WHERE WERE THE VOTERS? A SPATIAL ANALYSIS OF THE 2019 SLOVAK PRESIDENTIAL ELECTION[1]

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Abstract
This paper endeavours to deliver a comprehensive spatial depiction of Slovakia's presidential election held on 16th and 30th March 2019. At first, the text briefly considers electoral and institutional framework of presidential elections and its background. Within the context of the first round, the paper subsequently analyses the electoral support of four key candidates who had obtained at least 10 per cent in order to clarify the overall electoral support. At the municipal level, the analysis of aggregated data then brings a complex mapping of regional electoral support towards the presidential candidates. Our negative binomial regression models, based on socio-economic variables and the results of the 2016 parliamentary election, yield no satisfactory results. Nonetheless, among others, it was revealed that the final two contenders did not lose their voters from the previous round. In comparison to Šefčovič, Čaputová succeeded in acquiring lower levels of new electoral support (up to 20 per cent) but across the whole country. Afterwards, the Hungarian minority was proved a determinative factor for the win, contrarily to the socio-economic indicators as explicative variables of which the university degree and age were found the most significant.

KEY WORDS: *Slovakia, Slovak politics, Spatial analysis, Presidential election, Electoral support, Regional support, Electoral geography, Political geography.*

INTRODUCTION

Slovakia's 2019 presidential election was the sixth one in the modern history of Slovak Republic as established in 1993. The presidential election,

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held on 16th and 30th March 2019, has brought breakthrough outcomes. Zuzana Čaputová, a relatively unknown lawyer and activist, has won the presidential election and became the fifth president, and the very first female president of Slovakia.

This result was widely reflected by the world media (Walker, 2019; Mortkowicz, 2019) because Čaputová, supported by a new non-parliamentary political party, *Progresívne Slovensko* (Progressive Slovakia, PS)*,* defeated her main opponent, the Vice-president of the European Commission for Energy Union, Maroš Šefčovič, a candidate backed up by the long-standing ruling party in Slovakia, *Smer-SD* (Direction-SD). Furthermore, she has outflanked the rival in both rounds of voting. The newly elected president took office after an inauguration ceremony on 15th June 2019 from the outgoing president, Andrej Kiska, the first independent candidate and a genuine "political novice" in the 2014 presidential election (Rybář, Spáč, 2015).

In the aftermath of Čaputová's victory, and due to the accelerating democratic defects in Central and Eastern Europe reflected by many studies (Ágh, 2016a; Ágh, 2016b; Knott, 2018; Hanley, Vachudova, 2018; Cianetti, Dawson, Hanley, 2018), new hopes were pinned on this fresh political actor. First, for instance, Anne Applebaum had entitled her *Washington Times* article "Slovakia's president suggests a way out of the world's populist quagmire". And subsequently, in her latest book, she has perceived Čaputová as a presage of "some kind of a new and better (…) political leadership able to unify the citizens regardless of their interests" (Applebaum, 2019; Applebaum, 2020, p. 173).

Despite the fact that this election had been widely recognised as a crucial one in respect of the country's next heading, only study was focused on the role and use of social media in the election (see Švidroňová, Kaščáková, Bambuseková, 2019). For that reason, this paper has been inhered in two primary objectives. At first, this study aims to map and elaborate on the spatial and electoral support at the municipal levels in the 2019 presidential election. Secondly, the paper wishes to assist in making electoral analyses more frequent and common in the area as in case of other European countries wherein scholars put the accent on it greatly (e.g., Fleming, 2006; Maškarinec, 2013). Hence, the paper addresses the following research questions:

- *Q1: In which Slovakia's municipalities did the given candidates obtain their core versus minor electoral support?*
- *Q2: Which socio-economic characteristics and party preferences resulting from the 2016 parliamentary election may be attributed to*

the electorate of examined presidential candidates in the first round?
- *Q3: How did the spatial distribution of electoral support vary after the first round? Where did candidates acquire and/or lose the votes?*

In order to fulfil the aforementioned goals, the paper is structured as follows. In the first section, the theoretical base is introduced; therefore, an emphasis is put on electoral geography and spatial support. In the meantime, the authors emphasise Slovakia's experience with this type of research and consequently, a certain lack and insufficiency in numbers is presented. Then research questions is addressed concerning the data basic for the analysis. After a brief discussion on the institutional framework and 2019 political background for this presidential election, the spatial and socio-economic analyses may finally be conducted.

