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Strategic behaviour of political actors and changes to voting rules: A case study of regional elections in Slovakia

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Abstract

The paper highlights the issue of strategic behaviour among political actors in selected elections to bodies of Slovak administrative regions held under a majoritarian electoral system. While we abstract from deeper contexts of game theory and rational decision-making, our main contribution lies in the substantive dimension. After revealing the weaknesses of the regional electoral system in the conditions of Slovakia, we emphasise potential solutions, whose effects are evaluated in the text. In the concluding section, we discuss alternative vote to open the debate on modifying the regional-level electoral system with a view to strengthening the power of individual voters.

Keywords

Electoral system, voter behaviour, regional elections, strategic behaviour, alternative vote

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1. Introduction

Although the analysis and study of voter behaviour has always received considerable attention in Slovakia, especially in the post-election period in the context of its evaluation, it is still a relatively attractive and inexhaustible topic that is crucial for understanding the dynamics of the political system, the stability of democracy and the effectiveness of public policy. In terms of examining the factors and determinants of voter behaviour, various types can be identified, such as socio-structural voting behaviour, psychological, protest, retrospective and prospective, habitualised behaviour, and others.

Although the trend of emotional voting is increasingly coming to the forefront, particularly at the national level in modern democracies, the central thematic focus of this paper exclusively addresses the strategic type of behaviour at the regional level. This is due to the identified lack of scholarly studies in this area within the context of Slovakia. Strategic voter behaviour is an important topic in political science, as it influences not only the election outcomes themselves but also the overall dynamics of political competition and the shaping of the political system. This refers to a situation where voters do not vote solely based on their primary preference but also take into account the broader context, such as the electoral system—which is the key focus of this paper—the chances of individual candidates or parties, and, last but not least, potential post-election coalitions.

Since strategic voting is particularly significant in systems where there is a high likelihood of wasted votes, this paper will primarily focus on this type of behaviour in a single-round majoritarian system. The core idea is to highlight voter strategies and tactics where the outcome is not the election of the preferred candidate but rather the candidate with the best chance of defeating an undesirable opponent. Through a concrete example, we aim to illustrate the strategic positions of voters and political actors in the 2017 regional elections in Slovakia, where their shared ambition was to prevent the possible victory of an extremist candidate (Rybář 2019; Marušiak 2018). The objective of this paper is not only to identify this sophisticated model of electoral behaviour in a specific type of election but also to highlight its connections to electoral reform, which itself served as a stimulus for strategic decision-making.

In the context of the political realities surrounding the 2017 amendment to the electoral law and in line with the paper's thematic focus, our central research question is: What impact did the change in the electoral system for the directly elected heads of the self-governing regions – higher territorial units (HTUs) in 2017 have on electoral dynamics and voter behaviour? The conclusions drawn from this research will guide us towards considering an alternative electoral system that would minimise the risk of wasted votes, preserve the legitimacy of the winning candidate, and reduce the pressure for tactical voting. This will be demonstrated through a model example. In doing so, we will also fulfil a secondary objective of this paper—by identifying the weaknesses of the

current electoral system for heads of the HTUs, we will propose a new model as a potential solution.

The dominant methodological procedures used in the text to achieve the stated objective are the method of analysis and synthesis of knowledge, the descriptive method and the comparative method. In the initial part of the paper, we use comparative analysis to present expert approaches to strategic voting in different electoral systems, drawing on the perspectives of prominent political scientists. Thus, we compare their interpretation of insincere voting in majority, proportional, and mixed electoral systems. In the beginning of the second chapter, we focus on the analysis of the shortcomings of the single-round election of heads of the HTUs. Subsequently, using the comparative method, we will define the key aspects of the two-round and single-round electoral models for heads of the HTUs, with an emphasis on their impact on the electoral process and the representativeness of the results. In line with logical correlations, we will systematically define and analyse the positions of voters and political actors using the example of the Banská Bystrica self-governing region. This analytical approach enables us to examine patterns of strategic behaviour and, in turn, formulate an answer to the stated research question. At the end of the paper, based on the identified risks associated with the single-round election of the heads of HTUs, we will present a model of alternative vote system.

From a political science perspective, analysing strategic voting is essential for understanding the mechanisms that influence the functioning of democracy, the development of party systems, and the dynamics of political decision-making. The relevance of this topic is justified by the fact that, although several studies on voter behaviour exist in the Slovak academic environment (Mikuš et al. 2016; Buček and Plešivčák 2017; Maškarinec 2018), there is a noticeable lack of systematic research on strategic voting.

Research often focuses on overall voter turnout, party identification, or electoral volatility, while specific aspects of strategic voting—such as tactical choices and voter strategies at the regional level—remain underexplored. Many analyses in this area tend to be based on ad hoc political commentaries rather than in-depth academic studies. Given these factors, it is crucial to address this topic more systematically, particularly by employing empirical data and comparative analyses both within Slovakia and in the broader Central European context.

2. Theoretical aspects of strategic voting in the context of electoral systems

Before analyzing the key topic of regional elections, it is necessary to define the terminological apparatus of strategic voting. A specific determinant of voter behaviour is the type of electoral system, as its mechanism incorporates the power of indirect

inducement towards strategic voting, which is the focus of our paper in the context of regional elections. From a terminological perspective, strategic, sophisticated, insincere, or tactical voting can be considered synonymous terms to describe a situation where a voters, in the process of making an electoral decision, do not cast their vote for the political party, coalition, or candidate with whom they most identify, but instead choose a different preference for the sake of utility. Significant attention has been given to the study of strategic voting, particularly within the branch of North American political science (Palfrey and Rosenthal 1983; Feddersen and Wright 1990; Cox 1997; Alvarez and Nagler 2000; Kollman and Chhibber 2004), which has adopted the approaches of rational choice theory, emphasising the element of egoism.

