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## Environmental Legislation: Factors and Factions

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## Environmental Legislation: Factors and Factions

### Abstract

In recent years the environment has become an increasingly salient issue, with many citizens calling for higher environmental protection and precautions within the United States. However, it seems that congressmen have become unresponsive to these demands as partisanship progressively becomes the determining factor in environmental voting. This study attempts to discover what factors, along with party, determine a representative's voting decisions on environmental legislation. By collecting data on United States House members in 2006, 2007, and 2010 and running linear regressions, the most significant factors in predicting House members' voting patterns are identified; however, party and ideology seem to have increasingly become the most crucial factors in determining environmental voting decisions.

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## ENVIRONMENTAL LEGISLATION: FACTORS AND FACTIONS

Timothy Luby

***Abstract:** In recent years the environment has become an increasingly salient issue, with many citizens calling for higher environmental protection and precautions within the United States. However, it seems that congressmen have become unresponsive to these demands as partisanship progressively becomes the determining factor in environmental voting. This study attempts to discover what factors, along with party, determine a representative's voting decisions on environmental legislation. By collecting data on United States House members in 2006, 2007, and 2010 and running linear regressions, the most significant factors in predicting House members' voting patterns are identified; however, party and ideology seem to have increasingly become the most crucial factors in determining environmental voting decisions.*

### INTRODUCTION

In recent years we have witnessed an unprecedented increase in partisanship, especially at the national level.<sup>1</sup> More and more often, legislators vote with their parties, with liberal Republicans and conservative Democrats quickly becoming extinct.<sup>2</sup> As this trend of party voting continues, it is important to understand what other key factors, along with party, are influencing a legislator's voting decisions. Additionally, within the past decade the environment has become an increasingly salient issue, with many citizens calling for higher environmental protection and precautions within the United States.<sup>3</sup> In a recent study done by Davis and Wurth, it was found that the environment is an issue that has a significant impact on citizens' evaluations of candidates and is also a factor that cuts across constituency party inclinations.<sup>4</sup> That being said, the voting patterns of legislators on environmental issues in a partisan congress, with a constituency that is not divided in clear party terms, needs further investigation. What factors have the greatest effect on representatives' environmental voting decisions? Measuring the factors that influence House members' voting decisions on a matter where constituencies do not always fall into the clear party divide is important because a cleaner and more sustainable environment is something all constituents want for their districts.

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<sup>1</sup> Grose et al. 2003.

<sup>2</sup> Bond and Fleisher 1996.

<sup>3</sup> Dalton 2005.

<sup>4</sup> Davis and Wurth 2003.

Therefore, finding out what factors can increase the legislation passed for such an outcome is an essential issue.

#### LITERATURE REVIEW

The existing research shows that at the national level, partisanship within the United States Congress has dramatically increased within the past decade and party is one of the most important factors in congressional voting. In a study by Richard Fleisher, it was found that by the start of President Reagan's second term in 1985, the House had become overwhelmingly partisan. By defining presidents as either minority (when the president does not have a majority of party members in Congress) or majority presidents (when the president has a majority in Congress), evidence showed that increased partisanship affected presidential-congressional relations. As Congress became more partisan, presidential support from factions within the president's party increased, while support from factions of the opposition decreased.<sup>5</sup> In other words, as partisanship increased, liberal Republicans were less likely to vote in accordance with a Democratic president, and conservative Democrats were less likely to vote with a Republican president. Moreover, it has been found that parties have become so strong in Congress that the majority party can control the agenda in the legislature, screening out bills that divide their party and devoting more floor time to bills in its favor.<sup>6</sup>

Party has also become a chief predictor in national elections when constituency preferences are controlled for.<sup>7</sup> However, this phenomenon is contrary to the theoretical design of representation, in that congressmen are supposed to take the position at the median of their respective constituency. Yet, with most Americans failing to act on their preferences at the polls, it is no surprise that they are not represented by their legislator, but rather the party's preferences.<sup>8</sup> Trying to establish where the demand for environmental legislation works into the House now can prove to be difficult. While the environment is important to many Americans, establishing how legislators address the environment is the question we are posed with.<sup>9</sup> Nonetheless, it has been shown that as a demand for environmental amenities increases, (as measured by environmental group membership within a district) pro-environmental voting behavior also increases in the legislature; however, more often than not, environmental

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<sup>5</sup> Bond and Fleisher 1996.

<sup>6</sup> Cox et al. 2010.

<sup>7</sup> Grose et al. 2003.

<sup>8</sup> Akhmetkarimov and Bulat 2008.

<sup>9</sup> Davis and Wurth 2003.

legislation is only passed when the costs are not borne by individuals within the legislator's political jurisdiction.<sup>10</sup> Findings such as this are reassuring, in that maybe representatives do indeed take note of their constituents' demands, even if they only respond when it is monetarily convenient.

