Do parties matter? I
Lee et. al.

• Determinants of legislative voting:
  – Preferences of voters (affect of voters): politician can commit
  – Preferences of politicians (election by voters): politician can not commit

\[ RC_t = \alpha + \pi_0 P_t^* + \pi_1 D_t + \varepsilon_t \]

• Where

\[ P_t^* = \text{Electoral Strength} \]
\[ D_t = \text{Party of Politician in Power} \]
\[ RC_t = \text{Role Call Voting} \]
Do parties matter? II

• Causal inference problem:

\[ \text{Cov}(P_t^*, D_t) \neq 0 \]

and

\[ P_t^* \text{ is not observed} \]

• However, we can estimate \( \pi_1 \) if we can randomize \( D_t \) by running:

\[ RC_t = \alpha + \pi_1 D_t + \varepsilon_t \]
Do parties matter? III

- This allows to calculate the degree to which voters elect rather than affect policies by electing politicians. However it does not allow us to calculate the degree to which voters affect rather than elect policies.

- Nevertheless note that:

\[ E(RC_{t+1} | D_t) = \alpha + \pi_0 P_{t+1}^* + \pi_1 E(D_{t+1} | D_t) + E(\varepsilon_{t+1} | D_t) \]

- Moreover, if D is randomly assigned, then:

\[ E(\varepsilon_{t+1} | D_t) = 0 \]

Now, calculating the differential voting record at time t+1 given that a democrat wins at time t versus a republican:

\[ E(RC_{t+1} | D_t = 1) - E(RC_{t+1} | D_t = 0) = \pi_0 (P_{t+1}^{D*} - P_{t+1}^{R*}) + \pi_1 (P_{t+1}^D - P_{t+1}^R) \]

- where: \( P_{t}^D \) = the probability of a democrat winning at time t+1 given a democrat won at time t
Do parties matter? IV

- Now (if we randomize the election: D) we can calculate:
  - (1.) The degree to which voters elect policies
    \[ RC_t = \alpha + \pi_1 D_t + \varepsilon_t \]
  - (2.) The probability of that a Democrat wins an election in an electoral district given that a Democrat won the prior election:
    \[
    E(D_{t+1} | D_t = 1) - E(D_{t+1} | 0) = P_{t+1}^D - P_{t+1}^R
    \]

- We can also estimate the effect of a democrat getting elected at date t on policy at date t+1:
  \[
  \gamma = E(RC_{t+1} | D_t = 1) - E(RC_{t+1} | D_t = 0) = \pi_0 (P_{t+1}^D - P_{t+1}^R) + \pi_1 (P_{t+1}^D - P_{t+1}^R)
  \]

- Thus we can calculate the degree to which citizens affect policies (just the residual):
  \[
  \gamma - \pi_1 (P_{t+1}^D - P_{t+1}^R)
  \]
Do parties matter? V

• How do we achieve randomization of D?

• Regression Discontinuity: Two Approaches

  – (1.) Look at Close Elections (<2% vote margin of victory):

  \[
  E(RC_t | D_t = 1) - E(RC_t | D_t = 0) = \pi_1 \\
  E(D_{t+1} | D_t = 1) - E(D_{t+1} | D_t = 0) = P^D_{t+1} - P^R_{t+1} \\
  E(RC_{t+1} | D_t = 1) - E(RC_{t+1} | D_t = 0) = \gamma
  \]
Do parties matter? VI

• Regression Discontinuity: Two Approaches (continued)
  – (2.) Look at Polynomial fits in the vote share before and after the discontinuity and test for equality at the discontinuity:

\[
E(\text{RC}_t|D_t = 1) - E(\text{RC}_t|D_t = 0) = \\
D_t[\alpha_0 + \alpha_1 V_t + \alpha_2 V_t^2 + \alpha_3 V_t^3 + \alpha_4 V_t^4] + \\
(1 - D_t)[\beta_0 + \beta_1 V_t + \beta_2 V_t^2 + \beta_3 V_t^3 + \beta_4 V_t^4]
\]

• The estimate is then

\[
E(\text{RC}_t|D_t = 1, V_t = .5) - E(\text{RC}_t|D_t = 0, V_t = .5)
\]
Do parties matter? VII