1 ELECTORAL GEOGRAPHY AND THE CONTEXT OF SLOVAKIA

The outset of electoral geography as a research field may be tracked back to the early 20th century after André Siegfried compared various electoral outcomes in France in *Tableau Politique de la France de l'Ouest sous la Troisième République* (1913) his magnum opus. As a scientific discipline, political geography was founded by the turn of the 1950s and 1960s, and its popularity peaked in the Anglo-Saxon area in the second half of the 1980s (Leib, Quinton, 2011, p. 9). Pattie and Johnston, however, most aptly defined this scientific discipline as a "subfield of political geography focusing on the interaction of space, place, and electoral processes (…) while the field examines the impact of geographical context on voters' decisions, parties' strategies, and on the operation of electoral systems and forms an interface between human geography and political science" (Johnston, 2000, p. 204; Pattie, Johnston, 2009). Moreover, David Storey delineated three leading areas of interest in case of this subfield: (1) geography of elections (such as the forms of transfer of power); (2) geography of representation (meaning the types of electoral system); and finally (3) voting (implying sundry spatial patterns of voting behaviour) (Storey, 2009, p. 250).

After the breakdown of bipolar structure in the world and the re-creation of new democracies in the area of CEE, electoral geography was founded in Czechoslovakia, too. In Slovakia, nevertheless, electoral geography has lingered as an underestimated section of studies in political science and sociology. As Daniel Kerekeš notes, this discipline simply "does not enjoy great popularity" (Kerekeš, 2018, p. 32). Pioneering contributions may be

found in the 1990s and were based on comparisons of electoral outcomes and focusing on electoral support towards political entities in the 1990, 1992, and 1994 elections (Baráth at al., 1995). Later, Szőlős (2006) followed these footsteps when analysing the 1998, 2002, and 2006 elections. The work of Vladimír Krivý (1996; 2000; 2014) stressed more detailed analyses of electoral behaviour, specific for particular areas and respective socio-cultural links to regional differences. This sociologist's merit lies in the fact that his texts considered a long-term horizon from the 1990s. By contrast, multifarious studies dealing with particular national and supranational political phenomena, as gradually appearing in Slovakia, may be discerned. Predominantly, a vast majority of these studies have concentrated on the impact of local and regional levels of governance, though. In his analysis of the 2016 election, Hlaváč (2016) even "summarises the election results for the country as a whole, as well as separately by region". In addition, a creeping increase of far-right extremism, represented by Marián Kotleba's party (ĽSNS) accelerated the scholars' interest in the topic, too in connexion to the spatial support or voting behaviour (e.g., Gregor, 2015; Mikuš, Gurňák, Máriássyová, 2016; Buček, Plešivčák, 2017). Albeit in limited numbers but more valuable per se, there are research studies inquiring electoral geography of smaller territories as in case of Kerekeš (2016). His paper was then dedicated to the "parties' territory of voting support, territory of stable voting support, and spatial variance" in the town of Košice (ibid., p. 31). From a historical angle of analysis, some scholars attempted to describe electoral support and the electorate itself in the interwar period and the era of the First Czechoslovak Republic (e.g., Przybyla, 2019; Madleňák, Balážovič, 2018; Bahna, Krivý, 2016).

