence is consistent with the

[75] Consistent results were found using grouped logit estimators.
[76] This work relies on the dataset with the stated omissions of election years and individual elections. For example, 3.30 was the swing ratio of elections from 1918 to 1940 instead of 1914 to 1940.

argument that the institution of direct elections seemed to have little effect on swing ratios in the nonsouth.[77]

By disaggregating Senate elections by region, a new insight regarding direct and indirect elections in the United States is provided. Consistently across the full Senate and classes, the increases in swing ratios were larger in southern elections than nonsouth. If an alternative explanation for these larger swing ratios in the south can be determined, it could signify that the differences in responsiveness between direct and indirect elections are less dramatic than previously considered.

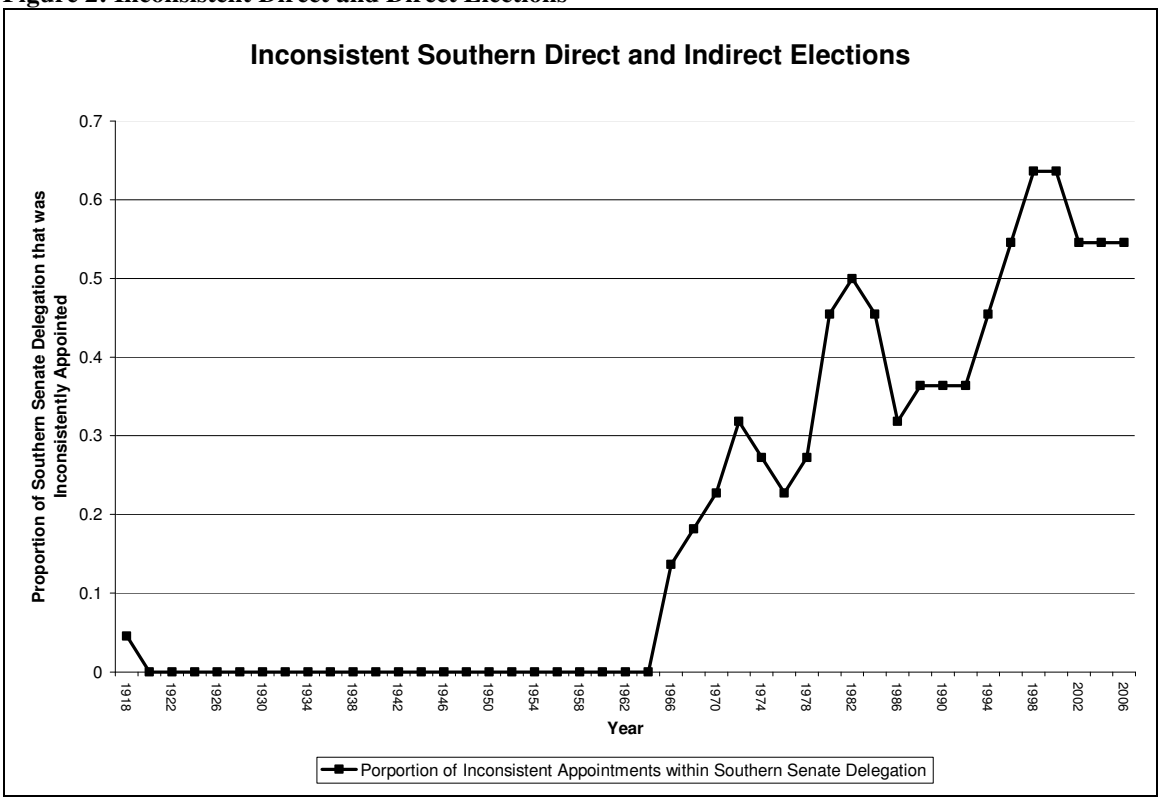
The Southern State Legislatures

Figures 2 and 3 may present a possible explanation for these increases in swing ratios. In the first half of the twentieth century, the southern Senate delegation was consistently Democratic for both the directly and indirectly elected Senates. Starting in the 1960s southern Republicans were directly elected. In the indirectly elected Senates, in contrast, Republican senators were not elected until the 1980s. However the proportion of Democratic U.S. Senate vote begins to fall in the 1950s, which likely led to Republican victories in the 1960s. As seen in Figure 2, there was a rise in the number of inconsistent appointments through direct and indirect elections. In other words, southern voters were electing Democrats at high rates to their state legislatures while beginning to send Republicans to the U.S. Senate. For example, Strom Thurmond was elected as a Republican by South Carolina voters starting in 1966, but both the South Carolina state House and Senate were under Democratic control until 1994. Therefore for almost thirty

