

ROBERT G. MOSER
University of Texas at Austin
ETHAN SCHEINER
*Stanford University and
University of California, Davis*

Strategic Ticket Splitting and the Personal Vote in Mixed-Member Electoral Systems

This article examines ticket splitting in five different mixed-member electoral systems—Germany, New Zealand, Japan, Lithuania, and Russia—and indicates the shortcomings inherent in any analysis of such ticket splitting that does not take into account the presence of the personal vote. We find that the personal vote plays a central part in shaping ticket splitting in all of our cases except for Germany, a heavily party-oriented system in which we find evidence of only a weak personal vote but evidence of substantial strategic voting.

Mixed-member electoral systems have gained substantial attention as growing numbers of states have adopted systems that provide voters with two ballots in elections for legislative office—one for a party list in a proportional representation (PR) tier and one for a candidate in a single-member district (SMD) tier (see, for example, Massicotte and Blais 1999; Moser 2001; and Shugart and Wattenberg 2001). Analysis of strategic voting in such systems is particularly well established in the literature. Scholars cite ticket splitting, in which voters cast a greater number of votes for large parties in the SMD tier than in the PR tier and, conversely, a smaller number of votes for minor parties in the SMD tier, as evidence that voters react strategically to electoral rules that tend to deny representation to minor parties.¹ Yet such analyses often do not account sufficiently for another factor that can drive ticket splitting: the personal vote, defined here as additional SMD votes cast for a candidate due to the candidate's personal appeal to voters rather than his or her strategic behavior.

In this article, we examine ticket splitting in five different mixed-member electoral systems—Germany, New Zealand, Japan, Lithuania,

and Russia—and indicate the shortcomings inherent in any analysis of such ticket splitting that does not take into account the presence of the personal vote. In particular, we demonstrate that, in four of our five cases, the personal vote plays a significant role in the overall base of support of SMD candidates and, hence, explains much of the difference in SMD and PR support in mixed-member systems. We find that the personal vote plays a central part in shaping ticket splitting in all of our cases except for Germany, a heavily party-oriented system in which we find evidence of only a weak personal vote but evidence of substantial strategic voting.

Research on Ticket Splitting in Mixed-Member Systems

Mixed-member electoral systems provide a unique opportunity to examine the extent of strategic voting through a controlled comparison of voting patterns under different electoral rules. Strategic voting can be defined as casting ballots for alternatives other than one's first preference in order to improve the expected outcome of the election. Naturally, examining survey data is the ideal approach to studying such strategic voting, but such data are not always readily available. For this reason, a number of authors—most notably Bawn (1999) and Reed (1999) on ticket splitting in, respectively, Germany and Japan—utilize a creative approach to studying such strategic voting without survey data, comparing district-level PR and SMD vote totals. These authors cogently assume that the PR vote represents a “sincere” vote, as most voters can feel assured that PR rules will permit their preferred party to win PR-tier representation and that they need not worry about wasting their votes.² In contrast, voters who sincerely prefer a weak candidate in SMD races have incentive to vote strategically, that is, to cast ballots for a different candidate in the district race in order to avoid wasting their votes. By examining systematically the differences between PR and SMD votes, these researchers make compelling claims about when voters will move away from their sincere preference (for whom they cast a PR ballot) in SMD races.

Taking advantage of the opportunity provided by the two votes in mixed-member systems, these scholars and others offer evidence suggesting the presence of strategic voting. In the most noteworthy investigations, Bawn and Reed each present OLS regression models in which the dependent variable is, at the district level, the SMD vote percentage of a given candidate minus the PR vote percentage won by the candidate's party. Bawn and Reed each include an independent

variable that indicates the closeness of the race, and both find that the closer the race in which a candidate is involved, the larger the gap between the number of SMD votes cast for the candidate and the number of PR ballots cast for the candidate's party. In short, Bawn and Reed's results suggest that ticket splitting is most prevalent when voters' SMD ballots are most likely to "count" and therefore that such ticket splitting is strategic voting.

It is critical to keep in mind, however, that strategic voting is not the only factor that can generate statistical outcomes of this kind. For example, even voters who do not support an incumbent's party and who are not behaving strategically may support the incumbent candidate for a variety of reasons, including greater familiarity with the candidate and the candidate's proven capacity to serve the district—that is, their vote may be a personal vote (Cain, Ferejohn, and Fiorina 1987). As Bawn observes, candidates may have positive SMD-PR vote gaps because of different types of personal votes cast for them. Karp, Vowles, Banducci, and Donovan (2002) also point out the significant impact of candidates' personal popularity on split-ticket voting in New Zealand's mixed-member system.

But Bawn's analysis does not control for the personal vote and, as a result, there is reason to question the meaning of her results. Bawn's analysis examines candidates who finished in first and second place in their districts. As we explain in greater detail in the next section, for any non-first-place candidate, the meaning of a finding that the candidate has a larger SMD-PR vote gap when in a close race is indeterminate and may be totally consistent with a significant personal vote, not just strategic voting. For example, a large number of personal votes cast for a second-place candidate may lead the candidate to (a) be in a closer race with the front-runner *and* (b) receive a markedly larger number of SMD votes than his or her party receives of PR ballots. This possibility indicates a potential flaw in Bawn's analysis. Nevertheless, as our findings suggest, the fact that Germany is a particularly party-oriented system—see Conradt 2001—may counteract this problem, as there simply may be much less personal voting in Germany.

