Objective. We make use of individual-level survey data from the 2006 midterm election in order to determine the degree to which redistricting affected the vote choice of whites residing in Georgia Congressional Districts 8 and 12. Methods. A multivariate probit model was used to assess the probability of voting for the GOP House candidate among voters represented by the same incumbent before and after redistricting versus voters who had been newly drawn into one of these districts. Results. Despite a national tide that favored the Democratic Party in the 2006 elections, redrawn whites were more likely to vote for the Republican challengers in the districts surveyed. Conclusions. Our findings indicate that redistricting can be used to dampen the incumbency advantage. In addition, the findings of this research also speak to the continuing Republican realignment of white voters in the Deep South and to the recognition that the effects of redistricting are dependent on political context.

A large Democratic tide swept across the country in the 2006 midterms. Democratic incumbents had not been so electorally secure since 1982, 12 years before their party lost its House majority in the 1994 elections. When the dust had finally settled, the GOP dropped 30 seats, going from a 15-seat majority to a division of 233 Democrats and 202 Republicans in the 110th Congress. Yet in the midst of a markedly lopsided election in which not a single Democratic incumbent lost, there were two Democrats fighting for dear life to hold onto their districts, Georgia U.S. House Representatives Jim Marshall (GA 8) and John Barrow (GA 12). Representing neighboring districts in southern and middle Georgia, these incumbents had to fend off spirited challenges from ex-Georgia Republican congressmen Mac Collins in...
District 8 and Max Burns in District 12. Both incumbents survived by razor-thin margins (1,752 vote margin in GA 8 and 864 votes in GA 12)—the closest contests for Democratic incumbents in the 2006 elections.

In an election cycle when other Democratic incumbents breezed to victory as unpopularity with the Iraq War strengthened and Republican excesses were punctuated by the Mark Foley scandal, Democrats Jim Marshall and John Barrow both found themselves in the curious predicament of burnishing conservative credentials, at times expressing their open support for the increasingly unpopular policies of the Bush Administration. How could this be? Why would two Democratic incumbents have to move to the right in a short-term political climate that clearly signaled the public’s discontent with the Republican status quo? The answer is that these two Democrats found themselves representing vastly altered districts whose redrawn populations contained a higher percentage of white, and thus more Republican, voters. Although the national picture made clear a Democratic landslide, in the context of Georgia politics, the state continued its onward march in favor of the GOP. We argue that the redistricting of Georgia’s congressional districts came very close to accounting for the only defeats of Democratic incumbents in 2006.

Redistricting and Political Behavior

In this research we look specifically at how redistricting influences political behavior—vote choice in particular. By focusing on the role of redistricting, we are able to assess how a change in the political context affects political behavior and thus how political behavior shapes election outcomes. For our purposes, redistricting amounts to a natural experiment. We expect that the impact of redistricting on vote choice varies significantly among two types of voters: (1) same-incumbent voters, those constituents with the same representative before and after redistricting, and (2) redrawn voters, those constituents with a different representative as a direct result of redistricting.

There is a large and growing literature that examines the effect of redistricting on elections. Prior to the 1990s round of redistricting, studies examining the partisan effect of redistricting yielded mixed results (see Cox and Katz, 2002). This should not be surprising though, because the impact of redistricting depends on the decision calculus of voters, which in turn is affected by the choice of candidates running in the district. In the 1960s, 1970s, and 1980s, partisanship did not factor as heavily in the decision calculus of voters because

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2Data are from the Georgia Secretary of State’s website (http://www.sos.state.ga.us/elections/election_results/2–6_1107/default.htm).

3Even as the Democratic Party made strong gains in state legislative contests—winning back a majority of legislatures for the first time since 1994—in Georgia the balance of power in the state senate remained the same (34 Republicans and 22 Democrats) and in the state house Republicans gained two seats (106 Republicans and 74 Democrats) (http://www.ncsl.org/statevote/StateVote2006.htm#). In addition, for the first time since Reconstruction, Georgia elected a Republican Lieutenant Governor.
candidates de-emphasized partisanship and accentuated their individual qualities, hoping to cultivate a personal vote (Cain, Ferejohn, and Fiorina, 1987; Fenno, 1978; Fiorina, 1977; Mayhew, 1974). The incumbency advantage grew in part because representatives were able to secure votes across party lines (Cox and Katz, 1996). In this political context, partisan redistricting often failed to broker the intended results because voters focused more on candidate competency, shifting their votes in favor of responsive incumbents and thus discounting the influence of political affiliation (see Rush 1992, 1993, 2000).

