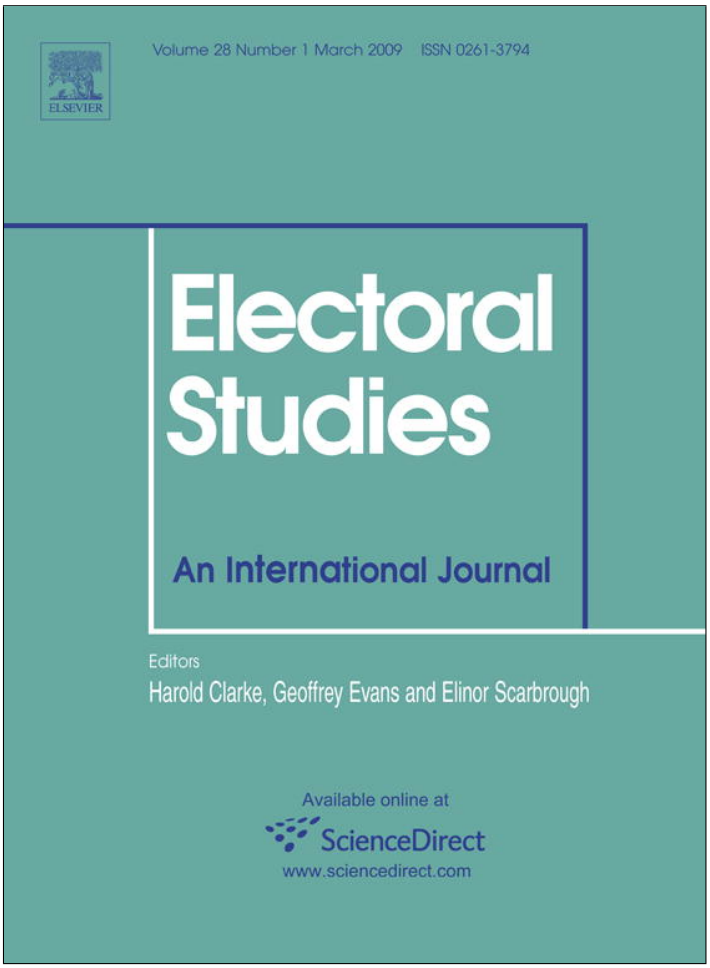

Electoral Studies 28 (2009) 62–69

Contents lists available at ScienceDirect

Electoral Studies

journal homepage: www.elsevier.com/locate/electstud

Testing sincere versus strategic split-ticket voting at the aggregate level: Evidence from split house–president outcomes, 1900–2004

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Keywords:
Split districts
Ticket splitting
Balancing
U.S. congressional elections

A B S T R A C T

We compare aggregate level predictions of sincere and strategic (balancing) models of voting behavior using data on the number of districts exhibiting split outcomes of elections for President and for representatives in U.S. House over the period 1900–2004. Our prime focus is on the mean ideological differences between Republican and Democratic House members (DW-NOMINATE scores). If voting is sincere then we argue that this variable will be negatively linked to the proportion of split outcomes. In contrast, balancing models of ticket splitting [Fiorina, M.P., 1996. Divided Government. second ed. Allyn and Bacon, New York] suggest that the further apart are the parties, the greater will be the degree of ticket splitting among individual voters, since, *ceteris paribus*, there will be more voters close to neither party who need to balance off House and Presidential candidates to come closer to their own more centrist position. In testing these differing predictions we control for other factors that affect the proportion of split outcomes for these two offices at the congressional district level: (1) margin of presidential victory; (2) magnitude of incumbency advantage; (3) magnitudes (standard deviations) of ideological differences among House members of the same party; and (4) mean ideological differences between Republican and Democratic presidential candidates. In our multivariate analyses, we find more support for sincere than for strategic voting as a determinant of aggregate levels of split-ticket outcomes.

1. Introduction

Various authors have looked at the empirical evidence on factors affecting split-ticket voting: in the United States (see e.g. Alvarez and Schousen, 1993; Born, 1994; Alesina and Rosenthal, 1995; Fiorina, 1996; Sigelman et al., 1997; Lacy and Paolino, 1998; Smith et al., 1999). Most of these studies examine incentives for ticket splitting at the individual level, and most use survey data. Here we look at split-ticket voting at the aggregate level, taking as our dependent variable the number of congressional districts that are split between the House and the President in the U.S. over the period 1900–2004. As we see from Fig. 1, there has been considerable variation over time in the proportion of districts with split outcomes, and the pattern is not monotonic.

