

# Does Geography Matter?

## A Regional Analysis of Variance Using ACU and ADA Indexes for U.S. House of Representatives 1981 - 2009



Meghan Kelly and Dr. Ryan Weichert  
Department of Geography and Anthropology

## METHODS

Index rating data was collected from two grassroots organizations: American's for Democratic Action (ADA) and American Conservative Union (ACU). These indexes assign a numerical value to how liberal or conservative a representative is based on voting record for twenty+ significant pieces of legislation. Data was collected every odd year: 1981-2009.

| Representative  | Voting Record | Index Rating |
|-----------------|---------------|--------------|
| Maine           |               |              |
| 1 Andrews T (D) | +++++         | 100          |
| 2 Snowe O (R)   | -----         | 30           |

**Null Hypothesis:** There are no differences in the voting patterns of House members, based on either ADA or ACU data, between regions.

To test the validity of the above statement, Dummy Variable Multiple Regression was used. This approach defines the dependent variable as the voting records of House members through index ratings and independent variables as political affiliation (0 or 1) and region (0 or 1).

Voting Index per year = b0 + b1 (west) + b2 (south) + b3 (party)

In other words, how predictive are political party and region in explaining how liberal or conservative a House member is.

Additionally, index rating averages were calculated by regional and political party

**Hypothesis:** There is a difference in the voting patterns of House members, based on either ADA or ACU data, between regions.

## FINDINGS

### ADA Index: Dummy Variable Regression Results

| Table I: | Democrats |           |        |        |           |        | Index Rating |
|----------|-----------|-----------|--------|--------|-----------|--------|--------------|
|          | Year      | Northeast | West   | South  | R-Squared | Margin |              |
|          | 1981      | 71.229    | 63.499 | 38.958 | 0.600     | 32.271 |              |
| 1983     | 82.978    | 76.051    | 57.481 | 0.759  | 25.497    |        |              |
| 1985     | 76.927    | 69.725    | 51.218 | 0.696  | 25.709    |        |              |
| 1987     | 84.853    | 78.319    | 61.079 | 0.791  | 23.774    |        |              |
| 1989     | 83.317    | 76.672    | 57.054 | 0.740  | 26.263    |        |              |
| 1991     | 77.154    | 68.721    | 51.553 | 0.692  | 25.601    |        |              |
| 1993     | 82.264    | 78.607    | 63.078 | 0.755  | 19.186    |        |              |
| 1995     | 83.214    | 79.672    | 72.582 | 0.877  | 10.632    |        |              |
| 1997     | 86.291    | 79.374    | 71.322 | 0.851  | 14.969    |        |              |
| 1999     | 91.961    | 89.350    | 79.605 | 0.864  | 12.356    |        |              |
| 2001     | 88.607    | 86.424    | 78.420 | 0.882  | 10.187    |        |              |
| 2003     | 91.541    | 89.947    | 84.498 | 0.945  | 7.043     |        |              |
| 2005     | 94.284    | 89.900    | 85.677 | 0.942  | 8.607     |        |              |
| 2007     | 94.113    | 87.938    | 85.842 | 0.875  | 8.271     |        |              |
| 2009     | 92.996    | 89.379    | 87.440 | 0.915  | 5.556     |        |              |

