Multimember districts (MMDs), districts in which voters of a district elect more than one representative, are used to elect state senators in four states and state representatives in eleven states and numerous local officials. MMDs are often used to maintain congruence between legislative districts and other political boundaries (such as towns, wards, etc.) while at the same time adhering to the principle of one-person-one vote rule mandated by the U.S. Supreme Court. There are five types of multimember legislative districts in the U.S. They are as follows.

1. Bloc: free-for-all elections in which all candidates run against each other, voters can cast only one voter per candidate, and voters must cast a number of votes equivalent to the number of seats.
2. Bloc with Partial Abstention: the same as Bloc MMDs, but voters can cast any number of votes up to the number of seats.
3. Cumulative: allows voters to cast more than one vote for a candidate (not used for state legislative contests any more in the U.S., but used for local elections).
4. Staggered: two legislators represent the same geographic region, but are elected at different times (ala the U.S. Senate).
5. Seat (a.k.a. MMDs with posts): candidates contest for a specific seat within the district.

Vermont uses the Bloc with Partial Abstention system for its multimember districts.

This report discusses the advantages and disadvantages of multiple-member districts (MMDs) versus single-member districts (SMDs) in terms of the incumbency advantage, levels of competition, election financing, party voting, and representation. The analysis includes a review of the relevant political science research on the subjects and an analysis of elections in Vermont State House districts.

---

Incumbency, Competition, and Contestation

Incumbents do not appear to gain any advantage from MMDs. Indeed, one study found that the incumbency reelection advantage was smaller in MMDs. A separate 50 state analysis of state legislative elections found no difference between SMDs and MMDs with regard to the rate at which incumbents ran for reelection and won. Political Scientists Malcolm Jewell and David Breaux argue that the potential for incumbents to be more vulnerable in MMDs, writing “a plausible argument could be made that incumbents are most difficult to defeat if they are entrenched in relatively small single-member districts.” The findings of their analysis supported this argument.

In a study of who runs for the state legislature, Moncief, Jewell and Squire found that “[i]ncumbents in multimember districts are likely to take a strong role in recruiting candidates to run with them as part of the party “team” in the district.” As a result of such activity the level of contestation and competition in MMDs would likely increase.

Since MMDs allow map makers to draw districts congruent with other political subdivisions, there is some reason to believe MMDs may enhance political competition. In an in-depth study of the process of redistricting Jonathan Winburn concluded that the most effective way to ensure greater electoral competition is to make criteria for redistricting part of the states’ constitutions and that a key criterion for all maps is that the district boundaries do not split up political subdivisions.

Additionally, using MMDs to avoid splitting up political subdivisions also makes sense in terms of keeping elections easier to understand. It is intuitively easier to understand who one’s representatives are if the boundaries of legislative districts coincide with those of, say, a ward or a town for most voters. It also makes sense in terms of the basis of representation. Without this requirement representation is based on an arbitrary chunk of land; with it, it allows for the representation of the interests of whole neighborhoods, towns or even counties that might have a shared set of interests that should be represented in the state capital or U.S. House.

---

Vermont’s Experience with MMDs in State House Contests 2002-2006

The above research speaks to the experience in general with MMDs in the U.S. To see whether these findings applied to Vermont, we conducted an analysis of Vermont House races in the 2002, 2004 and 2006 elections comparing SMDs and MMDs for differences with regard to incumbency, contestation and competition. Figure 1 compares MMDs and SMDs in Vermont House contests with regard to the percentage of open seats (an open seat is one for which no incumbent is running; MMDs were considered to have an open seat if there were fewer than two incumbents running for reelection, SMDs were open if there were no incumbents running). As seen in the chart, MMDs were more likely to have a seat that was not held by an incumbent legislator in the contest.

Figure 1: The percent of Vermont House districts with an open seat (no incumbent running for the seat), 2002, 2004 and 2006.
Figure 2 shows the percent of incumbents whose reelection was contested in SMDs and MMDs. The figure shows that a higher proportion of incumbents faced challengers in MMDs than in SMDs in 2002 and 2006 (there was only a 1 percentage point difference in 2004).