While we seek to identify a set of factors that, *in toto*, can account for changes in the proportion of House districts that register a majority of votes for one party's presidential candidate but simultaneously give their support to another party's candidate for House, our primary concern in this essay is with testing competing implications of sincere and strategic (balancing) models of split-ticket voting at the aggregate level.[2]

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[2] Since we are using aggregate data, this necessarily restricts the kinds of variables we can use on the right hand side of the equation. There are many individual level variables that affect the likelihood that a voter will cast a split ticket—education, partisanship, etc. These are all important factors at the individual lelve, but it is not what we are interested in for this particular paper.

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doi:10.1016/j.electstud.2008.06.008

The balancing approach (Alesina and Rosenthal, 1995; Fiorina, 1996) argues that voters ticket split in order to elect a 'set' of elected officials that is more likely to achieve policies preferred by the voter. For example, if slightly left of center voters who generally support Democrat candidates see (or expect to see) a Democrat in the White House, they may now wish to vote for a conservative Republican for the House of Representatives in order to (try to) move overall policies (slightly) to the right and thus closer to their ideal point then would be obtained were the federal government unified under either a Democratic (leftist) or a Republican (rightist) regime. With supplementary assumptions about shifts in either voter preferences or party/candidate locations, or about differences in voter certainty about probable election outcomes, the policy-balancing model can also be used to explain variations in the amount of ticket splitting across elections.

In particular we expect that, if voters are policy balancing, then, *ceteris paribus*, the mean ideological differences between Republican and Democratic House members should be positively linked to the proportion of split outcomes. Balancing models of ticket splitting (Fiorina, 1996), suggests that the further apart are the parties, the greater will be the degree of ticket splitting among individual voters, since, *ceteris paribus*, there will be more voters close to neither party who need to balance off House and Presidential candidates to come closer to their own more centrist position relative to the two parties.[3] In contrast, as we demonstrate below, sincere models of ticket splitting (of the sort proposed by Frymer, 1994; Frymer et al., 1997; Burden and Kimball, 1998, 2002; Grofman et al., 2000; Kimball, 2004), predict that, *ceteris paribus*, the mean ideological differences between Republican and Democratic House members should be negatively linked to the proportion of split outcomes. In these models the reason that voters split tickets is that the pairwise choices they confront for House and President may be quite different; e.g., a choice between a relatively conservative Democrat and an even more conservative Republican in some southern House district, versus a rather liberal Democrat competing for President against a rather conservative Republican at the national level. Confronted with different kinds of choices for different offices voters may be quite consistent with their own ideological stance in deciding *separately* about each office, and picking a Republican for one and a Democrat for the other.

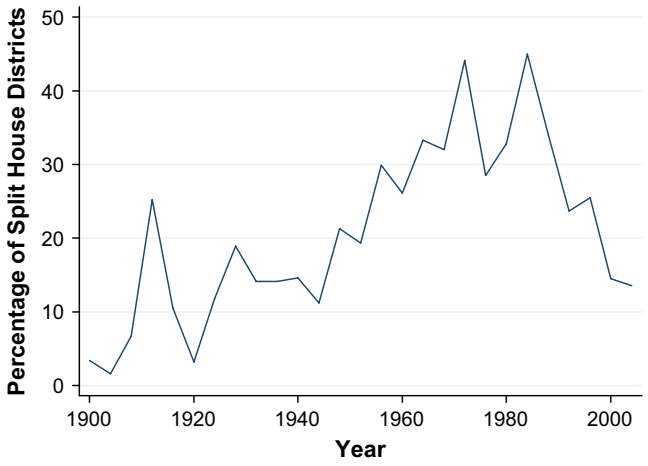

Fig. 1. Percentage of split districts, 1900–2004. The graph depicts the percentage of House districts that voted for the President from one party and a member of the House of another party.

To support our claim that sincere models of ticket splitting predict the mean ideological differences between Republican and Democratic House members should, *ceteris paribus*, be negatively linked to the proportion of split outcomes, we begin with three simple (stylized) empirical facts.

One fact is that constituencies differ in their distribution of voter ideological preferences. In particular, districts may be expected to differ in the ideological location of their median voter (Erikson et al., 1989); i.e., in some districts the median voter is right of center, in some districts the median voter is left of center.[4]

A second fact, à la Downs (1957), is that candidates in any given constituency will be pulled toward the median voter in that constituency if they wish to have any real chance of winning election.

A third fact (here, contra Downs), is that convergence is never complete, and candidates of opposite parties within any given constituency tend to be on opposite sides of the median voter in that constituency. In particular, over the 1900–2004 time period, in general, we expect the Republican candidate in any constituency to be to the right of the position of the overall median voter in that constituency and the Democrat to be to the left. Indeed, in general, we expect candidates of a given party to be located somewhere intermediate between their party's median voter in the constituency and the overall median voter in that constituency (Aranson and Ordeshook, 1972; Coleman, 1971, 1972; Fenno, 1978; Shapiro et al., 1990; Owen and Grofman, 2006).