Times have changed. Especially since the 1990s, there has been a marked increase in partisan voting (Bartels, 2000). What accounts for the resurgence in partisan voting? First, at the elite level, candidates such as Ronald Reagan in the 1980s and Newt Gingrich in the 1990s imposed greater ideological cohesiveness on their fellow partisans. Party elites (Democrats and Republicans) have made the choice between the parties clearer and more polarizing as a result of recruiting and running more ideological candidates. Second, the racial redistricting implemented for the 1992 congressional elections (see Cunningham, 2001) reinforced the appeals of left-of-center and right-of-center candidates who ran in districts that were now less racially diverse. Particularly in the South, with the increase in majority-minority districts and thus the concomitant rise in the number of “bleached” white-majority districts, candidates of both parties can secure voting majorities without appealing to biracial coalitions (Black, 1998).

This study constitutes a unique opportunity to assess the impact of redistricting on voting behavior by making use of individual-level data. Previous research has relied on various levels of aggregate data to assess the partisan consequences of redistricting by distinguishing between the same and redrawn parts of an incumbent’s U.S. House district with the following units of analysis: (1) blocks (Desposato and Petrocik, 2003), (2) wards (Engstrom, 2006), (3) counties and townships (Ansolabehere, Snyder, and Stewart, 2000; Engstrom, 2006; Rush, 1992, 1993, 2000), and (4) parts of congressional districts (McKee, Teigen, and Turgeon, 2006; Petrocik and Desposato, 1998).

Two studies in particular, Petrocik and Desposato (1998) and Ansolabehere, Snyder, and Stewart (2000), warrant specific attention because, similar to our approach, these works assess the share of the vote received by incumbents according to the same and redrawn parts of their districts.

4Like most scholars, we use the standard classification of the South as the 11 former Confederate states: Alabama, Arkansas, Florida, Georgia, Louisiana, Mississippi, North Carolina, South Carolina, Tennessee, Texas, and Virginia.

5With respect to party system change, the South is currently the most politically dynamic region in the United States. Georgia is a southern state undergoing a partisan transformation in favor of the Republican Party. In the South, ideological congruity continues to fuel the secular realignment of conservative white southerners into the Republican Party (Abramowitz and Saunders, 1998) and racial redistricting accelerated Republican voting in U.S. House elections (Hill and Rae, 2000). Districts neighboring majority-minority districts have higher proportions of white voters, which make them more attractive to viable Republican candidates (see Abramowitz, 1995; Black and Black, 2002; Jacobson, 1996), who are ideologically better positioned than their Democratic opponents to appeal to white voting majorities.
Confining their analyses to southern House elections in 1992 and 1994, Petrocik and Desposato (1998) use district-level data to show that in the face of a Republican tide, southern Democratic incumbents were disproportionately harmed by the presence of redrawn constituents.\(^6\)

Spanning more than a century of House elections (1872–1988), Ansolabehere, Snyder, and Stewart find that incumbents (irrespective of party) consistently obtain a higher share of the vote from the old parts of their district—leading the authors to conclude that representatives were able to cultivate a personal vote among what we call same-incumbent voters. Like both of these studies, we examine the influence of redistricting on the support given to incumbents. However, unlike both of the aforementioned studies, and all other published studies, we use individual-level data to examine the effect of redistricting on vote choice—allowing us to make more definitive statements regarding the influence of redistricting on voting behavior.\(^7\)

Unlike same-incumbent voters, who are familiar with their incumbent, redrawn voters behave as though they are voting in an open seat contest—especially when the incumbent faces a strong challenger (Petrocik and Desposato, 2004). Redistricting, therefore, often conditions the emergence of viable challengers because these candidates recognize that they have a reasonable chance to win if they can cultivate the support of redrawn voters. Since the 1990s, among white redrawn voters in the South, because of their ongoing partisan realignment in favor of the Republican Party, the effect of redistricting on vote choice is mainly one-sided and in favor of Republican candidates. In 2006, however, a competing hypothesis does exist as short-term national political conditions favored the Democratic Party. Given these circumstances it is possible that redrawn voters may not have been any more likely to vote Republican than same-incumbent voters. Using a survey of white redrawn and same-incumbent voters from Georgia’s 8th and 12th Congressional Districts, we put these possibilities to the test.