| Table II: | Republicans |           |        |        |           |        | Index Rating |
|-----------|-------------|-----------|--------|--------|-----------|--------|--------------|
|           | Year        | Northeast | West   | South  | R-Squared | Margin |              |
|           | 1981        | 25.848    | 18.552 | -6.423 | 0.600     | 32.271 |              |
| 1983      | 22.471      | 15.544    | -3.026 | 0.759  | 25.497    |        |              |
| 1985      | 24.829      | 17.627    | -0.880 | 0.696  | 25.709    |        |              |
| 1987      | 23.396      | 16.862    | -0.378 | 0.791  | 23.774    |        |              |
| 1989      | 24.862      | 18.217    | -1.401 | 0.740  | 26.263    |        |              |
| 1991      | 23.659      | 15.226    | -1.942 | 0.692  | 25.601    |        |              |
| 1993      | 20.384      | 16.927    | 1.398  | 0.755  | 19.186    |        |              |
| 1995      | 11.288      | 7.746     | 0.656  | 0.877  | 10.632    |        |              |
| 1997      | 19.688      | 12.771    | 4.992  | 0.851  | 14.969    |        |              |
| 1999      | 21.526      | 18.915    | 9.17   | 0.864  | 12.356    |        |              |
| 2001      | 13.132      | 10.949    | 2.945  | 0.882  | 10.187    |        |              |
| 2003      | 14.020      | 12.426    | 6.977  | 0.945  | 7.043     |        |              |
| 2005      | 12.281      | 7.897     | 3.674  | 0.942  | 8.607     |        |              |
| 2007      | 21.479      | 15.305    | 13.208 | 0.875  | 8.271     |        |              |
| 2009      | 13.107      | 9.490     | 4.551  | 0.915  | 8.556     |        |              |

### ACU Index: Dummy Variable Regression Results

| Table III: | Democrats |           |        |        |           |        | Index Rating |
|------------|-----------|-----------|--------|--------|-----------|--------|--------------|
|            | Year      | Northeast | West   | South  | R-Squared | Margin |              |
|            | 1981      | 13.339    | 20.271 | 39.002 | 0.765     | 25.663 |              |
| 1983       | 9.639     | 16.475    | 38.684 | 0.685  | 29.045    |        |              |
| 1985       | 13.230    | 20.334    | 36.763 | 0.728  | 23.533    |        |              |
| 1987       | 2.599     | 12.524    | 21.422 | 0.784  | 18.823    |        |              |
| 1989       | 9.748     | 16.080    | 31.383 | 0.766  | 21.635    |        |              |
| 1991       | 9.735     | 18.807    | 29.490 | 0.692  | 19.755    |        |              |
| 1993       | 13.948    | 17.805    | 26.549 | 0.745  | 12.601    |        |              |
| 1995       | 14.888    | 20.275    | 25.403 | 0.755  | 10.515    |        |              |
| 1997       | 14.780    | 20.587    | 26.990 | 0.832  | 12.210    |        |              |
| 1999       | 7.693     | 11.250    | 18.389 | 0.848  | 10.696    |        |              |
| 2001       | 15.053    | 20.401    | 30.661 | 0.671  | 15.608    |        |              |
| 2003       | 21.687    | 22.411    | 22.632 | 0.857  | 0.945     |        |              |
| 2005       | 11.896    | 17.086    | 28.185 | 0.749  | 16.289    |        |              |
| 2007       | 7.009     | 16.379    | 24.394 | 0.586  | 17.385    |        |              |
| 2009       | 5.758     | 8.238     | 15.508 | 0.885  | 9.750     |        |              |

| Table IV: | Republicans |           |        |         |           |        | Index Rating |
|-----------|-------------|-----------|--------|---------|-----------|--------|--------------|
|           | Year        | Northeast | West   | South   | R-Squared | Margin |              |
|           | 1981        | 81.659    | 88.591 | 107.322 | 0.765     | 25.663 |              |
| 1983      | 67.804      | 74.640    | 96.849 | 0.685   | 29.045    |        |              |
| 1985      | 67.447      | 74.551    | 90.980 | 0.728   | 23.533    |        |              |
| 1987      | 66.365      | 76.290    | 85.188 | 0.784   | 18.823    |        |              |
| 1989      | 71.025      | 77.357    | 92.660 | 0.766   | 21.635    |        |              |
| 1991      | 69.773      | 78.845    | 89.528 | 0.692   | 19.755    |        |              |
| 1993      | 79.544      | 83.401    | 92.145 | 0.745   | 12.601    |        |              |
| 1995      | 76.537      | 81.924    | 87.052 | 0.755   | 10.515    |        |              |
| 1997      | 77.832      | 83.639    | 90.042 | 0.832   | 12.210    |        |              |
| 1999      | 75.648      | 79.205    | 86.344 | 0.848   | 10.696    |        |              |
| 2001      | 75.403      | 80.751    | 91.011 | 0.671   | 15.608    |        |              |
| 2003      | 77.424      | 78.148    | 86.876 | 0.857   | 9.452     |        |              |
| 2005      | 77.073      | 82.263    | 93.362 | 0.749   | 16.289    |        |              |
| 2007      | 68.332      | 78.002    | 85.717 | 0.586   | 17.385    |        |              |
| 2009      | 86.062      | 88.562    | 95.812 | 0.885   | 9.750     |        |              |