Strategic decision-making is a standard part of political reality and practically always has a political character, or is tied to a goal that is important from the subject's point of view and which the subject must pursue against its will (Prorok 2012). Electoral systems define the rules by which a political party, coalition, or specific candidate becomes the political winner of an electoral contest, and they also have a mechanical influence on election results, as they define the methods and procedures by which voter votes are counted and transformed into specific mandates.

However, psychological effect seems much more interesting, as it is key within the voting process itself. The characteristics of the electoral system play a decisive role in determining to what extent voters will lean towards tactical voting and suppress their true preference, for example, due to the fear of their vote being wasted.

The strategic form of voting inherently incorporates an element of rationality, which is evident in the choice of an alternative that is sometimes the second, third, or even fourth most preferred option. Oftentimes, voters will prioritise choosing a politically party, coalition, or candidate that is more media-preferred, and who, in opinion polls, achieves the required electability threshold, at the expense of those actors with whom they may genuinely identify, but who, during the pre-election period, fail to show sufficient voter support in public opinion polls. In an effort to avoid an ineffective vote or an undesired outcome, tactical voters will be inclined to choose the powerful party, coalition, or specific candidate, even against their will. In general, the psychological effect of electoral legislation leads to sophisticated behaviour, which is “based on the assumption of the rationality of actors who are able to predict the expected consequences of electoral laws and adapt to them” (Rybář 2011: 47).

Elections can generally be understood as a means whose purpose is to elect and define the government. Within this concept, a distinction can be made between categories such as “voting rights”, which define the group of people eligible to vote and the conditions of voting, and the second category, “electoral systems”, which are related to the mechanism of transforming the will of the voters into the form of a representative assembly. The formal aspects of electoral systems fulfil the fundamental principles of

democracy and symbolise an important fraction of the normative foundations that support the development and progress of a healthy civil society.

In majoritarian electoral systems, the choice of party is often closely linked to the choice of government itself, as the system has a strongly reductive effect on the number of parties. The government tends to alternate between two parties, which typically form a stable majority and do not need to establish coalition alliances with other entities.

In proportional electoral systems, which predispose a greater number of parties, the situation is more complex, as there can be three possible scenarios in which the winning political party:

1. manages to form a single-party government;
2. is part of a governing coalition;
3. is unable to form a government.

The awareness of possible variants stimulates various model attitudes of voter behaviour. In studies focusing on strategic voting, the discourse centres around defining the environment in which this type of voting occurs. According to foundational studies, such as those by Duverger (1964) and Cox (1997), an inclination towards sophisticated voting is most notably observable in majoritarian electoral systems, as a simple or absolute majority is required to gain a mandate. Insincere voting, in the ambition to achieve the most favourable results, cannot be excluded from proportional or mixed electoral systems, but its intensity depends on various variables that are specific to the country with the adopted electoral system. The study of Sartori (2001) and Gibbard (1973) provides evidence that the motivations for strategic voting cannot be linked solely to one electoral system, as they acknowledge the possibility of voters resorting to this type of voting even in proportional systems. The element of rationality is often questioned in this environment, which stimulates more intense political competition among actors, and this is something Downs (1957) highlighted in his research, with a tone of scepticism regarding the strategic orientation.

The contradiction of the above are the ideas of Gschwend (2006) or Blais (2000), who believe that the voter has a rational predisposition to realistically evaluate possible alternatives when forming a government in a proportional system. Although at first glance, the complexity of potential electoral consequences in a proportional system may seem overwhelming, proponents of strategic voting argue that, in such a system, voters are able to simplify it according to their needs and interests, while still remaining within the line of rational decision-making. Sophisticated voting by the voter in the context of a proportional electoral system is directly proportional to the established threshold, the crossing of which is a condition for obtaining a mandate. The higher the percentage threshold, the greater the degree of tactical voting by the voter, who may resort to choosing less preferred candidates in order to avoid an undesirable outcome. The mixed

electoral system must not be overlooked, as this issue has been highlighted by scholars such as Bawn (1999) and Gschwend (2006).

Not only the attitude of voters, but also the attitude of aspiring candidates towards electoral tactics is modified and adapted under the influence of the electoral system. This is evident in their own presentation, the conduct of their political campaigns, or their inclination towards coalition groupings, and so on. Due to the intensity of pre-election marketing, voters tend to be influenced by the pre-election campaign, which helps them subjectively assess the electoral chances of individual candidates, political parties, and potential coalitions. The creation of a political image through their own evaluation of options often leads the voter to engage in insincere voting.

An important tool for mapping the development of political preferences in the pre-election period is public opinion polls, which can significantly contribute to changing a voter's decision by subtly encouraging a calculated choice. For example, this occurs when a voter's interest is primarily tied to a party that does not show strong voter support in the polls. Rational voters, as a result of the system's setup, are able to evaluate the situation and quickly realise that if their preferred political entity receives insufficient support, their vote will lose weight. Therefore, they modify their choice purposefully. The tendency towards insincere voting and the suppression of a true preference can also result from, for example, the pressure of a social group, where psychological determinants of voter decision-making and the manipulative influence of the social group come into play. However, in this type of situation, the element of rationality directly tied to strategic voting is absent.

