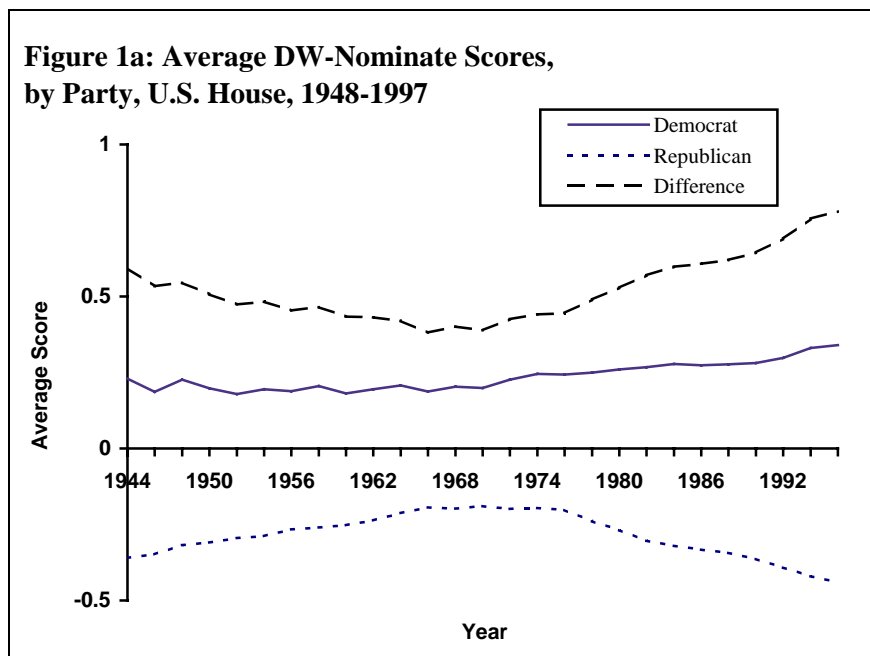


Appendix A: An Analysis Using DW-Nominate Scores

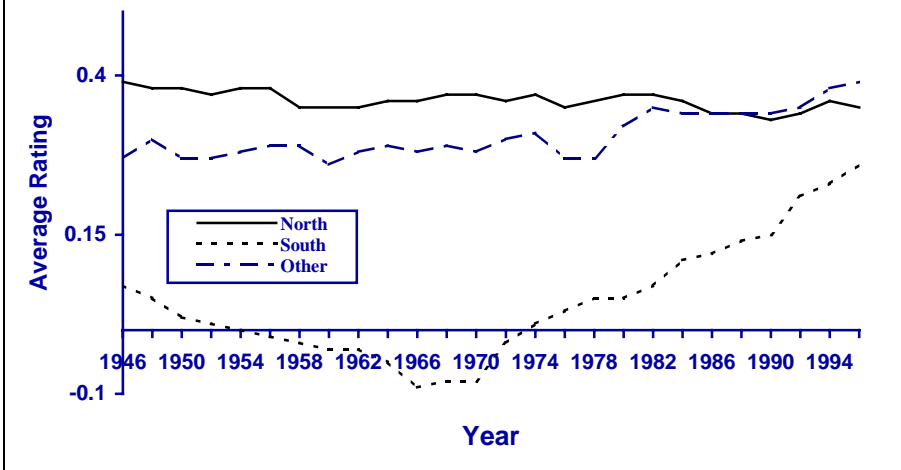
The Poole and Rosenthal scores are presented at: http://voteview.uh.edu/default_nomdata.htm. We downloaded data from that site and conducted an analysis parallel to that done for ADA scores. The DW-Nominate scores estimate the position of each legislator, using roll call voting records. While ADA scores are simply the addition of votes, DW-Nominate scores are estimations of positions using scaling techniques. Scores generally range from 1 to -1, though some members can diverge beyond that.

The figure below presents the trend in DW-Nominate scores from 1948-1997. The average scores for party members are presented, along with the differences between those averages. The trend for differences is the same as that for the ADA scores. The difference declines in the 1960s, and then rises steadily since then. The trend in the averages for Democrats is somewhat the same as that for ADA scores. The difference is that there is no decline in the average during the 1960s, as occurs with ADA scores. This difference in patterns is not large, however, as the ADA scores decline by only 10 points from the 1950s to the 1960s. The greatest difference between the two scores involves Republicans. For ADA scores, there is no clear pattern over time, while for the DW-Nominate scores party members start out more conservative, move more liberal during the 1960s and early 1970s, and then move more conservative. This difference represents a significant substantive issue in interpreting the path of the Republican Party in recent decades. The ADA scores suggest an unchanging Republican Party, while the DW-Nominate scores suggest a party moving more conservative in recent decades. The latter fits the pattern suggested by Rae (1989) and Stonecash (2000: 61-66). While sorting out the trend for Republicans is an interesting and important issue, our concern here is the behavior of Northern Democrats. Given that focus, and the similarity of results for the two indicators, we rely on the ADA scores, and leave the issue of the true trend of Republicans for another analysis.