Putting these facts together, we expect that, in most congressional districts, there will exist a set of voters who are to the Democratic side of the midpoint between, say, the Democratic and Republican candidates for House, but who also are to the Republican side of the midpoint

[3] Fiorina (1996: 81) asserts: "When the parties are relatively close, near the center of the gravity of the electorate, ticket splitting declines. When the parties move away from each other, they open up a large range in which ticket splitting is the voter response." We propose what is near to the exact opposite implication. However, our hypothesis and that of Fiorina are not fully contradictory because he is talking about incentives for ticket splitting at the individual level while we are talking about split outcomes at the aggregate level of whole congressional districts. At the individual level we would want to know both the (perceived) positions of the various candidates and the voter's ideal point in order to predict voting choices. However, it is important to note that Burden and Kimball (2002) demonstrate that "ticket splitting [at the individual level] increases as the parties/candidates move closer together".

[4] Also, the median Democrat or Republican voter in the district may be either to the left or the right of the national median voter of her party.

between the Democratic and Republican candidates for president, or conversely.[5] In our model, it is these voters who will (sincerely) split their tickets.[6] But, if such voters are the principal ticket splitters, then the proportion of House districts that exhibit split representative-President outcomes should decrease as the mean difference between the two party's ideological distributions in the House increases, and it should also increase with greater ideological diversity within each party's set of representatives since ideological diversity among legislators makes it more likely that the position of the House and presidential candidates of the same party will be different.

To put it perhaps even more intuitively, when split-ticket voting is sincere in nature, the more the two distributions (ideology of Democrat candidates and ideology of Republican candidates) overlap, the more split-ticket voting we ought to see. Under sincere voting in the Grofman et al. (2000) comparative midpoints and related approaches, for there to be any substantial number of split outcomes it is necessary that there be conservative House districts won by Democrats and liberal House districts won by Republicans. But, *ceteris paribus*, for that to be true, we must have an ideological range within each party. If every candidate from a given party were ideologically interchangeable with every other candidate from that party, regardless of which district they were competing in, with the Republicans more conservative than the Democrats, then, *ceteris paribus*, we would expect that Democrats would capture all (or virtually all) the districts where the median voter in the district was to the left of the midpoint between the Democratic and Republican party positions, while Republicans would capture all (or virtually all) the districts where the median voter in the district was to the right of the midpoint between the Democratic and Republican party positions. Thus, if a candidate's party label was fully descriptive of the product being franchised in the way that a McDonald's hamburger equals a McDonald's hamburger whether purchased in North Carolina, North Dakota, New York, or New Hampshire, then, except for non-ideological 'noise' in the system (e.g., voter choices based on candidate attributes, such as incumbency or perceived trustworthiness, that are distinct from pure ideological positioning), we would expect no split-ticket outcomes!

A simplified exposition of our sincere split-ticket voting model is shown in Fig. 2 (taken from Grofman et al., 2000). In it, the Democratic and Republican presidential candidates are treated as being located at roughly equal distances on either side of the national median voter with results illustrated for three generic types of House districts: liberal (type 1), moderate (type 2), and conservative (type 3). In each district, the Democratic and Republican candidates for that district are shown on opposite sides of the median voter in that district, with each party's candidate roughly an equal distance from the district median. In Fig. 2, capital letters refer to the location of the presidential candidates (D and R) and the national median (M), while lowercase letters refer to the locations of each party's candidates in each of these three generic types of districts (i.e., d_1 and r_1, d_2 and r_2, d_3 and r_3 and to the locations of the district medians m_1, m_2, and m_3).

In the sincere models of split-ticket voting, congressional districts will exhibit a split outcome for House and President either when (1) the median voter in the district is to the Democratic side of the midpoint between the Democratic and Republican candidates for House but to the Republican side of the midpoint between the Democratic and Republican candidates for president, or conversely, when (2) the median voter in the district is to the Republican side of the midpoint between the Democratic and Republican candidates for House but to the Democratic side of the midpoint between the Democratic and Republican candidates for president.[7] A glance at Fig. 2 reveals that the first case necessarily occurs when we have a Democratic Representative winning a generally conservative district, and the second case necessarily occurs when we have a Republican Representative winning a generally liberal district. Thus, if voters are sincere, when presidential and congressional voting outcomes in a district coincide is, by and large, determined by the ideological proximity of the median voter in the district to each of the pairs of candidates for President and House. Split outcomes for House and President are expected to be common in non-centrist districts won by a Representative of the 'wrong party'; e.g., in conservative districts in the South held by Democrats, or liberal districts in New England held by Republicans (see also Frymer, 1994, 1997).