- Data:
  - Dependent Variable
    - Democratic Two-Party Vote Share from House of Representatives Elections
  - Independent Variable
    - ADA Score (weighted measure of liberalism based on 20 key votes every year)
    - Nominate and DW-Nominate (Rosenthal and Poole)
    - Measures of Party Loyalty
    - Measures by Interest Groups (Unions, Christian Groups, etc...)
Do parties matter? VII

• Problems:
  – Identification:
    • (1.) Close Elections: We don’t know how close is close. A narrower definition of close election leads to better identification but less precision and less external validity.
      – Hahn, Todd, and Van Der Klaauw (Econometrica, Jan. 2001): Regression discontinuity as non-parametric estimator (remaining optimal bandwidth problem)
    • (2.) Polynomial Fitting: We don’t know the functional form of the polynomial in the vote share. If we get it wrong, we may estimate an effect just due to poor fitting of the polynomial.
      – Solution: Monte Carlo selection of placebo discontinuity points
    • (3.) General Problem: How do we know that there isn’t selection around the discontinuity (i.e. firm size regulations)
      – (a.) institutional knowledge (i.e. small committee elections with publicly observed votes versus general elections)
      – (b.) empirical verification that there is no selection around the discontinuity using other variables (i.e. David Lee paper, Jason Snyder paper)
be a continuous and smooth function of vote shares everywhere, except at the threshold that determines party membership. There is a large discontinuous jump in ADA scores at the 50 percent threshold. Compare districts where the Democrat candidate barely lost in period \( t \) (for example, vote share is 49.5 percent), with districts where the Democrat candidate barely won (for example, vote share is 50.5 percent). If the regression discontinuity design is valid, the two groups of districts should appear ex ante similar in every respect—on average. The difference will be that in one group, the Democrats will be the incumbent for the next election \((t + 1)\), and in the other it will be the Republicans. Districts where the Democrats are the incumbent party for election \( t + 1 \) elect representatives who have much higher ADA scores, compared with districts where the Republican candidate
FIGURE IIa
Effect of Party Affiliation: $\pi_1$

FIGURE IIb
Effect of Initial Win on Winning Next Election: $(P_{t+1}^D - P_{t+1}^R)$

Top panel plots ADA scores after the election at time $t$ against the Democrat vote share, time $t$. Bottom panel plots probability of Democrat victory at $t + 1$ against Democrat vote share, time $t$. See caption of Figure III for more details.
primarily elect policies (full divergence) rather than affect policies (partial convergence).

Here we quantify our estimates more precisely. In the analysis that follows, we restrict our attention to “close elections”—where the Democrat vote share at time $t$ is strictly between 48 and 52 percent. As Figures I and II show, the difference between barely elected Democrat and Republican districts among these elections will provide a reasonable approximation to the discontinuity gaps. There are 915 observations, where each observation is a district-year.20

Table I, column (1), reports the estimated total effect $\gamma$, the size of the jump in Figure I. Specifically, column (1) shows the difference in the average $ADA_{t+1}$ for districts for which the Democrat vote share at time $t$ is strictly between 50 percent and 52 percent and districts for which the Democrat vote share at time $t$ is strictly between 48 percent and 50 percent. Time $t$ and $t + 1$ refer to congressional sessions. $ADA_t$ is the adjusted ADA voting score. Higher ADA scores correspond to more liberal roll-call voting records. Sample size is 915.

Standard errors are in parentheses. The unit of observation is a district-congressional session. The sample includes only observations where the Democrat vote share at time $t$ is strictly between 48 percent and 52 percent. The estimated gap is the difference in the average of the relevant variable for observations for which the Democrat vote share at time $t$ is strictly between 50 percent and 52 percent and observations for which the Democrat vote share at time $t$ is strictly between 48 percent and 50 percent. Time $t$ and $t + 1$ refer to congressional sessions. $ADA_t$ is the adjusted ADA voting score. Higher ADA scores correspond to more liberal roll-call voting records. Sample size is 915.