Cross-national comparison is essential since the long-standing German system may be a unique case among mixed-member systems and generalizations based on German experience may be inapplicable to other cases. Reed's analysis of ticket splitting in Japan in 1996 includes a variable to take into account the potential impact of the personal vote (1999, 263). Reed uses the proportion of the new district's electorate that had supported the candidate in question under the old candidate-centered electoral system. While Reed is unable to take into account

which voters previously supported the candidate for personal rather than strategic reasons, his measure is a useful proxy. Unfortunately, this solution is largely unique to the 1996 Japanese election, the first held under Japan's new lower-house mixed-member system because the method is only viable in the first election under a mixed-member system in a country that had previously held democratic elections using a system in which voters cast ballots for individual candidates.

Proxy measures of the personal vote are difficult to find, particularly so in analysis that examines a wide variety of countries. Including incumbency as an independent (dummy) variable, as Bawn does, helps capture the personal vote; presumably, incumbents receive more personal votes than other types of candidates. But many other factors are also likely to generate a personal vote.

In this article, we offer a statistical analysis that differentiates electoral outcomes that signal the dominance of strategic voting from those outcomes consistent with a significant personal vote for the winning candidate. In this way, we offer an initial attempt to disentangle these two phenomena that drive disparities in SMD and PR support for parties in mixed-member systems. Our findings suggest that the additional SMD votes for leading candidates that other studies commonly interpret as evidence of strategic voting may in fact be attributable to the personal vote in four out of our five cases.

Disentangling the Personal Vote from Strategic Voting

In many cases, such as the example regarding second-place candidates in Bawn's analysis, it is difficult to decipher whether ticket splitting is personal or strategic voting. But for certain candidates—in particular, those in first place—the results make it easier to discern between these two types of ticket splitting. We follow Bawn's cue and consider closeness of the race through a variable that represents the difference between the vote percentages won by the first- and second-place candidates in a district. This variable, which we call *Margin*, is what Bawn utilizes to demonstrate the presence of strategic voting. According to most theories of strategic voting, candidates, including those in first place, will be more likely to receive additional SMD votes when they are in close races; fewer strategic votes will be cast in races that are not close. In other words, the SMD-PR vote gap should decline as *Margin* increases.

So, if there is *strategic voting*, *Margin* will have a negative coefficient. If there is substantial *personal voting*, then when we look

only at the first-place candidate, we should see Margin with a positive coefficient. That is, the first-place candidate may have a larger SMD-PR vote gap when not in a close race, that is, when he or she wins by a very large margin. The logic here is that, because of the candidate's considerable individual popularity, he or she dominates the competition (wins by a large margin) and therefore receives many more SMD votes than his or her party receives PR ones. For this reason, we believe that a positive (and significant) coefficient on Margin for winning candidates would clearly indicate that the personal vote is driving a very large proportion of ticket splitting.

Put another way, it makes little sense to think that strategic voters will be, all else being equal, more inclined to cast additional SMD votes for the winner when the race is not close. Rather, for the first-place candidate, a positive coefficient on Margin would suggest that the candidate was getting many personal votes, which also led the candidate to win by a larger margin.³ At the same time, a negative (and statistically significant) sign on Margin indicates very clearly the presence of strategic voting. That is, the personal vote is most likely present to some degree in nearly any electoral system and would create a bias in favor of a positive correlation between Margin and the SMD-PR vote gap for the top candidate. Therefore, a negative correlation would indicate that so many additional votes were being cast for the top candidates in close races—in short, strategic votes—that these votes counteracted the effect of the personal vote's positive correlation bias.

What is troubling from a social science perspective is the fact that deciphering between the personal vote and strategic voting can be difficult for many *lower*-ranked candidates. The two phenomena produce virtually identical patterns of electoral outcomes. Although top-ranked candidates are the most likely beneficiaries of the personal vote,⁴ other candidates are likely to benefit from such votes as well. These personal votes allow non-first-place candidates to better challenge the top candidate in the district, thereby reducing the margin between the top two candidates. And, as we discussed earlier, any candidate receiving a larger number of personal votes will win a larger number of SMD votes relative to the total PR votes won by his or her party. In sum, more personal votes for non-first-place candidates leads simultaneously to closer races (smaller margins of victory) and larger SMD-PR vote gaps. Therefore, if there is substantial personal voting, then there should be a negative correlation between margin of victory and SMD-PR vote gap (negative sign on Margin). Similarly, if there is substantial strategic voting, then a candidate involved in a close race should receive a larger number of SMD votes (both in general and relative to the

party's total PR vote). Thus, under strategic voting there should *also* be a negative correlation between margin of victory and SMD-PR vote gap (negative sign on Margin).

