"We are now substituting a ‘despotism’ for a free nation,” proclaimed the Pennsylvania Republican, James Beck, on the floor of the House as it debated the core legislation of Franklin Roosevelt’s Hundred Days, the National Industrial Recover Act. “It Russianizes the business of America,” declared his fellow Pennsylvania Republican, Harry Clay Ransley. “We are, in this bill, not to mention a long list of others recently passed under gag rule, placing American industry under the President as dictator,” pronounced their New Jersey colleague, Charles Eaton. New York Republican, James Wadsworth, Jr., similarly lectured the House on “The end of individualism in America! I cannot help but believe that this means the end of real liberty and the substitution of bureaucracy—the hard, heavy, cold hand of bureaucracy—upon the daily lives of millions and millions of Americans.”

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1 Congressional Record, 73d Congress, 1st session, May 25, 1933, pp.4212, 4188; May 26, 1933, pp.4358, 4348.
The back and forth in the chamber was rhetorically fierce; on key amendments, the depleted Republican opposition largely stood solidly together in efforts to weaken the bill against a virtually united Democratic Party, and in the face of mass opinion and interest group support across a wide spectrum. Final passage in the House witnessed Democrats voting in favor by a 206-23 margin. By contrast, Republicans split 53-50 in favor, reminding us that final passage votes often take distinct form. The House later approved the conference report by voice vote, but it only cleared the Senate 46-39, with 23 of the 28 participating Republicans voting no.

Not a national emergency, not a president with a landslide mandate, and not the active support of the business community could override partisan divisions. And so it went during much of the New Deal and Fair Deal years. Working with uncommonly large Democratic majorities, President Roosevelt succeeded on the Hill unless, as in 1937 debates over the Fair Labor Standards Act, or, later, in disputes about union organizing, southern Democrats defected to Republican positions. Over and again, Republicans and Democrats divided over the revolution in domestic affairs and national responsibilities the New Deal ushered in.

This hardly is an unconventional view. It is, after all, the way historians long have understood partisanship’s practices during this critical juncture in American political history. So it is particularly jarring to have the New Deal and Fair Deal era represented in landmark systematic scholarship on congressional behavior as a halcyon time of comparatively low polarization (Poole and Rosenthal 1997; McCarty, Poole and Rosenthal 2006).
That historical moment is now conventionally contrasted with today’s ubiquity of high polarization. We all have become familiar with the historical portrait of a U-shape pattern of elite polarization with a nadir during the New Deal and Fair Deal. Much literature also has linked polarization to legislative productivity (McCarty, Poole and Rosenthal 2006), and to heightened incivility in politics and rhetoric (Hetherington 2009).

Motivated by the puzzling asymmetry of historical accounts of partisan division during the 1930s and 1940s and the designation of the New Deal as a low polarization moment, this article is written as a series of four interlocking discussions. First is an engagement between history and one of our discipline’s most canonical measures. Second is an account of elements of change during the Roosevelt and Truman years that raise questions both about the level and constancy of that era’s polarization. Third is an assessment of alternative measures in tandem with a consideration of why NOMINATE generates results for this critical period in American history—a period that it designates as a polarization outlier—that appear to be in tension with patterns apprehended by focused historical treatments, and that do not capture shifts germane to polarization within these two decades. Fourth is an assessment of some implications for extant understandings of the impact of polarization on legislative productivity and for whether and how inequality shapes polarization.

These probes have a hortatory purpose. As the turn to history has taken hold—a quest that David Mayhew projected in his first book and was keenly advanced by Poole and Rosenthal’s pioneering analytical characterization of roll call behavior over the full span of America’s past—it has become ever more important to create a dialogue between history and method (Mayhew 1966; for an example, Katznelson 2012; for an assessment, Wawro...
and Katznelson 2013). To that end, we offer these reflections in the hopes that they spur further inquiries and questions directed at better understanding the causes and consequences of the difficult task of characterizing history.

1. **Defining and Measuring Elite Polarization**

   The NOMINATE project has defined polarization as being partisan in nature. We, too, ultimately adopt that definition, but we note that defining polarization is not an easy task, for it is an inherently ambiguous concept. In a review essay, Marc Hetherington (2009) underscores subtle differences between elite polarization more broadly and partisan polarization. He writes, “The 1960s and 1970s witnessed plenty of polarized rhetoric and behavior about divisive issues like Vietnam and Civil Rights. But differences did not break down along party lines.” (Hetherington 2009: 417). This observation is important both conceptually and as we think of measurement issues, especially as most conventional definitions of elite polarization are partisan-based.

   For the purposes of this chapter, we follow this practice. While we concur with Hetherington (2009) that polarization and partisanship are not necessarily identical, the extant literature measures differences organized by party. That is, we look to differences in voting behavior between and among various partisan groups to assess polarization even though polarization may certainly occur in the absence of partisan divisions.

   The bulk of empirical studies that focus on elite polarization, nonetheless emphasize partisan polarization, and typically use roll call voting behavior—most notably the estimates produced by the DW-NOMINATE algorithm (Poole and Rosenthal 1997) applied to the matrices of recorded roll call votes in particular—to measure polarization as the distance between the medians of both major parties in the House of Representatives in first
dimension DW-NOMINATE scores (Poole and Rosenthal 1997; McCarty, Poole and Rosenthal 2006; Hetherington 2009; Lapinski 2008 and 2013).

Before moving further, it is important to understand what a NOMINATE based measure of polarization does, and does not, tell us about the larger political context and the sources of partisan conflict in a legislature.²

Poole and Rosenthal (2007) explain that the variation that is characterized by the first dimension of DW-NOMINATE “can be thought of as ranging from strong loyalty to one party...to weak loyalty to either party to strong loyalty on the second, opposing party” (p. 55). In other words, the “ideal points” that are recovered on the first dimension capture the extent to which there is variation in members’ voting behavior on those issues on which the parties disagree. Political scientists, including Poole and Rosenthal, often label the resulting dimension as “liberal-conservative ideology” because the issues involved typically deal with such matters as income redistribution, but this label is an ex post interpretation of the recovered pattern. Nothing in the statistical or underlying behavior model necessarily requires the recovered dimension to have anything to do with liberal and conservative issues (or, in fact, even ideology).

This subtle point is consequential because the common measure of polarization indicates the tendency of Democrats to vote against Republicans, whether because the oppositional voting we observe is the result of the parties having very different policy preferences, whether members have similar preferences but party pressure causes them to vote with others in their own party, or whether polarization results from the type of issues

² To be clear, while some of the analysis in this chapter are specific to DW-NOMINATE (e.g., the unclear role of the second dimension), its broader points also apply to many other roll call-based estimates of polarization.
brought to a vote on the floor. It is impossible to adjudicate between these alternatives from roll calls alone. In fact, the pattern of “yeas” and “nays” being analyzed is a product of: the preferences of the members in the chamber, the extent to which voting behavior reflects those preferences, and the issues that are taken to a vote. Ideal points that result from analyzing the pattern of observed votes are sensitive to each (Clinton 2012).