Tables VI and VII show the results using average ADA and ACU ratings for both democrats and republicans for each region. The average ideology ratings indicate the dominant ideology of each region. Democrats in the Northern region are generally fairly liberal, while democrats in the south have the tendency to lean more toward the middle. Regardless of regions, between 1981 and 2009, democrats tended to become more liberal closer to 2009, possibly indicating a strengthening of party allegiance. Republican members tend to have a high party allegiance, with little deviation of voting behavior over 1981 to 2009. The northern republicans became more conservative, with southern and western republicans continuing their conservative stance toward national policy. As seen with the democratic analysis, party allegiance for republicans increased as well from 1981 to 2009 with highest rates found in 2007. The average ratings for democrats and republicans are not sufficient enough to support or reject that null hypothesis previously stated above.

To tie this back to Elazar's theory of political cultures, conservatives are most likely to fall into the Traditional culture. Whereas, the liberals would be classified into the Individualistic culture and the west becomes a sort of hodge-podge. Based on Tables VI and VII, the South would be Traditional, the North would be Individualistic and the West would be a mixture of all three traditions.

Tables I and II show the Dummy Variable Regression results by region and party affiliation. The R-Squared value is listed which indicates the strength of the participating relationships. It can be noted that over time, the R-Squared values gradually strengthen with the highest values from 2001-2009. This demonstrates that over time voting patterns.