<table>
<thead>
<tr>
<th></th>
<th>2002</th>
<th>2004</th>
<th>2006</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 seat</td>
<td>68%</td>
<td>68%</td>
<td>52%</td>
</tr>
<tr>
<td>2 seat</td>
<td>75%</td>
<td>69%</td>
<td>63%</td>
</tr>
</tbody>
</table>

Figure 2: Percent of incumbents in contested districts.

Figure 3 compares MMDs and SMDs with regard to the reelection success rate of incumbents. It appears that incumbents in MMDs are slightly more successful at winning reelection than incumbents in SMDs. Thus, the evidence from Vermont House contests regarding MMDs and incumbency is mixed: while there were more open seats (that is proportionately fewer incumbents per contest) in MMDs, and a higher frequency with which incumbents face a challenger in MMDs in 2002 and 2006, incumbents that do run for reelection tend to be slightly more successful in MMDs.

11 Comparing MMDs and SMDs with regard to contestation and competitiveness is, as political scientists who have tried to do so argue, very difficult (see Richard G. Niemi, Simon Jackman, Laura R. Winsky in “Candidacies and Competitiveness in Multimember Districts,” Legislative Studies Quarterly, Vol. 16, No. 1 (Feb., 1991), pp. 91-109). We code candidates as being in contested races if there are at least one more candidates than the number of seats. As argued in the literature, since Vermont’s 2 seat districts are Bloc with Partial Abstention types (a.k.a. free-for-all contests) contests all candidates face off against each other. So, if there are three candidates for 2 seats, all candidates are fighting for the 2 seats and are thus all facing competition.
Figure 3: Incumbency success rate by district type (the percent of incumbents who won reelection).

<table>
<thead>
<tr>
<th></th>
<th>2002</th>
<th>2004</th>
<th>2006</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 seat</td>
<td>85%</td>
<td>86%</td>
<td>88%</td>
</tr>
<tr>
<td>2 seat</td>
<td>92%</td>
<td>92%</td>
<td>93%</td>
</tr>
</tbody>
</table>

Figure 4 compares MMDs and SMDs with regard to the overall levels of contestation. There appear to be more MMD seats contested than SMD seats in 2002 and 2006, but no difference between the two in 2004.

Figure 4: The percent of candidates in contested elections (at least one more candidate than seats).

<table>
<thead>
<tr>
<th></th>
<th>2002</th>
<th>2004</th>
<th>2006</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 seat</td>
<td>83%</td>
<td>84%</td>
<td>74%</td>
</tr>
<tr>
<td>2 seat</td>
<td>87%</td>
<td>84%</td>
<td>80%</td>
</tr>
</tbody>
</table>
Comparing MMDs and SMDs with regard to competitiveness is tricky because of the difficulty in comparing the electoral distances between candidates in contests with different numbers of candidates (Is a 5 percentage margin of victory in a 4-way race for 2 seats the same as a 5 percentage margin of victory in a 2-way race for 1 seat? Are 5 percentage points the same when partial abstentions or bullet voting makes some votes worth more than a single vote?). Electoral practices may also confound comparing districts on competitiveness. The practice of placing a second candidate on the ballot in a 2 member district who doesn’t actually run for the spot but serves as a “soaker” to absorb voters’ second votes so they don’t go to the other party’s candidates, for example, might result in lower levels of competition (and the higher levels of contestation found above). The research on this matter recognizes that any such comparisons between SMDs and MMDs will not be perfect.\(^\text{12}\) With these caveats in mind, we compared MMDs and SMDs based on how many contests were decided by 10 percent of the vote or less. The results are in Figure 5. While fewer SMDs saw contests in two of the years studied, according to the calculations we used, there were a higher proportion of competitive seats in SMDs in every year.

\[\text{Figure 5: The percent of competitive seats (with a margin of victory} \leq 10 \text{ percentage points).}\(^\text{13}\)\]