Consider how extant statistical models are agnostic about the nature of the agenda, the substance of issues, and their degree of importance both in terms of the significance of legislation and the larger situation within which it is being offered and appraised. Constraints on how ideal points are assumed to change over time tend not to take such matters into account; yet we know that there is variation along these lines at different historical moments (e.g., Clinton and Lapinski 2008), and under different conditions of partisan electoral competition and success (Lee 2008; 2009).

Lawmaking during the New Deal took up issues that were different in kind from those debated in more recent Congresses. Legislation considered in the 1930s and 1940s fundamentally restructured the relationship between the state and its citizens in the context of the Great Depression that had exposed status quo policies as radically inadequate to the calamity at hand. As a result, legislation was introduced to change the laissez-faire status quo policies and promote a far more expansive role for the federal government not only in terms of its involvement and regulation of economic activity, but also in terms of the level of support that government provided to its citizens. Government was reacting to a set of existing policies widely thought to be inadequate.

More recent lawmaking has been very different. Aside from the Affordable Care Act enacted in 2010 and arguably the American Recovery and Reinvestment Act of 2009,
contemporary debates have largely amended or reformed existing policies. The contrast is stark. During the New Deal, political debates were over whether or not to create Social Security; current debates are over whether or not to raise the age of retirement or the formula used to calculate cost of living increases in the amount that is paid out. Put differently, the policies of the New Deal were largely, but certainly not exclusively, about *creating* new policies and redefining the nature of the citizens and the state given a status quo that was thought to be unacceptable. The politics of more recent periods largely, but not always, involve attempts to *amend* and slightly alter the relationships that characterize the existing policy regime.

Change to the nature of issues is consequential because the ideal points we estimate from observed voting behavior can change if we hold preferences fixed and alter the substantive agenda. Put differently, it is possible to generate what appears to be an increasing amount of polarization in voting behavior even if the preferences of legislators are held constant by simply adjusting the nature of the bills being voted upon. In particular, as the number of proposals to adjust centrist status quos increases – as we might expect would happen if policy converges to more median positions (Krehbiel 1998) – then the level of estimated polarization can increase even if preferences remain unchanged.

An illustrative Monte Carlo simulation briefly highlights this fact by demonstrating how both the preferences and the agenda affect the level of estimated polarization in a legislature. Think about a hypothetical legislature with 100 members and 55 Democrats. Suppose that the agenda initially consists of 100 votes with uniformly distributed cutpoints ranging between [-1,1]. Assume Democrats’ true preferences range uniformly between [-1, 1-\(\alpha\)] and Republicans’ range uniformly between [-1+\(\alpha\), 1]. Allowing \(\alpha\) to vary from 0 to 1
examines situations ranging from a complete lack of polarization to an instance where every Democrat is to the left of every Republican. Given the assumed cutpoints and ideal points for each choice of \( \alpha \), we follow Hirsch (2012) by introducing idiosyncratic voting error and generating a matrix of roll calls using the probabilistic behavioral voting model of Clinton, Jackman and Rivers (2003) that we then use to estimate ideal points.

The left-hand graph in Figure 1 plots the estimated level of polarization from the ideal points that are estimated in each simulation. As expected, for a fixed agenda, as the amount of party overlap in true preferences decreases from 1 (complete overlap) to 0 (complete separation), the estimated ideal points of the average Republican and average Democrat increasingly diverge. This is the common interpretation of polarization; that is, increased polarization reflects increased disagreement between the two parties about what policies ought to be pursued by the government.
What is less commonly realized is that the right-hand graph in Figure 1 reveals that polarization is also sensitive to the agenda being voted upon even when true preferences are polarized (by setting $\alpha=1$). Instead of assuming that the cutpoints uniformly range from $[-1,1]$ as in the left-hand graph, the left-hand figure illustrates the consequences of choosing 100 cutpoints from the uniform interval $[-1+\beta, 1-\beta]$ when $\beta$ varies from 0 to 1.
across simulations. When $\beta = 0$, cutpoints are uniformly spread across the entire policy space and we observe members from the different parties sometimes vote together on the issues we observe; $\beta = 1$ reflects the extreme instance in which every vote is a party-line vote in the absence of voting error. The right hand graph reveals that the measure of polarization increases as the distribution of cutpoints converges to the middle of the policy space. Theoretically, converging cutpoints can be interpreted as reflecting an increased attention on amending more centrist policies – perhaps because policy outcomes converge dynamically to median positions over time in the absence of exogenous shocks (Krehbiel 1998).

To be clear, our polarization measures depend on both: 1) the distribution of underlying preferences, and 2) the issues that are brought to a vote. However, our ability to control for the possibility of these changes when conducting analyses across extensive time periods is typically limited. The difficulty of identifying the cause of polarization is likely to be consequential because it matters whether a legislature is polarized because of divergent preferences or if it is polarized because the votes that are being taken are intentionally chosen to divide the parties. Whereas the latter may be a consequence of electoral position taking and may have limited implications for policy outcomes, the former reflects divergent opinions on the policies that the government should pursue. DW NOMINATE does not let us adjudicate between these two alternatives.

Another important and underappreciated feature of DW-NOMINATE scores is that they estimate two dimensions. The second dimension deals with issues that often split parties internally, especially matters that concern race and region (Poole and Rosenthal 1997). Curiously, even though the “residual” second dimension characterizes voting on
issues in which the parties are internally divided – and in which partisan-based
polarization therefore does not occur -- second dimension scores are almost universally
ignored in empirical studies of polarization. We know no major study focusing on the
second dimension of the NOMINATE project. To be sure, Poole and Rosenthal do look at
how issue areas map onto the second dimension in their landmark book, Congress: A
Political-Economic History of Roll Call Voting (1997). That noted, why estimate a two-
dimensional model (except for goodness of fit reasons), only to ignore the second
dimension when studying important substantive topics like polarization? Why not look at
overall polarization as characterized by the entire roll call voting record of a Congress?
These questions rarely are asked by the large and significant body of scholarship that
constructs polarization scores for Congress based on DW-NOMINATE measures.