\(^6\)As Petrocik and Desposato (1998) contend, redistricting weakened the incumbency advantage of southern Democrats because redrawn (new) voters were not familiar with their new Democratic representative. The change in the racial compositions of districts was often a necessary but insufficient condition for Republican House gains. In many cases, in order for Republicans to win, there would have to be an increase in Republican voting among southern whites who previously voted Democratic. Using district-level data, Petrocik and Desposato showed that an increase in the district percentage of redrawn constituents reduced the Democratic House vote in the 1992 and 1994 elections. Petrocik and Desposato find aggregate-level support for their argument that redrawn voters shifted Republican in 1992 and 1994, but their argument focused on a political context shaped by a partisan tide that favored Republicans. Given the political conditions during the 2006 midterms, resulting in a Democratic tide, our argument rests on the presence of a long-term realignment of southern whites in favor of the Republican Party. Thus, if redrawn voters are more likely to vote Republican in the current political climate, then it is strong evidence that redistricting can reinforce the effects of a secular Republican realignment even in the face of a short-term Democratic tide.

\(^7\)We should note, however, that McKee (forthcoming) has a forthcoming article in *Political Research Quarterly* that uses National Election Studies survey data to assess the effects of redistricting on vote choice in the 1992–1994 U.S. House elections.
The 2006 Campaigns in Districts 8 and 12

After the 2004 elections, Georgia Republicans captured a majority of state house seats. Along with control of the state senate and governorship (since 2002), the GOP now had the votes to redraw the congressional map. The new U.S. House boundaries were signed into law by Governor Perdue on May 6, 2005. Unlike in Texas, where redistricting the U.S. House in 2003 became a bitter partisan feud drawing national headlines (McKee and Shaw, 2005), the redistricting in Georgia garnered far less attention. Perhaps this was due to the emphasis that Georgia Republicans placed on drawing a map with “cleaner” boundaries than the ones enacted by a Democratic-controlled legislature after the 2000 Census. Of course, a primary motive for redrawing the Georgia congressional map was the same as in Texas: the redrawn congressional boundaries would greatly increase the likelihood for Republicans to win additional seats.

Under the new map, valid for the 2006 elections, Districts 8 and 12 were drawn specifically as Republican targets. Two former Republican congressmen, Mac Collins and Max Burns, emerged to challenge incumbent Democrats Jim Marshall and John Barrow in Districts 8 and 12, respectively. Figure 1 shows a map of Georgia U.S. House Districts 8 and 12 with Census blocks for redrawn residents in light gray and the blocks for same-incumbent residents shaded in dark gray. As can be seen from the map, vast portions of these two districts contained voters who formerly resided in other districts prior to the 2005 redistricting.

The Democratic drawn map valid for the 2002–2004 elections contained districts that split 34 counties, whereas the Republican drawn map for the 2006 elections contained districts that split only 18 of Georgia’s 159 counties (Barone, Cohen, and Ujifusa, 2005).

The Georgia map was not as blatantly partisan as the Texas map because in Texas the sole objective was to defeat several Democratic incumbents (see McKee and Shaw, 2005; McKee, Teigen, and Turgeon, 2006). To the contrary, Georgia Republicans had multiple priorities; in addition to reducing Democratic support in the redrawn portions of the 8th and 12th Districts, the new map smoothed out congressional boundaries and shored up Republican support in the 11th District, represented by Republican Phil Gingrey (Barone, Cohen, and Ujifusa, 2005). It is interesting to note that overall (in the entire district), the black voting-age population in the new District 12 went from 39.0 percent to 41.9 percent. At first blush this seems curious if Georgia Republicans intended to defeat Democratic Representative Barrow. However, Georgia Republicans faced considerable legal constraints in reconfiguring the 12th District. They had to steer clear of committing retrogression, which means they could not substantially reduce the percentage of the minority population. With such a high black population in the 12th District, coupled with a large redrawn population, it was possible that Barrow might lose to an African-American Democrat in the primary and this in turn would increase the likelihood of a Republican victory in the general election because voting would be even more racially polarized in the case of an African-American Democrat running against a white Republican.

