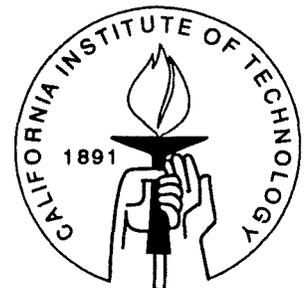


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Policy Moderation or Conflicting Expectations?  
Testing The Intentional Models of Split-Ticket Voting

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# **Policy Moderation or Conflicting Expectations? Testing The Intentional Models of Split-Ticket Voting**

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## **Abstract**

In this paper we examine two models of the electoral origins of divided government. One model is the policy-moderation model, advocated originally by Fiorina (1988, 1992). The other model focuses on the different expectations held by the electorate of the branches of government, as well as the different electoral contexts (congressional and presidential) in which voter decision making occurs (Jacobson 1990A, 1990B). Utilizing individual-level survey data, we test various hypotheses derived from each model. Our empirical results give little support to the policy-moderation model. However, the second model has strong empirical support. We conclude with a discussion of our results for empirical and normative studies of divided control of government.

# Policy Moderation or Conflicting Expectations? Testing The Intentional Models of Split-Ticket Voting

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## 1 Introduction

The recent debate surrounding governance under divided government (Cox and Kernell 1991; McCubbins 1991, Stewart 1991, Mayhew 1991, Sundquist 1988) has led some scholars to focus on the individual-level behavior of split-ticket voters. Morris Fiorina and Gary Jacobson offer the two most prominent, yet competing, models to explain why voters select a presidential candidate from one party and a U.S. House member from the opposing party. Fiorina's (1988, 1992) policy-balancing model hinges on the idea that voters cast split ballots in an effort to moderate national policy, while Jacobson's (1990A, 1990B) model sees ticket splitting as the result of voters with conflicting expectations. But while these may be the two most prominent ticket-splitting models, neither has been rigorously tested.

With rare exceptions (Beck et al. 1992; Campbell and Miller 1957; Devries and Tarrance 1972; Maddox and Nimmo 1981), few scholars have empirically examined individual-level models of split-ticket voting. Given the institutional and normative implications of split-ticket voting, the lack of empirical understanding of this phenomenon is troubling. In this paper we seek to rectify this problem using individual-level survey data to test implications of the two models of intentional ticket splitting. We are the first to test these models directly using multivariate statistical methodologies, and our empirical analysis supports Jacobson's conflicting-expectations model rather than Fiorina's policy-balancing model.<sup>1</sup>

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<sup>1</sup>However we are not offering a critical test of these two models. Rather, we are testing two implications from each model, and based on the outcomes of the four tests, we draw our conclusions about the relative validity of the models. In this manner, we cannot reject conclusively one model in favor of the other; instead we settle for a weaker test, where we base our conclusions on the relative weight of evidence in favor or against each model.

## 2 The Policy-Moderation Model

For Fiorina, voters make a single statement about national policy when voting for House and presidential candidates. Straight-ticket voters express a policy preference that reflects the ideological position of the party they support. Split-ticket voters, on the other hand, express a preference for a moderate national policy by dividing their ticket in an effort to produce a divided federal government.

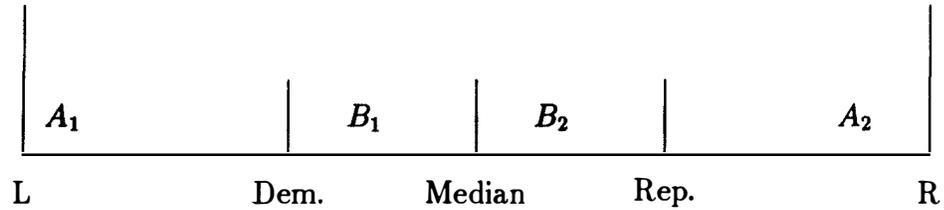
The policy-moderation model begins by arraying the electorate and the competing parties on a one dimensional issue or ideological scale. We give a similar presentation in Figure 1. The scale is anchored on the left by the extreme liberal position and on the right by the extreme conservative position. The positions of the two parties are given by D (Democrats) and R (Republicans). From this, Fiorina asserts that voters whose ideological positions are at or more extreme than the Democratic or Republican parties cast straight ballots in an effort to have their policy preferences implemented. For example, voters to the left of D realize that a Democratic president and a Democratic House would be more likely than any other ballot combination to produce policy outcomes closer to their own ideal point. Thus, voters in area  $A_1$  should cast straight Democratic ballots and voters in area  $A_2$  should cast straight Republican ballots. Voters between the two parties (in areas  $B_1$  and  $B_2$ ), however, should split their ballots.

But in what direction will the voters between the positions of the parties split their tickets? Fiorina asserts that voters believe that the president is more influential than Congress in determining national policy.<sup>2</sup> Based on this assertion, he predicts that voters between the Democratic position and the median position (area  $B_1$ ) should vote for a Democratic president and a Republican House member. Also, voters between the Republican position and the median (area  $B_2$ ) should vote for a Republican president and a Democratic House member. In each case, casting a ballot for divided control should moderate future policy, bringing future policy outcomes closer to the voter's ideal point.

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<sup>2</sup>This is given in Fiorina's model as the "q" term, denoting the relative strengths of the presidency and the legislature in the development of policy. Fiorina argues that in the contemporary period the value of this term is approximately 0.6, translating into a slightly more powerful presidency.

Figure 1: Policy-Moderation Model



Thus, this model generates two implications, which we test empirically using data taken from the National Elections Studies of presidential elections from 1972 to 1988.

Implication 1 Voters who hold issue positions that lie between the positions of the two parties ( $B_1$  and  $B_2$  in Figure 1) are more likely to split their ballots than voters who hold issue positions that lie at or to the extreme of one of the two parties ( $A_1$  and  $A_2$  in Figure 1).

Implication 2 Voters who hold ideologically moderate positions are more likely to vote for a presidential candidate from the party that is ideologically closer to them and a congressional candidate from the party that is further from them. Therefore, voters positioned at  $B_1$  should vote for a Democratic president and a Republican House member, while those at  $B_2$  should vote for a Republican president and a Democratic House member.