In short, *for non-first-place candidates*, Margin cannot be used to distinguish between strategic and personal voting and, when applied indiscriminately to all ranks of candidates, the margin between the top candidate and the second-place candidate (or between the winner and the candidate in question, irrespective of final ranking) by itself is not necessarily an independent variable that denotes strategic voting.

Factors Affecting the Level of Personal Voting

Many different factors affect the tendency toward personal voting, but we focus on three here. First, we hypothesize that the institutional rules within the mixed-member systems are likely to affect this tendency. As Carey and Shugart (1995) most thoroughly and systematically argue for non-mixed-member systems, the type of electoral system utilized has a substantial impact on the degree to which politics in the system is party-oriented or personalistic. There are also important features of mixed-member systems that affect politics on the institutional level. Mixed-member systems often differ substantially from one another regarding the rules governing the SMD and PR tiers and the way the two tiers are combined to elect the legislature. The most important distinguishing feature of a mixed-member electoral system is whether or not the two tiers are linked together in a system of compensatory seats. In mixed-member systems with linked tiers, seats or votes won by a party in the SMD tier are subtracted from its total determined by the PR tier. For example, in Germany and New Zealand, the PR tier determines the total number of seats each party will be allotted. SMD winners take the first set of seats won by their party. The remaining seats (the total determined by the PR tier minus the total won by the party's candidates in SMDs) are allotted to candidates on the parties' PR lists.

We expect that where there is no relationship between SMDs won and PR seats won, parties will have a particularly strong incentive to focus on taking SMDs because each district seat they win will be added onto the national party seat total. Insofar as more personalistic campaigning will be likely to increase the number of SMD votes that a candidate receives, parties will have incentive to encourage their SMD candidates to behave more personalistically.⁵ In systems with linked tiers, where SMD seats or votes are subtracted from the total allotted

in PR, parties will have far less incentive to encourage their candidates to behave personalistically. Such behavior will not increase the total number of seats the party will be allotted, unless candidates' individual behavior manages to increase support for the party as a whole (not always a likely proposition). Indeed, too much individualism on the part of candidates may hurt the party by introducing an image of party incoherence.⁶

Second, low levels of party institutionalization ought to increase the likelihood of the personal vote. The transitory nature of party organizations in unstable new democracies promotes great volatility between electoral periods and provides little opportunity for voters to cultivate lasting preferences for one party or another. In the absence of widespread, concrete party preferences, many voters lack partisan cues on how to cast their votes and must instead rely on patronage, incumbency, and the personal characteristics of candidates.

Third, we hypothesize that prior electoral system experience will be likely to affect behavior under the new mixed-member system. In Japan, the now-defunct single nontransferable vote (SNTV) system played an important part in exacerbating the highly personalistic nature of the Japanese political system. Clearly there were many features of the new Japanese mixed-member system that created incentives for personalistic politics (see, for example, McKean and Scheiner 2000)—not the least of which was the lack of linkage between the two tiers—but path dependency from SNTV also made continued personal voting likely.

In some cases, however, it is likely to be difficult to determine the “experience” that will be carried over from the old system to the new. This is certainly the case with New Zealand. Under its old SMD system, New Zealand represented “a virtually perfect example of the Westminster model of democracy” (Lijphart 1984, 16), which “promoted focused, programmatic party government” (Denemark 2001, 73). As Denemark points out, however, voter disaffection in the 1980s led to dealignment, a weakening of the links between voters and parties. In short, New Zealand’s Westminster-style history in many ways was likely to reinforce the incentives created by its linked mixed-member system institutions and thereby to promote party-oriented politics under the new system. At the same time, the weakened ties between voters and parties that developed toward the end of the SMD experience (combined with the SMD institution, which “socialized” voters in the electoral experience of casting their ballots for individual candidates) might also have carried over into the new system and therefore promoted more personalistic politics.

Sample and Hypotheses

Our sample covers recent elections in five countries with mixed-member systems: Germany (1998), New Zealand (1999), Japan (2000), Lithuania (2000), and Russia (1999).⁷ Our cases offer variation in the factors we hypothesize play an important role in shaping the personal vote. Germany and New Zealand offer strong linkage mechanisms between the PR and SMD tiers, but Japan, Lithuania, and Russia offer no such compensatory linkage. Germany, New Zealand, and Japan are consolidated democracies, but democracy is new to Lithuania and Russia. Lastly, Germany has utilized its mixed-member system for decades, but the system is quite new in the other countries.

Our analysis focuses on the SMD-PR vote gaps for the principal parties for each of these countries. Like Bawn and Reed, we focus on the district level. We examine the top five parties in Germany (other parties received extremely small proportions of the vote) and every party that ran in the PR tier in the other four countries.