<table>
<thead>
<tr>
<th>Variable</th>
<th>Total effect $\gamma$</th>
<th>Elect component $\pi_1 (P_{t+1}^D - P_{t+1}^R)$</th>
<th>Affect component $\pi_0 (P_{t+1}^D - P_{t+1}^R)$</th>
</tr>
</thead>
<tbody>
<tr>
<td>$ADA_{t+1}$</td>
<td>$\pi_1 (P_{t+1}^D - P_{t+1}^R)$</td>
<td>$\pi_1 (P_{t+1}^D - P_{t+1}^R)$</td>
<td>$\pi_0 (P_{t+1}^D - P_{t+1}^R)$</td>
</tr>
<tr>
<td>(1)</td>
<td>(2)</td>
<td>(3)</td>
<td>(4)</td>
</tr>
<tr>
<td>Estimated gap</td>
<td>21.2</td>
<td>47.6</td>
<td>0.48</td>
</tr>
<tr>
<td></td>
<td>(1.9)</td>
<td>(1.3)</td>
<td>(0.02)</td>
</tr>
<tr>
<td></td>
<td>22.84</td>
<td>-1.64</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(2.2)</td>
<td>(2.0)</td>
<td></td>
</tr>
</tbody>
</table>

20. In 68 percent of cases, the representative in period $t + 1$ is the same as the representative in period $t$. The distribution of close elections is fairly uniform across the years. In a typical year there are about 40 close elections. The year with the smallest number is 1988, with twelve close elections. The year with the largest number is 1966, with 92 close elections.
share. The coefficient reported in column (6) is the predicted difference at 50 percent. The table confirms that, for many observable characteristics, there is no significant difference in a close neighborhood of 50 percent. One important exception is the percentage black, for which the magnitude of the discontinuity is statistically significant.23

As a consequence, estimates of the coefficients in Table I from regressions that include these covariates would be expected to produce similar results—as in a randomized experiment—since

23. This is due to few outliers in the outer part of the vote share range. When the polynomial is estimated including only districts with vote share between 25 percent and 75 percent, the coefficients becomes insignificant. The gap for percent urban and open seats, while not statistically significant at the 5 percent level, is significant at the 10 percent level.
all predetermined characteristics appear to be orthogonal to $D_t$. We have reestimated all the models in Table I conditioning on all of the district characteristics in Table II, and found estimates that are virtually identical to the ones in Table I.

As a similar empirical test of our identifying assumption, in Figure V we plot the ADA scores from the Congressional sessions that preceded the determination of the Democratic two-party vote share in election $t$. Since these past scores have already been determined by the time of the election, it is yet another predetermined characteristic (just like demographic composition, income levels, etc.). If the RD design is valid, then we should observe no discontinuity in these lagged ADA scores—just as we would expect, in a randomized experiment, to see no systematic differences in any variables determined prior to the experiment. The
The lack of discontinuity in the figure lends further credibility to our identifying assumption. Overall, the evidence strongly supports a valid regression discontinuity design. And as a consequence, it appears that among close elections, who wins appears virtually randomly assigned, which is the identifying assumption of our empirical strategy.

