

District magnitude and representation of the majority's preferences—a reply and new perspectives

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Abstract We reply to the comment of John Carey and Simon Hix on our original contribution entitled “District Magnitude and Representation of the Majority’s Preferences: Quasi-Experimental Evidence from Popular and Parliamentary Votes” in Public Choice 151:585–610 (2012). District magnitude does not necessarily affect deviations between political representatives and their district voters in a strictly monotonic way but monotonicity is upheld for deviations between representatives and the national majority. We provide new perspectives and caution against evaluating electoral systems by focusing on individual politicians’ behavior but neglecting aggregation effects.

Keywords Political representation · Electoral systems · District magnitude · Voting behavior

JEL Classification D78 · D70 · D80

John Carey and Simon Hix (2012) (henceforth CH) refine the analysis in our original contribution (Portmann et al. 2012) in a fruitful way by investigating non-monotonic effects of district magnitude.

CH group together districts (Swiss cantons) with different magnitudes by means of separate dummies and regress one of our two original measures of divergence between representatives and voters on these dummies. The results show that individual politicians from small but multi-member districts represent the respective majority of their cantonal voters not only better than politicians from large multi-member districts (our original result) but also better than individual politicians from single-member districts (CH’s refinement).

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We appreciate CH's strategy of identifying non-monotonic effects of district magnitude and can confirm their interesting and important refinement with respect to deviations between politicians and cantonal voters. However, it is vital to highlight that this non-monotonic effect of district magnitude does not hold when considering how well politicians from the National Council represent the preferences of the national majority of all voters. This second measure of deviation between politicians and the national majority increases monotonically in district magnitude. CH correctly point out that members of parliament are elected by cantonal voters, which makes deviations from them particularly important; hence, expectations about whether the relationship between district magnitude and deviations from national majorities should be monotonic or non-monotonic are unclear. Nevertheless, deviations from the majority of national voters are also important. Members of the National Council are seen as "representatives of the People", while members of the Council of States¹ are seen as "representatives of the Cantons", according to the Swiss Constitution, articles 149 and 150. As this view is also held partly by voters and politicians themselves, deviations from the majority of national voters needed to be analyzed, which is why we considered them in our original contribution.

It is essential to explain the results for representation of cantonal and national preferences. While we were troubled before by potential non-monotonic effects of district magnitude at the cantonal level, we were not able to reconcile them with the monotonic effects of district magnitude at the national level. We suppose that the interesting theory presented in Carey and Hix (2011) allows us to do so now. Adding a second or third representative per district may generate competition and allows for better comparisons between representatives at the cantonal level, resulting in an "electoral sweet spot". At the national level direct comparisons between representatives are always possible and thus, the effect of district magnitude we describe in our original paper is monotonic. Moreover, the role and influence of political parties changes when moving from one representative to more than one. Unfortunately, it is impossible to differentiate between these explanations based on our prior data set.

Therefore, we have enriched our data by including new information on the second chamber of the Swiss parliament, the Council of States, in which six cantons have one member and 20 cantons have two members. For the Council of States, we do not find any significant difference in the quality of voter representation by individual politicians between districts with one representative and districts with two representatives (see Stadelmann et al. 2012a).² Moreover, we are now able to analyze the differential effects of representatives' party affiliations under majority and proportional representation. Again, we match the referendum decisions of constituents with the voting behavior of their representatives, who are elected either under a majoritarian system in the Council of States³ or a proportional system in the National Council. According to conventional expectations, politicians' party affiliations should influence political representation when they are elected by proportional representation, as in the National Council. In contrast, majoritarian systems, as in the Council of States, force politicians to converge more to the median position of their constituents, and

¹The Council of States is not analyzed in the original contribution in Public Choice but is analyzed in Stadelmann et al. (2012a) because members of the Council of States are only elected in single- or two-member districts.

²Note that Carey and Hix (2011) suggest that the "electoral sweet spot" of low-magnitude is likely to be about four to eight seats per district and not two, as in the Council of States. However, CH find an "electoral sweet spot" for two to six seats for Switzerland with our data from Public Choice.

³For the period of analysis, all but two members of the Council of States were elected under majority rule.

party affiliation should have little to no role. This is precisely what we find in the data within a common party system (see Stadelmann et al. 2012b).

The control variables used by CH and in our original contribution indicate that factors outside the spatial voting model are relevant when explaining the divergence between real political decisions by representatives and revealed constituents' preferences in referenda. In Stadelmann et al. (2012c) we show that district heterogeneity in voter preferences and ideology play an important role when explaining divergence.

Hitherto, we along with CH, focused on analyzing the congruence between individual members of parliament and the majority of voters. However, one might argue that the quality of representation should not be measured by the decisions of individual politicians but instead by looking at the aggregate decisions made by the majority of representatives from a given district. In a recent working paper (Stadelmann et al. 2011) we show that the probability that decisions by the *majority of representatives* correspond to their constituents' preferences *increases* strongly with district magnitude. This odd empirical fact emerges because individual incentives to cater to the majority's preferences in a constituency decrease only slightly with district magnitude. Yet, the probability of each member voting according to constituents' preferences remains systematically above 50 %. Thus, a larger number of representatives increases the probability of congruence between *the majority of representatives and the majority of their constituents* by a law of large numbers in political representation. In larger districts, the sheer number of politicians compensates for their greater individual "errors". Even though more politicians may lead to worse individual incentives, voters' preferences are more closely represented by the majority of politicians from large districts.

Thus, as in the conclusion of our original contribution, we would like to caution against reforms of electoral district sizes based only on results of how individual politicians represent the majority's preferences of their district or the nation as a whole. While increasing the number of representatives per district usually leads to weaker individual incentives for representation, as shown by our analysis and confirmed by CH for increases from small multi-member districts to large multi-member districts, the aggregate decisions of the *majority of representatives* may well improve, i.e., the decisions of the majority of representatives may well be closer to voters' preferences.

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