Mac Collins represented Georgia U.S. House District 8 under the previous congressional map. In 2004, Collins vacated his seat to run for the U.S. Senate, losing to Johnny Isakson in the Republican primary. Max Burns represented the old District 12 after the 2002 elections, but in 2004 he was defeated in his initial bid for reelection by John Barrow—making the 2006 contest a rematch in the redrawn 12th.
Because the redistricting was implemented by a Republican-controlled legislature, it is no surprise that the newly drawn portions of these districts reduced the black voting-age populations in addition to infusing them with large shares of redrawn voters. Table 1 provides data on the voting-age pop-
ulation (VAP) according to race/ethnicity in Districts 8 and 12. In brackets under the columns denoted “Same” and “Redrawn” is the percentage of the voting-age population represented by the Democratic incumbent before and after redistricting (same) and the portion of the VAP new to the incumbent (redrawn) as a result of redistricting. In District 8, 45 percent of the VAP was new to Democrat Jim Marshall and 30 percent of the VAP in District 12 was new to Democrat John Barrow. In both districts, compared with the entire district VAP and same-incumbent VAP, the percentage of the white VAP in the redrawn portion is highest (75 percent white in redrawn portion of District 8 and 61 percent white in redrawn part of District 12) and the black VAP is the lowest (21 percent black in redrawn portion of District 8 and 36 percent black in redrawn part of District 12). The percentage of the Hispanic VAP is highest in the redrawn sections of Districts 8 and 12.

Not only were the white VAP percentages the highest and the black VAP percentages the lowest in the redrawn sections of Districts 8 and 12, but in District 12 a large portion of the white constituents new to Democratic Representative John Barrow resided in rural/small town areas. For instance, the newly drawn District 12 no longer contained Clarke County,

### Table 1

<table>
<thead>
<tr>
<th></th>
<th>8th District</th>
<th></th>
<th>12th District</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Same (55.3%)</td>
<td>Redrawn (44.7%)</td>
<td>Total</td>
<td>Same (69.7%)</td>
</tr>
<tr>
<td>White</td>
<td>61.0</td>
<td>75.1</td>
<td>67.3</td>
<td>53.4</td>
</tr>
<tr>
<td>Black</td>
<td>37.5</td>
<td>21.4</td>
<td>30.3</td>
<td>44.4</td>
</tr>
<tr>
<td>Hispanic</td>
<td>1.3</td>
<td>3.8</td>
<td>2.4</td>
<td>1.8</td>
</tr>
</tbody>
</table>

**NOTE:** Cell entries are column percentages. Bracketed figures represent the percentage of each district composed of same-incumbent and redrawn voters. Data were compiled by the authors using block-level data from Geolytics (CensusCD 2000/Redistricting Blocks) and maps from Georgia’s Legislative Reapportionment Services Office (http://georgiareapportionment.uga.edu). All data are based on the 2000 Census for the population of adults (18 years and older) of one race only.

11 It is worth noting that previous studies (see, e.g., Epstein and O’Halloran, 1999) have shown that congressional districts with a black VAP of 40 percent or higher not only are likely to be represented by a Democrat, but in the South, an African-American Democrat would have a strong chance to win. In more recent elections in the South, however, and especially in a Deep South state like Georgia, whites continue to shift in favor of the GOP (Hayes and McKee, 2004) and thus an increase in racially polarized voting makes it possible for a Republican to win in a district (i.e., Georgia 12) with a 40 percent black voting-age population.

12 The rural percentage of District 12 went from 25.5 percent in 2004 to 40.1 percent in 2006. The rural percentage of District 8 (District 3 in 2004) actually declined from 51.2 percent in 2004 to 43.3 percent in 2006 (2004 data are from Barone, Cohen, and Ujifusa, 2005; 2006 data were calculated by the authors from the U.S. Census Bureau).
home to the City of Athens and the University of Georgia, a decidedly Democratic county and the erstwhile residence of John Barrow. In sum, the redrawn constituents added to Districts 8 and 12 were a cause for concern for both Democratic incumbents because their demographic characteristics foretold Republican support—of course, this is not surprising since a Republican-controlled legislature crafted the map for the 2006 U.S. House elections.