We test Implication 1 by examining voters' issue positions and general ideological placement relative to the positions of the two parties. We use both the specific issue scales and the ideological scale to produce the most conservative test of this implication.<sup>3</sup> First, we operationalize the issue and ideological variables by comparing the voters' placement

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<sup>3</sup>It is unclear in Fiorina's work whether a voter's preference for policy moderation exists on specific issues, or on some summary notion of the policy space, such as the liberal-conservative dimension. In his empirical work, Fiorina includes data from both the seven-point policy issue scales and the liberal-conservative scale. We do the same.

on seven-point scales to their personal placements of the two parties on the same scales. Then, to compensate for a potential bias problem resulting from the voters' projections, we include models that examine the voters' issue and ideological placements relative to the mean positions of the two parties.<sup>4</sup> These variables are coded one (1) if the policy-moderation model predicts the respondent should vote a split-ticket, and zero (0) if not.

We estimate probit models for each of these five election years using a dichotomous dependent variable which we code one (1) if the voters split their tickets, and zero (0) if they vote straight ballots. These models include the four issue variables or the single ideological variable, as well as control variables for strength of partisanship, region, incumbency, and political efficacy.<sup>5</sup> We test the first implication in two ways. First, Fiorina's argument implies that the probit coefficients for the relative ideological or issue position variables should be positive and statistically significant, since those who place themselves between the parties should be more likely to split their ballots. Second, we test for the joint effect of the four issues in each probit equation using log-likelihood ratio tests for their joint significance.<sup>6</sup> We present the probit results in Table 1 (Ideology) and Table 2 (Issues), with the log-likelihood ratio results in Table 3.

The probit models for these presidential elections (Table 1 and 2) fail to support Implication 1, and therefore, Fiorina's theory. In each of the five elections, the ideological variable fails to reach statistical significance. Whether we use a voter's personal placement of the two parties or the mean placement of the two parties, knowing a voter's ideological position relative to the two parties does not help us predict whether that voter will cast a split ballot. The models that employ specific issue variables produce similar results. When we use voters' personal positions relative to their placement of the two parties, none of the four issues are statistically significant for any of the five elections. Using the mean party position produces only one statistically significant issue variable in the 1972 election. These results indicate that voters' ideological and specific issue positions do not have a substantial effect on split-ticket voting.

To determine whether the joint effect of the four issue variables improves the ability

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<sup>4</sup>We are unable to use the same four issue variables for each of the five elections in which we test Fiorina's model. The only two consistent issue variables we use between 1972 and 1988 are: 1) the role of the government in creating jobs and a good standard of living, and 2) the role of government in aiding minorities. The other two issue variables vary in each election: for 1972 we use the issue questions on the Vietnam war and taxes, for 1976 busing and government involvement in health insurance, for 1980, 1984, and 1988 defense spending and government spending on domestic services. We use the same ideological variable in each of the five elections under study. See the NES codebook for each respective survey year for the exact wording of each issue question.

<sup>5</sup>We measure strength of party identification using a "folded" party identification indicator. (1 indicates independence, while 4 indicates strong partisanship). The political efficacy variable stems from a question such as the one used in 1988: "People like me don't have any say about what the government does." The stronger the efficacy, the higher they are ranked. The specific variables we use for each year are v269 for 1972, v3163 for 1976, v401 for 1980, v313 for 1984, and v960 for 1988. We employ a dummy variable for the South to control for the effects of region, and we base incumbency dummy variables on whether an incumbent House candidate is standing for reelection, coding 1 if an incumbent is running and 0 otherwise.

<sup>6</sup>See Aldrich and Nelson 1984; Maddala 1983.

of our probit models to account for split tickets, we run log-likelihood tests for the two models that incorporate issues. Table 3 shows that the joint effect of the four issues does not improve our ability to predict split-ticket voting. The model using issue variables, in which the voters personally place the two parties, and the model using mean party positions both fail to demonstrate statistical significance for any of the five elections. Therefore, we conclude that this test does not support the first implication drawn from Fiorina's model — that voters whose policy positions lie between the policy positions of the two parties are more likely to split their tickets.

Even though our results suggest that Fiorina's model cannot help us predict which voters are likely to split their ballots, we test Implication 2 because this model may still allow us to predict the direction of split-ticket voting. Recall that split-ticket voters whose policy positions are closer to those of the Democratic party should split their tickets DR (Democratic president and Republican House member), while voters leaning towards the Republicans should do the opposite (RD). In Tables 4 and 5, we present the ideological placements of the two types of split-ticket voters, relative to their placement of the parties, for each presidential election between 1972 and 1988.

Fiorina's model predicts that split-ticket voters selecting a Democratic president and Republican House member (DR) should place themselves ideologically between the two parties but closer to the Democratic party. In Table 4, therefore, DR voters should place themselves between the parties, but closer to the Democrats (fourth row, entries in bold). The table shows, however, that in all years other than 1984, most DR voters place themselves mid-way between the two parties. In fact, in 1984 only 36% of DR voters placed themselves between the two parties and closer to the Democrats. In the remaining four elections, that percentage drops to 20% or less. Thus, Table 4 shows that most DR voters do not fulfill Fiorina's expectations. As Table 5 shows, the ideological placement of RD voters is similar to that of DR voters. In every election except 1984, more RD voters place themselves at an equal distance from the two parties than at any other place on the scale—not, as Fiorina's model predicts, between the two parties and closer to the Republican party (second row, entries in bold). In all the elections except for 1984, the percentage of RD voters who place themselves between the parties and closer to the Republicans is under 20%, and even in 1984 only 33% of RD voters place themselves in the position anticipated by Fiorina's argument.

Because only a small number of split-ticket voters place themselves between the two parties on an ideological scale, we cannot run probit models for each election. We can, however, run a single probit model by pooling the data for the five elections. The dependent variable is a dichotomous measure for which we code one (1) if the voters split their ticket DR, and zero (0) if they vote RD. We limit the dataset in two different ways. The first model (Model 1) examines the direction of ticket-splitting for all respondents who cast split ballots and who are between the parties. In this model, the critical variable is coded -1 if the split-ticket voter was closer to the Republicans, 0 if equidistant from each party, and 1 if closer to the Democrats (on the ideological scale). The second model (Model 2) looks only at those split-ticket voters who are between the parties but closer

to one party (1 for Democrats and -1 for Republicans, again on the ideology scale).<sup>7</sup> The expectation from the policy-moderation model is that these coefficients should be positive and statistically significant in these two models. In addition, the model controls for party identification, region, and incumbency, and allows these coefficients to vary across election years (with 1988 as the baseline election year).