Discovering the types of people who are willing to pay more for environmental programs within their communities is very important. In a 1999 study examining the household value of a curbside recycling program, it was found that many different factors will increase or decrease a person's likelihood to pay more for pro-environmental programs. Through contingent valuation techniques and the use of phone surveys, the research found the variables that have the greatest effect on an individual's willingness to pay for the environment. Women, people with higher incomes, young people, and people with a higher education all value the environment more than their counterparts.<sup>11</sup> This research shows that individuals value the environment differently, and by the same logic, different districts that vary in social demographics should also value the environment differently.

This paper explores how factors, such as the ones above, affect representatives' voting decisions on environmental issues. While there is a wealth of literature demonstrating that party is the key predictor of a legislator's voting behavior, little research has been done on what variables other than party can predict single issue voting on the environment, and this research will attempt to fill that gap.

## DESIGN

This research examines the environmental voting behavior in the U.S. House of Representatives and the extent to which it varies with characteristics of the representatives themselves and their districts. The years 2006, 2007, and 2010 will be used to compare the changes in predictive variables over time. These three years were selected for this study because they include presidents of different parties in both the minority and majority. That is to say, George Bush in 2006 as a Republican majority president, Bush in 2007 as a minority president, and Barack Obama in 2010, as a Democratic majority president. For each of the three years, a separate equation will be run with the same independent variables to control for the changes in

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<sup>10</sup> Anderson 2011; Hussain and Laband 2004.

<sup>11</sup> Aadland and Caplan 1999.

presidency and time. The data were collected from the *Almanac of American Politics* by Michael Barone and the League of Conservation Voters' website. All 435 districts and representatives were used within the study, with a few cases missing when a representative was newly elected and did not have group ratings, or in the rare case when the seat was vacant. The sum of the number of cases for the three years included in the study is 1,210.

The dependent variable in this research will be the League of Conservation Voters (LCV) score a representative receives. This LCV score encompasses what the League of Conservation Voters deems the most important environmental bills that made it into Congress, and the resulting score a legislator receives is a direct correlation to how he or she voted on the bills. The more often a representative voted in favor of the environment, the higher the LCV score the representative received. The best possible score is 100, and the worst is zero.

Eleven independent variables are included in this study. These include the House member's party and gender, the average age and income of the district, the percentage of people with a college education in the district, percent vote for John Kerry in 2004 in the district, the percentage of people that live in rural areas within the district, and the percent of people that hold blue collar jobs within the district. Lastly, dummy variables for the region of the district include: South and non-south, and the political culture of a state using Daniel Elazar's political culture categorization. States can be categorized as moralistic, individualistic, or traditionalistic using Elazar's model. Moralistic states see politics as a means to help the well-being of everyone within a society, individualistic states see politics as a business, and traditionalistic states rely on the customs of the upper-class elites to keep the control they have always had in politics.<sup>12</sup>

#### THEORY AND HYPOTHESES

*Hypothesis 1: The party of the House members will have the greatest effect on the LCV score, regardless of the year, with Republicans being more likely to have lower LVC scores than Democrats.*

As much of the existing literature shows, party is one of, if not the most important, predictors of a legislator's vote. This is especially true within the recent years this study examines, as Congress has become increasingly more partisan with time.

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<sup>12</sup> Elazar 1999.

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*Hypothesis 2: Female representatives will be more likely to have higher LCV scores than males.*

This expectation is in accordance with the existing literature that women are often more sympathetic to environmental issues than males.<sup>13</sup>

*Hypothesis 3: House members within districts that have higher incomes will be more likely to have higher LCV scores than members in lower income districts.*

Studies have shown that as an individual's income rises, demand for a better environment rises with it.<sup>14</sup> This is because when individuals need not worry about their immediate needs such as food and rent, they are more willing to spend money on the environment.<sup>15</sup>

*Hypothesis 4: House members with lower median ages within their districts will be more likely to have higher LCV scores than members in districts with higher median ages.*

This expectation is consistent with the literature that states that young people (people between the ages of 18 and 34) will on average have a higher demand for environmental protection than older generations.<sup>16</sup>

*Hypothesis 5: As the percentage of people holding college degrees in a district increases, the LCV score of its House member will also increase.*

Past research has shown that as education increases, an individual's demand for environmental protection increases.<sup>17</sup>

*Hypothesis 6: As the percentage of "blue collar" workers in a district increases, the LCV score of its House member will decrease.*

As stated earlier, when the environment is viewed in terms of economic trade-offs and not in the sense of "buying the environment" the importance of the environment is muted. The rationale behind this expectation is that blue collar workers will more often think of environmental programs in terms of an economic trade-off and will not demand environmental policies within their districts.

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<sup>13</sup> Aadland and Caplan 1999.