We expect the personal vote to be the least prominent in Germany, which maintains linkage between its tiers, is a consolidated democracy, and has utilized its party-oriented electoral system for decades. We have good reason to expect that strategic voting will not be masked by the personal vote in Germany and that strategic voting will be more likely to be detected there. In contrast, we expect the personal vote to be prevalent in the other cases because of their lack of linkage mechanisms (Japan, Lithuania, and Russia), lack of democratic consolidation (Lithuania and Russia), and history of more personalistic behavior and voting (Japan). Results for New Zealand are more difficult to predict. This country's linked tiers and Westminster-model experience should lead us to expect the personal vote to be less prevalent, but we realize that its recent dealignment and institutional history of ballot casting for individual candidates might promote more personalistic voting in the new system.

Multivariate Analysis

Like Bawn and Reed, we focus on the difference in the number of SMD votes cast for an individual candidate and the PR ballots won by that candidate's party. We assume that PR votes represent voters' true party preferences, and we examine the extent to which voters split their tickets. In particular, we expect two types of "rational" ticket splitting: personal voting (increased SMD support for a candidate due to personal popularity) and strategic voting.⁸ As we have already argued, we require multivariate analysis to disentangle these different types of ticket splitting.

Dependent Variable

Like Bawn and Reed's, our dependent variable is—at the district level—each party's SMD vote minus its PR vote (divided by the total district vote).⁹ Positive SMD-PR vote gaps indicate that a candidate received more SMD votes than his or her party received PR votes in a given district; a negative vote gap indicates the opposite. We do not include (1) any party with PR votes but no candidate who ran in the SMD or (2) any candidate who had no party that received PR votes.

Independent Variables

We examine three sets of factors that shape the direction and magnitude of parties' SMD-PR vote gaps: (1) factors relating to the margin of victory, (2) factors relating to candidate identity, and (3) general controls.

Margin of Victory. Our study examines the impact of a race's closeness on the SMD-PR vote gap. Our variable, *Margin*, is the difference between the vote percentage won by the candidates in first and second place (cf. Bawn 1999).¹⁰

We do not expect all candidates to be affected in the same way by strategic voting. According to Duverger's Law, voters cast strategic votes for one of the likely top two candidates. According to a similar logic, we expect that as the race gets closer (*Margin* declines), voters will be more likely to seek to influence the final outcome and, therefore, will be more inclined to cast SMD ballots for one of the top two candidates rather than for candidates likely to finish third or worse.

We introduce interaction terms with *Margin* and thus are able to differentiate between the impact of *Margin* on candidates of different levels of competitiveness.¹¹ We first use $1st \times Margin$, which indicates the impact of *Margin* on the front-runner, and it is here that the negative sign indicates strategic voting and the positive sign indicates a heavy personal vote. We also use $2d \times Margin$ and $Bottom \times Margin$ as interaction terms for the second-ranked and third-and-worse-ranked candidates, respectively. As already discussed, results will tend to be indeterminate for second-place candidates. A negative coefficient could be consistent with both personal and strategic voting.

For candidates finishing in third place or worse, the logic is the reverse of that for first-place candidates. If there is substantial strategic voting, then poorly ranked candidates will tend to lose more votes when there is a close race between first and second place. In such a scenario,

Bottom \times Margin will have a positive coefficient: a larger margin between first and second place will lead to fewer voters leaving their preferred (poorly ranked) candidate. In short, a positive coefficient would be a clear indication of strategic voting.

A word is in order on the regular use in the mixed-member system strategic-voting literature (as well as our use here) of time t variables to predict the degree of strategic voting in an election that is also in time t . If our strategic variables are derived from the results of an election in a given year, then how can a voter cast a ballot in the same election based on these variables? Sadly, for the sake of our analysis, other options appear to be limited. Especially in early elections under a new system, it is very difficult to use prior electoral results as a heuristic for predicting new results. Substantial changes typically occur between each election in new systems, making the results of previous elections less reliable predictors. This fact and the rarity of outcomes being wildly off from what is generally expected before an election (Cox 1988) leave us with what is probably the best measure under the circumstances.

Candidate Identity. Incumbency is the most obvious factor relating to candidate identity. Like Bawn, we utilize a variable indicating whether or not the party ran an incumbent in the SMD and a separate one indicating whether or not the party faced an incumbent of another party in the district. Political scientists widely agree that an incumbent has a substantial advantage over other candidates because of voters' greater familiarity with the incumbent and his or her proven record of service for the district (Cain, Ferejohn, and Fiorina 1987). Moreover, even when voters support a specific party on the PR ballot, they may be less likely to support that party's candidate in the district if a candidate from a different party holds the SMD seat. Therefore, we expect the coefficient on *Incumbent* to have a positive sign and that on *Incumbent Opponent* to be negative.

In addition, in many districts, more than one type of incumbent is present. That is, within a given SMD, there may be at least one candidate who enters the election as the sitting incumbent from the PR list of one of the parties. We do not expect candidates holding a PR seat to have the same drawing power as candidates holding the SMD seat, but we believe PR incumbents ought to have greater individual drawing power, all else being equal, than other candidates. Thus, we expect *PR Incumbent* to have a positive sign.¹²

We believe that incumbency is a good proxy for the strength of the personal vote. The larger the coefficient on *Incumbent*, the more voters appear willing to cast votes for particular candidates because of

their personal attributes. For reasons already discussed, we expect Incumbent to have a smaller coefficient in Germany, and possibly New Zealand, than in the other countries.