The data we present to test the two implications fail to support Fiorina's theory. As Table 6 shows, knowing the split-ticket voters' ideological placement relative to their placement of the two parties does not help us predict whether they vote for a Democratic president and a Republican House member or vice-versa. Of the four parameters in each of the two specifications, only those for the split-ticket voter position relative to the parties in 1972 is larger than the accompanying standard error, but even those parameters fail to reach statistical significance. Thus, our analysis indicates that voters whose positions are between the two parties and closer to one party than the other are not more likely to vote for the Presidential candidate from the more proximate party.

While Fiorina acknowledges the existence of voters who may split their ticket for other reasons (incumbency, for example), he argues, nonetheless, that a significant portion of voters who split their tickets do so in an attempt to moderate national policy. Our analyses do not support his claim. The inadequacies of the policy-moderation model might lie in the assumptions it makes about moderate voters. Fiorina's model assumes that voters have clear perceptions of where the parties are located in the issue/ideological space, that they are willing to assume that the candidates in their districts have positions equivalent to the national party positions, that they have a clear notion of which national institution is controlled by which party and which institution has more control over the policy-making process, and that they can estimate with some degree of certainty which parties will control which institutions after the election. Given these assumptions, it is not surprising that we had difficulty finding support for this model.

### 3 Public Goods, Party Images, and Political Institutions

The model proposed by Jacobson posits that voters see the actions of the national government as public goods. On one hand, most voters want the services provided by the national government — for example, national defense, interstate highways, Medicare, Social Security. Thus, they desire to elect representatives who will go to Washington and provide these services. But these national government programs are public goods, and voters as rational individuals have the incentive to free-ride and let others bear the costs of provision (Olson 1965). While voters desire government services, they might

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<sup>7</sup>We could not use the pooled data set to run a probit model for issues because the issue variables were not the same for each election. Also we do not include a model that uses party means for the ideological variable because, in most years, the party means are so close together that split-ticket voters cannot fall between them and still voice a preference for one party or the other.

prefer to pass the costs of providing services to others. Therefore they might prefer to elect representatives who will keep the costs of providing these services low and shift the burden of provision of these public goods onto others.

As Jacobson notes, these conflicting preferences for the provision of public services mesh quite closely with the expectations voters have of presidents and House representatives, *and* with their respective institutional prerogatives. Presidents, because they have a broad national constituency are expected to concern themselves with the national issues of domestic and international policy. House members, on the other hand, are responsive to their congressional district; hence they should be more interested in the concerns of their district and the ways in which particular policies influence their constituents. These institutional differences between the two branches of American government lead voters to employ different criteria when choosing a representative for each office:

Offered two presidential candidates, voters choose the one they think more likely to keep taxes low and defense strong and to govern competently. Offered two House candidates, voters choose the one they think more likely to deliver local benefits and to protect their favorite programs (1990B: 119).

Furthermore the recent images of the two parties are such that the Republicans — the recent party of the presidency — are associated with better management of the national economy, fiscal restraint, and tax reduction (or promises of no new taxes!). The Democrats, though, are associated with the public goods the voters desire from the national government.<sup>8</sup> In Jacobson's words:

this combination of partisan and institutional expectations clearly strengthens Republican presidential candidates, particularly when they are given superior marks for personal competence, which presumably contributes to their ability to deliver desired collective benefits. It also helps Congressional Democrats, because people want representatives who will protect them from damaging policies regardless of the policies' broader benefits.

It is this overlap, then, between institutional powers and partisan images which Jacobson claims is the force behind the particular equilibria of divided control observed during most of the 1970's and 1980's — Democratic control of the House and Republican control of the Presidency.

Jacobson's argument leads to two implications which we test in this section of the paper:

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<sup>8</sup>Petrocik (1991) and Wattenberg (1991) have offered compatible accounts (in Cox and Kernell 1991; also see Brady's review [1993]).

Implication 1 Voting for presidential candidates should be directly related to national issues; similarly, voting for congressional candidates should be unrelated to national issues.

Implication 2 Voting for House candidates, especially Democratic incumbents, should be directly related to their service to the district.

To test these implications, we employ multivariate probit models. First, we test Implication 1 using data from the 1988 NES Senate Study.<sup>9</sup> Here we estimate two models, one with the presidential vote as the dependent variable, and the other with the congressional vote as the dependent variable (both coded so that 1 represents a Democratic vote, and 0 a Republican vote). Three independent variables are on the right-hand side of each equation — an indicator of the respondent’s partisan affiliation, a dummy variable for Democratic incumbents, and six variables for different national issues.<sup>10</sup>

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<sup>9</sup>The Senate Study has extensive data on House candidates and on respondent perceptions of a variety of national issues, making it ideally suited for testing these implications. Unfortunately, the recent NES general election pre-post studies, like those we used in the previous section of the paper, do not contain the questions we will use here to test these implications. The 1988 NES Senate Study, though, employed a state-level sampling frame which was designed to produce small sample of the voters from each state; in other words, the goal was to produce a sample in which the sampling variances were equivalent across states. This results in samples of voters from House districts which differ in size between states. For example, New Hampshire, with two congressional districts has a total of 50 respondents, split into 23 from the first district and 27 from the second. New York, in contrast, had 47 total respondents, with roughly two or three respondents from nineteen of thirty-four districts. Thus the data clearly over-represent districts from small states. The alternative would be use of the 1988 NES general election pre-post survey. But, as we just noted, the national issue data we need to test the first implication is not contained in the recent NES pre-post series. Furthermore, the NES pre-post surveys are also flawed in terms of their representation of *voters from House districts*, since they employ a *national probability sampling frame*. The result is that the NES pre-post surveys do not produce representative samples of House voters either, and there is a great deal of attrition of respondents. In fact, in the 1988 pre-post data, only 59% of the original sample are in districts with a competitive race involving an incumbent, and this is before missing data on the relevant independent and dependent variables is considered. Thus, we do not use the NES pre-post data since it does not include many of the questions important for this analysis, since they do not produce representative samples of House voters, and since they have serious problems of data attrition.

<sup>10</sup>Partisanship was coded to express the long-term component of partisan affiliation: -1 indicates Republican affiliation, 0 represents independence, and 1 indicated Democratic affiliation. The six issue variables were ideally suited for this test. Each asked the respondent to tell which party would better handle a particular national problem (inflation, unemployment, the deficit, war, cutting social security, and raising taxes). Each national issue indicator was coded 1 for a Democratic response, 0 for a neutral response, and -1 for a Republican response. To control for incumbency, a dummy variable was included where 1 indicated a Democratic incumbent running the respondent’s district, 0 otherwise. In the House voting models we include only respondents from races involving both incumbents and challengers. We have estimated models which used candidate thermometer scores as control variables for candidate evaluations, and the results of those models are similar to those reported here. The evaluation variables in those models document strong evaluation effects, and marginally weaker issue effects, than the models we report here. The results we report here, since they do not include controls for candidate evaluations, might overestimate the effects of national issues on both presidential and congressional voting. Even if that were the case, our primary conclusion would still hold, since the effects of issues would equally diminish in both models, which is the case in the models we estimated including the thermometer ratings as proxies for candidate evaluations.