[77] The direct election swing ratio for the 1942 to 2006 time period was 1.21. This was statistically significant to the .1 level. For indirect elections, the swing ratio was 1.16, which was statistically significant to the .05 level. Due to aforementioned problems with the Browning and King model, southern swing ratios were unachievable at statistically significant levels.

years voters wanted a Republican representative in the U.S. Senate, but their state legislature likely would have indirectly elected a Democrat. Similarly in Texas, John Tower was a Republican served in the Senate from 1966 to 1985, but Texas had a Democratic state legislature throughout this time period.

Figure 2: Inconsistent Direct and Direct Elections



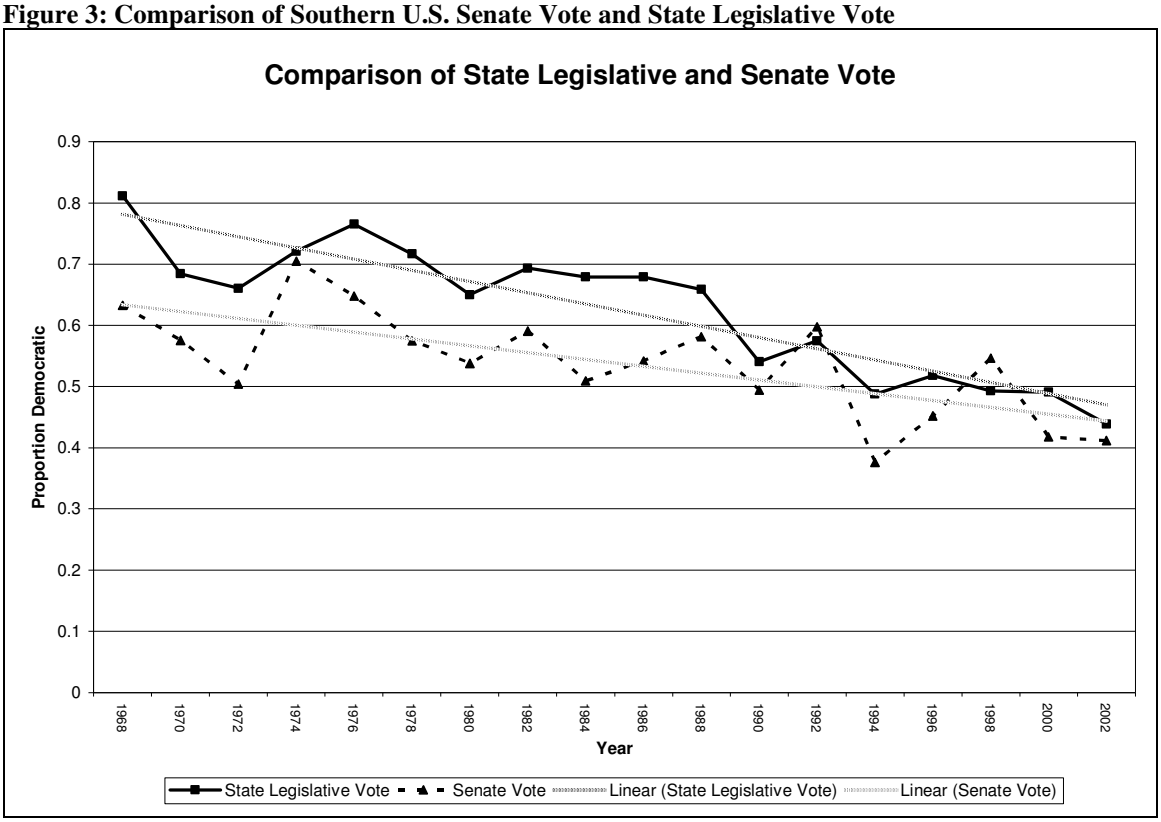
By linking seat allocation to voter preferences, the Seventeenth Amendment likely allowed the rising Republican sentiment amongst voters influence who represented them in congress. The southern state legislatures may have acted as twenty year delay mechanism for the election of Republican senators. As shown in Figure 4 (see Appendix), first the Democratic vote drops, then the number of factual southern Democratic senators, and finally the number of counterfactual Democratic senators.