\(^{13}\) To calculate the margin of victory for candidates in MMDs we matched candidates subtracting the vote percentage for the 4\(^{th}\) highest vote getter from the percentage for the top vote getter and subtracting the vote percentage of the 3\(^{rd}\) highest vote getter from the percentage for the second highest vote getter. This method was prescribed by Richard G. Niemi, Simon Jackman, Laura R. Winsky in “Candidacies and Competitiveness in Multimember Districts,” \textit{Legislative Studies Quarterly}, Vol. 16, No. 1 (Feb., 1991), pp. 91-109. This method may understate the level of competitiveness in 2 seat districts since the practice of bullet voting (casting only one vote instead of two) may inflate the margin of victory vis-a-vis the number of voters.
Vermont’s experience with MMDs versus SMDs in State House campaigns parallels the findings of the extant research on the effect of MMDs with regard to incumbents facing competition, but not with regard to incumbent reelection success. While there are proportionately fewer incumbents running for reelection in MMDs, those that do run are slightly more likely to face competition and slightly more successful at winning. Overall, more candidates face competition in MMDs than in SMDs, but fewer candidates in MMDs find themselves in close races (in which the margin is ≤ 10 percentage points). These results should be read with caution given the difficulties associated with such comparisons.

**Descriptive Representation**

Most studies have found that MMDs support a higher representation of women than SMDs.\(^14\) There are, on the other hand, conflicting research findings on the effect of MMDs with regard to the representation of minorities. Some scholars have found that multi-member electoral districts reduce minority descriptive representation\(^15\) while others fail to find such effects.\(^16\) Vermont’s lack of diversity makes the findings on minority representation irrelevant (minority population is so small and dispersed that it is nearly impossible to create any minority dominated districts in the state at this time).

Female legislators have been found to have distinct preferences on certain policies, favoring increases in welfare, health and education spending and programs to aid the poor and combat urban problems.\(^17\) A number of studies have found that MMDs result in a higher level of representation of women.\(^18\) In contrast to these studies, a more recent yet unpublished study contradicts the commonly accepted notion that MMDs reduce minority descriptive representation and the representation of women. By distinguishing between the different types of MMDs Richardson and Cooper find that the data do not support the claim that MMDs help

---


\(^{18}\) See note 15.
female legislative candidates. The authors suggest “some of these hypotheses may have been more accurate in the 1980s, but recent experience argues against them.”

**Vermont’s Experience with MMDs in State House Contests 2002-2006**

Table 1 shows the number of female candidates in each type of district for the elections of 2002, 2004 and 2006. Figure 6 shows the percent of women legislative candidates who won by district. The data shows that women candidates were more successful in SMDs than in MMDs in Vermont, lending support to the more recent findings of Richardson and Cooper.

<table>
<thead>
<tr>
<th>Table 1: Number of Female Candidates Running in Vermont State House Seats</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of Female Candidates</td>
</tr>
<tr>
<td>1 seat</td>
</tr>
<tr>
<td>2 seats</td>
</tr>
</tbody>
</table>

Figure 6: Percent of women candidates who won by district type.

**Policy Representation**

Are MMDs and SMDs different with regard to the nature of policy representation? If an election is fought on the basis of policy positions or ideology (a big “if” for elections in the U.S.\(^\text{20}\)), the best way to conceive of electoral competition is as a battle for the median voter on the

---


ideological scale of the district. The winning candidate in SMDs will be the candidate who wins the votes of those from her side of the ideological spectrum and enough voters in the center of the ideological spectrum to constitute a majority of the vote. MMDs change this calculus. “Instead of concentrating around the median voter, candidates in MMD elections are more likely to move to the extremes to stake out a particular constituency.”

In a study that compared Arizona state representatives with Arizona state senators researchers found that members in the House (MMD) are more likely than members of the Senate (SMD) to “reside on the extreme ends of the ideological spectrum and much less likely to be moderates.” The Arizona MMD House legislators “rely on ideology at the expense of other factors in voting on higher education policy. Conversely, senators in a SMD system primarily use constituency characteristics and not ideology to shape decision-making on higher education.”

Other research has found that representatives in MMDs are less likely to develop a “personal vote,” that is support based on their constituency service to members of the district and support for them personally, as opposed to support for their stances on the issues.