The probit models testing the first implication of Jacobson's model are in Table 7. Here, the independent variables are given in the left column, the congressional voting model in the next column, and the presidential vote model in the right column. It is immediately apparent that national issues did not have much of an impact in House races in 1988. Out of the six national issue indicators, only two — deficit reduction and cutting social security — reach reasonable levels of statistical significance.<sup>11</sup> But the important comparison is to the presidential vote model in the right column. There five of the six national issue variables were strongly related to presidential voting; all of the coefficients but the one on the raising taxes variable reached statistical significance.

But does this hold true for earlier elections, especially those before the sharp increase in split-ticket voting? To test the over-time relationship between national issues and presidential and House voting, we estimated a similar probit model using data taken from the 1960 NES sample. These models are different from the 1988 models only since the issue variables were worded in a different fashion and concerned different issues.<sup>12</sup>

The results are in Tables 8. In the congressional voting model, we see that national issues may have been marginally more important in the 1960 election than in the 1988 election. Here two of the national issue variables are clearly statistically significant — those associated with the guaranteed work and involvement in war variables. But notice that two of the other national issue variables, black equality and military aid, had a smaller, but almost statistically significant impact on congressional voting in 1960 (at the  $p=0.10$  level, one-tailed test). In the right column, we see that national issues had an impact in the 1960 presidential race which rivals that of the 1988 election. Again, five of the six variables in our presidential voting model had a statistically significant impact: all but the coefficient on isolationism were significant.

The results of both the 1960 and 1980 models are quite suggestive. First, they both demonstrate that national issues have a much greater impact in presidential races than in congressional elections. This is confirmation of the first implication of Jacobson's thesis.<sup>13</sup> Secondly, these models suggest that what may have occurred between 1960 and

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<sup>11</sup>The negative coefficient on the social security variable is due to the fact that the survey question was worded "which party do you think would be more likely to cut social security benefits, the Democrats, the Republicans, or wouldn't there be much difference between them?" Thus, respondents who believed the Democrats were more likely to cut social security were coded 1, and they were less likely to support Democratic congressional candidates.

<sup>12</sup>The use of NES studies before 1960 was not possible since they were very sparse on questions of national policy. We have a number of caveats to mention regarding these models. First, since candidate evaluations are not accounted for in the voting models, we run the risk that variance in voting which is actually due to general candidate evaluations might be expressed in the coefficients of the national issue variables. This bias in the national issue coefficients will be greater, the greater the covariation between candidate evaluations and national issue evaluations of the parties. Second, there were ten national issue variables in the 1960 NES study. We included in the voting models only those six which had the greatest covariation with the respondent's voting decisions. The 1960 study did not contain information about congressional incumbency, either. This was coded from the 1960 *Congressional Quarterly Weekly Reports*. And third, the sampling frame of the 1960 study employed the usual NES national probability format; accordingly, it is difficult to make inferences about the population of voters in House districts.

<sup>13</sup>Jacobson (in Cox and Kernell 1991) employed a different model and different data but reached a

1988, and what may lie behind the increase in ticket splitting across this period, is a disassociation of House voting and national issues. This is consistent with the findings of other studies on House elections, which have shown that House elections have become less contingent on partisanship and presidential coattails, but more dependent on local issues and district service (Cain, Ferejohn and Fiorina 1987; Calvert and Ferejohn 1983; Campbell 1986).

To test the second implication, we collected data on 1988 federal government expenditures in districts in the 1988 Senate study.<sup>14</sup> Recall that the second implication states that the level of services provided to the district is related to voting in House elections. We hypothesize that a greater level of federal expenditures, operationalized as federal grants to the district in 1988, should be beneficial for House incumbents, particularly Democratic incumbents.

For this test, we estimate a nine-equation hierarchical probit model of House voting, derived from standard voting models in the Congressional elections literature.<sup>15</sup> We estimated two sets of these voting models, with different specifications of the expenditures variables. The first set of models employed logged federal grants to the district on the left-hand side of each equation in the hierarchical model. In the second set of models, we

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similar conclusion regarding the 1988 election.

<sup>14</sup>This data came from the *Consolidated Federal Funds Report, Volume I: County Areas*, published by the U.S. Department of Commerce, Bureau of the Census. Of all the possible categories of expenditures we had data on, we used grant awards since it was the only type of federal expenditure which an incumbent might have influence over, which was not the case for the other categories of expenditures (like total salaries and wages, for example). The obstacle to using this data was that it is reported on county and municipal levels. While the congressional district and the local governmental units is given, often counties are in multiple congressional districts. To resolve this dilemma, we made two passes through the data. The first pass coded information for all states which did not have counties in multiple districts (most of the smaller states). The second pass coded information for each state in which all of the counties in a district were in only one district, or in which we could make relatively unproblematic assumptions about the proportion of certain counties in different districts. This gave us a large number of districts, from most states, although none of the major metropolitan areas of the United States are represented in the sample. No other apparent biases in the distribution of districts in our sample was apparent. Feldman and Jondrow (1983) employed an almost identical aggregation procedure, as do Mebane (1992A, B) and Bickers and Stein (1991), although the latter two use different data sources than our analysis (Mebane uses the Annual Surveys of Governments data, while Bickers and Stein use the Federal Assistance Awards Data System as their source).