<sup>14</sup> McConnell 1997; Morse 2008.

<sup>15</sup> Aadland and Caplan 1999.

<sup>16</sup> Arnold et al. 2009.

<sup>17</sup> Quimby and Angelique 2011.

*Hypothesis 7: As the percent vote for Kerry in the district increases, the LCV score of the House member will also increase.*

Districts with a higher percent vote for Kerry will be more ideologically left than districts with a lower percent vote for Kerry. This in turn would mean that districts with a greater Kerry vote are also more likely to have a representative who is a Democrat and votes in favor of environmental legislation; this justification is consistent with hypothesis one.

*Hypothesis 8: House members in states with moralistic political cultures will be more likely to have higher LCV scores than members who are in traditionalistic and individualistic states.*

As mentioned earlier, the moralistic political culture views politics as a way to benefit everyone in a society. One of the ways a society can receive altruistic benefits is through increasing the environmental welfare of a district. That being said, according to Elazar, the House of Representatives members within the moralistic states should be more likely vote in favor of the environment.

*Hypothesis 9: Party will have a more substantial effect on LCV vote when a majority president is in power compared to when a minority president is in power.*

When the president has a majority within the house, he has the ability to get more of his bills passed. With this advantageous ability, I expect that the minority party will coalesce together and maintain party unity to try and stop the majority from passing bills. In response, the majority party will also band together to ensure the passing of bills.



## DATA ANALYSIS

Table 1: Liner Regression for 2006, 2007, and 2010

Dependent Variable: LCV score

Independent Variable	2006	2007	2010
Constant	-40.572** (.042)	23.342*** (.070)	70.462* .000
Representative Party	-54.442* (.000) <i>-.667</i>	-58.077* (.000) <i>-.743</i>	-69.411* (.000) <i>-.843</i>
Representative Gender	4.710* (.087) <i>.042</i>	.425 (.852) <i>.425</i>	-.842 (.496) <i>-.012</i>
Age of District	.987** (.010) <i>-.74</i>	.023 (.610) <i>.011</i>	.036 (.373) <i>.015</i>
Percent College Grad	.305 (.175) <i>.074</i>	.196 (.297) <i>.050</i>	-.018 (.914) <i>-.004</i>
South	-7.487 (.147) <i>-.086</i>	-8.089*** (.064) <i>-.098</i>	3.824 .044 <i>.284</i>
Income	.000** (.001) <i>.148</i>	.000** (.002) <i>.123</i>	.000 (.698) <i>.013</i>
Percent Vote Kerry	.713* (.000) <i>.255</i>	.595* (.000) <i>.226</i>	.333* (.000) <i>.117</i>
Percent Rural	-.075 (.328) <i>-.037</i>	.047 (.412) <i>.025</i>	-0.62 (.209) <i>-.031</i>
Percent Blue Collar	.737** (.028) <i>.106</i>	.213 (.429) <i>.033</i>	-.315 (.184) <i>-.045</i>
Moralistic Political Culture	3.488 (.158) <i>.039</i>	1.908 (.348) <i>.023</i>	.862 (.681) <i>.010</i>
Individualistic Political Culture	.585 (.912) <i>-.007</i>	-1.713 (.698) <i>-.021</i>	.5235 (.150) <i>.062</i>

Note: Significance in parenthesis and beta weights italicized; \*\*\*p≤.1, \*\*p≤.05, \*p≤.001

In 2006, the adjusted R square is .787 and the standard error of the estimate is 18.850 percent. First and foremost, representative party is unquestionably having the greatest effect of all the variables in the equation. Party is the strongest predicting variable (beta weight of  $-.667$ ) and was statistically significant at the .001 level. The B value indicates the per unit change in party (moving from a value of 0 for Democrats to a value of 1 for Republicans) has a  $-54.442$  effect on LCV scores. Representative gender is also a significant predictor of LCV scores. Women are more likely to have higher LCV scores by almost 5 points, holding all other variables constant. Average age of the constituents in a district also has a positive effect on LCV scores. This relationship shows that as a district grows older, the amount of environmental legislation passed by its House member increases. Average income also has a positive effect on LCV scores. The incomes of the districts were at such wide ranges that the unstandardized coefficient did not capture the effect of per unit change in income on LCV scores. However, looking at the beta weight ( $.148$ ), there is a positive relationship between the average income of a district and the corresponding House member's LCV score. The percentage vote for Kerry has the strongest effect on LCV scores after party, and is also the only other variable in the model significant at past the .001 level. Representatives of districts with a higher percent Kerry vote are also more likely to have higher LCV scores. Lastly, the percentage of workers holding a blue collar job in a district has a positive statistically significant relationship with LCV score. The region, percent of the rural population, and political culture variables are not statistically significant in this model.