In the context of Slovakia, geographers instead of social scientists have shaped the contemporary discourse. Influential papers in this area are attributed to Plešivčák whose analyses has not only borne in mind the role of regions as sources of regional support (e.g., Plešivčák, 2011a), but he put an emphasis on mutual relations amongst socio-economic variables and electoral preferences, whilst not neglecting fundamental theoretical concepts as, for instance, the theory of Rokkan and Lipset on cleavages in Slovakia (see Plešivčák, 2011a; 2011b; 2013; 2014). Furthermore, Madleňák (2012a; Madleňák, Pink, 2012b) characterised fundamental aspects of spatial distributions in terms of electoral strongholds that the then political parties had enjoyed in the period of 1994–2010. Afterwards, Madleňák (2019; 2017) specialised either in geographic facets linked to the electoral system in the single electoral district as utilised in Slovakia, or eventually in

the representation share of individual regions in the NCSR (National Council of the Slovak Republic). The relation between socio-economic variables, pertaining to the electorate in given regions, and electoral outcome were not considered though as in case of the above-mentioned papers of Plešivčák.

As it was delineated, presidential elections and its spatial testing in respect of competitors standing for elections has remained omitted the most. Although some so-called electoral reports might be identified (e.g., Rybář, Spáč, 2015; Rybář, 2010; Rybář, 2005; Fitzmaurice, 2001), their contents and objectives are not being able to elucidate deeper patterns of electoral support at the regional or local level. A study of Pink and Spáč (2012) has represented the one and only endeavour to examine Slovakia's presidential election conscientiously. In this text, the authors divided the presidential candidates from 1999, 2004, and 2009 into five categories,[5] and their core attention was paid to those candidates who had obtained at least 5 per cent. Interestingly, according to the analysis, the candidates endorsed by political parties usually usurp a higher level of support in the strongholds of given parties, which had propounded the candidates. Non-party candidates, by contrast, tend to succeed in areas known for supporting political parties in close ideological proximity. Hence, a significant effect was proved in terms of partisanships and recommending endorsements as given by political parties. Last but certainly not least, the authors concluded that presidential elections still spun the societal division out (ibid., pp. 199–200).[6]

In this regard, however, there has been a certain lack of in-depth analyses investigating Slovak presidential elections in respect of spatial analyses considering the electoral support at the regional level. And this paper makes an attempt to fill this gap.

2 DATA AND METHODS

All the datasets necessary for the coefficient calculations were acquired from the official websites of the Statistical Office of the Slovak Republic and the Ministry of the Interior of the Slovak Republic. In this paper, the authors deliver a dataset of maps depicting the overall electoral support executed by the QGIS software. Subsequently, a raster layer for the level of municipalities,

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[5] The above-mentioned categories were as follows: 1) mainstream centre-right political candidates; 2) nationalist centre-left candidates; 3) Christian-conservative candidates; 4) civic centre-right independents; 5) the others as unclassified candidates.
[6] Apart from the party discipline, a strong impact is attributed to the "modificatory factor" that embodies the leader's personality and charisma (Spáč, Pink, 2012, p. 199).

as polygons, is included. The necessary data are available online at the Geoportal website.[7] In respect of the first research question, the authors differ from previous studies, and thus they use municipalities as the prime measuring unit in order to map the electoral support. Hence, the statistical models are based on the N=2,926. For the analysis of successful candidates, the authors condition the gain of at least 10% of votes. Hence, there are four candidates examined, namely Zuzana Čaputová, Maroš Šefčovič, Marian Kotleba, and Štefan Harabin. For acquiring an improved map lucidity and chances to compare the candidates better, a uniform quartile margin opts for as follows: 0.00–19.99; 20.00–39.99; 60.00–79.99, and 80.00< per cent.

The authors address the second research question on socio-economic features whilst using these independent variables: *University degree; aged 61+; unemployed; divorced; Roman Catholic; Hungarian affiliation.*[8] In respect of the analysed data exemplifying the electoral turnout in case of Slovakia's presidential election, the data distribution turned out to be diverse (see Graph 1 and Table 1). There was a higher number of municipalities with candidates acquiring a lower number of votes whilst reaching higher figures, and at the same time there was a lower number of municipalities in which the candidates had obtained a higher number of votes.