<sup>15</sup>The House voting model is hierarchical, in which four variables — partisanship, candidate expenditures, and grants to the district are predetermined. The first set of equations involved the four different types of contact with the incumbent (personal, mail, media, indirect) and the right-hand side variables were all the predetermined variables. In the second equations, the right-hand variables are the four predetermined variables and the contact indicators. The last equation was the voting equation, and the right-hand side variables are the predetermined variables and the candidate evaluation indicators. The variables were coded as in the previous probit models, with the following expectations: candidate expenditures were the total expenditures for the 1988 election cycle and were in natural logs; grants were taken from the CFR data and were in natural logs; contact variables were binary indicators, where 1 indicated the respondent reported contact, 0 otherwise; recall and recognition were also binary, in that 1 represented recall/recognition, and 0 not; likes and dislikes were also binary, where 1 indicated a respondent giving at least one like/dislike, 0 otherwise. We also used a dummy variable for Democratic incumbency in the models. See Jacobson (1987) for a similar analysis.

used a specification intended to determine whether Democratic incumbents were better able to capitalize on the federal fiscal activity in their districts. Here we interacted the logged grants variable with a dummy variable for Democratic incumbency. All of the right-hand side variables were coded so that if the respondent reported having personal contact with the incumbent (of either party), for example, the variable was scored 1; if no contact was reported, the variable was scored 0.

The estimates of the probit models are reported in Tables 10 and 11. In Table 9 we summarize the results by reporting the estimated impact of federal expenditures on each variable in terms of their “first differences” (King 1989). Using the estimated coefficients from each probit model, we calculated the probabilities that the respondent would report the particular response, first for the lowest value of logged grants, and then for the highest value of logged grants, as seen in our data. The difference between these two individual-level probability estimates is reported in Table 9, with the probability estimates for all incumbents in the middle column, and for only Democratic incumbents in the right column (the left column gives the particular right-hand side variable).

In the middle column of Table 9 it is apparent that incumbents do gain electoral support through the pork barrel. In particular, the greater the amount of federal money flowing to the district, the greater the probability that a respondent would recognize the incumbent’s name and report at least one thing they liked about the incumbent. And these two coefficients, as well as that of the grants variable in the media contact equation, were statistically significant ( $p=0.05$ , one-tailed test) in the probit models reported in Tables 10 and 11.

But consider the probability estimates in the right column of Table 9 from the interactive specification. Each of them is greater than the same probability difference in the middle column. Additionally, six of the nine coefficients (in the personal contact, mail contact, media contact, name recall, name recognition, and likes equations) are statistically significant ( $p=0.05$ ), and two of the remaining three are statistically significant at the  $p=0.10$  level (in the dislikes and voting equations). Note that some of these estimated changes in probability are relatively large. The likes and voting differences are 0.22 and 0.21, respectively; these imply that a voter would be 0.22 more likely to say they liked something about the incumbent, or 0.21 more likely to vote for the incumbent, if they were in a district with the maximal possible level of federal grants expenditures relative to a district with the minimal amount of expenditures. Only in the dislikes equation is there a difference in probability which is relatively small.

From these results we make three inferences. First, incumbents do receive electoral gains from the pork barrel. Second, however, this effect is stronger for Democratic incumbents than for all incumbents. Thus, Democratic incumbents benefit positively and substantially from greater federal grants going to their districts. We do not find this surprising, in light of the different party reputations which appear to constrict the actions of incumbents in their campaigns. Republicans, with a party reputation of tax-cutting and limited government, find it difficult to reap the electoral gains from federal expenditures in their district. Democrats, with a reputation for protecting the interests

of their constituencies from averse policies, are better able to take advantage of federal government spending in their districts. Third, these results provide support for the second implication of Jacobson's model, in that it shows the effects which local issues and district service have on House elections. These results, combined with those concerning the differential effects of national issues in presidential and House races, provide compelling support for Jacobson's model.

## 4 Conclusions

By presenting empirical tests of the implications of the Fiorina and Jacobson models, our work sheds considerable light on the perplexing problem of split-ticket voting. Fiorina and Jacobson both agree that split-ticket voting is the result of intentional individual-level behavior. Their models differ, however, on the criteria voters use as a basis for their decision and what preferences voters express when they cast their ballots for presidential and House candidates.

In examining the implications of Fiorina's model, we find no support for his hypothesis that voters between the parties on policy positions are more likely to split their tickets. In addition, we find no support for the notion that split-ticket voters who are between the parties are likely to support the presidential candidate of the party they are closer to in the policy space. We do, however, find support for Jacobson's conflicting-expectations model. Using probit models to determine the relative importance of national issues for presidential and House elections, we find that national issues are statistically important in presidential elections but not influential in House elections. When we examine the levels of federal spending in congressional districts to see whether benefits received by districts have an effect on elections, we find that the amount of federal spending in congressional districts is statistically associated with many aspects of candidate evaluation, especially the vote. Furthermore, these relationships are especially strong for Democratic incumbents, indicating that they are the beneficiaries of federal money spent in their districts. Republican incumbents, on the other hand, seem unable to reap the rewards of such spending.

But while our results support Jacobson's model and not Fiorina's, we hesitate to embrace the first model completely while dismissing the second. This paper is only the beginning of what needs to be a much larger systematic examination of split-ticket voting models. Several important issues, too large to be addressed in this paper, warrant further study. For example, from 1952 to 1968, split-ticket voting remained relatively stable at about 15% of the voting population. Then, between 1968 and 1972, the percentage of split-ticket voting increases 10% and remains relatively constant around 25%. Current split-ticket models are unable to account for this jump in split-ticket voting. This increase in split-ticket voting might be accounted for by institutional changes, like redistricting or campaign finance, by changes in party strategies or positions, or by changes at the individual-level in party identification and independence or voter perceptions of the parties and candidates. At this point, we simply do not have an adequate explanation.

Another reason that we are hesitant to endorse the Jacobson model without reservation is that our data focuses on a contemporary period during which most split-ticket voters vote for a Republican president and a Democratic House member. Jacobson's model does not account for split-ticket voters who select Democratic presidents and Republican House members. A complete model of split-ticket voting must account for DR ballots as well as RD ballots.

Political scientists need to research further these particular models of split-ticket voting, as well as split-ticket voting in general. The two models of split-ticket voting we explore in this paper suggest that voters are purposely dividing their ballots between the parties. Whether voters are attempting to moderate national policy or have different expectations of our national institutions is of critical importance in the current reform-minded environment on Capital Hill. As academics and lawmakers seek to reform national institutions we must be mindful of the preferences voters are expressing when they cast their ballots for presidential and House candidates.