## ABSTRACT

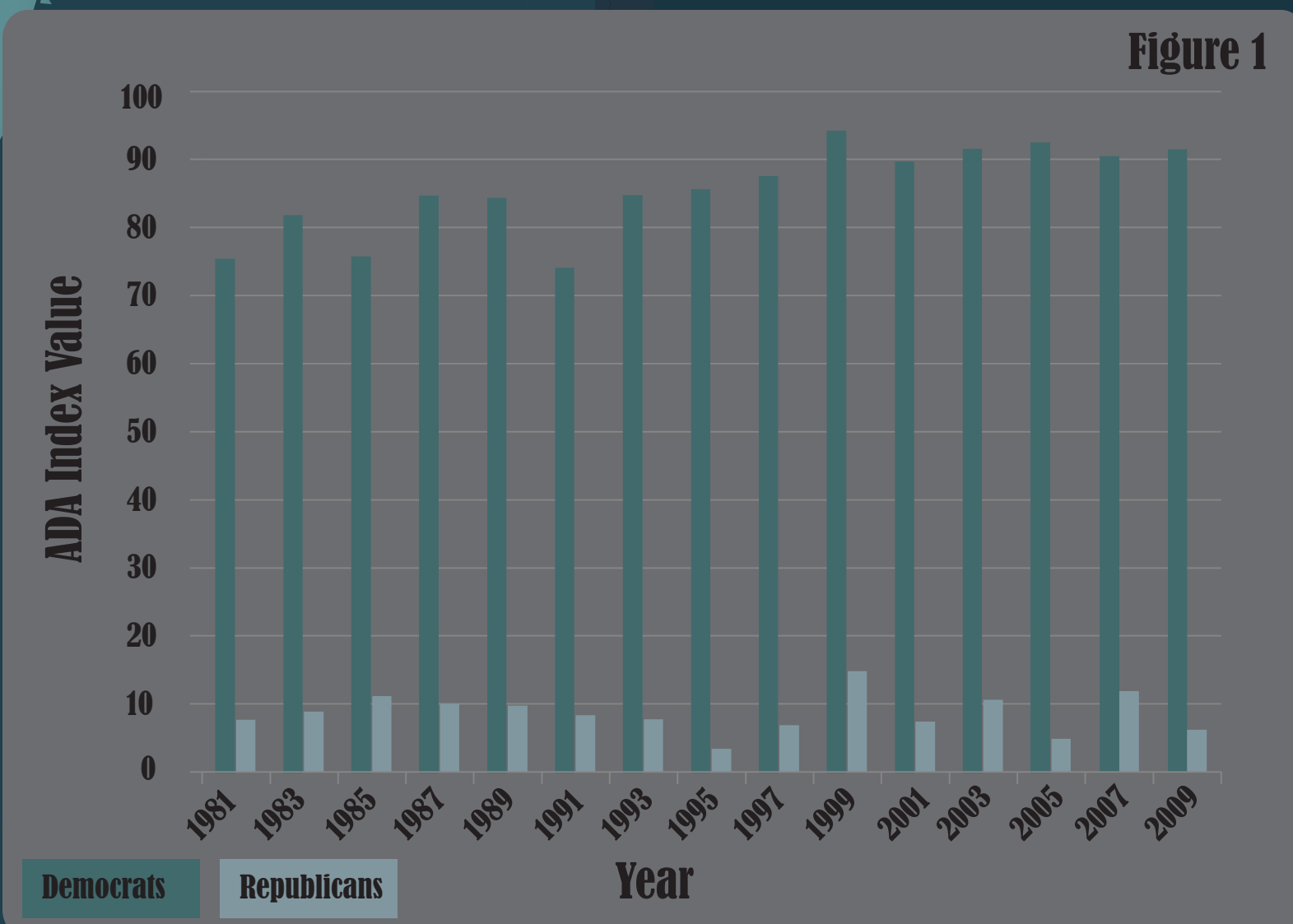
The polarization of politics and perceived political party influence have dominated recent literature concerning the roll call voting of Congressmen in the United States. In most instances the success of individual pieces of legislation depends on which party has control of either the House or the Senate. Likewise, literature has noted that over the past thirty years Republicans generally are more politically conservative than their Democratic counterparts. Literature concerning the subject, however, has neglected the influence of geography on Congressional voting patterns. This research investigates whether U.S. House of Representative voting records are influenced greater by party and ideology or region. Roll call voting data was collected from two grassroots lobbying organizations: American's for Democratic Action (ADA) affiliated with liberal analysis and American Conservative Union (ACU) affiliated with conservative analysis. The two lobbying organizations assign an index rating to a representative based on voting history to determine how liberal or conservative that representative might be. ACU and ADA ratings were collected for each member of the House from 1981-2009. Dummy variable multivariate regression analyzed polarization with two categorical variables: region and party affiliation. In the past, roll call voting was heavily influenced by the region from which that representative resided in. Over time, region has become less predictive of member voting and political party affiliation has become highly predictive of member voting contributing to the literature on the polarization of politics and the influence of geography.