Equally curious is how few scholars evaluate the assumptions of DW-NOMINATE’s
algorithm (for exceptions, see Carroll et al 2013; Carroll et al 2009; and Clinton and
Jackman 2009). To most, the method underneath the various NOMINATE estimators is a
black box. This is unfortunate because the assumptions necessary to implement any
scaling method such as NOMINATE have empirical consequences (Poole 2005; Clinton
2012). While the sensitivity of some assumptions have been explored, there are others
made by both the behavioral and statistical model that have not.3 Of particular interest

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3 For example, when estimating a two-dimensional model using a NOMINATE-based
estimator, the weight given to the first and second dimensions is assumed to be fixed
across time and the weight is chosen so as to maximize fit (variously computed). There is
also a “SAG Correction” built into the estimator that can override and impose a constraint
on how distant members can be from one another and rescale the computed estimates.
The SAG Correction prevents there from being too much distance between ideal points in
the [-1,1] space and it changes the meaning of the recovered space if the variation between
ideal points in a Congress becomes too large. It is unclear how consequential these
here is the manner in which strong assumptions are necessary to make scores comparable across time.

To evaluate how the ideal point estimates in one time period compare to another a baseline is required. Because everything is unobserved but a matrix of “ones and zeros,” to compute distance measures over time and interpret requires many assumptions about both a behavioral model of voting and the statistical model used to implement the behavioral model. For example, as is the case with DW-NOMINATE, if it is assumed that any change in a member’s ideal point must be steady, gradual and persistent might this affect our ability to characterize important moments in political history that are both dramatic and relatively short-lasting? As a key example, might the tremendous exogenous shocks to the political system caused by the Great Depression and World War II combined with the changing (endogenous) willingness to consider issues involving race and the electoral insulation of Southern Democrats affect our assessment of partisan conflict over this period? How sensitive are our conclusions to alternative assumptions we might make to compare ideal points over time?

2. The New Deal, Fair Deal, and Polarization in the U.S. House

The NOMINATE project finds political polarization to have been very low during the New Deal and Fair Deal periods in both the House and the Senate. Figure 2 reveals this portrait by graphing the amount of polarization in the U.S. House between 1920 and 1960 by calculating the difference in the average ideal point of Democrats and Republicans

assumptions are when computing estimates over long periods of time where the meaning of the dimensions and the scale could vary.
according to DW-NOMINATE. A crucial feature of historical analysis is distinguishing the particularities of distinctive situations. Doing this for the 1930s and 1940s, we can discern circumstances that, at minimum, complicate this low and flat characterization of the period. Moreover, these historical circumstances complicate any measure of Republican and Democratic polarization that, for this moment, fails to grapple with the particular place of southern Democrats occupied in Congress.

![Figure 2: Polarization in the Early 20th Century U.S. House](image)

Figure 2: Polarization in the Early 20th Century U.S. House: The trend line shows the difference in the average Republican and average Democrat DW-NOMINATE score in the first dimension.

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4 The Voteview.com website offers an identical figure of polarization using DW-NOMINATE scores for the entire history of the U.S. Congress. Using party medians instead of party means makes no substantive difference and the measures correlate at .995 for the 1877-2009 time period.
A first attribute of the period is a constellation of uncommon shifts to the circumstances of partisanship; not just ordinary changes, as in the 80th Congress when Republican majorities displaced Democratic control in each chamber, but two other sets of changes that could not but have affected both the extent and meaning of polarization.

The pre-New Deal 72nd Congress had been divided between 218 Republicans, 216 Democrats, and 1 Farmer Labor Party member. After the 1932 Democratic rout, fully 313 Democrats and 5 Farmer Labor members sat in the chamber. Bucking midterm trends, Democratic numbers grew two years later to 322; and, in 1936 to a remarkable 334, with only 88 Republican left (as well as 8 Wisconsin Progressives, and 5 Farmer-Labor members). For obvious reasons, change in the Senate was slower; but by the 75th Congress only 16 Republicans still were present. From this low base, the swing back to a more ordinary division was impressive. The 78th Congress, elected in 1942, witnessed 38 Senate Republicans, and a Democratic majority of just 222-209. Normal partisanship had been restored.

A further peculiarity concerns the balance of regional forces within the Democratic Party. This period, of course, witnessed Democrats starkly divided between a primarily urban, immigrant, Catholic and Jewish northern wing and a primarily rural, native-born, Protestant southern contingent. During the Republican 1920s, southern Democrats had constituted the great majority of the party in Congress. The early New Deal realignment brought in a non-southern party majority. But that did not last. Starting in the 76th House and the 77th Senate, southern Democrats constituted the party's majority in the legislature. Never again during the Roosevelt and Truman Administrations did their share fall below half of all House Democrats; and by the end of the Truman administration, fully 63 percent
of Democrats in the Senate hailed from the South (understood as the seventeen states that mandated racial segregation).

Long ago, V.O. Key, Jr.’s classic chapters on the House and Senate noted how southern Democrats constituted the most cohesive bloc within the legislature (Key 1949). That being the case, the level of polarization depended not just on the degree of likeness exhibited by members of the two parties, but by the extent to which southern and non-southern Democrats joined forces to share a partisan position.

An additional key feature of the period is the global conflict that consumed most of the 1940s, opening with World War II and closing with the Cold War and the hot war in Korea (Mayhew 2005). These developments exerted strong normative pressures for national unity in tandem with growth in the number of military and security issues to be adjudicated in Congress. This set of pressures cross-cut continuing partisan differences about the role of the United States in foreign affairs, often serving to soften them. Thus, as an example, even as isolationists (primarily Republican) and internationalists (primarily Democratic) disagreed about such key matters as the fate of American neutrality in the late 1930s and early 1940s, they could agree across party lines to dramatically increase military spending in a dangerous world.

Within this particular context, high polarization between the parties required Democratic Party solidarity across regional lines, but the absence of polarization could have been caused era by two different mechanisms—either growth in cross-partisan behavior, or the defection of southern Democrats to the Republican camp on a meaningful number of issues—working separately or together.
To help track the patterning of partisanship under these conditions during the New Deal and Fair Deal, Katznelson and Mulroy (2012) fashioned a classification of roll call types according to the degree of likeness southern members from the seventeen states that then mandated racial segregation manifested with respect both to fellow Democrats and Republicans. Assuming that voting behavior reflects preferences homogeneity rather than party discipline (Krehbiel 2000) yields the schema shown in Figure 3.

**Figure 3: Typology of Southern Roll Call Behavior.** Likeness scores between southern Democrats and non-southern Democrats (on horizontal access) and between southern Democrats and Republicans (on vertical axis). The dotted gray lines mark a likeness score of 70. A roll call that falls above or to the left of the dotted gray lines indicates that the two blocs under comparison voted with low likeness on the roll call.