Under the sincere voting hypothesis, we expect that a Democratic presidential candidate should be least likely to carry the set of districts in which there are conservative winners of the opposite party and most likely to carry the districts in which there are liberal winners of his own party; while a Republican presidential candidate should

[5] The sincere split-ticket voting literature implies that candidates of the same party who are running for office in different constituencies (e.g., running in different House districts, or running for nation-wide or statewide office rather than locally) will not necessarily share the same policy positions. In particular, constituency characteristics can be expected to affect the policy positions of candidates from that district, even though candidates of opposite parties running from the same constituency are still expected to exhibit policy differences. On the other hand, when we compare candidates of the same party running for the same office in two successive elections within the same constituency, the policy positions of these two candidates are likely to be very similar—especially, of course, when it is the same candidate in both elections.

[6] We should note, however, that in acting as if medians are fixed, we do not mean to exclude the possibility of random error in voter candidate location assignments. Erroneous perceptions create the potential for split-ticket outcomes as an artifact of either 'random' or 'systematic' errors by the voters in locating candidates in terms of the policy dimension(s). Here, ticket splitting is most likely in constituencies where the candidates are perceived of as symmetrically located around the median voter. Such random error creates 'noise' that reduces the likelihood that we will get statistically significance evidence for sincere split-ticket voting. We recognize, also, the potential for voter biases in assigning candidate locations generated by rationalization, assimilation and contrast effects (see, e.g., Page and Brody, 1972; Merrill et al., 2001). However, explicitly incorporating the potential presence of such individual-level effects would unduly complicate our exposition but not, we believe, fundamentally change the aggregate level results on which this paper focuses.

[7] In addition, sincere split-ticket voting at the aggregate level can occur due to error when the candidate locations are misattributed.

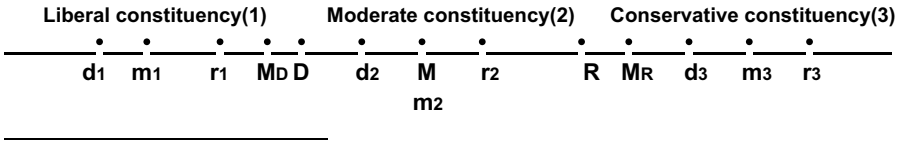

Fig. 2. Relative locations of candidates and voters in three constituencies. R or r is used for Republicans, D or d for Democrats. Capital letters are used to represent the positions of presidential candidates and the location of the national median voter both overall and within each of the two parties; lowercase letters are used to represent the positions of congressional candidates and the location of the median voter within each of the three types of congressional districts. Note that the relative location of r_1, D, and d_2 need not be the same as shown above; similarly the relative location of r_2, R, and d_3 need not be the same as shown above. Also the projected location of D relative to MD and R relative to MR reflects the view that a party's candidates are most likely to be found at policy positions located between the overall median voter and their own party's median voter.

be least likely to carry the set of districts in which there are liberal winners of the opposite party and most likely to carry the districts in which there are conservative winners of his own party. Thus, in a conservative district, if there is a split it will tend to occur, *ceteris paribus*, with a Democratic winning the congressional election and a Republican presidential candidate carrying the district; while the opposite is true for a liberal district. Under this model, it is also possible to have split-ticket outcomes even in perfectly centrist districts in which the median voter in the district is at the same location as the national median voter. *Ceteris paribus*, this will happen when the Republican presidential candidate is further away from the median voter in the district than is the Democratic presidential candidate, but the Democratic House candidate is closer to the median voter in the district than is the Republican House candidate, or conversely. Thus, in moderate districts, if there is a split outcome, it can occur either with a Republican winning the congressional election and a Democratic presidential candidate carrying the district, or the other way around.[8]

It is the potential for a candidate with the Democrat label to distinguish himself from other Democrats by positioning himself closer to the median voter in his district, and the potential for a candidate with the Republican label to distinguish himself from other Republicans by positioning himself closer to the median voter in his district, that makes split-ticket outcomes possible. Thus, we might expect that, when there are a lot of split-ticket outcomes, we would find that Democratic incumbents (or candidates) in conservative congressional constituencies will, on average, be considerably more conservative in voting behavior than the average Democratic representative; and, similarly, Republican incumbents (or candidates) in liberal congressional constituencies will, on average, be considerably more liberal in voting behavior than the average Republican representative. Still, as suggested in Fig. 2, the Democrat in a conservative constituency will not, in general, be quite as conservative as a Republican elected from that same constituency, and a Republican elected from a liberal constituency will still not be quite as liberal as a Democrat elected from that same constituency. This expectation is consistent with the empirical evidence (Brady and Lynn, 1973). But, to put it the other way around, and to get the direction of the causal arrow correctly, we may derive the following expectation: *Ceteris paribus*, the greater the range of ideological variation within each political party's House members, the greater the expected proportion of split House–President outcomes. That is, all other things being equal, the wider the ideological distribution within each party, the more likely are split outcomes.