## Elazar's Political Culture Regions

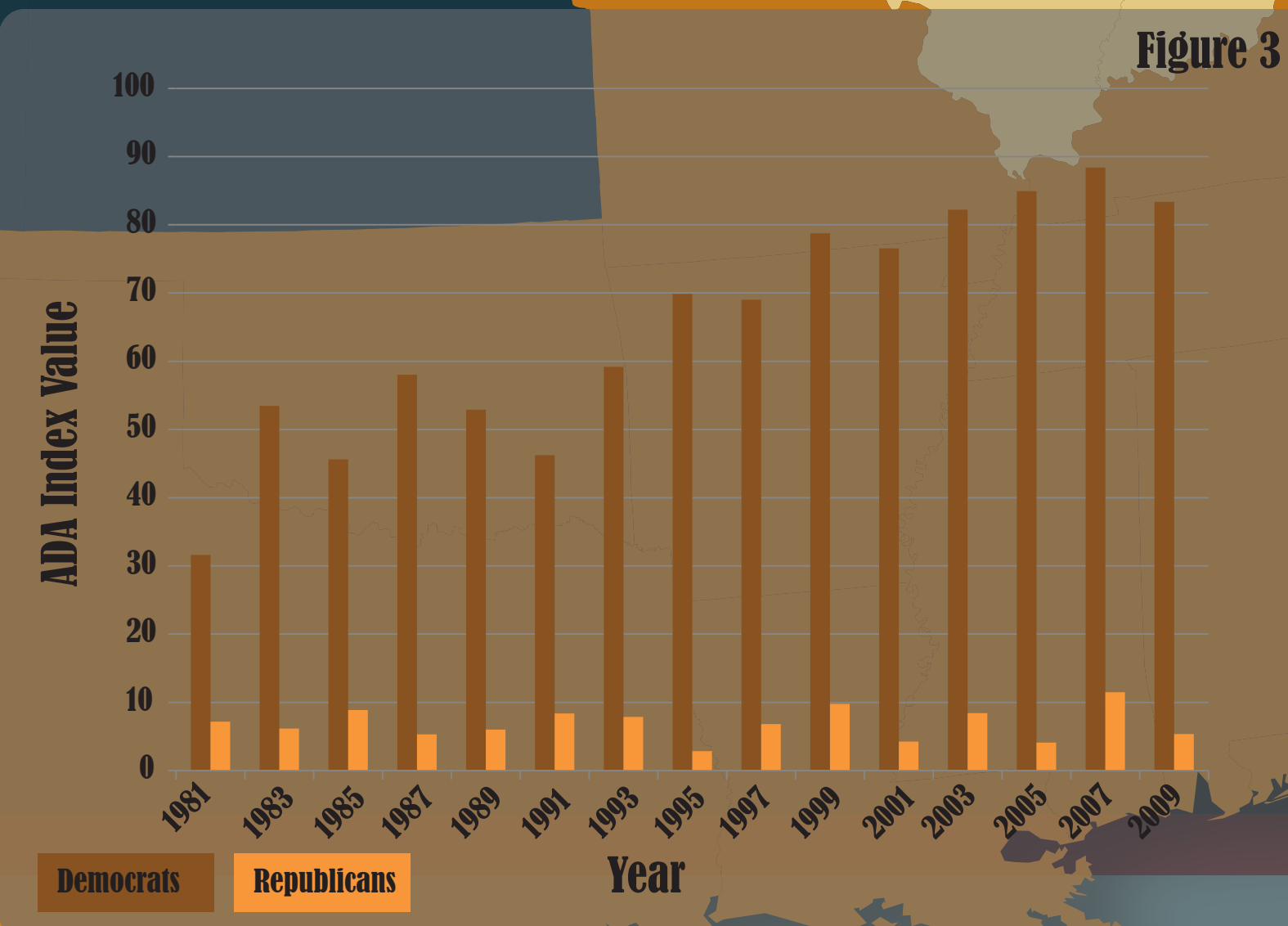