The DW-Nominate scores indicate essentially the same regional differences and trends over time. Southern Democrats are much less liberal than other party members, but they move steadily more liberal from the 1970s through the 1990s. Those members in the “Other” category were less liberal than Northern members during the 1950s and 1960s, but the differences were not large. Members from those states have moved to become very similar to those in the North. The only noticeable difference between ADA and DW-Nominate scores involves the North. With ADA scores there is a dip in the 1970s, with averages in the 1990s then returning to levels of the 1950s. With DW-Nominate scores the averages are essentially flat over time. Given the complicated way in which DW-Nominate scores are calculated and the simple addition process of adding up ADA scores, we cannot arbitrate the source of these different trends for Northern Democrats. We do not regard the difference as crucial, however, for our argument. The essence of our argument is that Northern Democratic Party members have more liberal voting records, that the North has become a larger proportion of the party, and that within the North the party now derives more of its seats from districts that tend to have more liberal voting records. As will be seen with subsequent tables, the argument is supported regardless of which scores are used.

Figure 5a: Average DW-Nominate Scores of Democrats, by Region, U.S. House, 1948 - 1998



For Republicans (below), the same difference between ADA and DW-Nominate scores emerges again. While ADA scores within each region are generally flat over time, the DW-Nominate scores follow a different trend within all three regions. The scores in the 1950s are relatively conservative. They move more liberal in the 1960s and 1970s, and then they all move more conservative. The difference is relative stability of position for ADA versus a trend to more conservative positions with the DW-Nominate scores. Again, we do not know the sources of these differences, but the differences are not central to our analysis.

Figure 6: Average DW-Nominate Scores of Republicans, by Region, U.S. House, 1948 - 1998

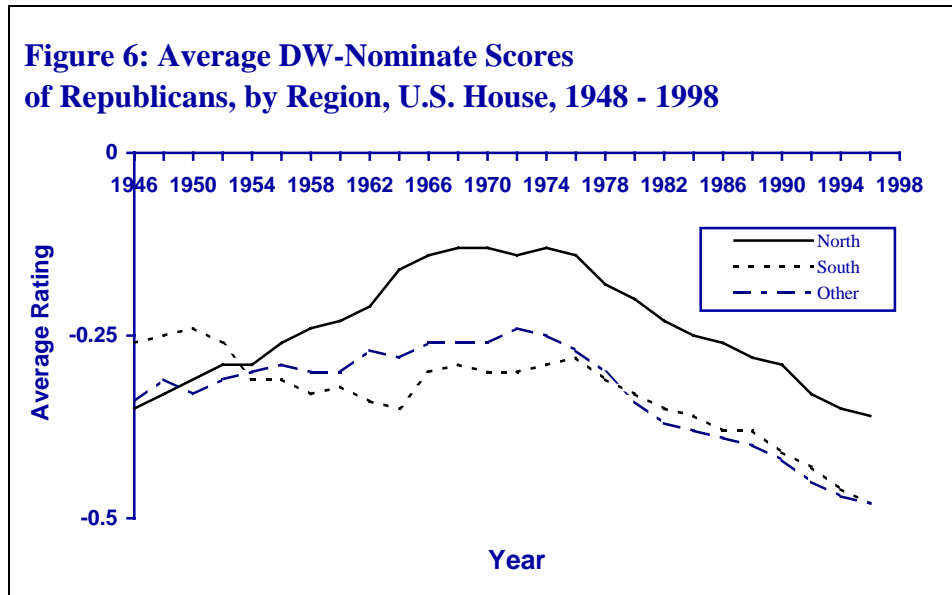


Table 3a: Regression of DW-Nominate Scores on Demographics for Northern Democratic Districts, 1960s-1990s

(Standardized Coefficients and Significance Levels; liberal scores are higher)

	1960s		1970s		1980s		1990s	
	B	Sign	B	Sign	B	Sign	B	Sign
Percent Non-white	.14	.01	.44	.00	.62	.00	.50	.00
Media Family Income	.05	.33	.12	.01	.15	.00	.14	.01
Percent Urban	.35	.00	.14	.00	.08	.05	.11	.08
R ²	.17		.25		.34		.31	
N	550		617		593		408	

Table 4a: Average DW-Nominate Scores for Northern Democratic House Members, by District Demographics, 1990-1998 (Liberal scores are higher)