The 2006 campaigns in Districts 8 and 12 were virtually mirror images of each other. The conservative bent of the white populations in these districts framed the political strategies of the Republican challengers. Both Collins and Burns went on the offensive, with the goal of convincing voters that their Democratic opponents were not suited to represent such districts because they were liberals. The Economic Freedom Fund (EFF), a 527 that bankrolled the Swift Boat Ads in the 2004 presidential election, flooded Districts 8 and 12 with direct-mail, radio, and television advertisements that pounded home the theme that Congressmen Marshall and Barrow were two-faced liberals who talked conservative in their districts while voting as liberals in Washington. In addition, both the EFF ads and the ads run by Collins and Burns sought to link Marshall and Barrow ideologically with local and national liberals (Cynthia McKinney, Nancy Pelosi, and Ted Kennedy) who were sure to draw the displeasure of most of the district’s white voters.

Marshall and Barrow were forced to spend most of their time on the defensive, deflecting the “liberal” charge cast by their Republican opponents, stressing their political independence as conservative Democrats, even going so far as to highlight their support for the Bush Administration. Indeed, viewed from the lens of the national political picture, the contests in Georgia’s 8th and 12th Districts seemed nothing short of bizarre. As Democrats across the country railed against President Bush for his handling of the Iraq War, in 2006 Marshall and Barrow were drawing themselves closer to the administration in their campaign messages and their voting. For example, in 2005, the percentage of roll-call votes that Marshall and Barrow sided with President Bush on was 59 percent and 47 percent, respectively. In 2006, both Marshall and Barrow supported the president on 66 percent of roll-call votes.

As Election Day neared it was becoming more evident that a Democratic tide was building and the best chances that the GOP had to unseat Democratic incumbents rested in Georgia’s 8th and 12th Districts. Underscoring the importance of these contests, President Bush visited both districts twice, with the last visits taking place the weekend before the election. With the

13 In the 2006 Georgia gubernatorial election, Republican Sonny Perdue won 60 percent of the two-party vote statewide, but in Clarke County the Democratic challenger Mark Taylor took 58 percent of the two-party vote (data are from the Georgia Secretary of State’s website).

14 Data are from Congressional Quarterly.
presence of heavy advertising by outside groups like the EFF, the strategic importance the Bush Administration placed on these districts, the strong challenges waged by Collins and Burns, and the attention the national media gave to these contests—voters in Districts 8 and 12 were saturated with political information. The total amount of money raised in District 8 was $1,953,070 for Marshall and $2,088,353 for Collins. In District 12, Barrow raised $2,489,080 and Burns amassed $2,145,800. When the dust finally settled, both Marshall and Barrow narrowly escaped defeat in the closet elections experienced by Democrats seeking reelection in 2006.

Data and Methods

The data for this project come from a survey of white residents who voted in the 2004 general election. The survey was specifically targeted to reach respondents living in Georgia’s 8th (GA 8) and 12th (GA 12) Congressional Districts as configured for the 2006 midterm election. The survey was developed by the authors and administered by Polimetrix using a web-based instrument. The pre-election study of GA 8 was conducted from October 18–31, 2006, with the post-election study running from November 11–December 20, 2006. The GA 12 survey consisted of a post-election survey only and was conducted from November 27–December 20, 2006.

In addition to questions concerning geographic location and demographic and political information, respondents were asked if they had voted in their respective House contest and which candidate they supported. For purposes of this study, we are interested primarily in determining if redistricting affected vote choice and, as an extension, the outcome of the election. As such, the dependent variable for our study is vote choice for U.S. House candidate and is coded 1 if the respondent voted for the Republican candidate in their district (Collins (GA 8) or Burns (GA 12)) and 0 if they voted for the Democratic candidate (Marshall (GA 8) or Barrow (GA 12)). Since the dependent variable is binary, we model vote choice using a probit model.

Our primary variable of interest, REDRAWN DISTRICT RESIDENT, is a dummy variable in which voters who were not part of Marshall’s or Barrow’s districts in the previous election cycle (2004) are coded 1, while voters who

15 Data are from opensecrets.org.
16 Black voters in the South display very little variance with regard to vote choice, routinely voting 90 percent and higher in favor of Democrats in contested U.S. House elections (Black, 1998). Consequently, most of the work analyzing vote choice in the region focuses on examining the behavior of white residents (see, e.g., Valentino and Sears, 2005).
17 The response rates (RR1) for the two surveys were 32.9 percent and 24.6 percent for GA 8 and 12, respectively. Information regarding specific question wording is available in the Appendix.
were constituents of these incumbents prior to the 2006 election are coded 0.\textsuperscript{18} Among those respondents who indicated they had voted in the House race in their district, a sizeable percentage, 41.4 percent, were classified as redrawn district residents. The breakdown by congressional district indicates that 52.7 percent and 23.3 percent of 8th and 12th District respondents, respectively, had not lived in Marshall’s or Barrow’s district during the 2004 election (see Table 1 for a comparison with population figures).