The dimension of strategic voting is incompatible with voting for the likely electoral winner driven by the bandwagon effect, where voters tend to follow the crowd's opinion and support the strongest candidate in terms of preferences. At the same time, it disregards the opposite underdog effect, which involves voting against strong candidates to favour less prominent political actors (Hodgson and Maloney 2013). Within the social spectrum, there is a significant group of so-called steadfast, loyal voters who prioritise a genuine expression of their identity, beliefs, and ideology. These voters are inclined to make a sincere choice, even at the cost of supporting a candidate with little realistic chance of succeeding in a competitive environment. Through their decision, they consciously diverge from tactical voting, as succumbing to it would undermine their identity. A prerequisite for resorting to sophisticated voting and evaluating the consequences of decisions is, undeniably, an understanding of the electoral system and its implications, such as the redistribution of mandates. However, the question remains to what extent the information a voter acquires is genuinely relevant and accurate, and whether they can utilise it effectively to achieve the desired outcome with their vote. A tactical voter in elections becomes part of the so-called Bayesian, the essence of which lies in the subjective evaluation of information whose truthfulness the voter cannot be certain of, as it is not definitively known. "The subjective interpretation of probability disregards

the objective state of the world but understands probability as an expression of the degree of certainty about the validity of our beliefs” (Démuth 2013: 33). Within the game, the voter forms expectations about the voting preferences of other participants, even though their methods of strategic reasoning are not fully known. “The voter thus creates expectations about the expectations of other voters based on incomplete information. The degree of strategic voting is often influenced by the phenomenon of wishful thinking on the part of the voter” (Dančišin 2015: 107).

The influence of contextual factors such as electoral rules, district size, electoral thresholds, and their impact on voter behaviour and the adoption of strategies has been highlighted by numerous political analysts, including Sartori (2001), Duverger (1964), Downs (1957), Ollivela (2004), and Potter & Montgomery (1997), among others.

The foundational theoretical framework for understanding the influence of electoral systems on voter behaviour, incorporating elements of strategy, as well as the shape of the party system, can be found in Duverger's three laws. These were articulated in his scientific study *Political Parties*, which states that a single-round majority system (simple-majority) favours two-party system, while a two-round majority system and proportional representation mechanisms favour multi-party systems (Duverger 1964). The rules in this form represent only a simplified version, in which we have highlighted only the relationship between the electoral system and the number of parties. However, Duverger's concept also appeals to the structure of parties and the interdependence or independence of parties, which, in his view, have a more significant impact on the electoral system compared to the number of parties. In 1951, the formulation of his three tendency rules was as follows:

1. The proportional electoral system fosters the existence of multiple political parties that are well-established, autonomous, and exhibit stability;
2. The two-round majoritarian system supports the existence of multiple interconnected, adaptable, and relatively stable political parties;
3. The single-round majoritarian system promotes a two-party model in which power alternates between two dominant political parties (Duverger 1964).

The French political scientist Duverger, in connection with the psychological effects of electoral systems, declared that in single-round majority systems, voters quickly realise that their votes are wasted if they cast them for a third party. Therefore, rational voters try to prevent the undesirable wasting of votes by employing tactical voting. They cast their vote for the party from the two main contenders that is more acceptable to them. From a scholarly perspective, Duverger refers to this as polarization or bipolarization.² According to him, polarization disadvantages a new party as long as it remains in third

² The term “polarization” should not be equated with Sartori's (2001) interpretation, as he uses it to refer to significant ideological distance between relevant parties within the system.

place. However, if it surpasses the weaker of the two established parties, this effect—similar to underrepresentation—turns against one of them (Duverger 1964). According to his theory, calculated voting is most visible in single-round majority electoral systems, whereas in two-round majority systems, this type of voting disappears, just as it does in proportional systems, because voters have no incentive to vote for anything other than their first preference. Duverger argues that in a single-round majority system, the fundamental characteristic of strategic voting is the abandonment of hopeless candidates (strategic desertion).

The discussions on the impact of electoral rules have been significantly enriched by the research of American political scientist Cox (1997), who argues that Duvergerian equilibrium (characterised by a tight political contest between two candidates) forms, along with non-Duvergerian equilibrium (characterised by the presence of multiple candidates vying for the top position or sharing the second position, which makes strategic defection harder for voters and leads to Duvergerian equilibrium), a set of stable solutions in electoral competition in single-member constituencies. Moreover, there is no theoretical tool that would allow Duvergerian equilibrium to be preferred as a more likely outcome of the electoral contest over non-Duvergerian equilibrium (Cox 1997). The key variable in the electoral system, according to Cox, is the size of the electoral district, as from a mechanical perspective, it is the strongest factor determining the number of parties. Within this dimension, the psychological effect is evident.

In his 1997 study *Making Votes Count*, Cox (1997) affirms the presence of strategic voting, particularly in majority electoral systems. Voters form their own preferences about candidates, and although they cannot be certain of their preference profile, they base their positions on estimates designed to differentiate between candidates who have a real chance of winning and those who lack significant voter support. Cox argues that if voters have rational expectations and are solely concerned with the outcome of a specific election, then strategic voting plays a similar role in two-round voting systems as it does in single-round majority systems. Voters tend to vote strategically even in the first round, as they form certain assumptions about the viability of candidates, and therefore often lean towards a different preference than their first choice. This somewhat challenges Duverger's emphasis on sophisticated voting in a single-round majority system. In his findings, when limiting the focus to Duvergerian equilibria, he generalised them into the well-known $M+1$ rule, where M represents the number of candidates advancing from the first round to the second.³ Cox, within the context of a two-round majority system, emphasizes the importance of "pairing", meaning the selection of two candidates who compete for the mandate in the second decisive round (Cox 1997). He excludes the

³ A Duvergerian equilibrium occurs when successful strategic coordination based on the ranking of candidates according to the preference profile results in only three candidates receiving substantial numbers of votes.

probability of a situation where a candidate is short by just one vote in the first round to win, making the second round of voting more interesting for the voter. About the majority two-round system, the following statements are formulated:

- In the case of a large number of participants and large electorates, the votes for candidates expected to finish fourth or lower will approach zero. This statement is supported by the fact that, in the first round, voters assess the political viability of the candidates. According to the $M+1$ rule, within the framework of the two-round majority system, they will choose among those political actors whom they subjectively evaluate as having a chance of securing one of the top three positions in the first round of voting.
- In the case of a large number of participants, the difference in votes between the candidates expected to finish first and second will be minimal. This observation is based on the assumption that if the candidate expected to secure first place is clearly favoured, voters may shift away from this candidate, focusing more on the principle of so-called "pairing" rather than attempting to elect the candidate outright in the first round. As a result, the candidates in first and second positions are likely to achieve similar vote shares, or it may even occur that the candidate expected to secure first place does not receive enough votes to advance to the second round (Cox 1997).