These conclusions about the role of ideology and MMDs can be interpreted as positive for representation if one wishes representation to be policy based as opposed to being based on personalities of the representatives or constituency service. If candidates in MMDs are more ideologically differentiated, voters are more likely to have a clear choice in an election, a choice that translates into actual policies preferred by voters after an election. The conclusion regarding ideological differences between MMDs and SMDs can be interpreted negatively if the increased import of ideology leads to greater polarization within legislatures of the type that is not policy-based.

In terms of the role of political parties, voters in MMDs may be more likely to vote along party lines, using party labels as voting cues in a rational attempt to simplify their vote choice (especially considering that legislative contests are typically further down the ballot). While there is no empirical evidence to date on this question, such a pattern of voting behavior would constitute a benefit of MMDs since party voting enhances the functioning of elections as a means to control government policy.

22 Lilliard E. Richardson, Jr., Brian E. Russell and Christopher A. Cooper, “Legislative Representation in a Single-Member versus Multiple-Member District System: The Arizona State Legislature.”
24 Anthony Gierzynski, Saving American Elections.
Research on the representation of political parties in MMDs versus SMDs has found that MMDs do NOT harm minority party representation.  

**Campaign Finance and MMDs**

Another consideration is whether there are differences between SMDs and MMDs with regard to the financing of campaigns and the importance of money in winning those campaigns.

**Fund Raising**

According to a study of state legislative MMDs in Maryland, fundraising is a more challenging endeavor for candidates contesting elections in MMDs. Not only are these candidates typically able to raise less money, they also need to work harder to raise the funds they collect. It is clear that the dynamics of fundraising for MMD elections in Maryland differ from those of SMD elections in the state. “The most important differences stem from the heightened level of uncertainty associated with MMDs, the increased competition in fundraising resulting from this uncertainty, and the basic fact that there are more candidates involved in the money chase.” The comparison of candidates in MMDs and SMDs in Maryland found that candidates in MMDs raised less money than candidates in SMDs.

Do State House candidates in MMDs in Vermont have more difficulty fund raising than candidates in SMDs and to what effect? Figures 7 and 8 compare the median revenues raised by candidates in MMDs and SMDs (Figure 7 includes all candidates, 8 is just challengers whose relative success in fund raising holds implications for the competitiveness of the contests). While tested using a simpler analysis, it is clear that the findings of Curry, Herrnson and Taylor in Maryland hold for Vermont as well. Candidates in MMDs tend to raise less campaign money than candidates in SMDs. Because candidates often run as teams in MMDs in Vermont, a tactic that can save money, these differences may not be as important.

---


26 Michael James Curry, Paul S. Herrnson, and Jeffrey Alan Taylor, “The Impact of District Magnitude on Campaign Fundraising,” p 19

27 Michael James Curry, Paul S. Herrnson, and Jeffrey Alan Taylor, “The Impact of District Magnitude on Campaign Fundraising,” p 8
Figure 7: Median campaign revenues for Vermont House candidates in MMDs and SMDs.

Figure 8: Median campaign revenues for **challengers** to incumbent Vermont House members in MMDs and SMDs.

**The Importance of Money in Winning**

While it seems to be the case that candidates in MMDs raise less money than candidates in SMDs it may be also be the case that the dynamics of running in MMDs affects the impact
money has on the electoral fortunes of candidates. Because candidates in MMDs often run as a team, sharing expenses, it may be that candidate spending is not as important as it is in MMDs. Is there any difference in the importance of money for winning votes in MMDs versus SMDs? To examine that question we conducted a multivariate regression analysis to assess the importance of spending on the vote in MMDs and SMDs. The results are presented in Table 2 and indicate that candidate spending (as a proportion of all spending in the race) has less of an impact on the fortunes of candidates in MMDs than in SMDs.\textsuperscript{28} In other words, campaign spending advantages are more strongly related to the percentage of the vote won by candidates in SMDs than in MMDs.