Again, we hypothesize that voters who were not part of Marshall’s or Barrow’s constituency in 2004 would be more likely to vote for the Republican challenger. To ensure our model is not capturing the effects of residents who may have moved into the 8th or 12th Districts between election cycles (2004–2006), we truncated our sample to only include respondents who had lived in their current residence for two or more years.\textsuperscript{19} A dummy variable, DISTRICT 8 RESIDENT, is used to separate respondents in the two congressional districts with residents of District 8 coded 1 and District 12 residents coded 0.

In addition, we also employ a number of standard control variables. Among the demographic controls we utilize are GENDER (1 = male; 2 = female); INCOME (1 ≤ $10,000; 2 = $10,000–14,999; 3 = $15,000–19,999; 4 = $20,000–24,999; 5 = $25,000–29,999; 6 = $30,000–39,999; 7 = $40,000–49,999; 8 = $50,000–59,999; 9 = $60,000–69,999; 10 = $70,000–79,999; 11 = $80,000–99,999; 12 = $100,000–119,000; 13 = $120,000–149,000; 14 = $150,000+); and EDUCATION (1 = no high school; 2 = high school; 3 = some college; 4 = associate’s degree; 5 = BA; 6 = graduate).

We also included a number of political controls in our model. Among these is the standard seven-point scale for PARTY IDENTIFICATION (1 = strong Democrat; 2 = Democrat; 3 = Democratic leaner; 4 = independent; 5 = Republican leaner; 6 = Republican; 7 = strong Republican). A second seven-point scale, IDEOLOGY, is used to denote respondent ideological self-placement and is coded as follows: 1 = very liberal; 2 = liberal; 3 = slightly liberal; 4 = moderate; 5 = slightly conservative; 6 = conservative; 7 = very conservative. In an effort to measure the influence of conservative Christians in these contests, we also include a dummy variable; PROTESTANT FREQUENT CHURCH ATTENDEE, coded 1 for self-identified Protestants who attended church once or more a week and 0 for all others. Finally, we also include a measure of reported gubernatorial vote in order to control for the statewide political environment in Georgia. REPUBLICAN GUBERNATORIAL VOTE is coded 1 for those respondents who cast a ballot for the GOP candidate Sonny Perdue and 0 for those who voted for Democrat Mark Taylor or another third-party candidate.

\textsuperscript{18}Information concerning a respondent’s corresponding congressional district during the 2004 election cycle was provided by Polimetrix.

\textsuperscript{19}One of the survey questions asked respondents the length of time they had lived in their current residence in months and years.
Findings

The results of our survey indicate that among white voters, 70.4 percent of redrawn district residents voted for the GOP House candidate, compared with only 56.5 percent of same-incumbent district residents. The findings of our vote choice model, presented in Table 2, also confirm the hypothesis that voters who were redrawn into the incumbent Democrats’ districts prior to the 2006 election were more likely to vote for the GOP challenger. The redistricting effect continues to be statistically significant even after controlling for other relevant factors like partisanship, ideology, and income. To put the size of this effect in perspective, we used Clarify to produce a set of estimated probabilities for redrawn and same-incumbent district voters (Tomz, Wittenberg, and King, 2003). Holding all other variables at their mean or modal values, the estimated probability of a redrawn district resident voting for the Republican challenger in these contests is 0.83, while the

### TABLE 2

Probit Model Predicting Vote for Republican House Candidates (GA 8 and GA 12)