According to Cox (1997), resorting to sophisticated voting is an effective tool against wasted votes. He considers votes for candidates with little chance of winning, as well as unquestionably those for the first runner-up, to be wasted votes. A common characteristic of all individuals whose votes are wasted is that, although they typically prefer one candidate they see as the most acceptable over others, their chosen candidate does not directly influence the political contest between the leading candidates in the relevant election.

The essence of insincere voting in the context of electoral systems was also examined in the studies of Giovanni Sartori. According to him, this type of voting does not differ significantly between proportional and majority systems, though certain distinctions are evident in the extent to which the voter engages in the electoral game. In his research, Sartori (2001) concluded that electoral systems have two effects: a reductive effect, which relates to the number of parties, and a restrictive effect, which applies to the voter. However, the definition of their operation does not fundamentally deviate from the mechanical and psychological effects introduced by Duverger. Sartori, unlike Duverger, distinguishes between the format and mechanism of party political competition (ideological distance) and does not overlook relevant parties with coalition or blackmail potential. He differentiated between strong and weak electoral systems based on their (in)ability to minimize the number of relevant parties. In his research, he points out that

a two-round voting system never functions as a purely majoritarian system nor as a purely proportional one. Although two-round electoral procedures are often part of a majoritarian electoral system, from Sartori's perspective, voters in the first round behave as if in a proportional system, as they freely express their genuine preferences. The stated observation aligns with Duverger's idea and contradicts Cox's belief that candidates resort to strategic voting in the first round. Any electoral system designed to eliminate an excessively high number of political parties must also, in some way, narrow the range of voter choices, with the two-round system softening this pressure and to some extent modifying it into a form of intelligent decision-making (Sartori 2001).

Sartori built upon Duverger's laws, seeking to specify them further, as evidenced by his emphasis on voter dispersion and the structure of the party system. This is determined by the extent to which voters cast their votes for influential actors (low structuring) or the degree to which their loyalty is tied to the political party itself and only then to its specific candidate (high structuring). Voter dispersion refers to the extent of dispersion of minority voters across individual electoral districts. According to Sartori (2001) countries that adopted proportional electoral systems eliminated the possibilities for overcoming the atomization of the party system. In his attempt to highlight the impact of electoral rules on the number of parties, which led him to formulate his four laws, it is essential to familiarize oneself with his rules, which are key to understanding the essence of his study:

- A single-round majoritarian system by itself is not capable of creating a two-party format on a national level, but in the case of its existence, it helps maintain it,
- A single-round system of relative majority will create a two-party format, provided that the party system is structured and part of the electorate, resistant to the pressures of the electoral system, is dispersed across electoral districts in such a way that they are unable to secure a relative majority;
- A two-party format is impossible regardless of the electoral system if political minorities (united, for example, by racial, linguistic, or ideological symbols) exist and are concentrated in sufficient numbers within electoral districts to secure a relative majority. In such cases, the effect of a majoritarian electoral system will be reductive, particularly for third parties that do not represent these minority groups;
- a system of proportional representation has a smaller reductive effect, which is directly proportional to its disproportionality, particularly in small electoral districts (Sartori 2001).

With an emphasis on respecting the outlined rules, Sartori formulated four laws:

1. In the case of a single-round relative majority system with a structured party system and an even distribution of votes (voter dispersion), the system leads to bipartism (a two-party format).
2. In the case of a single-round majority system with a structured party system but an uneven distribution of votes (without voter dispersion), the system leads to multipartism.
3. If there is systemic structuring of political parties, a proportional representation system acquires a reductive effect due to its disproportionality.
4. If systemic structuring of political parties is absent and a “pure” or “nearly pure” proportional representation system is applied, the system leads to multipartism, and the number of political parties is determined by the electoral quota (Sartori 2001).

In this context, Orosz (2015: 116) states that “these are rules that cannot be attributed the relevance of indisputable defining features of basic electoral systems, but on the other hand, their influence is not only appropriate but also desirable when characterising basic electoral systems in a suitable manner.”

Furthermore, Nohlen primarily criticised Sartori’s laws for their weak explanatory value, though he did not question their validity. In contrast to Sartori, who understood the electoral system as an independent variable that unidirectionally influences the shape of the party system, Nohlen points out that electoral systems do not exist in a vacuum but are part of a broader whole within which numerous processes occur that can influence the nature of electoral rules (Nohlen 1978). Regarding the causality between electoral and party systems, it is noted that a relative majority electoral system in single-member districts does not lead to bipartism where societal fragmentation prevails. In ethnically divided societies, it may, and likely will, have a predominantly disintegrative tendency. Criticism was also directed at Duverger’s approach, highlighting a theoretical deficit in defining the conditions under which his rules are valid, as well as issues with methodology. Specifically, Duverger is critiqued for comparing a simple majority electoral system in single-member districts with the principle of representation, which can manifest in different forms of electoral systems with varying effects. Nohlen refined Duverger’s rule, stating that majority electoral systems always lead to a two-party system, except in countries with significantly strong local minorities. Other electoral systems are associated with a two-party system only when the parties representing minorities are too weak.