Graph 1: *Distribution of Electoral Results by Selected Candidates*
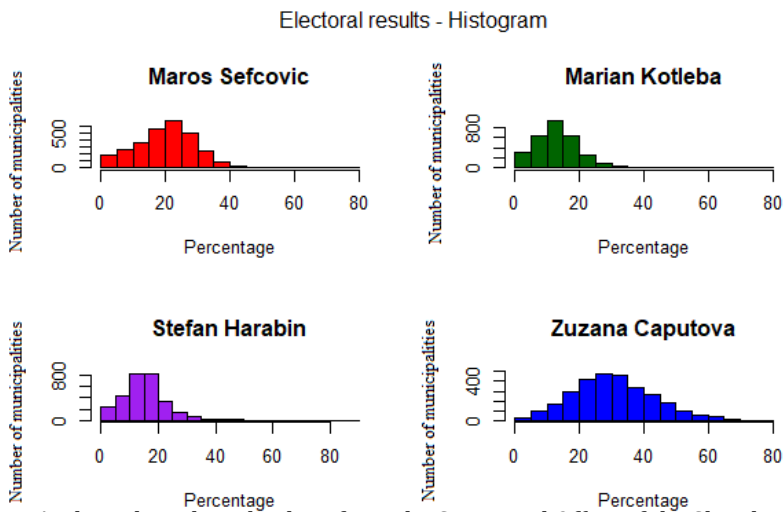
Source: Authors, based on the data from the Statistical Office of the Slovak Republic.

[7] The raster layer is available here: https://www.geoportal.sk/sk/kataster-nehnutelnosti/na-stiahnutie/?fbclid=IwAR37T44XQ-Y19euRIsVZbjI4Ze-yXrmgUSxSwRyaDlnuw6Q9yaV9eQ0gOVQ.
[8] The variables follow the patterns of the Population and Housing Census (2011).

Table 1: *Distribution of Electoral Results by Selected Candidates*

Candidates	Skewness	Kurtosis	Mean	Variance
Zuzana Čaputová	0.31	3.1	30.83	156.76
Maroš Šefčovič	0.23	3.91	20.29	86.6
Marian Kotleba	1.25	7.52	13.55	53.11
Štefan Harabin	1.35	8.55	15.33	65.55

Source: Authors, based on the data from the Statistical Office of the Slovak Republic.

It is palpable that the highest figures are individual in case of each candidate. However, the data distribution has been proved to be inclined to the left, i.e. towards 0, in all the analysed examples, including the dataset of Zuzana Čaputová, albeit in a moderate mode. Inclinations that are more puissant prevailed amongst the datasets of Kotleba, Harabin, and Šefčovič. After conducting a partial analysis for each candidate, the authors have ascertained that the values of variance were higher than the mean values. Therefore, the authors have decided to use the negative binomial regression as regularly employed in social sciences (UCLA, 2020; Hilbe, 2011; Allison, Waterman, 2002; Land, McCall, Nagin, 1996), instead of ordinary least squares regression (OLS). OLS calculates the line of relation corresponding to the manifested data in accordance with given mathematical criterion. In case of OLS, it enumerates a line minimising the distance differences between the calculated line and the real data. Linear regression is used in cases possessing the normal data distribution, meaning that its histogram appears to follow the Gaussian distribution, thus a bell curved. The aforementioned type of data tends to have various features, and apart from the distribution, it is skewness and kurtosis of which values extend to 0 in both cases.[9] (Mareš, Rabušic, Soukup, 2015). Furthermore, the authors endeavour to analyse possible connexions amongst candidates and electoral outcomes from the 2016 general election. Therefore, in the model, all the parties that had surpassed the 5 per cent threshold shall be figured in.