24. The estimated gap is 3.5 (5.6).

TABLE II
DIFFERENCE IN DISTRICT CHARACTERISTICS BETWEEN DEMOCRAT AND REPUBLICAN DISTRICTS, BY DISTANCE FROM 50 PERCENT

<table>
<thead>
<tr>
<th></th>
<th>All</th>
<th>+/- 25</th>
<th>+/- 10</th>
<th>+/- 5</th>
<th>+/- 2</th>
<th>Polynomial</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>(1)</td>
<td>(2)</td>
<td>(3)</td>
<td>(4)</td>
<td>(5)</td>
<td>(6)</td>
</tr>
<tr>
<td>North</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>(-0.211)</td>
<td>(-0.156)</td>
<td>(-0.096)</td>
<td>(-0.054)</td>
<td>(-0.059)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(0.018)</td>
<td>(0.019)</td>
<td>(0.021)</td>
<td>(0.024)</td>
<td>(0.036)</td>
</tr>
<tr>
<td>South</td>
<td></td>
<td>0.250</td>
<td>0.145</td>
<td>0.093</td>
<td>0.053</td>
<td>0.099</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(0.015)</td>
<td>(0.014)</td>
<td>(0.016)</td>
<td>(0.019)</td>
<td>(0.028)</td>
</tr>
<tr>
<td>West</td>
<td></td>
<td>-0.031</td>
<td>-0.012</td>
<td>-0.036</td>
<td>-0.003</td>
<td>0.001</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(0.013)</td>
<td>(0.015)</td>
<td>(0.020)</td>
<td>(0.017)</td>
<td>(0.020)</td>
</tr>
<tr>
<td>Log income</td>
<td></td>
<td>-0.086</td>
<td>-0.036</td>
<td>0.014</td>
<td>0.026</td>
<td>0.030</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(0.013)</td>
<td>(0.012)</td>
<td>(0.014)</td>
<td>(0.017)</td>
<td>(0.026)</td>
</tr>
<tr>
<td>Percentage high-school grad.</td>
<td>-0.035</td>
<td>-0.024</td>
<td>-0.008</td>
<td>-0.001</td>
<td>0.001</td>
<td>0.008</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(0.000)</td>
<td>(0.003)</td>
<td>(0.004)</td>
<td>(0.004)</td>
<td>(0.007)</td>
</tr>
<tr>
<td>Percentage urban</td>
<td></td>
<td>0.070</td>
<td>0.065</td>
<td>0.053</td>
<td>0.053</td>
<td>0.056</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(0.011)</td>
<td>(0.011)</td>
<td>(0.012)</td>
<td>(0.014)</td>
<td>(0.023)</td>
</tr>
<tr>
<td>Percentage black</td>
<td></td>
<td>0.082</td>
<td>0.042</td>
<td>0.013</td>
<td>0.003</td>
<td>-0.003</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(0.005)</td>
<td>(0.004)</td>
<td>(0.004)</td>
<td>(0.005)</td>
<td>(0.009)</td>
</tr>
<tr>
<td>Manufacturing</td>
<td></td>
<td>-0.002</td>
<td>0.000</td>
<td>0.004</td>
<td>0.004</td>
<td>0.005</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(0.001)</td>
<td>(0.001)</td>
<td>(0.002)</td>
<td>(0.002)</td>
<td>(0.004)</td>
</tr>
<tr>
<td>Total population</td>
<td></td>
<td>1817.9</td>
<td>3019.2</td>
<td>4961.5</td>
<td>3211.4</td>
<td>8640.4</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(3517.3)</td>
<td>(3723.0)</td>
<td>(4562.4)</td>
<td>(5524.2)</td>
<td>(8427.9)</td>
</tr>
<tr>
<td>Percentage eligible to vote</td>
<td>0.005</td>
<td>0.010</td>
<td>0.007</td>
<td>0.006</td>
<td>-0.003</td>
<td>-0.003</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(0.002)</td>
<td>(0.002)</td>
<td>(0.003)</td>
<td>(0.004)</td>
<td>(0.006)</td>
</tr>
<tr>
<td>Open seats</td>
<td></td>
<td>0.070</td>
<td>0.065</td>
<td>0.053</td>
<td>0.053</td>
<td>0.056</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(0.011)</td>
<td>(0.011)</td>
<td>(0.012)</td>
<td>(0.014)</td>
<td>(0.023)</td>
</tr>
<tr>
<td>Number of observations</td>
<td>13413</td>
<td>10229</td>
<td>4174</td>
<td>2072</td>
<td>910</td>
<td>13413</td>
</tr>
</tbody>
</table>

Standard errors are in parentheses. The unit of observation is a district-congressional session. Columns (1) to (5) report the difference in average district characteristics between Democrat and Republican districts. Column (1) includes the entire sample. Columns (2) to (5) include only districts with Democrat vote share between 25 percent and 75 percent, 40 percent and 60 percent, 45 percent and 55 percent, and 48 percent and 52 percent, respectively. The model in column (6) includes a fourth-order polynomial in Democrat vote share that enters separately for vote share above and below 50 percent. The coefficient reported in column (6) is the predicted difference at 50 percent. All standard errors account for district-decade clustering.
V.C. Sensitivity to Alternative Measures of Voting Records

Our results so far are based on a particular voting index, the ADA score. In this section we investigate whether our results generalize to other voting scores. We find that the findings do not change when we use alternative interest groups scores, or other summary measures of representatives’ voting records.

Table III is analogous to Table I, but instead of using ADA scores, it is based on two alternative measures of roll-call voting. The top panel is based on McCarty, Poole, and Rosenthal’s DW-NOMINATE scores. The bottom panel is based on the percent of individual roll-call votes cast that are in agreement with the Democrat party leader. All the qualitative results obtained using ADA scores (Table I) hold up using these measures. When we use the DW-NOMINATE scores, $\gamma$ is $-0.36$, remarkably close to the corresponding estimate of $\pi_1[P^D_{t+1} - P^R_{t+1}]$ in column (4), which is $-0.34$. The estimates are negative here because, unlike ADA scores, higher Nominate scores correspond to a more conservative voting record. When we use the measure “percent voting with the Democrat leader,” $\gamma$ is $0.13$, almost indistinguishable from the
We show the graphical analysis for the estimate of $\pi_1$ in Figure VI. Our empirical findings are also not sensitive to the use of ratings from various liberal and conservative interest groups.