In addition to the aforementioned wasted vote effect, where voters, due to the fear of their vote being wasted, choose a different preference, according Jarabinský and Chytilék the main types of strategic voting can include:

- Rental vote: the motivation for using this strategy is to elect a specific coalition. The essence lies in supporting a smaller political party that could be a potential coalition partner for a stronger party.⁴
- Balancing strategy: A voter tends to choose this strategy in order to balance the power between the expected political parties in the governing coalition. This strategy can indirectly lead to the underdog effect.⁵ The key factor for applying this strategy becomes the noticeable inequalities within the system.
- Strategic sequencing: In the ambition to influence which of the competing parties will have the first say in forming the government, voters resort to this type of strategy, applied in a closely contested electoral competition. The voters will prioritize a party with the potential to be the primary actor in government formation, assuming that their first preference, which they did not vote for, will also inevitably have a place in the government. If it is unclear which party will have the decisive say in forming the government, the voters can choose between two alternatives: the one that is closer to them or the one they believe will guarantee the inclusion of their first choice in the coalition (Jarabinský and Chytilék 2016).

The stated differentiation reflects the sophisticated choice of the voter in relation to a political party. However, one cannot overlook the factor of personalization, where the voter's decision is based on a specific candidate from a party, which may not automatically be the voter's first preference. As a result of a choice influenced by the dominance of a particular candidate from a party other than the voter's most preferred one, the preference arena also shifts. In practice, this leads to direct support for the political party or coalition from which the candidate is running for office, even though the voter may not fully identify with that party.

The choice of a specific strategy depends on the goal that the voters focus on in the political competition and their motivation, within which voters must clearly identify the stimuli that will influence their strategy choice. The usability and applicability of the mentioned strategies in relation to the observed goal or decision motive is shown in Table 1, which clearly indicates that the individual tactics are designed for different purposes. For example, the balancing strategy can be chosen to achieve the most preferred goal, which is either the election of a political party or a coalition.

⁴ This type of strategy is typical for Germany (Kedar 2005).

⁵ For example, if political party X has a majority in the lower house of parliament, a voter may lean towards voting for political party Y in the upper house to balance the distribution of power.

Table 1. Application of voter strategies in relation to the motive of electoral decision-making

Strategic voting	Motive of electoral decision-making		
	Political party	Coalition	Candidate
Wasted Vote	✓		✓
Rental Vote		✓	
Balancing Strategy	✓	✓	
Strategic Sequencing		✓	

Source: Jarabinský and Chytilék (2016).

If a significant number of voters in the political spectrum do not express their true preferences in elections, this leads to a distortion of the election results. We believe that the issue of strategic voting should be approached cautiously and carefully. Before drawing strict judgments and conclusions, we must not overlook certain barriers, such as the unrealizability of fully understanding the genuine preferences of all participants, which, along with election results, are a necessary condition for a thorough analysis.

3. Strategic positions of political actors and possible impacts of changing the electoral mechanism: a case study of Slovak regional elections

As we have already mentioned, in addition to voters, political actors participating in the political competition also tend to adopt strategic positions resulting from the setup of the electoral system to achieve the desired electoral outcome. Since strategic behaviour appears particularly intriguing in a majoritarian system, we aim to highlight the presence of such tactics within Slovak political context. To illustrate this, we will briefly revisit the year 2017, a pivotal moment marked by a significant change in the electoral mechanism.

In 2017, two amendments to the electoral code were adopted by Slovak unicameral parliament to override the presidential veto. One of these introduced a single-round election for the heads of self-governing regions (HTUs), while the other temporarily extended the terms of office for regional deputies and heads of HTUs to five years. This was done to facilitate the simultaneous holding of regional and local elections in 2022. At the outset of the explanation, we emphasise that the new electoral rules do not affect the conditions for either active or passive suffrage. This means that the right to vote for the head of a self-governing region, as well as the right to stand for election as head, remains applicable to the same groups of individuals as before the amendment. As we have already indicated, the rule change primarily affected the conditions for electing the head of the HTU. The previously applied absolute majority electoral system was replaced with a relative majority system. Provisions governing the second round of elections were therefore removed from the electoral code, except in cases where two or more candidates

in first place received an identical number of votes. This scenario would result in the announcement of new elections. The election of the head of the self-governing region was amended by a new law to require only a majority of valid votes for election. The substantive argument of the single-round election proponents was primarily based on saving financial resources and time.

In the context of the adopted law, it is important to highlight the potential risks that the existence of a single-round election has opened up. It is an indisputable fact that regional elections are among the less popular elections in terms of voter turnout, as evidenced by the low level of voter participation. The lowest recorded interest in participation in regional elections so far was in 2005, when voter turnout in the first round was only 18.02% and 11.07% in the second round (Table 3 below). The proposal to merge regional elections with municipal elections was partly intended to address the issue of voter turnout, which was reflected in the first combined elections in 2022, when turnout reached 43.7%.

The advantage of the single-round electoral system, which is popular in Commonwealth countries, lies in its simplicity and clarity, both from the perspective of the mechanical processing of results and from the perspective of voter perception. On the other hand, the legitimacy of the elected candidate is not derived from the majority, but from the highest number of votes, which may not necessarily represent a majority (Kerekes 2017). With a sufficiently large number of competing candidates, the eventual winner may even be a candidate with a single-digit result. Although in practice, under our conditions, voter turnout in the second decision-making round was generally lower compared to the first round, the winners of the second round, in the majority of cases, received a higher share of votes from all eligible voters when considering the overall total. Therefore, we consider the argument correct that the originally introduced two-round system more accurately reflected the will of eligible voters than the single-round system.