With a conventional Rice score of 70 serving as the distinction between high and low similarity, this typology classifies votes in four categories: partisan votes in which southern and non-southern Democrats vote with high likeness but southern Democrats
and Republicans do not; cross-partisan votes in which all members vote with high likeness across party lines; sectional votes in which southern Democrats do not vote either with Republicans or other Democrats; and defection votes in which southern Democrats join Republicans while deserting the party position.

Over the course of the twenty years of the Roosevelt and Truman presidencies, we can observe significant shifts to the percentage of roll calls falling within each quadrant. During the four New Deal Congresses that preceded American participation in World War Two, between 67 and 73 percent of all roll calls in the House were partisan; yet during and after the 77th Congress, at no time did more than 42 percent of the votes prove to be partisan.

<table>
<thead>
<tr>
<th>Congress</th>
<th>Number of RCs</th>
<th>Disloyal</th>
<th>Sectional</th>
<th>Partisan</th>
<th>Cross-Partisan</th>
</tr>
</thead>
<tbody>
<tr>
<td>73 (1933-34)</td>
<td>143</td>
<td>1.5</td>
<td>3.7</td>
<td>73.3</td>
<td>21.5</td>
</tr>
<tr>
<td>74 (1935-36)</td>
<td>212</td>
<td>2.4</td>
<td>0.6</td>
<td>66.7</td>
<td>30.4</td>
</tr>
<tr>
<td>75 (1937-38)</td>
<td>158</td>
<td>4.4</td>
<td>4.4</td>
<td>67.2</td>
<td>24.1</td>
</tr>
<tr>
<td>76 (1939-40)</td>
<td>227</td>
<td>7.2</td>
<td>4.6</td>
<td>67.7</td>
<td>20.5</td>
</tr>
<tr>
<td>77 (1941-42)</td>
<td>152</td>
<td>8.8</td>
<td>11.7</td>
<td>42.3</td>
<td>37.2</td>
</tr>
<tr>
<td>78 (1943-44)</td>
<td>156</td>
<td>17.3</td>
<td>6.4</td>
<td>39.1</td>
<td>37.2</td>
</tr>
<tr>
<td>79 (1945-46)</td>
<td>231</td>
<td>20.6</td>
<td>5.9</td>
<td>40.2</td>
<td>33.3</td>
</tr>
<tr>
<td>80 (1947-48)</td>
<td>163</td>
<td>21.9</td>
<td>8.0</td>
<td>41.7</td>
<td>28.5</td>
</tr>
<tr>
<td>81 (1949-50)</td>
<td>275</td>
<td>9.8</td>
<td>16.0</td>
<td>40.2</td>
<td>34.0</td>
</tr>
<tr>
<td>82 (1951-52)</td>
<td>181</td>
<td>24.1</td>
<td>13.3</td>
<td>36.8</td>
<td>25.9</td>
</tr>
<tr>
<td>Total</td>
<td>1755</td>
<td>12.1</td>
<td>7.8</td>
<td>50.7</td>
<td>29.5</td>
</tr>
</tbody>
</table>

**Table 1: Southern Roll Call Behavior: The percent of roll calls falling in each quadrant.**

It is clear, in consequence, that measures displaying consistently low polarization, as shown by DW-NOMINATE in Figure 1, either are not accurate, or mask important transformations to roll call behavior within and across the parties. Indeed, it seems clear that
both mechanisms—the growth of cross-partisan voting under conditions of global duress, and the upward trend of southern defection—should be invoked and better understood as underpinning any aggregate outcome of diminished polarization during the second half of this twenty-year period.

Compared to the more flat and low pattern projected by DW-NOMINATE, the categorizations of Table 1 discern a pattern that is more varied. Roll call voting in the 73d and 74th Congress at the start of the New Deal in 1933-1936 was largely defined by partisanship. The southern and northern blocs of the Democratic party united against the members from the Republican bloc, with only a few roll calls venturing into the Sectional (3.7 percent in the House and 1.8 percent in the Senate) and Disloyal (1.5 percent in the House and 3.5 percent in the Senate) quadrants. This pattern continued through much of the early New Deal period with southern Democrats diverging from non-southern Democrats on fewer than 13 percent of all roll calls in both chambers of the first four New Deal Congresses, as represented by the extreme bias of roll calls grouped on the right-hand side of that moment’s scatterplots.

But this pattern did not prove to be stable. Rather, the early New Deal configuration changed dramatically, with several breakpoints marking the evolution of southern bloc behavior as members from the region began to selectively disengage from their coalitional relationship with non-southern Democrats. As southern members began to behave less reliably as party voters, two patterns emerged. First, southerners began, on occasion, to find new allies within the Republican Party. By the 76th Congress, the proportion of Disloyal roll calls (7.2 percent) had nearly doubled that in the 75th. Even more substantial at this moment was the sudden accumulation of Sectional votes. On these roll calls, southern members broke away as a distinct and independent bloc, diverging both from Republicans and their co-partisans on nearly 12
percent of the roll calls. Southern Democrats in the House were shedding some partisan loyalty in favor of regional preferences.

By the 78th Congress, the Disloyal category had become the reservoir for a massive deluge of roll calls. Quite suddenly and considerably, southern Democrats began to ally with Republicans in proportions that far exceeded any previous New Deal Congress. This pattern continued into the Truman years, thus dramatically softening intra-party polarization. Democrats as a whole were not moving closer to Republicans; rather, the party’s southern majority was doing so selectively.

One of the striking features of these shifts over the course of the New Deal and Fair Deal is how they match much of what we know in a more qualitative way about the period. The early moments of the New Deal, marked by the passage of an extraordinary range of legislation that transformed the scale and responsibilities of the national state — laws about banking and Wall Street, agriculture and labor, economic oversight and social security — pitted very different perspectives, if not quite formed ideologies, against each other in what then was a rather one-sided political competition between the parties. We also know, as the historian James Patterson noted long ago (Patterson 1981) that a southern revolt against the wage-labor bill in the 75th Congress marked the first moment when the region, fearing disruption to its low-wage and racialized labor market, and concerned about the upsurge in union activity in the region, opened a new era when southern members started to calculate how votes on what ordinarily would be thought of as first dimension issues might affect their intense preferences about race and region. “Southern solidarity,” noted the Atlanta Constitution, was becoming “solidarity unhitched to Democratic Party leadership” (December 22, 1937: 6).

3. **Characterizing Patterns of Elite Polarization**
Given the discrepancy that we think is evident between the degree of polarization during the New Deal and Fair Deal period according to DW-NOMINATE and both the amount and variation based on the historical record, it is useful to contrast how the politics of the New Deal and Fair Deal are categorized according to other measures. In characterizing how DW-NOMINATE’s measure of elite polarization compares for this era, we can open the way to an evaluation of the difference variations in assumptions about ideal points make to empirical results over time.