2. Model testing

In addition to changes in the degree of ideological dispersion of each party's House candidates,[9] we have identified three other variables that may be expected to impact on the number of split districts: margin of presidential victory, magnitude of incumbency advantage, and mean ideological differences between Republican and Democratic presidential candidates.[10] Although we are certainly interested in evaluating the size and direction of their independent effects, as noted earlier, our principal concern is with using these three factors as controls in our multivariate regression.

The magnitude of the presidential tide will affect how many districts exhibit a different outcome for House and for President. If (perhaps for reasons largely unrelated to ideological positioning, e.g., a backlash against the performance of the previous incumbent) the winning presidential nominee wins big, it is likely that s/he will win a majority of the votes even in some of the districts in which House victories are won by candidates (especially incumbents) of the opposite party. Thus, *ceteris paribus*, the larger the margin of victory for the winning presidential candidate, the greater the proportion of House seats we expect to exhibit split outcomes.

The magnitude of incumbency advantage effects also ought to matter. In particular, as theorists associated with the 'rise in candidate-centered politics' thesis have observed, declines in voter party loyalty, an increase in

[8] Grofman et al. (2000) present clear evidence for exactly this pattern of voting outcomes in the post-WW II period—driven by the interaction of voters' sincere preferences with differences in candidate locations for the two offices relative to the placement of the median voter in each district.

[9] We measure variance differences within each party via a proxy: the variance of each party's House members, averaged over the two parties, based on Poole-Rosenthal DW-NOMINATE measure of roll call voting.

[10] In addition, we initially considered in our multivariate analyses two additional possibly complicating factors suggested by past readers of the paper: one a dummy variable for on-year and off-year elections, the other the level of roll-off between congressional and presidential elections. However, neither was statistically significant in any of our models and we have omitted these two variables from the analyses we report here.

the number of voters who call themselves independents, a change toward media-centered campaigns, a decline of party machines, have all, arguably, contributed to an increase in incumbency advantage as well as an increase in ticket splitting (see e.g., Wattenberg, 1991, 1996). The basic idea is that changes in the magnitude of the incumbency advantage effect can be expected to affect the proportion of split House–President outcomes because a strong incumbency advantage means that House candidates will be expected to run ahead of their party's candidate for president,[11] and this is a recipe for split House–President outcomes at the aggregate level.[12] Thus, we are led to the following prediction: *Ceteris paribus*, the bigger the incumbency advantage in the House, the greater the proportion of House seats we expect to exhibit split outcomes.

Now let us think about the expected link between the ideological differences between the parties' presidential candidates and the expected proportion of split House–President outcomes. On the one hand, if there are large differences between the presidential candidates of each party, then we expect that, from a balancing view, all else being equal, there should be more reasons for voters to balance. On the other hand, it is reasonable to believe that each party's candidates are pulled away (at least slightly) from the median voter in their own district toward their party's location (e.g., toward the position of the party's presidential nominee, or party platform, or toward the position of the party's House leadership, or toward the location of the party's median supporter nationwide: see Shapiro et al., 1990). If so, then the further apart are the party's national positions, the less likely it is that each party will be able to win House seats where the location of the median voter gives us the other party a natural advantage.

In other words, if each of the national parties exerts a pull on their own candidates, then we should expect that, if, nationally, Democrats and Republicans look very ideologically distinct, few Democrats will be elected from conservative House districts and few Republicans will be elected from liberal House districts. But, if few Democrats are being elected from conservative House districts and few Republicans are being elected from liberal House districts, then, we expect that there will be very few split outcomes for House and President. From this line of reasoning, we expect that, *ceteris paribus*, the greater the difference between the mean ideological location of each political party's Presidential candidate, the lower the expected proportion of split House–President outcomes. Since the two lines of argument we have provided go in opposite directions, we make no clear prediction about the expected sign of the presidential difference variable.

We have now identified five variables as our predictors of aggregate number of split-ticket outcomes: (1) margin of presidential victory; (2) magnitude of incumbency advantage; (3) magnitudes (standard deviations) of ideological differences among House members of the same party (DW-NOMINATE scores) averaged across the two parties;[13] (4) mean ideological differences between Republican and Democratic House members (DW-NOMINATE scores);[14] and (5) mean ideological differences between Republican and Democratic presidential candidates.[12] We expect the first of these variables to be negatively linked to the proportion of split outcomes, but that variance of within-party House member ideology and magnitude of incumbency advantage will each be positively linked to that proportion. The sign on the fourth of these variables may be used as our initial test of sincere versus strategic voting. A positive sign supports strategic policy balancing; a negative sign supports sincere reasons for split-ticket voting. For the last of these variables we have made no clear prediction as to sign.