However, it cannot be excluded that even in single-round elections, a situation could arise where the winning candidate is elected by an absolute majority of votes. In the past four two-round elections for the heads of self-governing regions, this occurred in three instances. In 2001, one out of eight heads were elected in the first round, in 2009 as many as four out of eight achieved an absolute majority, and in 2013 three out of eight heads were elected in the first round. In the 2005 elections, no heads of self-governing regions were elected in the first round (Domin 2017). The impact of the new single-round election system in 2017 was the election of eight heads of self-governing regions, none of whom secured an absolute majority of voter support. The situation in 2022 was already different, as three out of eight heads were elected with an absolute majority.

Gaining an absolute majority in a single-round election is more intensely determined by factors such as the candidate's ability to appeal to voters or the successful consolidation of political forces through agreements to reduce the number of joint candidates, compared to two-round decision-making.

A single-round election cannot be regarded as an effective tool for excluding extremist parties from the competitive process, as a change in the electoral system also brings a shift in the candidate's electoral strategy. A single-round election, or a first-past-the-post system, may to some extent favour candidates from extremist parties.

The comparison of aspects of the implemented single-round election system with the original two-round election system is summarised in Table 2.

Table 2. Comparison of aspects of two-round and single-round elections for the head of HTU

Aspects	Single-Round Election	Two-Round Election
Legitimacy	Resigns from the ambition to guarantee the minimum legitimacy of the winner	Provides at least some guarantee of minimum legitimacy for the winner
Time Factor	Time-saving	A lengthier process compared to a single-round election
Financial Factor	Cost-saving	More financially demanding compared to a single-round election
Advancement of Candidates from the Political Margins/Extremist Forces	Higher risk, creates no limits for more extreme entities	Lower risk, creates limits for more extreme entities

Source: processed by the author.

The risk of a possible victory by the extremist candidate Marian Kotleba was faced by the Banská Bystrica self-governing region in the first single-round elections in 2017, which created a stimulus for strategic positions. In the previous elections in 2013, Kotleba recorded a significant increase in support in the second round of the regional elections compared to the first round, securing victory as the candidate of the People's Party Our Slovakia (ĽSNS). His success was influenced by several factors, including the intense negative campaigning by the unsuccessful right-wing candidate Ľudovít Kaník from the Slovak Democratic and Christian Union – Democratic Party (SDKÚ-DS) against acting head of HTU Vladimír Maňka from SMER – Social Democracy party (SMER-SD) before the first round of the election. Kotleba gained support not only from traditional voters of far-right parties but also from anti-system voters and a portion of centre-right sympathisers who decided to vote against the candidate of the ruling SMER-SD. Voters feared that a similar scenario could repeat itself, and even if Kotleba were rejected by the majority of eligible voters, he could paradoxically become the winner, aided by the new single-round election model.

After the abolition of the two-round election system, pre-election polls gained crucial importance in shaping the campaign in the Banská Bystrica self-governing region.

Despite their significant role, their effectiveness was partially limited by a controversial embargo on publishing poll results, which meant that the last available data came from approximately three weeks before the election. Although the polls reflected voters' declared preferences at the time, their relevance for election day itself was limited due to the long period available for shaping voter attitudes and the substantial proportion of undecided voters who made their final decisions in the closing phase of the campaign. Before the 2017 election, polls indicated that Kotleba would place second, which was ultimately confirmed on election day.

The strong democratic instincts of the public, in the ambition to suppress extremist forces, were demonstrated by the highest voter turnout compared to other regions, and ultimately, Kotleba with 23.2% support, was defeated by the independent candidate Ján Lunter, who received 48.5%. The inclination towards strategic voting was evident in these elections, as reflected in the more intense mobilization of voters who chose to participate solely to eliminate the potential victory of the former head of the Banská Bystrica self-governing region, since the condition for obtaining an absolute majority had been abolished. As Table 3 demonstrates, the change in the electoral mechanism positively contributed to the highest voter turnout in this region (40.29%). However, this did not generally indicate an increased public interest in the self-government level but was rather the result of voting against an unacceptable candidate.

Table 3. Voter turnout in individual regions of Slovakia in the 2017 regional elections

Region	Turnout (%)
Bratislava	31.34
Trnava	24.74
Trenčín	26.32
Nitra	26.83
Žilina	33.84
Banská Bystrica	40.29
Prešov	29.40
Košice	26.73
Slovakia	29.95

Source: Statistical Office of the Slovak Republic 2017

The evidence of political actors resorting to strategic behaviour was also reflected in the unconventional gesture of the political opposition, the so-called Mičev's memorandum, as the high number of candidates led to a fragmentation of democratic forces. The essence

of this specific tool led to the consolidation of political forces, where, in order to reduce the chances of Kotleba, some candidates withdrew their candidacies in favour of the strongest candidate in public opinion polls (Kováčová 2018). The political situation led several candidates to withdraw from the race in favour of others. The most preferred candidate, Ján Lunter, was supported by the withdrawal of Martin Klus, Stanislav Mičev, Viliam Baňák, and Vojtech Kókény. Michal Kantor withdrew in favour of Igor Kašper, while Ivan Saktor, Jozef Šimko, and Zdenek Očovan ended their candidacies without expressing support for any other candidate. On the other hand, the memorandum of cooperation was a dangerous political experiment that, to some extent, limited free political competition with the sole argument of “because of Kotleba”, and since voters do not always tend to vote according to a prescribed pattern, there were valid concerns that the memorandum could prove counterproductive. The concerns raised were, however, not confirmed, and the voter participation, which reflected a ‘vote against someone’, contributed to Lunter's victory. It is likely that, if Kotleba had not been part of the political contest, the voter turnout would have been lower from a logical perspective, and the strategic behaviour of political actors would not have gained such momentum.