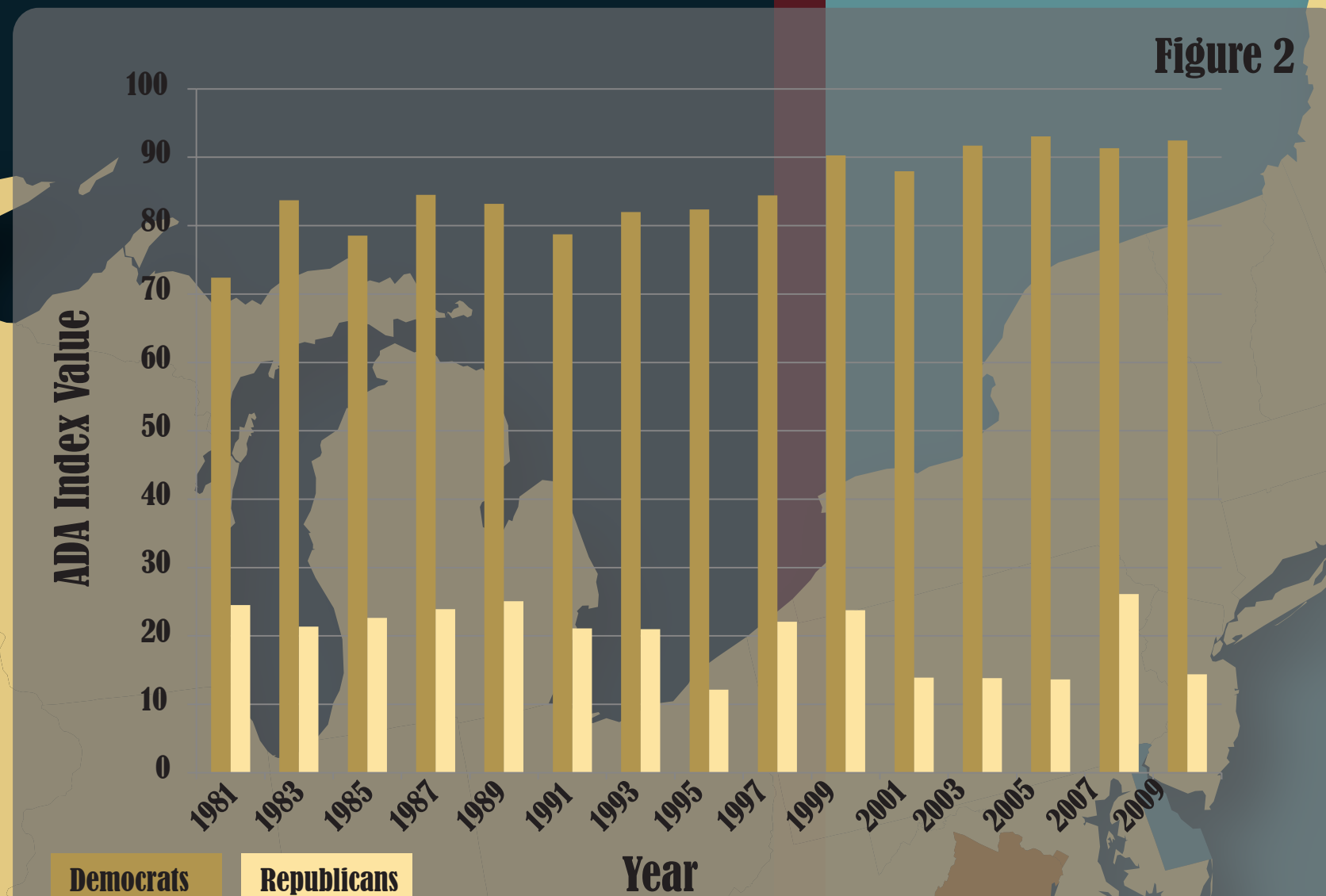
AND