The analysis in Table 1 also presents a more rigorous test of the effect of MMDs on the success of female candidates. While the signs of the coefficients were in the correct direction for two of the three elections (negative, supporting the findings in Figure 6) they were not statistically significant, suggesting that the reason female candidates may not be as successful in MMDs may be due to some other factors as opposed to the size of the district.

<table>
<thead>
<tr>
<th>Table 2: Multiple Regression Analysis, Dependent Variable = candidates’ percent of the vote</th>
<th>2002</th>
<th>2004</th>
<th>2006</th>
</tr>
</thead>
<tbody>
<tr>
<td>proportion of spending</td>
<td>0.33</td>
<td>0.13</td>
<td>0.13</td>
</tr>
<tr>
<td>proportion of spending X 2MD</td>
<td>-0.27</td>
<td>-0.12</td>
<td>-0.09</td>
</tr>
<tr>
<td>1st on ballot</td>
<td>6.36</td>
<td>1.98</td>
<td>0.35</td>
</tr>
<tr>
<td>2nd on ballot</td>
<td>2.80</td>
<td>0.11</td>
<td>1.39</td>
</tr>
<tr>
<td>Incumbent</td>
<td>12.69</td>
<td>11.69</td>
<td>11.90</td>
</tr>
<tr>
<td>open seat candidate</td>
<td>4.34</td>
<td>7.17</td>
<td>0.57</td>
</tr>
<tr>
<td>female candidate</td>
<td>-0.14</td>
<td>2.08</td>
<td>3.90</td>
</tr>
<tr>
<td>female candidates in 2MDs</td>
<td>0.85</td>
<td>-3.14</td>
<td>-2.55</td>
</tr>
<tr>
<td>Democrat</td>
<td>1.92</td>
<td>2.66</td>
<td>6.98</td>
</tr>
<tr>
<td>number of candidates</td>
<td>-3.16</td>
<td>-7.00</td>
<td>-8.20</td>
</tr>
<tr>
<td>adjusted R-square</td>
<td>0.72</td>
<td>0.78</td>
<td>0.75</td>
</tr>
</tbody>
</table>

\textsuperscript{28} We used an interaction model to test for differences between the two. To do so we multiplied the candidates’ proportion of spending by a dichotomous variable for 2 seat districts (equaled 1 if it was a 2 seat district, 0 if it was a 1 seat district). The interaction term (highlighted in the table) indicates that the impact of the candidates proportion of spending in the races was less (as indicated by the negative sign) than the impact of spending differentials in the 1 seat districts. Another way to perform this analysis is to run separate regression analyses for 1 seat districts and 2 seat districts; doing so produces the same results, candidate financial advantages (in terms of the proportion of money spent in the election) matter less in explaining the percentage of vote received by candidates. All cells that are highlighted are coefficients that were statistically significant at the .05 level.
Conclusion

The comparison between MMDs and SMDs (note caveats discuss above) finds that compared to SMDs,

- there are more open seats (contests without an incumbent) in MMDs;
- incumbents are more likely to face an opponent in MMDs;
- incumbents that do run for reelection are likely to be more successful in MMDs;
- there are likely to be more contested districts overall in MMDs;
- there appears to be fewer close races in MMDs;
- while female candidates at first seem to be more successful in SMDs, a multivariate analysis suggests that this may be due to factors other than the MMDs;
- candidates are unable to raise as much money in MMDs;
- and, campaign spending differentials have less of an impact on the vote candidates receive in MMDs.

Overall, the picture does not offer a strong case for MMDs over SMDS or the other way around. Since that is the case, other factors (such as maintaining boundaries congruent with other political jurisdictions, such as towns or wards) may become more important considerations.

Prepared by Professor Anthony Gierzynski, with Katie O’Rourke, Michael Ferris, Henry Webster, and graduate student Kate Fournier on December 1, 2011.

Contact: Professor Anthony Gierzynski, 513 Old Mill, The University of Vermont, Burlington, VT 05405, phone 802-656-7973, email agierzyn@uvm.edu.

Disclaimer: This report has been compiled by undergraduate students at the University of Vermont under the supervision of Professor Anthony Gierzynski. The material contained in the report does not reflect the official policy of the University of Vermont.