Table 1: Models of Split-Ticket Voting  
Models for Election

Ind. Var.	1972	1976	1980	1984	1988
<b>Model 1</b>					
Constant	-1.3* (-5.1)	-1.0* (-3.3)	-.67* (-2.1)	-1.1* (-4.3)	-1.6* (-3.4)
Region	.59* (4.9)	.18 (1.2)	.27* (2.0)	.29* (2.7)	.15 (.83)
Str. PID	.19* (3.6)	.25* (3.7)	.16* (2.3)	.28* (3.7)	.50* (3.7)
Dem. Inc	.45* (3.8)	.43* (2.2)	-.07 (-.79)	-.06 (-1.5)	-.15 (-1.5)
Rep. Inc	-.19 (-1.3)	.37* (1.8)	-.11 (-1.4)	-.10* (-2.3)	-.17 (-1.6)
Efficacy	.03 (.26)	-.14* (-2.5)	-.39 (-2.4)	.08 (.75)	-.99 (-.77)
Ideology1	-.28 (-.91)	.24 (.61)	-.00 (-.03)	-.15 (-.66)	..17 (.98)
n	769	497	392	776	329
$\chi^2$	75.86†	23.82†	12.38†	27.90†	23.03†
<b>Model 2</b>					
Constant	-1.3* (-5.1)	-1.0* (-3.3)	-.87* (-2.0)	-.55 (-1.5)	-1.2* (-2.0)
Region	.57* (4.8)	.19 (1.3)	.26* (1.8)	.30* (2.8)	.15 (.85)
Str. PID	.20* (3.7)	.24* (3.5)	.16* (2.3)	.29* (3.7)	.50* (3.7)
Dem. Inc.	.46* (3.9)	.43* (2.2)	-.02 (-.23)	-.17* (-2.5)	-.24* (-1.8)
Rep. Inc.	-.18 (-1.2)	.36* (1.8)	-.06 (-.50)	-.20* (-3.0)	-.26* (-1.8)
Efficacy	.03 (.24)	-.14* (-2.6)	-.04 (-.24)	.09 (.83)	-.11 (-.83)
Ideology2	.00 (.01)	.10 (.83)	.13 (.63)	-.35* (-2.0)	-.14 (-.60)
n	769	497	392	776	329
$\chi^2$	75.00†	24.14†	12.77†	31.55†	22.44†

Note: The dependent variable in each model is a dichotomous indicator of whether the respondent split their ballot (1) or voted a straight-ticket (0). Ideology and issue variables followed by a "1" indicates the voters' placement relative to their personal placement of the parties; those with a "2" after them indicate the voters' placement relative to the mean party positions. Entries are maximum-likelihood estimates, with t-scores in parentheses. An \* denotes an estimate which is statistically significant at  $p=.05$ , with a one-tailed test. An † indicates a  $\chi^2$  significant at  $p=.05$ .

Table 2: Models of Split-Ticket Voting  
Models for Election

Ind. Var.	1972	1976	1980	1984	1988
<b>Model 3</b>					
Constant	-1.3* (-5.3)	-.99* (-3.3)	-.67* (-2.2)	-1.2* (-4.5)	-1.4* (-3.1)
Region	.57* (4.8)	.18 (1.2)	.28* (2.0)	.30* (2.7)	.15 (.85)
Str. PID	.20* (3.7)	.25* (3.6)	.17* (2.3)	.29* (3.8)	.50* (3.7)
Dem. Inc	.46* (3.9)	.44* (2.2)	-.08 (-.98)	-.06 (-1.3)	-.20* (-2.0)
Rep. Inc	-.18 (-1.3)	.35* (1.7)	-.11 (-1.4)	-.09* (-2.2)	-.21* (-2.0)
Efficacy	.03 (.29)	-.14* (-2.6)	-.02 (-.15)	.07 (.67)	-.14 (-1.1)
Vietnam1	-.33 (-.44)				
Jobs1	.31 (.82)	-.07 (-.13)	-.26 (-1.3)	.13 (.98)	.04 (.16)
Taxes1	.13 (.29)				
Minorities1	.12 (.20)	.37 (.72)	-.01 (-.05)	.96 (.39)	-.36 (-1.4)
Busing1		.46 (.74)			
Gov't Ins1		3.4 (.82)			
Defense1			.22 (1.1)	.13 (.26)	.13 (.62)
Gov't Sp1			-.49 (-.76)	-.15 (-.13)	.34 (.85)
n	769	497	392	776	392
$\chi^2$	76.00†	27.07†	15.72	28.72†	25.04†
<b>Model 4</b>					
Constant	-1.3* (-5.2)	-1.1* (-3.5)	-.54 (-1.6)	-1.5* (-4.2)	-1.6* (-3.5)
Region	.58* (4.8)	.21 (1.4)	.27* (1.9)	.29* (2.6)	.17 (.92)
Str. PID	.20* (3.7)	.24* (3.6)	.17* (2.4)	.29* (3.7)	.51* (3.8)
Dem. Inc.	.46* (3.9)	.44* (2.2)	-.09 (-1.1)	-.07 (-1.6)	-.19* (-1.9)
Rep. Inc.	-.18 (-1.3)	.39* (1.9)	-.13 (-1.6)	-.09* (-2.1)	-.19* (-1.8)
Efficacy	.01 (.10)	-.15* (-2.7)	-.06 (-.37)	.09 (.80)	-.09 (-.73)
Vietnam2	-.13 (-1.2)				
Jobs2	.24* (2.2)	.17 (1.2)	.46 (.26)	.02 (.21)	.09 (.51)
Taxes2	.04 (.34)				
Minorities2	-.03 (-.23)	.17 (1.3)	-.12 (-.75)	.06 (.70)	-.09 (-.46)
Busing2		-.40 (-1.6)			
Gov't Ins2		.28 (1.3)			
Defense2			.02 (.14)	.07 (.72)	.30* (1.8)
Gov't Sp2			-.25 (-1.6)	-.07 (-.70)	.00 (.02)
n	769	497	392	776	392
$\chi^2$	81.50†	30.97†	15.96	28.71†	25.72†

Note: The dependent variable in each model is a dichotomous indicator of whether the respondent split their ballot (1) or voted a straight-ticket (0). Ideology and issue variables followed by a "1" indicates the voters' placement relative to their personal placement of the parties. Those with a "2" after them indicate the voters' placement relative to the mean party positions. Entries are maximum-likelihood estimates, with t-scores in parentheses. An \* denotes an estimate which is statistically significant at  $p=.05$ , with a one-tailed test. An † indicates a  $\chi^2$  significant at  $p=.05$ .