In 2007, the adjusted R square is .841 and the standard error of the estimate is 15.404 percent. In the model for this year, fewer of the independent variables are statistically significant. However, the model still explains about 84% of the variance in the equation. Of the eleven variables, only 4 are statistically significant: party ( $p < .000$ ), income ( $p < .002$ ), percent vote for Kerry ( $p < .000$ ), and South ( $p < .064$ ). Once again, party is the strongest variable with a beta of  $-.743$  and a B value of  $-58.077$ . Note that in this model, party is having an even greater effect on LCV scores than in the previous model. Average income of a district, again, has a positive effect on LCV scores. Percent Kerry vote for the second time had a positive relationship with the LCV scores, having a B value of  $.595$ , and the second greatest a beta weight of  $.226$ . The final variable, South, has a B value of  $-8.089$ , showing a negative relationship; House Representatives that are in the south (1) are more likely to have lower LCV scores than Representatives in the north (0).

In 2006, the gender, age, and blue collar variables are all statistically significant, but are no longer in 2007. That being said, of the three variables in 2007 that are also statistically significant in 2006, only the party variable increased its relative impact while the others diminished.

In 2010, the adjusted R square is .878 and the standard error of the estimate is 14.185 percent. However, even though the model is explaining almost 90% of the variance, only two variables are statistically significant in 2010: party and percent vote for Kerry, both at the .001 level. Party became an even stronger predictor than in 2007, with a B value of -69.411. Furthermore, the percent vote for Kerry, again, has the second highest a beta weight of .117 and a B value of .333. In this 2010 model, income is statistically insignificant, whereas in the previous two models it is a strong predictor. Looking at the significance of the variables in this 2010 model, all of the variables that were significant in the previous years, aside from party and Kerry vote, now are insignificant. For example, age in the 2006 model was significant at the .01 level, yet in 2010 the p-value grew to .373. While all the variables but party and Kerry vote were statistically insignificant in 2010, the degree to which this insignificance increased is to be noted.

## DISCUSSION

There is a clear trend as the study progresses through the three years, showing that party becomes gradually more important, with an increase in B values of 14.969 between 2006 and 2010. Moreover, the effects of once statistically significant variables are muted by the increasing effect of party in the equation. Even the B value of percent vote for Kerry progressively decreases as the years advance. This suggests that ideologically diverse constituencies, for example those where Kerry or Bush had marginal victories, are being underrepresented because their House members are voting solely along party lines more and more often. As factors that once played a role in the decision process of House members' environmental voting scores are phased out for party preferences, the diverse demands of constituencies throughout the country are being ignored. By 2010 we are left with only party and the percent vote for Kerry as the sole statistically significant variables in predicting a House member's LCV score.

## CONCLUSION

The results from this investigative analysis of LCV voting scores within the House of Representatives show the increasing amount of partisanship within Congress in recent years. This finding is consistent with hypothesis one and the previous literature; however, the fact that the relative impact of party is consistently increasing disproves hypothesis nine, in that party did not have the greatest effect when majority presidents were in office (2006 and 2010). Hypotheses two, three, and four were confirmed in the year 2006, and in 2007 for hypothesis three, but failed to make a significant impact in 2010. This was likely due to the immense increase in partisanship that was found in 2010. Inconsistent with conventional wisdom, the education level of the constituency- did not have a significant impact on LCV scores. In all three years, the percentage of people holding a college degree in a district did not influence House members' decisions, thus disproving hypothesis five. Hypothesis six was not verified, because increases in blue collar workers had a positive effect on LCV scores in 2006, working in the opposite direction than predicted; however, it was not statistically significant in 2007 or 2010. Hypothesis seven, the percent vote for Kerry will have a positive relationship with LCV scores, was confirmed in all three regression analyses; however, as stated earlier, its effect on LCV scores diminished gradually as the years progressed. Lastly, Hypothesis eight was unconfirmed in this study, showing that political culture did not have an effect on LCV scores.

From this study, the conventional wisdom that party is the greatest predictor of a legislator's vote can be further reinforced. The regression models show that between the years of 2006-2010, the House of Representatives has become increasingly partisan. These findings suggest that House members will typically not take into account the diversity of their constituents, and instead will vote solely with their respective party. If the trend found in this research continues, valuable differences in districts will not be represented.

To further investigate the partisanship trend in Congress, more years could be included in future studies. Additionally, looking at other group ratings aside from LCV scores (for example National Tax Payer Union, American Conservative Union , etc.) and the relationship they have with the same independent variables would investigate if the increased partisanship is also being displayed in other policy areas other than the environment.

The House of Representatives plays a vital role in representing diverse groups of people within the states. Nevertheless, the recent trends of extreme partisanship show a decline in the representation of diverse districts, reflecting almost a dichotomous system where once a House member is elected, solely the values of his or her party will be represented in Washington.

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