To evaluate whether measures exist that come closer to historical treatments of the New Deal and Fair Deal we focus on the relationship between polarization in the House according to DW-NOMINATE and the average level of party unity voting in the House; the amount of electoral polarization that is present in House districts; and wealth inequality over time. Each of these inquiries strengthens our awareness that the characterization of polarization during the New Deal and Fair Deal by DW-NOMINATE is anomalous.

3.1 Party Unity Voting and Elite Polarization

Consider simple differences in party unity voting over time as a first comparison to DW-NOMINATE trends in party polarization. We identify the set of votes in each congress on which the parties are opposed to one another and we use using the percentage of such votes for which the average member of Congress votes with their own party. This is a relatively coarse description of elite polarization (Krehbiel 2000), but it does capture the level of conflictual voting behavior.
Figure 4: Trends in Party Unity Voting, 1877-2010. The top graph shows the average party unity voting between 1877 and 2010. The bottom graph plots the correlation between this average and the DW-NOMINATE measure of polarization. Dark points indicate Congresses during the New Deal and the Fair Deal (1933-1953).

Figure 4 shows that the party unity voting slowly declined from 1877 through the early 1960s until it fell rather dramatically before beginning a steep ascent in the 1970s. The bottom graph considers the relationship between such average party unity and the level of
polarization characterized by DW-NOMINATE scores. A very strong relationship is found, except for the period of the New Deal and the Fair Deal! During this period, the level of polarization is estimated to be far less than the average party unity would suggest based on the relationship between party unity and polarization. In fact, over the entire period, the correlation between average party unity and polarization measured using DW-NOMINATE is .69, but this correlation increases to .76 when the ten Congresses associated with the New Deal and Fair Deal are excluded.

3.2 Electoral Polarization and Elite Polarization

Another measure of polarization is provided by the extent to which the districts of Democrat and Republican incumbents vote for different presidential candidates. If districts represented by Democrats vote differently than districts represented by Republicans in presidential elections, this arguably provides some evidence that the two electorates disagree on issues related to national politics. To measure district electoral polarization, we calculate the difference in the average percentage of votes cast for the Democratic presidential candidate for districts represented by Democrats and Republicans.

To be clear, this measure is imperfect – not only does the meaning of voting for the Democratic candidate change over time depending on which Democrat is running, but even if the same candidate were to run in every election, what it means to cast a vote for that Democratic candidate would depend on who else is running. Despite these shortcomings, district presidential voting behavior provides one of the only characterizations we have about the views of the electorate across enough time so as to allow us to track the decline and rise of polarization.
To compute this measure of electoral polarization we rely on several data sources. For the first half of this period (presidential elections from 1872 through 1948), we utilize district-level estimates of presidential votes derived from county-level election returns by Ansolabehere, Snyder and Stewart (2001). For the modern period (1952 through 2008), we use district-level returns as reported by the Census Bureau.

Figure 5 presents the comparison in an analogous way as Figure 4. The top graph plots the difference in the average two-party Democrat vote between Democrats and Republicans over time and it reveals a fairly constant level of electoral polarization (which notable exceptions in notable elections such as 1912) – especially in the period leading up to, and including, the New Deal and Fair Deal before the level of electoral polarization decreases before gradually increasing throughout the 1980s and 1990s.

These data are incomplete due to difficulties in matching county-level election returns with congressional districts; 18% of districts are missing, primarily in large cities and the Northeast. Our graphical representations of responsiveness include breaks between the early and later data to underscore this limitation. In addition, we omit the 88th Congress (1963-1964) due to missing data stemming from widespread congressional redistricting in the early 1960s.
Figure 5: The relationship between district electoral polarization and DW-NOMINATE polarization. The top graph depicts the difference in the average percentage of two-party Democratic presidential vote between districts with Democrat and Republican representatives. The bottom graph reveals the relationship between this measure of electoral polarization and the measure of polarization based on DW-NOMINATE. Dark points indicate Congresses during the New Deal and the Fair Deal (1933-1953).

In general, Figure 5 reveals that periods of high electoral polarization in district level voting behavior in presidential elections occur when high levels of polarization in elite
voting behavior also occur. There are some exceptions to this pattern – most notably the Congresses of the New Deal and the Fair Deal graphed in solid plots. During this critical period, DW-NOMINATE suggests that there is far less polarization than the voting behavior of districts in presidential elections would otherwise suggest based on what we observe in other time periods. The stark difference is more clearly revealed when we consider the correlation between the two measures. When we include the New Deal and Fair Deal congresses, the correlation is only .24 over the entire time period, but it increases to .45 when the outlying congresses of the New Deal and Fair Deal are excluded. This discrepancy implies that there is something different about the measures during this time period or the period itself.

3.3 Income Inequality and Elite Polarization

The rise of income inequality has been causally associated with increases in polarization. Notably, McCarty, Poole and Rosenthal (2003; 2006) argue that income inequality and congressional polarization in Congress are tightly linked. Our revisionist view of polarization during the New Deal era signals caution. To explore the correlation between elite polarization and income inequality, we use the fraction of wealth in the United States held by the top 1% as measured by Piketty and Saez (2003) and extended by Saez to 2011. This data series begins in 1913. Figure 6 reveals a near identical pattern to those of Figures 5 and 4, at least for the 1940s when income inequality according to this measure began to dramatically decrease (top graph.)
Figure 6. The Percentage of U.S. Wealth held by the Top 1%, 1913-2009. The top graph reveals the percentage of wealth held by the top 1% of U.S. households computed by Piketty and Saez (2003). The bottom graph presents the relationship between polarization and income inequality over the same time period. Solid points denote the New Deal and Fair Deal period.

Figure 6 again reveals that the polarization that DW-NOMINATE estimates to be present during the period of the New Deal and the Fair Deal appears different from the
polarization present during periods of similar income inequality -- the relationship between income inequality and polarization evident during other historical moments appears absent during this time period. Over the entire time period the correlation between the measures is .51, but it increases to .68 when the congresses of the New Deal and Fair Deal are excluded.

Examining the relationship between DW-NOMINATE polarization and three time-series that are thought likely to be associated with elite polarization in Congress – the extent of party unity voting in the House, the extent to which congressional districts are electorally polarized, and the extent of income inequality in the United States – reveals that there is a strong relationship in each case except for the period pertaining to the New Deal and the Fair Deal. The characterization of polarization in the House during the New Deal and the Fair Deal according to DW-NOMINATE is far less than the level of polarization we would predict based on other measures that are commonly thought to be related to polarization.