Liberal interest groups include the American Civil Liberties Union, the League of Women Voters, the League of Conservation Voters, the American Federation of Government Employees, the American Federation of State, County, and Municipal Employees, the American Federation of Teachers, the AFL-CIO Building and Construction, and the United Auto Workers. Conservative groups include the Conservative Coalition, the U. S. Chamber of Commerce, the American Conservative Union, and the Christian Voice. All the ratings range from 0 to 100. For liberal groups, low ratings correspond to conservative roll-call votes, and high ratings correspond to liberal roll-call votes. For conservative groups the opposite is true.

These alternative ratings yield results that are qualitatively similar to our findings in Table I and III. Instead of presenting these results in a table format as we did in Table I and III, we present the main results in graphical form. We summarize our

### TABLE III

<table>
<thead>
<tr>
<th>Variable</th>
<th>Total effect $\gamma$</th>
<th>Elect component $\pi_1$</th>
<th>Affect component $\pi_1[(P_{t+1}^D - P_{t+1}^R)]$</th>
<th>Elect component $(P_{t+1}^R - P_{t+1}^D)$</th>
<th>Affect component $(P_{t+1}^D - P_{t+1}^R)$</th>
</tr>
</thead>
<tbody>
<tr>
<td>$Z_{t+1}$</td>
<td>$-0.36$</td>
<td>$-0.58$</td>
<td>$0.62$</td>
<td>$(0.03)$</td>
<td>$(0.02)$</td>
</tr>
<tr>
<td>$Z_t$</td>
<td>$-0.34$</td>
<td>$-0.02$</td>
<td></td>
<td>$(0.04)$</td>
<td>$(0.04)$</td>
</tr>
<tr>
<td>$DEMt$</td>
<td>$0.13$</td>
<td>$0.29$</td>
<td>$0.46$</td>
<td>$(0.01)$</td>
<td>$(0.006)$</td>
</tr>
<tr>
<td>$DEM_t+1$</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

(a) Results based on Nominate scores

(b) Results based on percent voted like Democrat leadership

Standard errors are in parentheses. The unit of observation is a district-congressional session. The sample includes only observations where the Democrat vote share at time $t$ is strictly between 48 percent and 52 percent. The estimated gap is the difference in the relevant variable for observations for which the Democrat vote share at time $t$ is strictly between 50 percent and 52 percent and observations for which the Democrat vote share at time $t$ is strictly between 48 percent and 50 percent. Time $t$ and $t+1$ refer to congressional sessions. The top panel uses the DW-NOMINATE score constructed by McCarty, Poole, and Rosenthal. Higher Nominate scores correspond to more conservative roll-call voting records. The bottom panel uses the percent of a representative’s votes that agree with the Democrat party leader. Sample size is 276 in top panel and 1010 in bottom panel.

estimate $\pi_1[P_{t+1}^D - P_{t+1}^R]$ in column (4), which is 0.13. We show the graphical analysis for the estimate of $\pi_1$ in Figure VI.

Our empirical findings are also not sensitive to the use of ratings from various liberal and conservative interest groups. Liberal interest groups include the American Civil Liberties Union, the League of Women Voters, the League of Conservation Voters, the American Federation of Government Employees, the American Federation of State, County, and Municipal Employees, the American Federation of Teachers, the AFL-CIO Building and Construction, and the United Auto Workers. Conservative groups include the Conservative Coalition, the U. S. Chamber of Commerce, the American Conservative Union, and the Christian Voice. All the ratings range from 0 to 100. For liberal groups, low ratings correspond to conservative roll-call votes, and high ratings correspond to liberal roll-call votes. For conservative groups the opposite is true.

These alternative ratings yield results that are qualitatively similar to our findings in Table I and III. Instead of presenting these results in a table format as we did in Table I and III, we present the main results in graphical form. We summarize our
Nominate Scores

The top panel plots DW-Nominate scores at time $t$ against the Democrat vote share at time $t$. Circles represent the average Nominate score within intervals of 0.01 in Democrat vote share. The bottom panel plots the fraction of a Representative's votes that agree with the Democrat party leader at time $t$ against the Democrat vote share at time $t$. Circles represent the percent voted with Democrat leader within intervals of 0.01 in Democrat vote share. The continuous line is from a fourth-order polynomial in vote share fitted separately for points above and below the 50 percent threshold. The dotted line is the 95 percent confidence interval.