The delayed shifting of southerners voting Republican instead of Democratic in state legislative elections may be the reason for the lagged Republican representation in the southern, indirectly elected Senates. Perhaps with the rise of candidate centered campaigns, Republicans at the federal level were able to establish their own identities with voters. Meanwhile state legislative candidates continued to rely on the Democratic Party label. There is a considerable difference in partisan voting between the federal and state legislative levels. Southern federal elections have produced more Republicans, but state legislative elections have produced more Democratic victories. For example, there is a notable lack of change in southern state legislatures. Since 1914, there have been less than 25 changes in majority party within southern state legislative chambers. Meanwhile in the nonsouth, there have been over 500. While there are approximately four times as many nonsouth chambers, this is still a disproportionate amount of changes of majority status. Additionally it should be noted that most of the changes in southern state legislatures have occurred more recently. Even with these, there are currently fourteen southern state legislative chambers controlled by Democrats, but these states only have three Democratic U.S. Senators.

The recent increased frequency in changes in legislative chambers' composition is likely due to the decline of Democratic vote at the southern, state legislative level. Using a dataset created by Tom Carsey and others, southern state legislative and Senate vote are compared in Figure 3.[78]

[78] This dataset only covers state legislature elections from 1968 to 2002. For elections occurring in odd numbered years, vote totals were added to the following year's election. The same definition of southern states was used by the author, and these states were hand coded for this project.

Figure 3: Comparison of Southern U.S. Senate Vote and State Legislative Vote



The linear trend lines show that the proportion Democratic vote at the state legislative and U.S. Senate level in the south are declining and converging. These merging trends could also indicate that there is a decline in ticket splitting amongst southern voters. Jacobson (2009) found a decrease in southern ticket splitting between the presidential and senatorial level.[79] A similar decline may be occurring at the state legislative level. This potential argument is not inconsistent with the one presented by Engstrom and Kernell for explaining the increased responsiveness. They partially attributed changes in responsiveness and more so bias to other electoral institutional changes, such as the introduction of the Australian ballot that allowed for ticket-splitting.

[79] Jacobson, Gary. The Politics of Congressional Elections. 7th. New York: Pearson Longman, 2009: 219.

If the increasing trend of more consistent partisan ballots continues, it would be interesting to see if the southern, indirect election swing ratios also increase. One could hypothesize that as the south votes more consistently Republican up and down the ballot, the responsiveness of direct and indirect elections within the south may mirror the nonsouth. This trend also prompts questions regarding the responsiveness of state legislative elections. Although at this point, more elections need to take place to see if these trends continue.

Conclusion

The recent literature on the impact of the Seventeenth Amendment has discovered distinctions between directly and indirectly elected senators. Differences have also been found in the levels of partisan responsiveness of these two types of elections, with the predominant argument from Crook and Hibbing being that direct elections are more responsive and sensitive than indirect elections across the country. This work does not entirely disagree with this assessment, but it suggests that greater consideration be given to regional differences.

By creating counterfactual, indirectly elected Senates, this work was able to compare direct and indirect elections over one time period while utilizing the actual Senate election returns. In this analysis, multiple swing ratio models showed that direct elections are more responsive than indirect elections when considering the full country. However when the country is divided into nonsouth and south regions, the differences between direct and indirect elections' responsiveness are inconsistent between the regions. Swing ratios were larger in southern elections when moving from indirect to direct elections. Meanwhile in some cases the nonsouth swing ratios were relatively unchanged.

The lack of change in nonsouth swing ratios serves as evidence against the argument that direct elections are more responsive than indirect elections. Instead, it appears that voter preferences between the federal and state legislative levels may have been more consistent in the nonsouth than south. One possible explanation offered by this work is that there has been a delay in southern voters casting consistent partisan

ballots between state legislative and federal elections. Although the research for this explanation should be taken as preliminary, it may want to be considered in the future. This difference between the south and nonsouth may prompt political scientists to investigate differences between elections and voter preferences between state and federal legislative elections.