4. **Lawmaking and Elite Polarization**

Conventional wisdom holds that elite polarization produces gridlock. Lying in opposition to this conventional wisdom about the inability of the House and Senate to enact significant legislation during periods of stark partisan and ideological division, however, is the fact that some such periods in fact have been punctuated by dramatic lawmaking. The highly polarized 111th Congress, – characterized as “the most dysfunctional political environment that I have ever seen,” according to Norman Ornstein, nonetheless, as he put the point, was “one of, at least, the three most productive Congresses’ since 1900.” (Fahrenthold et al 2010). How then should we think about the relationship between
polarization and legislative accomplishment? Is there a systematic relationship between the two that would lead us to think that polarization in and of itself is sufficient to impede lawmaking, or is the relationship less solid or more complex than ordinarily is thought? Moreover, given the apparent discrepancy between the historical record and how DW-NOMINATE classifies the polarization of the New Deal and the Fair Deal, how dependent is our conclusion about the relationship between polarization and lawmaking on how we classify that era's politics?

Correctly diagnosing polarization during the 1930s and 1940s is important for understanding the consequences of polarization. In terms of lawmaking, this was among the most productive moments in American history; many New Deal and Fair Deal statutes have had a lasting and profound effect on the relationship between the federal government and its citizens. If these changes did not occur during a period of low polarization, what we attribute to polarization *per se* rather than features of the political environment have to be carefully reconsidered (e.g., Jones 2001; Schnaffner 2011).

Many have argued that polarization decreases the ability of Congress to pass laws essential for governance. Most empirical work confirming this relationship analyzes the period after World War II (see, for example, Binder 1999; McCarty Poole and Rosenthal 2006; McCarty 2007), a period in which polarization is estimated to be either constant or increasing according to the commonly used DW-NOMINATE measure. Given the nature of this variation, exploring the consequences of polarization can be difficult as any increasing trend would produce a high inverse correlation with productive lawmaking.

Lapinski (2008) has provided a valuable extension to this literature by exploring the correlation between polarization and lawmaking since Reconstruction – a long period with
far more variation in polarization according to DW-NOMINATE. Utilizing that measure, he indeed reports that Congresses with high levels of polarization are among the least productive (using the legislative accomplishment data of Clinton and Lapinski, 2006). We build upon this analysis while showing how alternative measures for classifying polarization during the New Deal and Fair Deal affect the empirical conclusion and causal argument.

Here, we model the number of “significant” enactments passed by each congress as a function of polarization in the House and other prominent variables that are thought to affect the supply and demand for legislation using a negative binomial model to account for the discrete nature of the count data being modeled. The regression results of Table 2 reveal that the characterization of polarization during the New Deal and the Fair Deal is critical for what we can conclude about the empirical relationship connecting polarization and lawmaking. Looking at congressional activity between 1877 and 1994, Model 1 reveals a relationship consistent with the conventional understanding of the relationship between polarization and legislative accomplishments – as the parties become more polarized in congress, the congress is increasingly unable to pass significant legislation to address important problems facing the nation. The effect of House polarization on the ability of Congress to pass a piece of legislation in the “Top 500” is negative and statistically distinguishable from zero using a two tailed test at p=.12 and using a one-tailed test at p=.06.

[INSERT TABLE 2 ABOUT HERE]

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6 The covariates include in Table 2 do not include a size of the majority party. We ran the models with this variable included and it does not change any of the findings presented here.
The results of Model 2 shows that the coefficient on House Polarization shrinks to be a fourth of what it was when the New Deal and the Fair Deal are excluded, and the standard error nearly doubles to provide a substantively uninformative confidence interval that ranges from -4.27 to 3.60. If the New Deal and the Fair Deal are excluded from the analysis – as we might be inclined to do if we suspect that the polarization of this period is mischaracterized -- the relationship between polarization and legislative accomplishment is neither substantively or statistically distinguishable from zero.

[INSERT FIGURE 9 ABOUT HERE]

To interpret the substantive significance of the results reported in Table 2, Figure 9 graphs the predicted number of notable laws enacted across the range of observed values of House polarization for the two models for modal categories. The left-graph in Figure 9 presents the relationship using every Congress between 1874 and 1994, while the right hand figure replicates the analysis after omitting the Congresses associated with the New Deal and the Fair Deal. As Figure 9 reveals, whereas there is a negative relationship between polarization and legislative productivity when we measure the period of the New Deal and the Fair Deal as being a period of low polarization, if we remove these congresses from the analysis we can no longer be confident that there is any notable relationship between the two – the line indicating the predicted number of enactments is much flatter and the shaded area denoting the 95% confidence interval is much wider.

The dramatic changes in the relationship between polarization and legislative accomplishment evident in Models 1 and 2 reveals that our inferences regarding the relationship between polarization and the capacity for legislative accomplishment hinges

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7 To generate predicted values we set Start of Term, Divided Government, Vietnam War, and Post-1946 to 0 and we chose the median year for Year and Year².
critically on how we characterize the politics of the New Deal and the Fair Deal. If we think it is a period of low polarization as DW-NOMINATE classifies it, we would conclude that periods of low polarization are also periods of legislative accomplishment. If, however, we remove this period from the analysis to see how robust the relationship between polarization and legislative accomplishment is to the characterization of this period, we find that we can no longer conclude that the relationship between polarization and accomplishment is a meaningful one.

5. **Other Assumptions, Other Measures?**

The preceding sections suggest that scholars should be exceptionally careful when using DW-NOMINATE to explore the politics of the critical period surrounding the New Deal and Fair Deal. Not only does the characterization of low polarization seem at odds with the historical record and the patterns of voting we observe, but the measures of polarization for this period do not correlate with measures that correlate quite highly with the polarization measure in other historical moments. Moreover, the impact of this discrepancy is important. What we conclude about such vital subjects as the relationship between polarization and lawmaking depends heavily on how we classify the New Deal and Fair Deal eras. In these instances, two possible conclusions are conceivable. Either the larger analyses are spurious because of the mischaracterization of that key period; or, the larger relationships in fact are robust but the exceptional qualities of behavior during the New Deal demand explanation. One such possibility concerns the constellation of unusual factors regarding partisan patterns across and within the parties during this era, especially the role played by southern Democrats.
The analysis we present stops well short of integrating the various elements we have considered; we are not in a position either to adjudicate between possible measures or diagnose the reasons that have propelled the divergent characterizations of polarization in the space we possess. But we do wish to consider some consequences of making alternative assumptions about the nature of politics across time when comparing the results of analyzing roll call voting behavior over time and highlight how alternative assumptions provides a different characterization that also appears to better account for the trends we highlight.

To be clear, the alternative assumptions we consider involve different assumptions about how to compare ideal points across time. It does not, however, grapple with the question of whether or not the agenda itself is shifting in consequential ways that are not adequately captured by the assumptions made about ideal point change across time.