<table>
<thead>
<tr>
<th>Coefficient</th>
<th>Standard Error</th>
</tr>
</thead>
<tbody>
<tr>
<td>Redrawn district resident</td>
<td>0.7132*</td>
</tr>
<tr>
<td>Republican gubernatorial vote</td>
<td>0.7546</td>
</tr>
<tr>
<td>Gender</td>
<td>-0.6992*</td>
</tr>
<tr>
<td>Education</td>
<td>-0.0494</td>
</tr>
<tr>
<td>Income</td>
<td>0.0202</td>
</tr>
<tr>
<td>Party identification</td>
<td>0.4762**</td>
</tr>
<tr>
<td>Ideology</td>
<td>0.6620**</td>
</tr>
<tr>
<td>Protestant frequent church attendee</td>
<td>-0.0871</td>
</tr>
<tr>
<td>District 8 resident</td>
<td>-1.2442**</td>
</tr>
<tr>
<td>Constant</td>
<td>-4.2831**</td>
</tr>
<tr>
<td>N</td>
<td>222</td>
</tr>
<tr>
<td>Null model</td>
<td>64.4%</td>
</tr>
<tr>
<td>Percent correctly predicted</td>
<td>91.0%</td>
</tr>
<tr>
<td>Proportional reduction in error</td>
<td>74.7%</td>
</tr>
</tbody>
</table>

*p < 0.05; **p < 0.01; two-tailed test.

Note: Entries are probit coefficients with standard errors in parentheses.
probability for an existing district resident is only 0.61. The difference in probabilities between these two groups, at 0.22, is statistically significant at the 0.05 level. These findings, while valid for only two House races in 2006, do seem to lend some evidence to the supposition that redistricting can blunt the effects of the incumbency advantage.

In terms of other substantive findings, self-identified Republicans and conservatives were more likely to vote for the Republican House candidate in their respective districts, as were male voters. In general, voters in the 8th District were also significantly less likely to vote for the Republican challenger compared to 12th District voters.\textsuperscript{20} Finally, it should be noted that the model presented correctly classifies 91 percent of the cases, resulting in a substantial 75 percent reduction in classification errors over the null model.

Figures 2 and 3 further explore the effects of redistricting on vote choice conditioned on party affiliation and ideology, respectively. Again, holding the other variables in the model at their mean or modal values, another set of predicted probabilities was produced to estimate the effects of redistricting.

\textsuperscript{20}To determine whether the effects of our primary variable of interest, REDRAWN DISTRICT RESIDENT, were variable across the 8th and 12th Congressional Districts, we specified a model that included an additional term where district residency was interacted with the 8th District identifier. Using this setup, we can distinguish between the effects of redistricting across the two districts surveyed. The results of this model indicate that there are no significant differences in the probability of voting for the GOP House candidate between same-incumbent residents across the 8th and 12th Districts or, likewise, between redrawn residents in these districts.
across the various categories of the familiar seven-point party identification and ideology scales. In Figure 2, one can note that redrawn district residents are more likely to vote for the Republican House candidate compared with same-incumbent district residents, a consistent effect from strong Democrats through strong Republicans.\(^{21}\) The strongest effects, in terms of altering vote choice, appear to be found among those who identified as Democratic leaners and pure independents. Conditioned on district residency, respondents in these categories actually switch from voting Democratic to voting Republican. For Democratic leaners, the probability of voting for the GOP House candidate increases from 0.27 for same-incumbent district residents to 0.52 for redrawn district residents. The effects for independents, moving from 0.43 to 0.69, are even more pronounced.

As displayed in Figure 3, the effects of redistricting across the ideological spectrum reveal a similar pattern to that of partisanship, with the probability of voting for the GOP House candidate being greater for redrawn district residents across the full ideological spectrum.\(^{22}\) The most pronounced effect is found among moderates, who are predicted to switch from voting Democratic to Republican conditioned on district residency. For those moderates classified as same-incumbent district residents, the probability of voting for

\(^{21}\)Probability differences between same-incumbent and redrawn district residents within each category of partisan affiliation are statistically significant (\(p < 0.05\)).

\(^{22}\)Probability differences between same-incumbent and redrawn district residents within each category of partisan affiliation are statistically significant (\(p < 0.05\)).
the GOP House candidate is 0.33, compared with redrawn district residents at 0.59, a 26-point difference. The results presented in Figures 2 and 3 are exactly what one would posit for groups (moderates and independents) less likely to rely on partisan or ideological heuristics to make voting decisions. Normally, voters in these categories would likely rely on cues related to incumbency, but these cues do not exist for voters newly drawn into a district. Under such circumstances, voters with these characteristics may rely more heavily on other information related to the campaign or the candidates themselves in order to make a decision.