Still, this work brings some nuance to our understanding of the impact of the Seventeenth Amendment on the responsiveness of Senate elections. Most of the previously found differences can be attributed to changes within the south. Therefore the difference between direct and indirect elections may be less notable than previously considered.

References

Alford, John R., and John R. Hibbing. 2002. "Electoral Convergence in the U.S. Congress." In Bruce I. Oppenheimer, ed., *U.S. Senate Exceptionalism.* Columbus, OH: The Ohio State University Press.

An Act to Regulate the Times and Manner of Holding Elections for Senators in Congress in Select Statutes and Other Documents Illustrative of the History of the United States, 1861-1898 By William MacDonald.

Ansolabehere, Stephen, David Brady, and Morris Fiorina. N.d. "Turnout and the Calculation of Swing Ratios." Stanford University Graduate School of Business, Research Paper Series, no. 990.

Babich, Peter. 1934. "Senatorial elections before and after the passage of the Seventeenth Amendment." MA Thesis., University of Florida.

Bernhard, William, and Brian R. Sala. "The Remaking of an American Senate: The 17th Amendment and Ideological Responsiveness." Journal of Politics 68(2006): 345-357.

Cox, Gary W., and Jonathan N. Katz. Elbridge Gerry's Salamander. New York: Cambridge University Press, 2002.

Cox, Gary, and Mathew McCubbins. Setting the Agenda. Cambridge: Cambridge University Press, 2005.

Crook, Sara Brandes. 1992. "The Consequences of the Seventeenth Amendment: The Twentieth Century Senate." PhD. Diss., University of Nebraska.

Crook, Sara Brandes, and John R. Hibbing. "A Not-so-distant Mirror: the 17th Amendment and Congressional Change." The American Political Science Review 91(1997): 845-853.

CQ Voting and Elections Collection.

Dubin, Michael J. Party Affiliations in the State Legislatures: A Year by Year Summary, 1796 - 2006. Jefferson, NC: McFarland & Company, Inc., Publishers, 2007.

Ellis, Susan, and Ronald F. King. "Inter-Party Advantage and Intra-Party Diversity: A Response to Wirls." Studies in American Political Development 13(1999): 31-45.

Engstrom, Erik and Samuel Kernell. 2003. "The Effect of Presidential Elections on Party Control of the Senate under Direct and Indirect Elections." Presented at the 2003 History of Congress Conference, University of California, San Diego.

Engstrom, Erik J. and Samuel Kernell. 2007. "The Effects of Presidential Elections on Party Control of the Senate under Indirect and Direct Elections." In. Brady, David and Mat Mathew D. McCubbins, ed. *Party, Process, and Political Change in Congress, Volume 2.* Stanford, CA. Stanford University Press.

Fearon, James D. "Counterfactuals and Hypothesis Testing in Political Science." World Politics 43(1991): 169-195.

Highton, Benjamin. "Senate Elections in the United States, 1920-94." British Journal of Political Science 30(2000): 483-506.

Jacobson, Gary. "The Marginals Never Vanished." The American Journal of Political Science 31(1987): 126-41.

Jacobson, Gary. The Politics of Congressional Elections. 7th. New York: Pearson Longman, 2009.

Kendall, M.G., and A. Stewart. "The Law of Cubic Proportion." The British Journal of Sociology 1(1950): 183-196.

King, Gary, and Robert X Browning. "Democratic Representation and Partisan Bias in Congressional Elections." The American Political Science Review 81(1987): 1251-1273.

King, Ronald F., and Susan Ellis. "Partisan Advantage and Constitutional Change: The Case of the Seventeenth Amendment." Studies in American Political Development 10(1996): 69-102.

Madison, James. “The Debates in the Federal Convention of 1787.”

Meinke, Scott R. August 2007. “Institutional Change and the Electoral Connection in the Senate: Revisiting the Effects of Direct Election.” Manuscript.

Niemi, Richard G., and Partrick Fett. "The Swing Ratio: An Explanation and an Assessment." Legislative Studies Quarterly 11(1986): 75-90.

Pothler, John T. 1984. The Partisan Bias in Senate Elections. American Politics Quarterly 12(1984): 89-100.

Riker, William H.. "The Senate and American Federalism." The American Political Science Review 49(1955): 452-469.