The ideal point estimates that are recovered by the DW-NOMINATE model are temporally comparable over time because it is assumed that members’ ideal points can only change in a linear fashion over time. Different members may change by different amounts, but if change occurs it is linear and it persists across a member’s entire tenure in office. For the analysis in this paper, we take the same behavioral model used in DW-NOMINATE – as implemented in W-NOMINATE – but we consider the effect of taking an alternative approach to comparing ideal points over time. Rather than impose assumptions about how the preferences of individual members may change and use the constraints that are imposed by assumptions to relate ideal points over time, instead we follow the approach taken by Groseclose, Levitt, and Snyder (1999) when extending the work of Poole and Daniels (1985) to adjust interest group scores across time.
Groseclose, Levitt and Snyder (1999) propose a linear transformation to compare estimates that would otherwise be dissimilar because of differences in the underlying scale due to differences in the agenda being voted upon. By assuming that the underlying ideological space is constant, but that the scale for any particular Congress may be stretched, thinned or shifted from that space depending on the votes being taken, they provide a method for adjusting estimates that would otherwise not be directly comparable.

The critical assumption of the approach proposed by Groseclose, Levitt and Snyder (1999) is that the mean member of Congress is unchanged over time. This implies that for an individual with a long term average ideal point of $x_i$, if $y_{it}$ is the estimated ideal point of legislator $i$ in Congress $t$,\[ y_{it} = \alpha_t + \beta_t x_i + \epsilon_{it} \quad (1) \]
where $\alpha_t$ effectively re-centers the ideological space of Congress $t$ and $\beta_t$ accounts for any "stretching" or “shrinking” of the space that may have occurred because of the political agenda in Congress $t$. From this, we can compute an “adjusted” score that accounts for possible scale differences using: \[ \frac{y_{it} - \alpha_t}{\beta_t}. \]

Conceptually, this method estimates a series of regressions between Congresses to determine how the scales of adjacent Congresses differ from one another and then it uses the estimated difference to remove the effects of these differences from the ideal points that were estimated in time $t$. It creates ideal points that: 1) have a constant mean for those members serving across time, and 2) best account for the evident variation subject to the constraint that the mean is fixed across time.8

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8 Given the nature of the relationship in equation (1), the change in individual behavior is idiosyncratic across legislators and time and it is due to differences in the error (see, for
Given an alternative method of computing ideal points over time, we now explore how applying the Groseclose, Levitt, and Snyder (1999) transformation to W-NOMINATE ideal points estimated in each House compares to the conclusions we would reach using DW-NOMINATE. Given that our purpose is to explore how the statistical models we employ to characterize the nature of politics over time matter, we focus on a comparison that uses as much of the same machinery of DW-NOMINATE as possible. So doing allows us to attribute differences that we uncover to the alternative assumptions used to compare the estimates over time. In particular, we ask whether the assumption of linear preference changes problematic in the presence of large exogenous changes to the status quo such as might be caused by the Great Depression and its aftermath.

Comparing how this adjustment affects the estimated ideal points for individual members provides perhaps a clearly illustration of the maintained assumptions when trying to compare ideal points across time. Figure X graphs the relationship between several estimates for the 27,940 ideal points we analyze. The graph in the upper-left illustrates the consequences of assumption 1 – the adjustment behind equation 1 rescales the underlying W-NOMINATE scores in a linear way to produce the adjusted scores. It does so by assuming that the mean ideal point of members is constant over time but subject to random fluctuations. The upper-right graph illustrates this assumption as it is possible to visually identify legislators with a constant Adjusted WNOMINATE Mean and changing DW-NOMINATE scores.

example, the discussion of Groseclose, Levitt and Snyder (1999, pg. 48)). The fact that members’ average ideal points are unchanged means that it is assumed that Congress is not drifting systematically to the right or the left over time; Congress is operating in the same ideological space as past Congresses. To be clear, this is also an implicit assumption in DW-NOMINATE – scaling methods cannot easily identify if the ideological conflict shifts.
Figure 7: Ideal Point Estimates Four Ways: Each point is an ideal point for a member in a Congress calculated using either W-NOMINATE, DW-NOMINATE, or W-NOMINATE adjusted using the procedure suggested by Groseclose, Levitt, and Snyder 1999.

The consequences of the linear rescaling proposed by Groseclose, Levitt, and Snyder (1999) and presented in the upper-left graph can be seen in the bottom two graphs which
show how the unadjusted (left) and adjusted (right) WNOMINATE scores compare to those produced by DW-NOMINATE.

While not a surprise given the scaling assumptions being employed and the common behavioral voting model being assumed in each instance, there is a great deal of overall similarity between the individual ideal point estimates. The ideal points of individual members in the congresses we examine using DW-NOMINATE and adjusted W-NOMINATE, for example, correlate at roughly .95. However, the high level of similarity does mask some dramatic differences among some individuals. For example, if we examine the predicted ideal points of the second longest-serving member in the U.S. House -- Jamie Whitten (D, MS-2) -- we can observe the consequences of the different assumptions being made to compare ideal points over time.

![Figure 8: Three Ideal Point Estimates for Rep. Whitten (D, MS)](image_url)
When the House debated a bill to outlaw the poll tax in May 1943, Rep. Whitten rose to attack both organized labor and non-southern Democrats for supporting the legislation. Their meddling in southern race relations, he cautioned, will "make it much more difficult for us who consider ourselves liberals in the South as we struggle to free the poor people in the South and admit them to the economic life of the region and to a participation in its political processes." Like many southern members of this era, he was supportive of liberal economic policies, but fiercely opposed to civil rights initiatives. Later, he signed the Southern Manifesto condemning the U.S. Supreme Court for the 1954 decision in *Brown vs. Board of Education*, and he opposed the Civil Rights Acts of 1957, 1960, 1964, 1965 and 1968 (he later apologized for these actions and he supported the Civil Rights Act of 1991). He also frequently opposed the foreign and domestic policies proposed by President Reagan in the 1980s.

Whitten's specification in DW-NOMINATE is at odds with his self-described commitments. Because DW-NOMINATE assumes that ideal points can change only linearly over time – if at different rates for each member – its estimates for Whitten in Figure 8, denoted by the thick line, suggests that he begin his service in the House as a conservative and gradually and steadily became more liberal over the course of his House career. The adjusted-WNOMINATE estimate suggests a very different account. They suggest more accurately and in a more nuanced way that Whitten opened his career as a New Deal liberal but became dramatically more conservative in the civil rights era, only later to once again move to the left once civil rights issues had been settled at the federal level.  