Based on the above, we can draw comprehensive general conclusions that respond to our research question: What impact did the change in the electoral system for the heads of higher territorial units in 2017 have on electoral dynamics and voter behaviour? We conclude that the introduction of a new, single-round election led to significant tactical strategies by political actors aimed at concentrating votes on the candidate with the best chance of victory, as well as a higher level of voter participation. Voters chose to support Ján Lunter, who was able to gain support across the political spectrum, thereby minimizing the risk of vote fragmentation, which was further aided by the withdrawal of eight candidates from the race. From a political science perspective, we summarize that voters did not aim to choose the ideal candidate, but rather sought to prevent their vote from being wasted and to avoid the victory of a candidate they considered unacceptable. Political actors were aware that the introduction of a single-round election could lead to a situation where a candidate with relative, but not necessarily majority, voter support might be elected as the head of a higher territorial unit, as we will further discuss in the following text. This reality highlighted the need for tactical decision-making in the electoral process, as under the single-round system, vote fragmentation could occur, leading to the victory of a candidate who, in a head-to-head contest with another opponent, would be rejected by the preference majority of voters.

Through a clear model example, we can see the undesirable outcome that a hypothetical single-round election for the head of the self-governing region could lead to. We assume that in region XY, for the simplicity of the calculations, 100,000 eligible voters will participate in the election. We know that the following candidates have accepted their candidacy: A, B, C, and an extremist candidate (see Table 4). Of the 100,000 voters, 40,000 would lean towards the extremist candidate, while the remaining 60,000 votes would be

distributed among the other candidates A, B, and C. If, however, the extremist candidate did not accept the candidacy, the remaining candidates would be acceptable to the extremist candidate's voters in the order of C, B, and A. Let us imagine that voter preferences might look as follows (table 4).

Table 4. A Model example of acquired preferences in regional elections

Number of voters	40,000	30,000	25,000	5,000
First preference	Extremist candidate	A	B	C
Second preference	C	C	C	Extremist candidate
Third preference	B	B	A	A
Fourth preference	A	Extremist candidate	Extremist candidate	B

Source: processed by the author.

If the original two-round system for electing the head of the self-governing region had been preserved, no candidate would have been elected in the first round. Consequently, the two strongest candidates – an extremist candidate and Candidate A – would have advanced to the second round, with Candidate A ultimately becoming the election winner. However, under the currently applicable law, which introduced a single-round election, the head of the self-governing region would be the extremist candidate. This would occur despite being unacceptable to the majority of voters, as the head of the self-governing region would not secure the support of an absolute majority.

Based on the above and the outlined risks in Table 2, it becomes pertinent to consider which voting system would be the most effective, avoiding a two-round election while maintaining the legitimacy of the winner and reducing wasted votes. It is worth considering the possibility of alternative voting, which is based on ranking individual candidates. An example of the application of Alternative Vote (AV) system in the selection of political representation at the national and federal levels is Australia, where this system is used in elections to the lower house of parliament. AV is also applied in the formation of parliaments in individual states of the Commonwealth of Australia. At the local level, it is used in the United States, specifically in states such as California and Maryland.

In the USA, the term “instant runoff voting” is used to describe this system, which contrasts with the two-round election. In Australia, this voting method is referred to as “preferential voting”, while in Europe, it has come to be colloquially known as “Australian voting.” The AV system can be considered a “preferential voting system that creates a winner with an absolute majority of votes, where voters in single-member constituencies assign preferences to candidates, either one or as many as there are candidates on the list.

However, this does not mean that the voter has more than one vote, and it can be stated that it is a multiple-choice system conducted in a single act” (Kováčová 2019b: 190). The essence of alternative vote has been explored in the studies of Australian political scientist Reilly (2002) who considers alternative voting a majoritarian system, primarily applied in single-member constituencies.

The voting mechanism is based on expressing the voter’s full preferences, as if the voters were providing information about the order in which they would choose the individual candidates. The clarity of the system is evident in the fact that voters, for example, assign the number one to their preferred candidate and then proceed to rank the remaining candidates in order of preference (Klíma 1998). The commission then counts the first preferences, and the candidate who secures an absolute majority of votes becomes the winner—in this case, the head of the self-governing region. If no candidate achieves an absolute majority, the candidate with the fewest first preferences is eliminated, and votes are redistributed among the remaining candidates based on the second preferences, i.e., those marked with the number “2”. In the third round of scrutiny, the votes of the candidate with the lowest number of votes are redistributed once again. However, if the second preference corresponds to a candidate who has already been eliminated, the votes are allocated according to the third preference. This cycle of vote redistribution continues until one of the candidates secures the required absolute majority (Kerekes 2017).

It is important to distinguish between different variants of AV system, particularly between a system that requires voters to define all their preferences and one that does not mandate expressing preferences for all candidates, but only for some. Based on this distinction, three primary variants of alternative voting can be identified (Chytilék et al. 2009):

- **Mandatory** – If a voter does not define all preferences – vote is deemed invalid. This system has been applied since 1918 in elections to the lower house of the Australian Parliament, since 1999 in the Parliament of Fiji, and has also been used in countries such as Tanzania.
- **Optional** – A voter’s ballot is not contingent upon expressing all preferences. Since the 1980s, this system has been employed in Australian states such as Queensland and New South Wales.⁶
- **Restricted** – The validity of a vote depends on assigning a limited number of preferences. For example, in Papua New Guinea, a minimum of three preferential votes must be cast for the ballot to be valid.

⁶ For these countries, the strategy of so-called “plumping” is typical, where voters focus solely on supporting a single nominee and abstain from assigning preferences to other candidates.

Although restricted and optional AV systems avoid the necessity of ranking all preferences – which could pose significant challenges, particularly in countries with low levels of education - they can lead to situations where the election winner does not achieve an absolute majority.