## ADA Index Averages by Year and Region

Figures 1-3



\*\*West includes Alaska and Hawaii



between members of each party begin to stabilize. This means that party affiliation is increasing its predictability of voting patterns and has become more important in the last few years than it was in the early 1980s when regionality was a large contributing factor.

The Margin columns in Tables I-IV were calculated by finding the difference between Northern and Southern scores. The Margins show a steady decrease through the study's timeframe. From 1981 to 2009 this Margin has narrowed which means that political party has become a larger influence on House member voting and demonstrates the increased polarization into the 2000s.

These Tables also show how the Democrats and Republicans change over time by particular regions. In Table I for example, Democrats from the Northeast were voting fairly liberal in 1981 with a generated score of 71.229. By 2009, Democrats from this region were generally voting as stronger liberals. In contrast, Democrats in the South in 1981 voted more conservatively with a score of 38.958. By 2009, Southern Democrats received a score of 87.440. Democrats regardless of region have voted more liberal in the last ten years.

These measures provide a deeper analysis of divided government and how regionality has become less of a predictor ideology. Instead, political party affiliation is a more important variable in determining how a House member will vote. It is important to note that although polarization and party affiliation are playing a larger role, regionality still plays a statistical role but at a smaller level.

## DISCUSSION

**Elazar's Political Culture:** A distinctive and patterned form of political philosophy that consist of beliefs on how governmental, political, and economic life should be carried out. Remnant of Elazar's works can be seen in regional characteristics of modern political thought. These divisions were used in this study to divide US regions: North, South, and West.

### WEST

Moralistic  
Focus on bettering the community as a whole

### SOUTH

Traditionalist  
To maintain the traditional order of things and place high regard on the elite

Individualistic  
Promotes economic efficiency in the context of improving economic development

### NORTH

**Dummy Variable Regression:** Indexes independent variables by substituting a 0 or 1 to indicate the absence or presence of a given variable to optimize the regression model. This method is used to combine party affiliation into one category:

Democrat = 1  
Republican = 0

**Contract with America:** Released by the Republican Party in 1994 on the basis of shrinking government, promoting lower taxes, and welfare reform. First time since 1918 that the Congressional election was run on the national level.

### ACU 2007 Voting Descriptions

**Iraq War:** The House adopted a resolution opposing the "surge" of 20,000 additional troops into Iraq. ACU opposed this resolution, which passed 246-182 on February 16, 2007.

**Iraq Troop Withdrawal:** The House defeated a bill that would have required the withdrawal of US troops from Iraq within 180 days. ACU opposed this bill, which failed on May 10, 2007 (vote, 171-255).

## CONCLUSIONS

As indicated by the reversed findings, partisan politics have increased over the study's timeframe. The ACU and ADA ratings illustrate that from 1981 to 2009 geography has decreased in importance when looking at the voting patterns of House members. Even though the model presented in the study does indicate that northern House members for both parties are more liberal than both southern and western House members, the overall trends illustrated in Tables I-IV indicate that today, membership in a particular party is a strong predictor of the voting patterns of US House of Representative members. Today, an elected Democrat member, regardless of region, is likely to score a high liberal rating based on both ACU and ADA indexes. Granted, the results do indicate that democratic members tend to deviate party lines, particularly in the south and west, more often compared to their republican counterparts. Recently, party line voting has stabilized in all three regions.

Some interesting patterns are found in this study's findings that are highly reflective of the political environments from which this data was collected. Table I shows a significant drop in Margin calculations from 1993 to 1995. When looking at the pieces of legislature and the politics of the time, this significant Margin drop can be associated with the Contract of America in 1994 (see Discussion for details). This was the Republican Party's platform to re-take the House to take control during the Clinton era. This created a sharp divide in government which is reflected in this study from 1994 to 1995. This party control switch is also found in Table III.

There is another peculiar occurrence in Table II from 2005-2007. These two years increase in Margin in comparison to the decreasing trend. It is important to put these results in the scheme of reality. At this time in history, the US was heavily involved in Afghanistan and Iraq. This increase in Margin can be associated with responsiveness to constituents. A vote to support our troops was a key piece of legislature to cross party lines to maintain a seat in the House of Representatives. In 2007, these pieces of legislation included: Iraq Troop Withdrawal Roll Calls (see Discussion for details).

This study is an extension of research regarding divided government. Ryan Weichert produced an identical study at the Senatorial level instead of the House. Weichert found similar relationships between House member's ratings, regions, and party affiliation. These findings are listed below. Weichert concluded that Senators are highly cognizant of the public and reflect the general political overtones of the public at large. The next step to Weichert's analysis would be at the House level. House membership re-election is strongly associated with incumbency advantage which means that members can be less responsive to constituents. Because of this, the results found here further substantiate the hypothesis - there is a difference in the voting patterns of House members, based on either ADA or ACU data, between regions - adding to the overall research concerning divided government.