Percent Nonwhite	Percent Urban Less than 70 Median Family Income (thirds)			Percent Urban 70 Plus Median Family Income (thirds)		
	Bottom	Middle	Top	Bottom	Middle	Top
0 - 9	.24	.40	.31	.48	.27	.39
10 - 19		.08	.36	.21	.37	.39
20 plus				.51	.42	.36

Table 6a: Average DW-Nominate Scores for Democrats by District Type, Northern House Districts, 1960s - 1990s

<i>Type</i>	1960s			1970s			1980s			1990s		
	N	Avg	% from	N	Avg	% from	N	Avg	% from	N	Avg	% from
Non-core	569			621			599			411		
Core Democrat	401	.33	70.5	415	.32	66.8	363	.31	60.6	223	.32	54.3
	163	.44	29.5	206	.44	33.2	236	.40	39.4	188	.42	45.7

Appendix B: Unadjusted and Adjusted ADA Scores

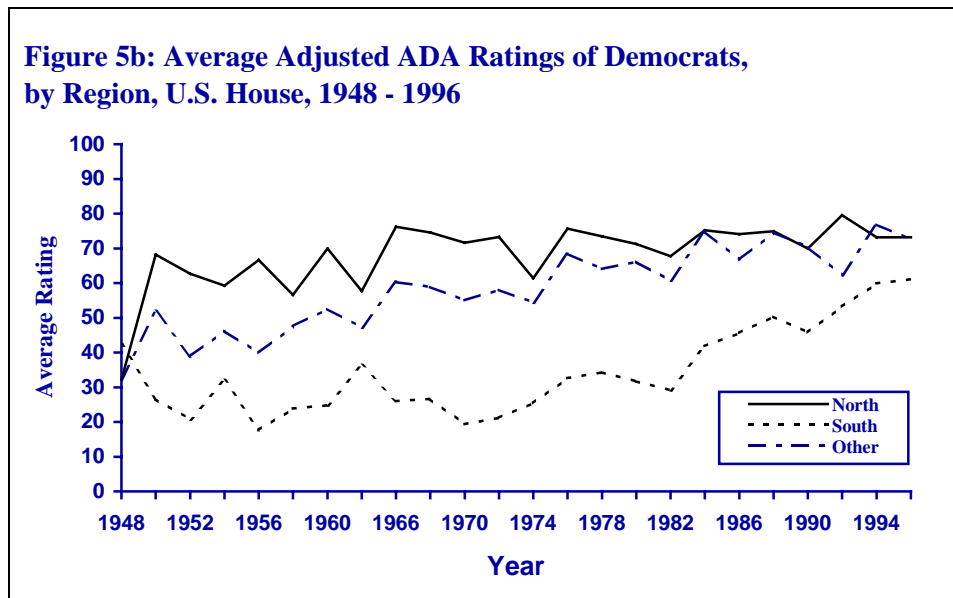
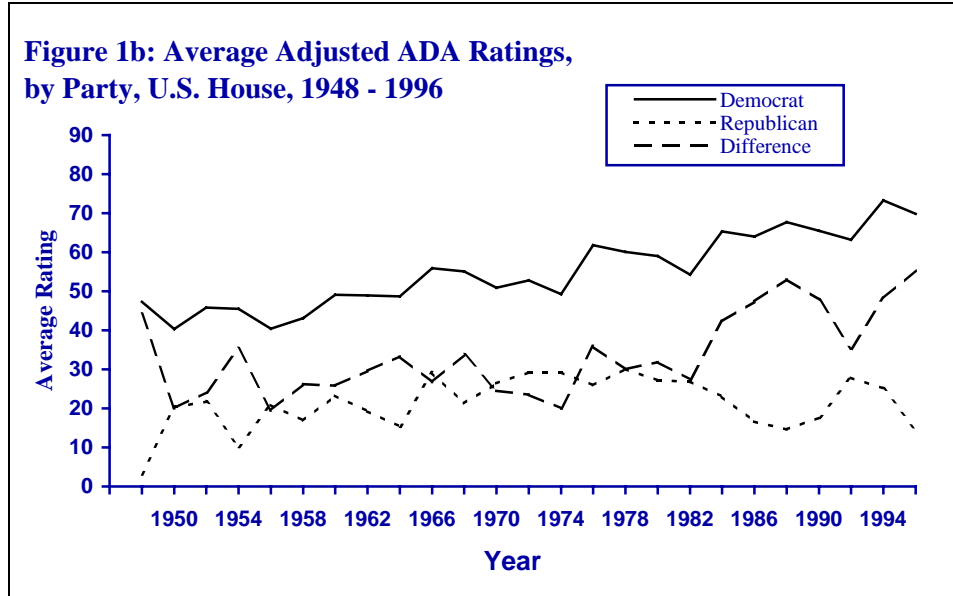
The ADA scores for 1946 - 1994 are taken from Tim Groseclose's web site of: <http://wesley.stanford.edu/groseclose/>. We then acquired the ADA ratings for the years 1995 - 1999 at: <http://www.adaction.org/>. Groseclose et al. (1999), adjust ADA scores for 1946 through 1996.