To operationalize the first of these variables, presidential sweep, we take as our measure of presidential sweep the ratio of the vote share of the winning major party's presidential candidate to the vote share of the losing major party candidate.[15] To operationalize incumbency advantage we use the measure developed by Gelman and King (1990). They create an 'unbiased' measure of the incumbency advantage by modeling the two party share of the vote based on previous vote shares, partisan control of the seat, and a variable indicating if the seat was held by an incumbent or if it was open. The coefficient on this last variable is the estimate of the value of being an incumbent in terms of the share of the two-party vote.[16]

To operationalize party ideological cohesion we take the standard deviations of Poole and Rosenthal (1997) DW-NOMINATE scores, and look at the yearly value of those standard deviations averaged over the two parties; while to operationalize differences between the legislative parties, we take as our measure of party ideological differences the differences between the mean DW-NOMINATE scores for

[11] Take a district where the incumbent is further away from the median than her opponent. If the incumbent still wins, we may attribute this to a kind of 'benefit of the doubt' (Feld and Grofman, 1991) given to the incumbent by many voters that compensates for her ideological 'disadvantage'. Similarly, if the incumbent retains her seat in a district where a presidential nominee of the opposite party carries the district, it is likely that either she is closer to the median voter in that district than the losing presidential nominee of her own party, or that she retained the district thanks to an incumbency advantage that helped her withstand the presidential tide in favor of the other party.

[12] However, a realigning election may 'trump' local considerations, allowing a presidential landslide to translate into a partisan sweep of house districts as well. Such a phenomenon, as may have been observed in 1932, say, cuts against our argument. We might also wish to take into account how many seats the losing nominee's party previously held in Congress. Obviously, if the party of the losing presidential candidate had few House seats to begin with, that puts constraints on the proportion of House districts that we might expect to exhibit split outcomes in which the split involved the district being carried by the winning Presidential nominee and a House victory for the party of the losing presidential candidate.

[13] We take as our proxy for the ideological character of the district the party and roll call voting behavior of the incumbent, using the Poole-Rosenthal DW-NOMINATE measure of roll call voting. Because of the absence of data over this entire time period that would allow us to locate the ideological locations of challengers, we focus on the ideological characteristics of winners/incumbents.

[14] See Footnote 6.

[15] We experimented with alternative operationalizations to reflect the existence of third parties, but the differences in results were so minimal that we decided to stick with the simplest specification.

[16] How one handles uncontested elections in the estimation of the incumbency advantage matters a great deal. In our case we imputed values of 75% for an uncontested incumbent.

Table 1
Bivariate correlations among the dependent and independent variables.

	Presidential sweep	House incumbency advantage	House standard deviations	House mean party differences	Presidential/ platform differences	**Number of split districts**
Presidential sweep	1					−**0.02**
House incumbency advantage	−0.38*	1				**0.65****
House standard deviations	−0.29	0.63***	1			**0.83****
House mean party differences	0.15	−0.20	−0.78***	1		−**0.61****
Presidential party platform differences	−0.08	0.37	0.33	−0.20	1	**0.40***

*$p<0.05$, **$p<0.01$, ***$p<0.001$.

the House members of each party. Of course, these winner-only based measures are only proxies for within-district differences between the candidates of the two major parties. Yet we expect the former to be highly correlated with the range of variation in ideological stance within each party, and the latter is likely to be highly correlated with the differences in the national positions of the (congressional) parties.[17]

Finally, to operationalize party differences at the presidential level we use data generated on the respective platforms of the two major political parties from 1920 to 2004 (Budge and Hofferbert, 1990; Klingemann et al., 1994).[18]

Table 1 shows the matrix of bivariate correlations among these independent variables and with the dependent variable of number of split-ticket outcomes. Only the first variable, presidential sweep, is not correlated with split outcomes to a statistically significant degree (and the sign on that variable is also not in the predicted direction). In looking at the last column of the table, which shows correlations with the dependent variable, we find statically significant effects for the last four variables, with the signs on variables two and three in the predicted direction and the sign on the fourth variable negative, supporting the sincere over the strategic view of split-ticket voting. On the other hand, although we had made no prediction for the sign of the presidential/ party platform difference variable, the positive sign on this variable is most in accord with expectations derived from the balancing approach.

The bivariate results are largely inconclusive vis-à-vis testing strategic versus sincere models of voting. While we get a strong negative correlation with split-ticket outcomes for legislative differences between parties, suggesting sincere voting as the more likely cause of split-ticket outcomes than policy balancing, we get a positive sign on the presidential/platform difference variable. But, given interrelationships among variables and possible confounds, we would not wish to rely on bivariate correlations for definitive results, or even for correct signs on the variables.

