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MALAPPORTIONMENT AND GERRYMANDERING IN POST-SOCIALISM: THE HUNGARIAN CONTEXT

Introduction

One of the most important political questions in representative democracies is how votes are translated to parliamentary seats. The basic principle is to make the conversion of votes to seats as fair as possible. In this respect, one of the main questions is territorial proportionality without as much bias as possible. Therefore, the territorial division of national space into electoral districts has been for long on the agenda among geographers (*Johnston, R. 2002, 2015*).

This issue is especially widely discussed in countries with electoral systems based on single-member constituencies, for instance the UK, USA, or France (*Grofman, B. et al. 1997; Leib, J. – Quinton, N. 2011; Chen, J. – Rodden, J. 2013*), but in proportional systems the division of national territory also tends to get in the focus of interest (*Giugal, A. et al. 2017*). With few exceptions, this question has been largely neglected so far in post-socialist Central and Eastern European countries, partly because in many of these countries proportional system prevails (e.g. Poland, Slovakia, Latvia), or the post-socialist division of electoral districts was adjusted to the existing administrative boundaries in 1989-1990, leaving little room for alternatives. Rare examples in the growing body of literature in the region focus on the criteria used in districting (*Giual, A. et al. 2017; Popescu, M. –*

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Toka, G. 2008), and the ethnic aspects of gerrymandering (*Halás, M. – Klapka, P. 2017*). Redistricting in the post-socialist countries has been limited and the issue raised little attention so far. The new electoral system of Hungary laid down by Law CCIII/2011 was the first example in the region where the size and shape of constituencies were significantly changed during a substantial redistricting process (*Kovacs, Z. – Vida, Gy. 2015*).

The main aim of this paper is to provide a brief overview about the disproportionality of the Hungarian electoral system regarding territorial asymmetry, as far as malapportionment and gerrymandering are concerned. The paper is constructed as follows. In the next section, the theoretical foundations of electoral bias, as well as the determining role of geographical scale and its conceptual issues, are discussed. After the literature review, we present the electoral bias including malapportionment and gerrymandering of the Hungarian electoral system both before and after the redistricting process based on the results of the Hungarian parliamentary elections. Finally, we provide a short conclusion.

Electoral bias in theory and applied methods

Political justice and fair representation are often on the agenda among social scientist investigating the fairness of electoral systems. Although an absolutely fair electoral system seems to be impossible, efforts should be made to reach the highest possible level of proportional representation (*Webster, G. R. 2013*).

Researchers focusing on the issue tend to measure the disproportionality of electoral systems with different statistical methods (Loosemore-Hanby's Index, Gallagher Index) and its possible effects on the party system (*Monroe, B. L. 1994, Gallagher, M.–Mitchel, P. 2005*). However, in these studies, the geographical

features of disproportionality are often neglected. According to Ron Johnston (2002) in any electoral system where certain parts of seats are allocated in constituencies, geography, most precisely electoral geography has an important role.

The first example of geographical bias in drawing the boundaries of electoral districts goes back to 1812 in Massachusetts where Governor Gerry delimited odd and peculiar shaped electoral districts which were morphed into a political cartoon depicting a strange animal with claws, wings, and a dragon-type head (*Martis, K. 2008*). Gerrymandering has flourished ever since all over the world providing many examples of unfair redistricting. As a consequence, the whole issue gradually became a dominant subject in electoral geography (*Leib, J. – Quinton N. 2011, Webster, G. R. 2013*). Unfair electoral districting normally favor major parties for which various terms are used like electoral bias (*Johnston, R. 2002*), partisan bias or majoritarian bias (*Borisyuk, G. et al. 2008, 2010*).

According to Grofman *et al.* (1997) and Johnston (2002), there are three potential sources of electoral bias: malapportionment, reactive malapportionment, and partisan gerrymandering. Malapportionment is understood as variations in the population size of constituencies within a country. Reactive malapportionment refers to turnout rate differences across electoral districts, whereas partisan gerrymandering means territorial manipulation of electoral districts to discriminate or favor certain parties or persons. In the present study, the sources of electoral bias will be presented briefly on the example of Hungary and the new electoral law of 2011.

Studying electoral bias in the new division of Hungarian constituencies we apply mathematical and statistical methods considering the 176 constituencies before 2011, and the 106 new constituencies after that. To detect malapportionment, we analyse the number of eligible voters across constituencies,

and the divergence from the national average based on the proportion of voters. Furthermore, to detect gerrymandering effects we calculate Hoover index to express the effective voters' distributions of political parties. To calculate the values, and to edit the maps we used ArcGIS 10.3 program.

Malapportionment and Gerrymandering in the Hungarian electoral system

Based on the analysis of the distribution of eligible voters we found that there was a clear divergence among the single-member constituencies compared to the national average values after the boundaries were redrawn. However, we also found substantial differences among counties and constituencies embedded in the same county, based on the 2014 election results (Figure 1.).