"As it is essential to liberty that the government in general should have a common interest with the people, so it is particularly essential branch of it under consideration (House of Representatives) should have an immediate dependence on, and intimate sympathy with, the people."

(Madison in Federalist 52)

### Averages by Year and Region

| Table VI | ADA Index |           |        |        | ACU Index |           |      |       |
|----------|-----------|-----------|--------|--------|-----------|-----------|------|-------|
|          | Year      | Northeast | West   | South  | Year      | Northeast | West | South |
| 1981     | 50.009    | 40.460    | 23.023 | 45.138 | 55.609    | 62.992    |      |       |
| 1983     | 58.775    | 47.389    | 47.389 | 32.510 | 44.294    | 56.259    |      |       |
| 1985     | 54.896    | 44.219    | 32.205 | 36.045 | 47.158    | 56.267    |      |       |
| 1987     | 59.781    | 48.245    | 39.703 | 38.985 | 43.400    | 43.601    |      |       |
| 1989     | 59.935    | 48.387    | 35.993 | 34.737 | 43.601    | 54.142    |      |       |
| 1991     | 56.762    | 44.819    | 33.333 | 34.162 | 45.073    | 52.278    |      |       |
| 1993     | 56.346    | 53.457    | 39.843 | 41.862 | 44.554    | 52.878    |      |       |
| 1995     | 47.059    | 37.363    | 32.678 | 45.877 | 56.287    | 58.760    |      |       |
| 1997     | 57.086    | 40.197    | 32.363 | 42.617 | 57.676    | 64.130    |      |       |
| 1999     | 61.667    | 50.297    | 38.117 | 36.765 | 48.559    | 58.418    |      |       |
| 2001     | 53.710    | 49.060    | 33.655 | 41.840 | 47.618    | 66.624    |      |       |
| 2003     | 53.876    | 51.513    | 37.094 | 48.768 | 50.018    | 64.728    |      |       |
| 2005     | 55.367    | 50.416    | 33.543 | 42.090 | 47.542    | 67.463    |      |       |
| 2007     | 66.875    | 56.810    | 42.550 | 30.915 | 40.177    | 58.914    |      |       |
| 2009     | 69.445    | 57.885    | 38.940 | 27.989 | 39.028    | 58.053    |      |       |

## REFERENCES

- "ACU Ratings" (online). The American Conservative Union; available from <http://conservative.org/legislative-ratings/>; accessed June 2012.
- "ADA Ratings" (online). American's for Democratic Action; available from <http://www.adaction.org/pages/publications/voting-reCORDS.php>; accessed June 2012.
- Brunell, Thomas L. et al. "The R<sup>2</sup> = 0.92: Where Then Do They Differ? Comparing Liberal and Conservative Interest Group Ratings." Legislative Studies Quarterly 24.1 (1999): 87-101.
- Caines-Worine, Brandice, David W. Brady, and John F. Cogan. "Out of Step, Out of Office: Electoral Accountability and House Member Voting." The American Political Science Review 96.1 (2002): 127-40.
- Fitzpatrick, Jody L., and Rodney E. Hero. "Political Culture and Political Characteristics of the American States: A Consideration of Some Old and New Questions." The Western Political Quarterly 41.1 (1988): 145-53.
- Florina, Morris P. "Divided Government in the States." Political Science and Politics 24.4 (1991): 646-650.
- Johnson, Charles A. "Political Culture in the American States: Differ? Comparing Liberal and Conservative Interest Group Ratings." Legislative Studies Quarterly 24.1 (1999): 87-101.
- \*\*Special Thanks to the Office of Research and Sponsored Programs for student-faculty collaborative research funding and putting on the 21st Student Research Day.\*\*