Control Variables. For the results to make sense, we must include two control variables. First, in some cases, votes for an SMD candidate are due neither to voters' sincere first preference nor to strategic voting. Sometimes a voter's preferred party simply runs no candidates in the SMD. To control for this possibility, we include a variable, *SMDcands/PRparties*, that is the ratio of SMD candidates to parties running in the district in PR balloting. In a world with no ticket splitting, districts where all parties ran candidates (and no independents appeared) would see no SMD-PR vote gaps at all. When we hold the number of PR parties constant, we see that, as the number of SMD candidates drops, additional votes become available to be divided among the SMD candidates still running and thus SMD-PR vote gaps increase. Therefore, we expect a negative sign on *SMDcands/PRparties*.

Second, following Reed's cue, we include where possible *Independent SMD Vote*, a measure of the proportion of the SMD vote won by independent candidates. As the number of independent SMD candidates increases, the number of votes available to other SMD candidates declines, thereby reducing their likely SMD-PR vote gaps.¹³ Independents have a substantial presence in New Zealand, Japan, Lithuania, and Russia, so we use the variable in those cases. We expect the proportion of Independent SMD Vote to be inversely related to SMD-PR vote gaps, like the *SMDcands/PRparties* variable, and thus we expect a negative sign on this variable.

Finally, in the case of Lithuania, four parties formed a single PR list (the Brazauskas Social Democratic Coalition) but nominated candidates in the SMD tier under separate party labels (although they coordinated nominations to avoid contesting the same SMD seat). As a result, the coalition consistently experienced huge negative SMD-PR vote gaps. For this reason, we include the variable *Alliance*, a dummy variable coded as 1 for candidates or parties in an alliance or coalition, and coded as 0 for all others, to control for these extra-large SMD-PR vote gaps. We expect a large negative coefficient in the Lithuania model.

Results

Table 1 lists the results from our models. The results strongly suggest the presence of a great deal of personal voting in all cases but Germany. Conversely, the evidence for strategic voting is limited, except

TABLE 1
 OLS Regression Models of the Gap between SMD and PR Results
 (standard errors in parentheses)

Variable	<i>Germany</i> Coefficient	<i>New Zealand</i> Coefficient	<i>Japan</i> Coefficient	<i>Lithuania</i> Coefficient	<i>Russia</i> Coefficient
Incumbent	0.011 (0.002)***	0.067 (0.012)***	0.039 (0.006)***	0.046 (0.009)***	0.028 (0.009)***
Incumbent Opponent	0.002 (0.001)	-0.009 (0.007)	-0.006 (0.005)	-0.004 (0.004)	0.002 (0.005)
1st Place	0.053 (0.002)***	0.055 (0.010)***	0.139 (0.005)***	0.061 (0.006)***	0.097 (0.008)***
2d Place	0.047 (0.001)***	0.006 (0.007)	0.064 (0.004)***	-0.010 (0.006)	0.038 (0.008)***
1st × Margin	-0.044 (0.012)***	0.102 (0.051)**	0.318 (0.020)***	0.544 (0.055)***	0.384 (0.042)***
2d × Margin	-0.062 (0.012)***	-0.135 (0.051)***	-0.138 (0.021)***	-0.195 (0.052)***	-0.159 (0.041)***
Bottom × Margin	0.036 (0.007)***	-0.006 (0.017)	-0.012 (0.017)	-0.062 (0.022)***	-0.037 (0.019)*
<i>Control Variables</i>					
SMDcands/PRparties	0.006 (0.004)	0.004 (0.033)	-0.160 (0.016)***	-0.053 (0.015)***	-0.115 (0.018)***
Independent SMD Vote		-0.179 (0.062)***	-0.074 (0.014)***	-0.043 (0.020)**	-0.024 (0.010)**
PR Incumbent			0.014 (0.006)***	0.038 (0.008)***	-0.009 (0.009)
Returnee			0.014 (0.007)*		
Alliance				-0.150 (0.006)***	
Constant	-0.019 (0.002)***	-0.009 (0.017)	0.085 (0.009)***	0.048 (0.011)***	0.067 (0.009)***
N	1,550	389	1,103	573	1,052
R ²	0.652	0.428	0.742	0.597	0.305
Adj R ²	0.650	0.415	0.740	0.589	0.298

Note: All models are for candidates or parties at the single-member district level.

*Significant at .1 level; **Significant at .05; ***Significant at .01.

in the German case. In all of the countries except for Germany, 1st × Margin is positive and statistically significant, which suggests the presence of a substantial personal vote for the winner. In the New Zealand case, this result is somewhat surprising because of the country's linked tiers, which ought to discourage greater personalistic politics. 2d × Margin is negative and significant for all cases. The reader will remember, however, that this finding is in reality an indeterminate result, consistent with personal and strategic voting.