9 *Congressional Record*, 78th Congress, 1st session, May 25, 1943, 10 The constant mean assumed by the adjusted-WNOMINATE approach is denoted in Figure 8 by the thin line. The deviations from the log-term mean certainly appear non-random, but
Aggregating the individual ideal points plotted in Figure 7 to compute the level of polarization according to the two measures provides the long-term trends graphed in Figure 9. Figure 9 plots House polarization between 1877 and 2010 according to DW-NOMINATE (top) and the transformed W-NOMINATE estimates (bottom).

**Figure 9.** Measures of Polarization In the U.S. House, 1877-2010: Measured Using DW-NOMINATE (top) and Adjusted W-NOMINATE scores (bottom). The horizontal line denotes the period of minimum polarization.

The important point is that the conclusions one would draw from this pattern differs significantly from that which DW-NOMINATE would suggest.
The first point worth noting about Figure 9 is that despite the different assumptions being used to relate ideal points over time, the two trends exhibit a substantial level of covariation over this time period – they correlate at .80.

Even so, it is clear that the trends suggest qualitative differences in the level of polarization across time. The horizontal line denotes the minimal level of polarization that is estimated to occur in each of the two measures. According to DW-NOMINATE, the periods of the New Deal and Fair Deal represent the start of a low period of polarization that extends to 1980. In contrast, if we "bridge" W-NOMINATE scores estimated in each House using the algorithm proposed by Groseclose, Levitt, and Snyder (1999), we observe a very different characterization. Not only is the New Deal a period of polarization that is more on par with the level of polarization that we currently measure in the House, but the nadir of polarization does not occur until the 1960s, having begun, as the work of Katznelson and Mulroy (2012) has suggested, in late 1930s and 1940s.

To exploring the differences in these two measures further, we compare how well each covaries with the measures we examine in Section 3. Predicting each as a function of polarization measured using both DW-NOMINATE and adjusted W-NOMINATE scores reveals that the adjusted W-NOMINATE measure is a better fit in every case.

[INSERT TABLE 3 ABOUT HERE]

Table 3 shows that polarization in the House is highly related to these three measures, but the adjusted W-NOMINATE measure of polarization appears to do a better job than DW-NOMINATE at describing the observed variation. Including both measures reveals that only the adjusted W-NOMINATE score is correlated with the measure of party unity.
presented in Figure 4 (Model 1) and the level of income inequality graphed in Figure 6 (Model 5). Disentangling the relationship with voter polarization evident in Figure 5 is more difficult, but Models 2, 3 and 4 suggest that the relationship is slightly stronger when using adjusted W-Nominate to measure levels of elite polarization.

In all, the differences in the two measures of polarization are largely due to differences in how the two measures characterize the level of polarization during the New Deal and Fair Deal period. The fact that the level of polarization according to the adjusted W-Nominate scores better predicts the observed variation of interest than the level of polarization suggested by DW-NOMINATE implies that the characterization of polarization according to DW-NOMINATE during this period is at odds with what we observe in similar situations in other periods.

Despite both this improved fit and the more reasonable account the measure provides concerning levels of polarization during the New Deal and Fair Deal, we are not claiming that the W-NOMINATE adjustments provide the silver bullet solution to the notoriously difficult task of establishing comparable estimates over time when agendas and larger political and economic contexts can change so dramatically, as they did in the 1930s and 1940s.

Moreover, our discussion remains incomplete regarding what “second-dimension” estimates imply about polarization and how to make them more constitutive of congressional analyses. The descriptive data we presented on southern roll call shifts in the period we have considered further underscores the significance of this lacuna. If the second dimension essentially reflects “error” in the first dimension that can be fit in a second dimension, what does it mean substantively that the relevance of the second
dimension varies so much over time and that the relevance of the second dimension rises precisely when polarization is estimated to fall? Clearly, there is a cost to ignoring aspects of the congressional agenda that do not fit neatly into a one-dimensional partisan divide.

6. **Instead of a Conclusion**

The roll call estimates pioneered by Poole and Rosenthal revolutionized congressional studies, and, indeed, those of American politics more broadly. The intent of our chapter not to claim that a different bridging mechanism is “better” than the approach employed in the DW NOMINATE procedure, nor is it to suggest that we have not greatly benefited from the analysis of roll call voting behavior data because of the NOMINATE project. It was, and still is, a critical scholarly enterprise that has revealed much about the nature of politics.

However, we do think that it is perhaps important to reconsider some of the underlying assumptions and compare the results to what we know historically when conducting wide-ranging analyses spanning many different political, economic, and social contexts. Precisely because of the significance of the NOMINATE project, it is important to continue to assess the vulnerabilities as well as the strengths of this, or any other, approach to measurement that seeks to apprehend long-term historical trends. To this end, we have been attentive to a particular historical moment when their approach seems at odds both with focused historical accounts and with other approaches to measurement. In so doing, we hope to have cleared some ground, and to have suggested pathways for continued research and analysis.

Our intention was not, and is not, to suggest that existing analyses are necessarily problematic or that alternative existing methods produce superior results. We instead
intend our analysis to prompt further questions about the importance and accuracy of various assumptions and to encourage continued conversations about how to measure and assess the nature of the changing political environment over time.

When considering polarization, for example, a host of vexing questions loom. What exactly does it mean? How close a fit should the concept of elite polarization have with partisan divisions, as distinct from substantive disagreement about issues divisions? When do considerations of ideology and partisanship become tautological? How might we best transcend an exclusive focus on the left to right first dimension, especially in circumstances like the New Deal years when race and region were so manifestly important not only in the issue space of the time, but in the very dynamics of the party system? How should we think about comparing estimates over time? Should we be aiming at portable hypotheses that hold up over huge swaths of time, or focus with at least equal intensity on historical moments that seem either exceptional or serve as critical junctures? If so, how should such times be identified? Does it make sense to be agnostic about what substantively is being scaled when we are scaling votes? There are no easy answers to these questions when measures meet history.
Works Cited:


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| N                      | 59       | 48                    |

Table 2. Relationship between Polarization and Legislative Accomplishment, 1877-1994. Model 1 includes all years and Model 2 excludes the New Deal and the Fair Deal.
Table 3: Correlates of Alternative Measures of Polarization

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<tr>
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<th>Party Unity</th>
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Standard errors in parentheses

* indicates two-sided significance at $p < 0.05$
Figure 9. Interpreting the Effect of Polarization in Table 2. The left plot presents the predicted number of notable enactments as a function of polarization in the House using the specification reported in Model 1 and data from all Congresses between 1874-1994. The right plot is the relationship when the Congresses of the New Deal and Fair Deal are omitted. The line denotes the predicted number of enactments and the shaded region is the 95% confidence interval for that prediction.