Table 3: Log-Likelihood Tests for Issue Importance

Models and Ratios	1972	1976	1980	1984	1988
Unconstrained LL (Model 1)	-438.27	-271.80	-236.08	-435.34	-170.31
Issues1 Constrained LL (Model 4)	-437.78	-269.99	-234.41	-434.71	-168.83
$\chi^2$ (Models 1 and 4)	.84 (4)	3.62 (4)	3.34 (4)	1.26 (4)	2.96 (4)
Issues2 Constrained LL (Model 5)	-435.03	-268.04	-234.29	-434.71	-168.49
$\chi^2$ (Models 1 and 5)	6.48 (4)	7.52 (4)	3.58 (4)	1.26 (4)	3.64 (4)

Note: Entries in row one are the log-likelihoods from the maximum-likelihood models in Table 1, those in rows two and four are log-likelihoods from identical models where the issue coefficients have been constrained to be zero, and the third and fifth rows are twice the difference between the constrained and unconstrained log-likelihoods. None of the log-likelihoods reported in this table are statistically significant.

Table 4: Split-ticket voters and party positions  
DR Voters (in percents)

Position	1972	1976	1980	1984	1988
Outside R	10	11	2	5	11
Closer R	2	9	2	15	7
Equal	48	32	58	26	43
<b>Closer D</b>	<b>8</b>	<b>19</b>	<b>20</b>	<b>36</b>	<b>12</b>
Outside D	33	30	18	18	27

Note: The entries are percentages of voters casting a ballot for a Democratic president and Republican House member in the particular election year. Outside R (D) refers to a voter who is outside the Republican (Democratic) party; Closer R (D) a voter who is between the parties, but closer to the Republicans (Democrats); Equal a voter who is equidistant between the parties.

Table 5: Split-ticket voters and party positions  
RD Voters (in percents)

Position	1972	1976	1980	1984	1988
Outside R	29	53	17	20	30
<b>Closer R</b>	<b>7</b>	<b>14</b>	<b>11</b>	<b>33</b>	<b>14</b>
Equal	47	23	58	20	43
Closer D	5	5	9	17	5
Outside D	11	5	5	8	7

Note: The entries are percentages of voters casting a ballot for a Republican president and Democratic House member in the particular election year. Outside R (D) refers to a voter who is outside the Republican (Democratic) party; Closer R (D) a voter who is between the parties, but closer to the Republicans (Democrats); Equal a voter who is equidistant between the parties.

Table 6: Pooled Model of Direction of Ticket-Splitting, 1972-1988  
 Prob. of DR Split:

Ind. Var.	Model 1	Model 2
Constant	-.64* (-4.6)	-.69* (-3.9)
Region (1972)	-1.1* (-1.9)	-.88 (-1.3)
Region (1976)	-.11 (-.19)	-.02 (-.03)
Region (1980)	.14 (.21)	.92 (.95)
Region (1984)	-.39 (-.65)	-.71 (-.93)
Dem. Id. (1972)	.05 (.25)	-.11 (-.42)
Dem. Id. (1976)	.41* (1.7)	.73 (1.6)
Dem. Id. (1980)	-.17 (-.48)	.17 (.32)
Dem. Id. (1984)	.75* (2.9)	.79* (3.0)
Dem. Inc. (1972)	-1.0* (-2.5)	-1.1 (-1.6)
Dem. Inc. (1976)	-.65 (-1.5)	-1.5* (-1.7)
Dem. Inc. (1980)	-3.9 (-.32)	-4.5 (-.29)
Dem. Inc. (1984)	-.97* (-2.6)	-.78* (-1.9)
Rep. Inc. (1972)	.13 (.32)	.19 (.31)
Rep. Inc. (1976)	1.6* (4.3)	2.0* (3.0)
Rep. Inc. (1980)	.99 (1.4)	1.6* (1.9)
Rep. Inc. (1984)	1.5* (3.1)	1.4* (2.7)
Ideology (1972)	.59 (1.6)	.60 (1.3)
Ideology (1976)	.09 (.25)	-.09 (-.18)
Ideology (1980)	.49 (.87)	-.32 (-.37)
Ideology (1984)	.10 (.35)	.08 (.26)
$\chi^2$	1150.9†	1239.0†

Note: Entries are maximum-likelihood probit estimates, accompanied with t-statistics. \* indicates statistical significance at the  $p=0.05$  level, one-tailed test. An † indicates a  $\chi^2$  significant at the  $p=.05$  level. The two models differ in their specification of the ideological positioning variables: in the Model 1 specification, the coding of the variable is -1 for those closer to the Republicans, 0 for those equidistant from both parties, and 1 for those closer to the Democrats; the Model 2 specification drops those equidistant from both parties. The sample contains only split-ticket voters between the parties.

Table 7: Congressional and Presidential Voting Models, 1988

Independent Variables	Congressional Vote	Presidential Vote
Constant	-.74* (-8.5)	-.44* (-5.9)
Partisanship	.54* (6.9)	.88* (10.5)
Dem. Inc.	1.5* (15.4)	
Inflation	.05 (.61)	.48* (4.9)
Unemployment	.04 (.50)	.57* (6.5)
Deficit	.19* (2.4)	.37* (4.2)
War	.04 (.56)	.20* (2.5)
Social Sec.	-.17* (-2.1)	-.42* (-4.6)
Taxes	.06 (.89)	.06 (.75)
$\chi^2$	426.62†	860.16†

Note: Entries in the table are maximum-likelihood estimates, with t-scores in parentheses. An \* denotes an estimate which is statistically significant at  $p=0.05$ , one-tailed test. An † indicates a  $\chi^2$  significant at  $p=0.05$ . In both models the dependent variable is Democratic vote (1), Republican vote (0).

Table 8: Congressional and Presidential Voting Models, 1960

Independent Variables	Congressional Vote	Presidential Vote
Constant	-.48* (-2.5)	.04 (.26)
Partisanship	.89* (7.0)	.72* (5.6)
Dem. inc.	.75* (3.7)	
Housing	.08 (.55)	.48* (3.2)
Jobs	.29* (1.9)	.42* (2.5)
Isolationism	-0.65 (-.35)	-.08 (-.37)
Black Equality	.19 (1.2)	.52* (3.0)
Military Aid	.26 (1.2)	.46* (1.9)
War	.55* (3.4)	1.1* (6.3)
$\chi^2$	216.07†	276.64†

Note: Entries in the table are maximum-likelihood estimates, with t-scores in parentheses. An \* denotes an estimate which is statistically significant at  $p=0.05$ , one-tailed test. An † indicates a  $\chi^2$  significant at  $p=0.05$ . In both models the dependent variable is Democratic vote (1), Republican vote (0).