**Conclusion**

It seems likely that the Georgia redistricting would have ousted Democrats Jim Marshall and John Barrow if not for such an unfavorable short-term national political climate. A national Democratic tide, coupled with the high percentage of African-American residents in Georgia Districts 8 and 12, was enough to secure reelection for Jim Marshall and John Barrow. Similar to the Texas Republicans who were successful in using redistricting as a means to unseat several Democratic incumbents in 2004, redrawn white voters in Georgia Districts 8 and 12 proved electorally harmful to these incumbent Democrats. But unlike the Texas Republicans, who orchestrated their new plan during the previous election cycle when the GOP was riding high, Georgia Republicans enacted their map at a time when their party at the national level endured an acute short-term setback, a setback that even in Georgia proved just large enough to deny Republicans their only realistic chances of winning seats represented by Democrats in the 2006 U.S. House elections.

As hypothesized, by drawing white voters into districts with new Democratic incumbents, redistricting removed the incumbency advantage for these representatives. Although Marshall and Barrow managed to hold onto their seats, the results of our analysis of individual-level data do indicate that redistricting produced large electoral effects. Based on the estimates from our model, for those white voters who resided in Georgia Districts 8 and 12 before and after redistricting, the likelihood of voting Democratic was 0.39, whereas among redrawn white constituents, the probability of voting Democratic was less than half as large (0.17). The difference in the vote choice of same-incumbent and redrawn voters is striking—especially since it takes into account a voter’s partisanship and ideology. This research demonstrates convincingly that an act as simple as redrawing political boundaries can have substantial effects on voter preferences.

**REFERENCES**


Appendix: Survey Question Wording

**GUBERNATORIAL VOTE:** In the election for governor who did you vote for:

1.) Democrat Mark Taylor;
2.) Republican Sonny Perdue;
3.) Libertarian Garrett Hayes;
4.) Other Candidate;
5.) Did not vote for governor

**U.S. HOUSE VOTE:** In the election for U.S. House of Representatives who did you vote for:

1.) Democrat (Jim Marshall/John Barrow);
2.) Republican (Mac Collins/Max Burns);
3.) Other;
4.) Did not vote for U.S. House of Representatives

**EDUCATIONAL ATTAINMENT:** What is the highest level of education you have completed?
1.) Did not graduate from high school;
2.) High school graduate;
3.) Some college, but no degree (yet);
4.) 2-year college degree;
5.) 4-year college degree;
6.) Postgraduate degree (MA, MBA, MD, JD, PhD, etc.)

GENDER: Are you male or female?
1.) Male;
2.) Female

INCOME: Thinking back over the last year, what was your family’s annual income?
1.) less than $10,000;
2.) $10,000–$14,999;
3.) $15,000–$19,999;
4.) $20,000–$24,999;
5.) $25,000–$29,999;
6.) $30,000–$39,999;
7.) $40,000–$49,999;
8.) $50,000–$59,999;
9.) $60,000–$69,999;
10.) $70,000–$79,999;
11.) $80,000–$99,999;
12.) $100,000–$119,999;
13.) $120,000–$149,999;
14.) $150,000 or more;
15.) Prefer not to say

PARTY IDENTIFICATION (seven-point scale built from the following three questions):
Generally speaking, do you think of yourself as a . . . ?
1.) Democrat;
2.) Republican;
3.) Independent;
4.) Other (Please Specify)

Partisan Follow Up: Would you call yourself a strong Democrat/Republican or not so strong Democrat/Republican?
1.) Strong Democrat/Republican;
2.) Not so strong Democrat/Republican

Independent Follow Up: Do you think of yourself as closer to the Democratic or the Republican Party?
1.) Democratic Party;
2.) Republican Party;
3.) Neither party

**IDEOLOGY:** Which of the following best describes your political ideology? Please choose only one of the following:

1.) Very Liberal;
2.) Liberal;
3.) Slightly Liberal;
4.) Middle of the Road;
5.) Slightly Conservative;
6.) Conservative;
7.) Very Conservative

**PROTESTANT FREQUENT CHURCH ATTENDEE** (built from the following two questions):

What is your religious preference?

1.) Protestant (denomination optional);
2.) Catholic;
3.) Another type of Christian (denomination optional);
4.) Jewish;
5.) Muslim;
6.) None;
7.) Some other religion (please specify)

How often do you attend religious services?

1.) Once a week or more;
2.) A few times a month;
3.) Less than once a month;
4.) Almost never or never;
5.) Not sure