They adjust scores because of two problems with comparing the set of bills chosen and the resulting scales across years. The first problem involves a shifting scale from year to year. In one year the Americans for Democratic Action may choose a relatively conservative set of bills and score legislators. The next year they may choose a relatively liberal set of bills. Assume there are three legislators with relatively set liberal to conservative voting positions. Each legislator's position is shown in the table below in the second column. In Year 1 ADA chooses bills with true liberal positions of 7 through 3. The resulting scores, or percentage of bills a legislator of the particular liberal position will vote for, is shown in the next column. These legislators vary from 100 to 60 to 20. In the next two years a shift of the ADA scale occurs. The next year the ADA chooses 5 more liberal bills. The legislators, with relatively set liberal positions, do not vote for as many, and receive scores of 60, 20, and 0. Because the ADA has changed their set of bills to a more liberal set, it appears that the legislators have grown more conservative, while in reality the set of bills has become more liberal. In Year 3 the ADA chooses a set of bills that are more conservative, with the result that the set of legislators now appear to be more liberal. In the next two years, 4 and 5, the set of bills becomes more diverse, which results in an expanded scale. The result is another set of ADA scores. Finally, in year 5 the set of bills is less diverse. For all five years, the position of legislators did not change, but their scores did. To correct for this, Groseclose et al., correct for scale shifts and expansion or contraction of scores. They do so by setting one year, 1980, as the base score, and calculating shifts of the mean, or changes in the dispersion of the scale. The shifts from year to year, relative to 1980, are corrected by adding or subtracting the scale, while changes in diversity are correcting by dividing the index by a scale to assess dispersion changes.

The Effects of Shifting, Expanding, and Contracting ADA Scales

Liberal Scale	Legislator Position	"normal"		Shift up		Shift down		Stretch		Shrink	
		Yr 1	ADA score	Yr 2	ADA score	Yr 3	ADA Score	Yr 4	ADA score	Yr 5	ADA score
10											
9				1				1			
8				1							
7	1	1	100	1	60		100	1	80		100
6				1						2	
5	1	1	60	1	20		100	1	60	1	60
4				1		1				2	
3	1	1	20		0	1	80	1	40		0
2						1					
1						1		1			
0						1					

We find the logic of their adjustment very plausible. If we were to use their adjusted scores, the resulting trends in scores by party for the nation (Figure 1b) and by region for Democrats (Figure 5b) as shown below.



The essential difference between the unadjusted and adjusted scores is that with the former cores are higher in the 1950s – 1960s, there is then a dip in scores for Democrats in the 1970s and then a steady increase since then. Adjusted scores show a relatively steady increase in score levels

since the 1950s. In terms of our analysis, which focuses on the 1970s – 1990s, using their scores produces different results only with regard to Table 6, where the unadjusted scores show scores rising for all categories, where the adjusted scores indicate no changes over time by category. Otherwise, there is no significant difference in results.

We do not use the adjusted scores for two reasons. The first is intuitive, and certainly open to criticism. The second is technical, and involves our not understanding how their technique handles some issues. First, party polarization scores indicate that there was a significant decline in party polarization during the 1970s. This was a time when the parties were going through considerable turmoil and changes in their electoral bases (Stonecash 2000), and this dip in party voting and ADA differences seems plausible. Such notions of what was “really” going on are often in error, of course, so this basis can easily be seen as suspect.

The second hesitation stems from technical issues. The adjustment of Groseclose et al. involves adjusting scales for shift. While this seems like an appropriate and plausible adjustment, we are not certain of how their approach establishes real changes. Their example (35, 2nd column) suggests that they compare mean scores from year to year, and if the mean decreases, they regard this as a shift of the scale by ADA, and not a real shift. Footnote 11 (36) indicates mean preference scores for legislators and adjustment parameters are estimated simultaneously. We are not sure how this allows distinguishing scale shifts from real changes. It is also not clear how their approach adjusts for cyclical shifts that are “real.” An example of a problematic situation involves the 1970s. The Democratic Party in the 1970s, following the McGovern candidacy and loss, and discussions of backlash, may have seen the need to temper their liberalism, which could produce a real downturn among existing members for several years. They indicate that they allow for changes in individual mean preferences, but those are specified as error terms, when they could be strategic and cyclical adjustments, and the sources of a dip such as that experienced in the 1970s.

In general, we find their argument of the importance of adjustment plausible, but are pursuing this further with Groseclose to understand what their technique does. Given those hesitations, we use the unadjusted scores for now.