The results for Germany, in contrast, are highly consistent with strategic voting. There is personal voting in any system, which creates a bias toward a positive coefficient on $1st \times Margin$. The fact that in Germany the coefficient is negative and significant offers substantial support for the view that high-ranking candidates are more likely to receive strategic votes when in a close race. In addition, $Bottom \times Margin$ is positive and significant, indicating that candidates ranked third or worse lose SMD votes when the top two candidates are locked in a close race and further bolstering the assertion of strategic voting in Germany. We only find such results in Germany; the other cases show no such evidence of strategic flight from poorly ranked candidates.

The results also serve to support Bawn's evidence of strategic ticket splitting in Germany. The existence of strategic voting in Germany is most likely due to the very heavy emphasis that voters place on party in Germany. Voters appear less likely to cast a personal vote. The result is striking because it indicates that, despite this heavy party emphasis and the presence of linked tiers that eliminate the importance of SMDs in determining the total number of seats that a party wins, voters in Germany appear to care about avoiding a wasted vote, even if that vote simply determines the individual who will represent their district. If a voter's top choice appears unlikely to win the district race, then the voter seeks a part in determining the final outcome and therefore is willing to cast a strategic vote to affect the selection of that representative.

The impact of incumbency is quite interesting because of what it implies about the personal vote and the power of incumbency in each of the countries. The results for Incumbent are fairly consistent, even in Lithuania and Russia. The size of the coefficients on Incumbent suggests that incumbency has the largest influence on ticket splitting in New Zealand and the smallest impact in Germany. New Zealand incumbents tend to receive a SMD-PR vote gap that is 6.7 percentage points larger than that of nonincumbents, whereas German incumbents' vote gap is only 1.1 percentage points larger than nonincumbents. The large size on Incumbent in the Japanese model should not be surprising because the unlinked Japanese system is well known for its personalistic politics especially focused on incumbents. Similarly, we expected large coefficients on incumbency in Lithuania and Russia because of the lack of linkage mechanisms in their mixed-member systems and the fact that their party systems have not yet been consolidated.

The very large positive coefficient on Incumbent in New Zealand is quite surprising, however, because of the substantial linkage mechanism between the two tiers. Our results strongly suggest that

voters' experience under the previous SMD institution, whereby all ballots were cast for individual candidates, as well as the dealignment of the New Zealand party system, had an important impact. This finding coincides with Karp et al.'s conclusion that the strength of New Zealand voters' attachment to particular candidates—and not to specific parties (Denemark 2001)—had a significant impact on the likelihood of ticket splitting (2002, 17).

Finally, the small size on the coefficient for Incumbent in the German model makes sense and suggests why strategic voting—as demonstrated by the negative (and significant) coefficient on $1st \times Margin$ and the positive (and significant) coefficient on $Bottom \times Margin$ —would be detected in the German case but not in the others. Because Germany maintains strong linkage mechanisms, has a party system that has been consolidated for decades, and has substantial experience with its mixed-member system, the German system is founded first and foremost on party-line voting. The personal vote is less potent than in the other countries examined here and therefore its presence did not outweigh that of strategic voting. Again, German voters tended to be eager to split their votes not when they had a preference for a candidate for personal reasons, but when splitting their ticket would help them play a part in affecting the outcome of the SMD election.

Finally, it should be noted that the coefficient on $1st \times Margin$ is largest for Lithuania and Russia, our two cases of unconsolidated democracy with underdeveloped party systems. This finding also coincides with expectations regarding strategic voting in such contexts. We speculate that the higher coefficient is likely due to: 1) a larger amount of personal voting arising from voters basing their decisions on personal characteristics rather than on poorly defined party labels, and 2) a smaller amount of strategic voting caused by a lack of adequate information regarding the relative support of specific candidates, which is necessary if voters are going to defect from candidates with little or no chance of gaining election.

Conclusions

Our analysis demonstrates the clear impact of the personal vote in mixed-member electoral systems in an array of countries. It also indicates how the personal vote complicates the analysis of strategic voting in mixed-member electoral systems because the personal vote can also account for the gap between a party's SMD and PR vote. Our findings suggest that much of what has been taken for evidence of strategic voting in mixed-member systems in previous studies is in fact

due to candidates' personal electoral support. Only one of our five country cases experienced patterns of SMD-PR vote gaps for winning candidates that were unambiguously consistent with strategic voting.

One interesting aspect of this part of our findings is the exceptionalism of the German case. The personal vote—as we have been discussing it for the other country cases—was not readily apparent in Germany, a country noted for its heavy emphasis on party-based political behavior. Thus, although there is a relatively low level of ticket splitting in the German system compared to in other mixed-member systems (Karp et al. 2002), our analysis suggests that strategic calculations were at the heart of such voting in Germany. In contrast to our findings for Germany, our other results suggest the presence of substantial personal voting in the new democracies we examined, in the highly candidate-centered Japanese system, and in New Zealand, where voter anger had weakened ties to leading political parties. In three of these four cases (Russia, Lithuania, and Japan), institutional factors in the form of unlinked tiers must also be considered prominent in promoting the personal vote.