However, there are problems in running multivariate regressions due to the small sample size, on the one hand, and the strong correlation between the mean ideological difference between the parties and the degree of variance in within-party positions, on the other. What we see from Table 1 suggests that, as the parties differentiate themselves from one another, within-party differences shrink. Thus, including both mean and variance variables in the same regression model is apt to be problematic. Indeed, when we do so we find that the effects of the mean difference between parties showed up as not statistically significant, with all the 'action' being picked up in the variance term (analyses omitted for space reasons). As a consequence of this multicollinearity problem, the multivariate regression analyses we offer in Table 2, with number of divided House districts taken as our dependent variable, omit the variance measure from our set of independent variables. Later we will offer a more direct test of the implications of the sincere voting model of split-ticket voting that combines mean and variance effects.

Despite having the wrong sign when looked at in isolation (as shown in Table 1), in all the multivariate models in which it is entered the sign on presidential sweep is positive, as expected, and this variable is statistically significant in the full model (Model 4), and in Model 3 as well. In all the models the sign on incumbency advantage is positive, again as expected, and this variable is statistically significant in the all models in which it is entered (including Model 4, the full model).[19]

In all four models in Table 2, the mean ideological difference between the House parties is found to be significantly linked to the number of divided outcomes at the 0.001 level, and in all four it has a negative sign. This seems to us to offer strong support for sincere voting as a contributory source of split-ticket outcomes. For comparison purposes, although it reduced the sample size, in the full model (Model 4) we also included differences in party platforms. This variable proved not significant. So while there was a positive bivariate relationship between this variable and the number of split districts, which indicated some support for the balancing model, in the multivariate models this variable proves to have no effect.

Due to sample size and collinearity issues we cannot readily put both mean and variance measures of ideology in the same regression. We can however test their combined effect in another way by thinking about the effects

[17] Because of the absence of data over the entire time period of our study that would allow us to locate the ideological locations of challengers, we focus on the ideological characteristics of winners/ incumbents.

[18] An alternative to this measure would be to use the perceived differences between the major candidates from the American National Election Surveys, although those data only exist since 1972.

[19] It might be suggested that this relationship is coincidental, in that both incumbency advantage and split outcomes have been on the rise. However, since we have provided a clear theoretically expected link between the two variables, and the relationship persists even after other controls have been introduced in multivariate models, we believe that the observed relationship is not spurious.

Table 2
Models explaining the proportion of congressional districts with split outcomes between the President and the House, 1900–2004.

	Model 1	Model 2	Model 3	Model 4
Presidential sweep		3.29	13.98*	18.21**
		(7.28)	(5.07)	(5.66)
Incumbency advantage			213.39***	268.62***
			(36.62)	(43.26)
House party differences	−50.35***	−51.23***	−43.16***	−70.0***
	(13.11)	(13.47)	(8.85)	(11.57)
Presidential party platform differences				−.031
				(0.101)
Constant	55.16***	51.44***	22.24*	25.07*
	(9.16)	(12.43)	(9.5)	(9.59)
N	27	27	27	22
Adjusted R^2	0.35	0.32	0.72	0.74

Entries are unstandardized regression coefficients with standard errors in parentheses. The dependent variable is the percentage of congressional districts with split outcomes between the president and the member of the House. *$p<0.05$, **$p<0.01$, ***$p<0.001$.

Table 3
Additional regression models using a composite variable of ideological non-overlap.

	Model 1	Model 2	Model 3
Ideological overlap House parties	17.42***	18.18***	27.43***
	(4.04)	(3.57)	(4.63)
Incumbency advantage	145.95***	181.14***	228.69***
	(39.88)	(37.27)	(38.2)
Presidential sweep		13.98**	19.37**
		(4.95)	(5.29)
Presidential party platform differences			−.03
			(0.09)
Constant	35.68***	16.66	17.16
	(6.05)	(8.6)	(8.21)
N	27	27	22
Adjusted R^2	0.65	0.73	0.77

Entries are unstandardized regression coefficients with standard errors in parentheses. The dependent variable is the percentage of congressional districts with split outcomes between the president and the member of the House. *$p<0.05$, **$p<0.01$, ***$p<0.001$.

of within-party and between-party ideological differences from the perspective of ideological overlap in the party distributions. It is easy to see that overlap will be greater the larger is the standard deviation of each distribution and the smaller is the difference in the party means. From the perspective of the sincere split-ticket voting models, when the two party distributions overlap, the potential for split-ticket voting should increase.[20] Thus, we hypothesize that, *ceteris paribus*, the greater the range of ideological variation *between* each party's House members as compared to the range of ideological variation *within* each political party's House members, the greater the expected proportion of split House–President outcomes. Using the DW-NOMINATE score distributions for the House members of each party, we operationalize this idea by taking the mean party differences and dividing them by the square root of the sum of the squared party standard deviations.[21]

The way in which we initially operationalize the overlap variable higher values correspond to lower levels of overlap, while smaller values of this variable are indicative of higher levels of overlap. To fix this we subtract each of the values from 1, so that high values of the variable indicate more overlap, and we expect the coefficient to be negative when we include this variable in a statistical model if split-ticket voting is due primarily to sincere voting. Table 3 presents the results of our analyses when we include the various independent variables we have previously identified in the same regression equation with our new composite mean and variance based measure of ideological overlap. The new overlap variable derived from the sincere split-ticket voting literature is statistically significant and is correctly signed in all three of our models. The incumbency advantage variable and presidential sweep variable are correctly signed and significant in all models as well. Model 3 in Table 3 also includes the platform differences variable which again, as in Model 4 in Table 2, fails to achieve statistical significance.