Based on the outlined model scenario, where theoretically no candidate manages to achieve an absolute majority, the mechanism of AV system would result in the elimination of Candidate C. The votes of Candidate C would be transferred to the extremist candidate (see Table 5). As this redistribution would still not result in an absolute majority, another candidate, in this case, Candidate B, would be eliminated. The votes of Candidate B would initially transfer to Candidate C, but since the Candidate C had already been excluded, the preferences would, according to the rules, be allocated to Candidate A. The election outcome achieved through alternative voting would correspond to the result of the original two-round system, as Candidate A would emerge as the winner. This would simultaneously preserve the majority legitimacy of the head of the self-governing region, with the election being conducted in a single day.

Table 5. Model example of preference redistribution in the alternative voting system

Candidates	First count	Second count	Third count
Extremist candidate	40,000	45,000	45,000 Eliminated
A	30,000	30,000	55,000
B	25,000	25,000 Eliminated	
C	5,000 Eliminated		

Source: processed by the author.

As Kováčová (2019a) states, to win in AV vote it is not enough to be first and gain more votes compared to others, but to gain more votes compared to all other candidates combined. AV, which ensures a majority for the winning candidate, represents an alternative to the original two-round election system, or rather, it serves as a single-round alternative to the principle of absolute majority.

In order to achieve the most objective reflection of voter intent, it is important to evaluate and analyze the impacts of current electoral systems and subsequently point out the possibilities that could contribute to the desired outcome, such as adopting new alternatives, which, of course, must be preceded by discussion. The effects of the alternative voting system, which we have presented as a possible replacement for the relative majority system, through which the elections of regional self-government heads have been held since 2017, are clearly illustrated in the following Table 6.

Table 6. Positive and negative aspects of alternative voting

Positive aspect	Negative aspects
The winner is elected by an absolute majority	Lack of knowledge about the system, absence of awareness
The suppression of extremist formations	An administratively demanding process of manually processing ballot papers
The elimination of vote splitting	If voters fail to allocate enough preferential votes, and their votes are exhausted before determining the outcome, or if their only remaining preference is for a candidate already eliminated, it can be concluded that alternative voting secures only a majority of "continuing or non-exhausted votes" rather than a majority of all votes. As a result, the winning candidate may not have the support of the majority of voters but merely the support of the majority of votes that influenced the final round of distribution
The elimination of insincere voting – the voting method prevents wasted votes by redistributing preferences in subsequent counts	
Cost efficiency	
No decline in turnout during the second round	
Fewer negative campaigns – candidates are less likely to resort to negative campaigning and mutual attacks, as they have a chance to gain redistributed preferences	

Source: processed by the author.

4. Conclusion

The power of an electoral system is evident not only in its mechanical effects but also in its psychological impacts, which influence voter behaviour. Using the example of regional elections in Slovakia, the presence of strategic behaviour among voters and political candidates was demonstrated. This behaviour resulted from the modification of the majority electoral system, where the original two-round election of the heads of the self-governing regions regional was replaced by a single-round election in 2017. The inclination toward strategic voting reflected elements of rationality and purposefulness.

The change in the electoral system fundamentally influenced voter strategies, particularly in the Banská Bystrica self-governing region, where there was a risk of an extremist candidate being elected. Strategic voter behaviour focused on consolidating votes around the strongest opposing candidate, with voters pragmatically supporting the one identified by pre-election public opinion polls as the frontrunner. Rational voter decision-making aimed to minimise the impact of wasted votes and prevent the victory of the extremist candidate. The motivation to vote “against an undesirable candidate” drove turnout, which was the highest in the Banská Bystrica region. The withdrawal of candidates emerged as a key political strategy in these elections, aiming to prevent vote fragmentation that could have benefited Marian Kotleba. Several candidates decided to withdraw in favour of the strongest contender, Ján Lunter, thereby increasing his chances of victory.

We emphasise that the application of strategic voting practices requires a thorough understanding of the electoral system and its mechanisms. Political actors were fully aware that the introduction of a single-round election could lead to a paradoxical situation in which a candidate rejected by the majority of voters in a preferential vote could be

elected as the head of the higher territorial unit. This phenomenon necessitated the adaptation of electoral strategies to maximise the effectiveness of voter decisions and eliminate the risk of undesirable electoral outcomes.

In summary, we can conclude that the change in the electoral system had a significant impact on electoral dynamics, manifesting in a strong mobilisation effect and considerably shaping the behaviour of political actors. Their actions were based on tactical considerations and candidate withdrawals, thereby addressing our research question.

By analysing the adopted single-round election of the heads of the self-governing regions, we marginally highlighted potential undesirable effects of the implemented change. At the same time, we drew attention to the proposal for a more effective use of voter preferences through the introduction of alternative voting. With this, we have fulfilled the partial objective of the paper, which aimed to optimise the electoral system by reducing tactical voting, minimising wasted votes, and strengthening the legitimacy of the elected winner.

The search for an appropriate level of efficiency in modifying electoral legislation is a complex process, as evidenced by the fact that even when the same number of votes are cast for the same political actors, the electoral results will always differ when different electoral systems are used. Electoral models applied in other countries can serve as a source of inspiration to some extent, but they may not necessarily have an effective impact, as it is important to take into account the historical traditions of a given country, regional differences, population density, the heterogeneity of culture, and the minorities living in the area, among other factors, which are unique to each country. However, any change requires a thorough analysis and expert discussion to avoid undesirable effects if it is implemented in practice. In addition to defining the reasons for and justification of the change, it is important to address the question of whether voters are ready for the modification of the established system, as it carries risks such as voter resignation due to unfamiliarity with the electoral system or, for example, a higher percentage of invalid votes.

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