Our results suggest the limits of institutional analysis. Institutions clearly do matter—Germany's linked system no doubt has strongly influenced what we have described as its low levels of personal voting. But substantially more appreciable personal voting in New Zealand indicates that current institutions are not a sufficient explanation for political behavior. Clearly, New Zealand personal voting is due to other factors, most likely societally based factors such as voter anger and dealignment (Denemark 2001). Moreover, the very strong results indicating the personal vote in Lithuania and Russia are certainly attributable, in very large part, not to their electoral institutions but to the lack of institutionalization of their party systems.

On a different note, it is noteworthy that it is Germany, a system in which district races typically do not affect overall seat shares, where strategic voting is especially discernible. As Jesse (1987) has noted, strategic defection to large parties in the SMD tier of Germany's mixed-member system makes no sense if voters are concerned primarily with the overall distribution of seats in the legislature.¹⁴ Thus, there is something of an irony in our analysis: Although we have been playing up the differences between Germany and the other countries (there was clear strategic voting and lower levels of personal voting in Germany), German strategic voting may in fact be founded on *personalistic* concerns over which individuals occupy SMD seats. It seems that, in a given SMD, voters pursue their strategic moves not to benefit their party in the legislature, but to elect an individual of whom they particularly

approve or perhaps to avoid wasting their votes for the sake of principle—even though such strategic moves have no impact on the overall partisan character of the legislature. One implication of this analysis is that we should inquire into the causes of strategic voting. Unfortunately, it is impossible to determine the psychological sources of voters' strategic moves by comparing SMD and PR results. Individual survey data would be required for such an investigation, but our analysis suggests this issue deserves further attention.

Finally, future research would do well to expand upon our analysis in two other ways. First, there is very good reason to believe that strategic voting occurs with some frequency in all of these cases. Additional efforts need to be made to study strategic voting in mixed-member systems by first *controlling for* the personal vote. Second, because incumbency had a strong effect in all four of the non-German cases, we were unable to determine which factor—linkage mechanism, party institutionalization, or path dependency—was most potent in helping to generate a larger personal vote. Future cross-national research would do well to address this issue.

Robert G. Moser is Associate Professor of Government, University of Texas at Austin, 1 University Station A1800, Austin, Texas 78712. Ethan Scheiner is Assistant Professor of Political Science, University of California at Davis, One Shields Avenue, Davis, California 95616 and Postdoctoral Fellow at the Stanford Institute for International Studies, Stanford, California 94305.

NOTES

Thanks to Kathy Bawn, Andy Baker, and Shigeo Hirano for helpful comments. Thanks to Steve Reed for sharing his data on Japan. Ethan Scheiner thanks the Program on U.S.-Japan Relations at Harvard University and the Stanford (University) Institute for International Studies, where he was a fellow during work on this paper.

1. See Bawn 1999, Cox 1997, Fisher 1973, and Roberts 1988 on Germany's mixed system and Reed 1999 on Japan's.

2. This assumption proves more unwieldy as the PR threshold of representation increases.

3. A positive coefficient does not necessarily rule out the possibility of strategic voting. Indeed, without strategic voting, the positive coefficient may be larger. But, in this sort of analysis, the positive coefficient on Margin makes it impossible to know if strategic voting is taking place.

4. Indeed, these candidates' great success is very often due to the substantial personal support many of them receive.

5. Such personalistic behavior may not be as prevalent in countries with strong, cohesive parties that may suppress the differences among copartisans for the sake of

party unity. Nonetheless, we would expect more personalistic campaigning and voting in unlinked systems that reward such behavior.

6. The type of linkage between the two tiers may also affect the likelihood of strategic voting. Mixed systems like Germany's, which use the PR tier to compensate for disproportional effects of the SMD tier, should undermine the constraining effect of the SMD half of the system. One can argue that voters in linked mixed systems have no incentive to defect from small parties to large parties since the SMD vote has virtually no effect on the final distribution of legislative seats. For this reason, Jesse (1987) argues that evidence of defection from small parties to larger ones in Germany reflects a misunderstanding of the incentives of the system. As we have noted, however, it may be difficult for methodological reasons to use an analysis of ticket splitting to reveal strategic voting in systems with a substantial personal vote.

7. Data for the study came from the following sources: for Germany, <http://www.bunderswahlleiter.de/ergeb98/index.htm>; for New Zealand, <http://www.elections.org.nz/pandr/stats.html>; for Japan, Steven R. Reed; for Lithuania, <http://www3.lrs.lt/n/rinkimai/seim96/index.html> and www3.lrs.lt/n/rinkimai/20001008/index_en.html; and for Russia, www.fci.ru.

8. A third type of rational ticket splitting is also quite possible: threshold-beating voting. When there is a legal threshold for representation in the PR tier, large parties may have incentive to find a way to give some of their PR votes to a small party that is a potential coalition partner, thus helping it to overcome the threshold. Many supporters of the large parties would be encouraged to split their tickets to give SMD votes to the large party and PR votes to the smaller potential coalition partner. Scenarios of this kind do in fact emerge in particular elections in countries such as Germany. It is difficult to conceive of a systematic way of controlling for such behavior, but, more important, there is no reason to think that such behavior would bias our results, creating an illusion of strategic voting for candidates in single-member districts when in fact there was none.