Table 9: Effects of Federal District Expenditures, 1988  
Maximum Difference in Probability:

Endogenous Variable	All Incumbents	Democratic Incumbents
Personal Contact†	0.06	0.14
Mail Contact†	0.02	0.13
Media Contact†	0.07	0.12
Indirect Contact†	0.08	0.10
Name Recall‡	0.06	0.16
Name Recognize‡	0.14	0.13
Likes‡	0.14	0.22
Dislikes‡	-0.05	-0.06
Vote§	0.11	0.21

Note: The entries are the maximum estimated differences in the probability that the respondent would report the phenomenon listed in the left column, calculated across the possible range of Federal grants to the particular district. † indicates probabilities estimated under the assumptions that the respondent was an independent in a district with a Democratic incumbent, where both candidates had average logged campaign expenditures; ‡ are probabilities estimated assuming an independent respondent with a Democratic incumbent, average campaign expenditures, and with only personal and mail contact; § are probabilities estimated assuming an independent respondent with a Democratic incumbent and average campaign expenditures.

Table 10: House Incumbents and Local Federal Expenditures, 1988

Ind. Variables	Probability of Incumbent:								
	Personal Contact	Mail Contact	Media Contact	Indirect Contact	Name Recall	Name Recognize	Likes	Dislikes	Vote
Intercept	-1.6*	.127	-.714	-1.98**	-3.18**	-4.81**	-3.84**	-.191	-2.28*
	(-1.61)	(.125)	(-.58)	(-1.98)	(-3.0)	(-2.84)	(-3.69)	(-.154)	(-1.37)
Partisan Agreement	.17**	.002	.139*	.093	-.021	-.085	.253**	-.365**	1.24
	(2.27)	(.031)	(1.44)	(.24)	(-.26)	(-.708)	(3.22)	(-3.66)	(.08)
Inc. Expend. Chal.	.013	.001	-.013	.019	.006	-.094*	-.004	-.056*	.133**
	(.458)	(.036)	(-.346)	(.69)	(.162)	(-1.29)	(-.132)	(-1.65)	(2.74)
Expend. Federal Grants	-.017*	.001	-.004	-.01	.062**	.0366**	-.012	.062**	-.075**
	(-1.45)	(.086)	(-.255)	(-.86)	(4.18)	(2.17)	(-.932)	(3.24)	(-2.87)
Personal Contact	.087	.033	.164**	.108*	.083	.461**	.193**	-.13*	.131
	(1.09)	(.416)	(1.68)	(1.35)	(1.0)	(3.74)	(2.33)	(-1.3)	(.968)
Mail Contact					.545**	.531**	.703**	.268**	
					(6.14)	(2.67)	(8.0)	(2.61)	
Media Contact					.519**	.645**	.581**	.286**	
					(4.68)	(4.66)	(5.6)	(2.12)	
Indirect Contact					.364**	.974**	.743**	.468**	
					(2.17)	(6.74)	(4.3)	(2.08)	
Name Recall					.143*	.041	.166**	.299**	
					(1.61)	(.237)	(1.89)	(2.92)	
Name Recognize									-.279**
									(-2.14)
Likes									.102
									(.352)
Dislikes									1.28**
									(9.47)
Dem. Inc.	.04	.063	.05	-.037	-.127*	.154*	-.097	-.002	-.177*
	(.539)	(.827)	(.537)	(-.49)	(-1.6)	(1.29)	(-1.25)	(.02)	(-1.4)
$\chi^2$	152.4†	128.6†	90.76†	150.8†	340.28†	308.14 = dag	450.48†	207.6†	340.28†

Note: Entries are maximum-likelihood estimates, with t-scores in parentheses. An \*\* denotes an estimate statistically significant at  $p=0.05$ , while \* denotes a  $p=0.10$  level, both one-tailed tests. An † indicates a  $\chi^2$  significant at  $p=.05$ .

Table 11: Democratic House Incumbents and Local Federal Expenditures, 1988

Probability of Incumbent:

Ind. Variables	Personal Contact	Mail Contact	Media Contact	Indirect Contact	Name Recall	Name Recognize	Likes	Dislikes	Vote
Intercept	-.447* (-1.4)	.644** (1.91)	1.4** (3.04)	-.615** (-1.91)	-2.03** (-4.8)	.947 (1.04)	-1.37** (-3.78)	-1.84** (-4.31)	-.592 (-1.01)
Partisan Agreement	.171** (2.28)	.004 (.05)	.14* (1.44)	.094 (1.24)	-.019 (-.239)	-.096 (-.802)	.257** (3.27)	-.366** (-3.67)	1.25** (8.09)
Inc. Expend. Chal.	.007 (.24)	-.006 (-.192)	-.022 (-.548)	.016 (.567)	-.003 (-.10)	-.11* (-1.42)	-.012 (-.432)	-.052* (-1.49)	.124** (2.54)
Expend. Grants *	-.018* (-1.48)	-.0005 (-.041)	-.003 (-.184)	-.009 (-.76)	.062** (4.21)	.046** (2.69)	-.01 (-.803)	.06** (3.18)	-.074** (-2.86)
Dem. Inc. Personal Contact	.197** (1.76)	.19** (1.7)	.286** (2.15)	.138 (1.22)	.221** (1.81)	.43** (2.58)	.308** (2.61)	-.18* (-1.29)	.261* (1.44)
Mail Contact					.543** (6.11)	.541** (2.73)	.701** (8.0)	.269** (2.62)	
Media Contact					.516** (4.64)	.614** (4.5)	.572** (5.52)	.291** (2.15)	
Indirect Contact					.36** (2.14)	.975** (6.79)	.748** (4.32)	.47** (2.09)	
Name Recall					.144* (1.62)	.064** (.372)	.17** (1.94)	.298** (2.92)	
Name Recognize									-.286** (-2.19)
Likes									.122 (.421)
Dislikes									1.27** (9.39)
Dem. Inc.	-2.41** (-1.71)	-2.31* (-1.65)	-3.5** (-2.1)	-1.74 (-1.23)	-2.88* (-1.88)	-5.1** (-2.46)	-3.92** (-2.64)	2.22 (1.27)	-1.05** (-7.1)
$\chi^2$	154.4†	131.32†	92.5†	150.5†	342.62†	300.44†	451.98†	207.5†	341.1†

Note: Entries are maximum-likelihood estimates, with t-scores in parentheses. An \*\* denotes an estimate statistically significant at p=0.05, while \* denotes a p=0.10 level, both one-tailed tests. An † indicates a  $\chi^2$  significant at the p=.05 level.

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