In summary the evidence here demonstrates that as the ideological diversity within the two parties increases so does split-ticket voting; and as the differences between the two political parties *increases,* split-ticket voting goes *down*. These aggregate level findings are, simply put, irreconcilable with strategic theories of split-ticket voting.[22]

3. Conclusion

While we are using aggregate data to study what is fundamentally an individual level phenomena (split-ticket voting) we believe that our results are still very informative. It is possible to explain a very large proportion of the variance in the proportion of split House–Presidential outcomes over the entire 1990–2004 period with very simple and intuitive ideas that combines the neo-Downsian approach involving sincere motivations for split-ticket voting (Frymer, 1994, 1997; Grofman et al 2000; Burden and Kimball, 2002; Kimball, 2004) with, on the hand, an incumbency advantage factor inspired by the quite different candidate-centered perspective of scholars such as Wattenberg (1998) and Gelman and King (1990) and, on the other hand, a variable that measures the magnitude of the presidential victory margin.

Moreover, consistent with Kimball's findings using survey data (Kimball, 2004), we feel that we are on solid footing in concluding that the 'sincere' ticket-splitting model explains more about voter behavior than strategic models.[23] Here, we have shown that an expectation that can be derived from the policy balancing model, namely

[20] We might also note that from an analysis of variance perspective, two distributions are different to a statistically significant degree as a function of sample sizes of each, the mean difference between them, and the standard deviations of each distribution.

[21] While there are differences in relative party strength over the period, without great loss of generality, we shall simply disregard sample size effects, especially since there is little change in the number of representatives and no change in the size of the House after 1912.

[22] Our confidence in the robustness of our results is bolstered by other runs (not shown) in which additional variables such as controls for level of roll-off between presidential and congressional electorates, and for redistricting years, are entered without affecting our basic findings.

[23] Note, however, we are certainly not claiming that no voters (or even few voters) are engaged in policy balancing. Our aggregate level approach does not allow us to address this question.

that, *ceteris paribus,* levels of ticket splitting should *increase* when the congressional parties become more ideologically distinct, is not supported empirically. Rather, the expectation we derived from the class of models based on sincere split-ticket voting, that greater ideological differences between the congressional parties should, when appropriate controls are introduced, lead to fewer split outcomes, was strongly supported. Moreover, when we created a composite variable with both a mean and a variance component—one designed to tap the overlap between the ideological distributions of the two parties—we found the correct (positive) sign on this variable, in a simple three-variable regression model.[24] Thus, when parties are 'catch-all,' split-ticket voting is more likely.[25] In short, voters are not necessarily pining for split control of the executive and legislative branches, as policy-balancing theory suggests, although some might be. Rather, most voters who split tickets will choose to opt to do so when it makes sense (in a Downsian way) to do so.

Finally, we would also note that our argument has applicability to more than just the United States. If candidates can 'distinguish themselves' ideologically (or otherwise) from the rest of their party, they can win votes from those who, in other contexts, cast their votes for the candidates of other parties. Thus, for example, in mixed member systems such as in Germany, where voters have two ballots to cast—one to determine party proportionality (PR), one to determine the winner of a single member district contest—some of the voters who cast split votes may be doing so for sincere rather than for tactical reasons.[26]

Acknowledgments

We are very grateful to Judith Bara and Ian Budge for providing the party manifesto data for the American political parties to us, and to Clover Behrend-Gethard for bibliographic assistance.

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[24] We would also note that there was no support (non-significant results) for the hypothesis that the greater the ideological distance between the two presidential candidates, the greater the number of split district outcomes—an hypothesis that can also be motivated by a policy balancing argument.

[25] In future work it would also be helpful to consider the confounding effects of realignment. Because any recent partisan realignment in the country has been most marked in (or perhaps even largely isolated to) the South, with the replacement of conservative Democrats by (even more) conservative Republicans, we anticipate that, if this realignment has played itself out in the 1990s, the proportion of split-ticket outcomes in the South should go down (see Aistrup, 1996; Brunell and Grofman, 1998).

[26] By 'tactical reasons' we refer to voter beliefs that the candidate of their most preferred party had no chance to win a plurality in the district (see, e.g., Cain, 1978). However, we would emphasize that tests of tactical voting, like tests of policy-balancing, require analysis of individual level survey data, and thus the results in our paper can be only suggestive.