Romero, Francine. "The Impact of Direct Election on Reform Votes in the US Senate." Social Science Quarterly 88(2007): 816-829.

Rossum, Ralph. Federalism, the Supreme Court, and the Seventeenth Amendment: The Irony of Constitutional Democracy. Lanham, MD: Lexington Books, 2001.

Schiller, Wendy and Charles Stewart III. “U.S. Senate Elections before 1914.” (April 2004).

Schiller, Wendy. 2007. “The Electoral Connection: Career Building and Constituency Representation in the U.S. Senate in the Age of Indirect Elections.” In. Brady, David and Mat Mathew D. McCubbins, ed. *Party, Process, and Political Change in Congress, Volume 2.* Stanford, CA. Stanford University Press.

“State Legislative Election Returns, 1967-2003, Thomas M. Carsey, William D. Berry, Richard G. Niemi, Lynda W. Powell, and James M Snyder, Release Version 5."

Stewart, Charles III. 1992. “Responsiveness in the Upper Chamber: The Constitution and the Institutional Development of the Senate.” In Peter Nardulli, ed., *The Constitution and American Political Development: An Institutional Perspective.* Urbana, IL: University of Illinois Press.

Stewart, Charles III, and Barry R. Weingast. "Stacking the Senate, Changing the Nation: Republic Rotten Boroughs, Statehood Politics, and American Political Development." Studies in American Political Development 6(1992): 223-71.

Tufte, Edward R. "The Relationship between Seats and Votes in Two-Party Systems." The American Political Science Review 67(1973): 540-554.

Van der Veer Hamilton, Virginia . Lister Hill: Statesman from the South. Chapel Hill: University of North Carolina Press, 1987.

Walling, Jeremy. 2005. “Original Design, Popular Usurpation, and the Seventeenth Amendment: The Effect of Constitutional Change on the United States Senate, 1870 – 1945.” PhD. Diss., University of Kansas.

Wawro, Gregory J., and Eric Schickler. Filibuster: Obstruction and Lawmaking in the U.S. Senate. Princeton, NJ: Princeton University Press, 2006.

Wirls, David. "Regionalism, Rotten Boroughs, Race, and Realignment: The Seventeenth Amendment and the Politics of Representation." Studies in American Political Development 13(1999): 1-30.

Appendix

Table 5: Replication of Table 2 Including House Swing Ratios

Chamber	Swing Ratio Model	Seat Level of Analysis	Swing Ratio
Directly Elected Senate	Historical	Full Senate	0.517**
Indirectly Elected Senate	Historical	Full Senate	0.246*
Directly Elected Senate	Historical	Class	2.73**
Indirectly Elected Senate	Historical	Class	1.60**
House	Historical	Full House	1.84**
Indirectly Elected Senate	ABF	Full Senate	1.18**
Counterfactual Senate	ABF	Full Senate	-.043
Indirectly Elected Senate	ABF	Class	2.11**
Counterfactual Senate	ABF	Class	0.901**
House	ABF	Full House	1.72**

** $p \leq .05$; * $p \leq .15$

Table 6: Replication of Table 4 with Historical Swing Ratios and House Swing Ratios

Seats Sample	Senate	Historical Nonsouth Swing Ratio	Historical South Swing Ratio	ABF Nonsouth Swing Ratio	ABF South Swing Ratio
Full Senate	Directly Elected	.621***	.043	1.99***	1.25***
Full Senate	Indirectly Elected	.251	-.002	2.22***	.292***
All Classes	Directly Elected	2.93***	1.93***	3.55***	1.43***
All Classes	Indirectly Elected	1.89***	.015	3.69***	.413***
Class 1	Directly Elected	3.90***	.711**	3.01***	1.48***
Class 1	Indirectly Elected	3.74***	-.253	4.16***	.546**
Class 2	Directly Elected	3.22***	.642	3.70***	1.52***
Class 2	Indirectly Elected	2.54**	.076	2.65***	.230*
Class 3	Directly Elected	4.15***	1.50*	4.15***	1.17***
Class 3	Indirectly Elected	2.90***	.336	3.81***	.518***
Full House		2.27***	.478***	2.27***	1.12***

*** $p \leq .05$;** $p \leq .1$; *$p \leq .2$

Figure 4: Comparison of the Southern Factual Senate, Counterfactual Senate, and Democratic Vote