FIGURE VI  
Nominate Scores, by Democrat Vote Share; and Percent Voted with Democrat Leader, by Democrat Vote Share
VI. RELATION TO PREVIOUS EMPIRICAL LITERATURE

A number of empirical studies have directly or indirectly examined the policy convergence issue. Typically, the studies examine whether party affiliation matters for the observed voting records of the legislator. Most studies find evidence of this, which is strictly inconsistent with the complete policy convergence result. For example, Poole and Rosenthal [1984] show that senators from the same state belonging to different parties have significantly different voting records.

28 An example of early empirical work in this area is Miller and Stokes [1963]. The literature is too large to be summarized here. Other examples include, but are not limited to, Snyder and Ting [2001a], Fiorina [1999], Poole and Rosenthal [2001], Snyder and Ting [2001b], Lott and Davis [1992], Canes-Wrone, Brady, and Cogan [2002], Kreibiel [2000], Bender [1991], McArthur and Marks [1988], and McCarty, Poole, and Rosenthal [2000].

TABLE IV
RESULTS BASED ON ADA SCORES, BY DECADE—CLOSE ELECTIONS SAMPLE

<table>
<thead>
<tr>
<th>Variable</th>
<th>(1)</th>
<th>(2)</th>
<th>(3)</th>
<th>(4)</th>
<th>(5)</th>
</tr>
</thead>
<tbody>
<tr>
<td>ADA_{t+1}</td>
<td>ADA_t</td>
<td>DEM_{t+1}</td>
<td>Elect component</td>
<td>Affect component</td>
<td></td>
</tr>
<tr>
<td>1946–1958</td>
<td>14.2</td>
<td>41.7</td>
<td>0.41</td>
<td>17.0</td>
<td>-2.8</td>
</tr>
<tr>
<td>1960–1968</td>
<td>23.5</td>
<td>49.5</td>
<td>0.51</td>
<td>25.2</td>
<td>-1.7</td>
</tr>
<tr>
<td>1970–1978</td>
<td>11.5</td>
<td>46.6</td>
<td>0.40</td>
<td>18.6</td>
<td>-7.1</td>
</tr>
<tr>
<td>1980–1996</td>
<td>46.8</td>
<td>56.6</td>
<td>0.76</td>
<td>43.0</td>
<td>3.8</td>
</tr>
</tbody>
</table>

Standard errors are in parentheses. The unit of observation is a district-congressional session. The sample includes only observations where the Democrat vote share at time $t$ is strictly between 48 percent and 52 percent. The estimated gap is the difference in the average of the relevant variable for observations for which the Democrat vote share at time $t$ is strictly between 50 percent and 52 percent and observations for which the Democrat vote share at time $t$ is strictly between 48 percent and 50 percent. Time $t$ and $t + 1$ refer to congressional sessions. ADA is the adjusted ADA voting score. Higher ADA scores correspond to more liberal roll-call voting records. Sample sizes are 322 in 1946–1958; 245 in 1960–1968; 183 in 1970–1978; 164 in 1980–1996.

VI. RELATION TO PREVIOUS EMPIRICAL LITERATURE

A number of empirical studies have directly or indirectly examined the policy convergence issue. Typically, the studies examine whether party affiliation matters for the observed voting records of the legislator. Most studies find evidence of this, which is strictly inconsistent with the complete policy convergence result. For example, Poole and Rosenthal [1984] show that senators from the same state belonging to different parties have significantly different voting records.
Do parties matter? VIII

• Problems:
  – Interpretation & External Validity
    • Benefit of Approach: Clean identification
    • Cost of Approach: Small Sample
      – Heterogeneous Treatment Effects and External Validity
      – Statistical Power

• Specific Problems with Lee et. Al. Paper
  – Estimates of electing policies: clean
  – Estimates of affecting policies: not so clean
  – Other identification problems
    • impact on composition of legislature and thus on what bills are voted in?
    • do we care about voting in the legislature? maybe the only difference in voting patterns is for votes which are sufficiently lopsided that the differences are policy irrelevant?