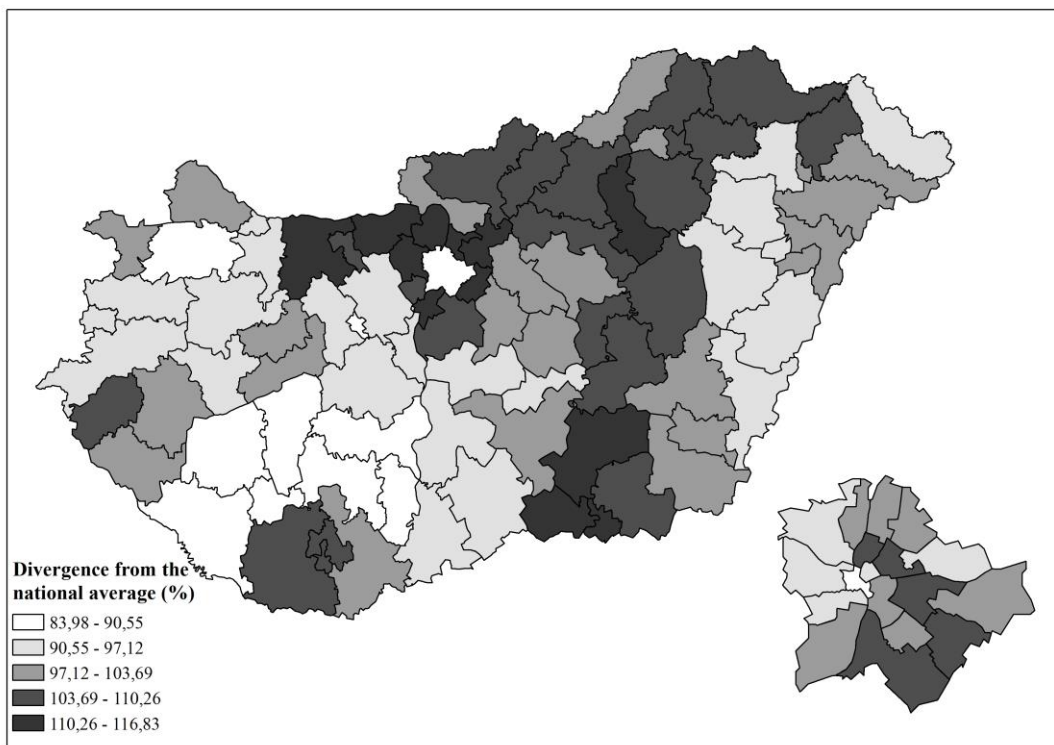


Figure 1. The level of divergence of the Hungarian single-member districts from the national average based on the number of eligible voters in 2014

Data source: Hungarian National Election Office

The main challenge for redrawing the boundaries of electoral districts in Hungary is the rule set by the law (the previous and also the new one), that county boundaries (in addition to national boundaries) could not be crossed, and all constituencies should be embedded in one single county (*Süli-Zakar, I. 2002*). Under these circumstances we can hardly expect an equal size of constituencies, thus, after the reform in 2011 bigger and smaller electoral constituencies were created. We must also note, that the new electoral law solved the earlier huge size differences only for a short term, partly because demographic trends and migratory effects in Hungary (i.e. geography) were not seriously taken into account by politicians. There are uneven electoral districts where future population changes might create a serious discrepancy. Malapportionment comes to the fore if parties get higher support in small districts or vice versa.

Next to malapportionment, the other pillar of unequal territorial representation is gerrymandering. In the Hungarian electoral system, the gerrymandering phenomenon was measured by dividing the parties vote distribution among constituencies with Hoover-index (Table 1.). The lower the value was the more evenly was distributed the party's support among constituencies.

*1. Table: Effective Voting distribution of parties based on Hoover-Index
Data source: Hungarian National Election Office*

	Conservative	Left-liberal alliance	Radical nationalist	Greens
Electoral district level 2010	5.37%	9.88%	13.94%	19.39%

Electoral district level 2014	7.99%	15.66%	11.10%	23.56%
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Our calculations show that after the landslide victory of the conservative party in 2010 the distribution of votes of parties changed significantly across electoral constituencies. After this event, the voting base of right-wing parties spread more evenly than that of the left-liberal side. After the acceptance of the new law and the creation of new electoral boundaries, the Hoover values of all the parties became higher than before except for the radical nationalist party. The reason for this is the spatial spread of party support after 2010. The distribution of conservatives votes was very even, thus, gerrymandering only little favored the right-wing parties. However, international studies have also pointed out (*Chen, J. – Rodden, J. 2013*), that the concentration of voters may also reverse the gerrymandering phenomenon. These processes are also detected in Hungary because of the high level of concentration of the left and liberal votes in urban areas, especially in the capital city of Budapest.

Conclusions

In this paper we aimed to provide a brief overview of the electoral bias in the new Hungarian electoral system introduced after 2011 regarding malapportionment and gerrymandering. Our analysis showed that the new Hungarian electoral law solved the constitutional problem concerning disproportional constituencies, however, only for a short term. Due to contemporary demographic and migration trends, the principle of proportionality is seriously going to be threatened in the next couple of years.

We can also conclude, that the new Hungarian electoral system elaborated after 2011 became more majoritarian and hence it favors bigger parties and it is rather disadvantageous for smaller parties. In addition, we can also note that conservative and radical nationalist parties are moderately beneficiaries of the malapportionment and gerrymandering effects of the new system. The delimitation of constituencies favours the conservative parties and concentrates the left-liberal votes across Hungary, and especially in major cities (Budapest, Szeged, Pécs etc.) where left-liberal votes are more concentrated. Obviously the delimitation of electoral districts is only one side of the coin, and it provides the framework for possible malapportionment and gerrymandering. At least as important are the voters themselves, whether they participate in the elections (i.e. turnout rates) and which party they vote for. As voters often shift between parties with different ideological background an intentional trial for gerrymandering may hit back to those who manipulate the geographical shape of electoral districts.

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