9. Turnout was about the same in both SMD and PR balloting.

10. Like Reed, we also ran models with Margin based on the gap between any candidate (no matter what place) and first place. Overall, the substantive meaning of the results scarcely changed and thus the results are not shown.

11. By using interaction terms, we avoid selection bias problems that would necessarily follow from attempting to test the same hypotheses by dividing the sample into only top-ranked candidates and only lower-ranked candidates. We employ the mean-difference or "centering" method of adjusting the interaction variables (Hamilton 1998). This method gives greater substantive meaning to the results for the dummy variables we used to create the interaction terms.

12. In the Japanese case, former seat-holders, who do not hold office at the time of the election, also have an incumbent-like personal vote advantage, so we add for the Japan model *Returnee* to represent such candidates.

13. Note that SMDcands/PRparties is not correlated with Independent SMD Vote in our samples.

14. It would of course represent a misunderstanding of the workings of the system if voters in the linked-tier systems in Germany and New Zealand were using their SMD votes to increase the seat shares of their preferred parties.

REFERENCES

- Bawn, Kathleen. 1999. "Voter Responses to Electoral Complexity: Ticket Splitting, Rational Voters, and Representation in the Federal Republic of Germany." *British Journal of Political Science* 29: 487–505.
- Cain, Bruce, John Ferejohn, and Morris Fiorina. 1987. *The Personal Vote: Constituency Service and Electoral Independence*. New York: Cambridge University Press.
- Carey, John, and Matthew S. Shugart. 1995. "Incentives to Cultivate a Personal Vote: A Rank Ordering of Electoral Formulas." *Electoral Studies* 14: 417–39.
- Conradt, David P. 2001. *The German Polity*. New York: Addison-Wesley Longman.
- Cox, Gary W. 1988. "Closeness and Turnout: A Methodological Note." *Journal of Politics* 50: 768–75.
- Cox, Gary W. 1997. *Making Votes Count: Strategic Coordination in the World's Electoral Systems*. New York: Cambridge University Press.
- Denemark, David. 2001. "Choosing MMP in New Zealand: Explaining the 1993 Electoral Reform." In *Mixed-Member Electoral Systems: The Best of Both Worlds?*, ed. Matthew S. Shugart and Martin P. Wattenberg. Oxford: Oxford University Press.
- Duch, Raymond M., and Harvey D. Palmer. 2002. "Strategic Voting in Post-Communist Democracy?" *British Journal of Political Science* 32: 63–91.
- Duverger, Maurice. 1963. *Political Parties: Their Organization and Activity in the Modern State*. New York: Wiley.
- Hamilton, Lawrence C. 1998. *Statistics with Stata 5*. Pacific Grove, CA: Duxbury.
- Jesse, Eckhard. 1987. "The West German Electoral System: The Case for Reform, 1949–87." *Western European Politics* 10: 434–48.
- Karp, Jeffrey, Jack Vowles, Susan A. Banducci, and Todd Donovan. 2002. "Strategic Voting, Party Activity, and Candidate Effects: Testing Explanations for Split Voting in New Zealand's New Mixed System." *Electoral Studies* 21: 1–22.
- Lijphart, Arend. 1984. *Democracies: Patterns of Majoritarian and Consensus Government in Twenty-One Countries*. New Haven, CT: Yale University Press.
- Massicotte, Louis, and Andre Blais. 1999. "Mixed Electoral Systems: A Conceptual and Empirical Survey." *Electoral Studies* 18: 341–66.
- McKean, Margaret A., and Ethan Scheiner. 2000. "Japan's New Electoral System: La Plus ça Change..." *Electoral Studies* 19: 447–77.
- Moser, Robert G. 2001. *Unexpected Outcomes: Electoral Systems, Political Parties, and Representation in Russia*. Pittsburgh, PA: University of Pittsburgh Press.
- Reed, Steven R. 1999. "Strategic Voting in the 1996 Japanese General Election." *Comparative Political Studies* 32: 257–70.
- Roberts, Geoffrey K. 1988. "The 'Second-Vote' Campaign Strategy of the West German Free Democratic Party." *European Journal of Political Research* 16: 317–37.
- Shugart, Matthew, and Martin P. Wattenberg, eds. 2001. *Mixed-Member Electoral Systems: The Best of Both Worlds?* Oxford: Oxford University Press.
- Website of the Central Electoral Commission of the Russian Federation, www.fci.ru
- Website of Elections New Zealand, www.elections.org.nz/pandr/stats.html
- Website of the Federal Returning Officer of Germany, www.bunderswahlleiter.de
- Website of the Lithuanian Seimas–1996 Election, www3.lrs.lt/n/rinkimai/seim96/index.htm
- Website of the Lithuanian Seimas–2000 Election, www3.lrs.lt/n/rinkimai/20001008/index_en.html