With regard to the third question inquiring two main rivals, Zuzana Čaputová and Marián Šefčovič, no additional analysis of geographical results is to be conducted. Instead of this, the authors employ a modified hotspot analysis[10] in which, thanks to the QGIS programme, all the votes for the two

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[9] The Kolmogorov-Smirnov test represents another way in which the normal distribution may be tested.

[10] The hotspot analysis elucidates where the examined elements cluster (see, desktop.arcgis.com).

candidates are to be calculated as a difference between the groups of votes from the first and the second round. Afterwards, these calculations shall expose the territories with the voters' shifts in the course of the two voting rounds. Once again, the quartile range of similar character is to be used as in case of electoral support for candidates in the first round. This time, though, the margin figures might gain a negative dispersion too.

3 ELECTION BACKGROUND

Presidential election held in March 2019 was the fifth to use the direct ballot, whilst applying the two-ballot system, often characterised as the "absolute majority system with a runoff "or "second ballot majority-runoff system" (Norris, 1997, p. 302; Chytilek et al., 2009, p. 28).[11] The Slovak constitution defines the president as the "Head of State" who "represents the Slovak Republic both outwardly, and through his/her decisions ensures the due performance of constitutional bodies", making the president part of the executive. In addition, the president is a "Supreme Commander of armed forces" and in some particular cases he or she "may dissolve the *Národná rada Slovenskej republiky*" (hereinafter referred to as the *NRSR or* National Council of the Slovak Republic).[12]

Slovakia's 2019 presidential election was conspicuously determined by the domestic political background much more than any other election ever. The Government was formed after the 2016 general election which brought an unwonted and ideologically-heterogeneous coalition composed of social democratic *Smer-SD*, nationalist *Slovenská národná strana* (*SNS*, Slovak National Party), centre-right *#Sieť* (#Network), and *Most-Híd* (The Bridge)*,* a Slovak-Hungarian party (Just, 2019; Rybář, Spáč, 2017; Zvada 2018; Filipec 2019). This Fico's third Cabinet was set up and agreed, although, in their campaigns the latter two political parties openly proclaimed that lacked any intention to join a coalition composed of Fico's *Smer-SD*. Moreover, one

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[11] For more information, about the presidential competences see the Constitutional Bills No 9/1999 and No 46/1999. Also some studies concerned and evaluated impact of the direct ballot in Slovakia (e.g. Giba, 2011; Horváth, Juhás, 2011).

[12] The most essential and visible presidential competence is to "appoint and recall the Prime Minister (PM), other members of the Government of the Slovak Republic, the heads of central bodies and higher-level state officials, university rectors, university professors, generals, and chiefs of diplomatic missions" (The Slovak Constitution, 1993, Articles 101-107). The Slovak president also has the right to use a suspensive veto. He or she has, however, no right to propose a new bill to the NRSR, whereas, for instance, the president of Poland is allowed to do so (Fitzmaurice, 1998, p. 70).

of the traditional Slovak parties, *Kresťansko-demokratické hnutie* (*KDH*, Christian-Democratic Movement) remained out of the *NRSR*. However, two new populist forces, *Sme Rodina* (We Are a Family) or the extreme right party *Kotleba - Ľudová strana naše Slovensko (ĽSNS*, Kotleba - People's party our Slovakia) entered the Parliament thanks to their ability to promote vehemently anti-immigrant and anti-Muslim rhetoric (Zvada, 2018, p. 217).

A strong ideological discrepancy could be witnessed amongst the highest Slovak representatives, i.e. the leaders of ruling coalition parties, Fico who had been Kiska's main opponent in the 2014 presidential election, and the Speaker of the *NRSR*, Andrej Danko. Political tensions intensified after Ján Kuciak, an investigative journalist, and his fiancée, Martina Kušnírová, were savagely murdered in their house on 21st February 2018. The violent murder of those young people led the Slovak society into a deep political depression which even escalated into an initiative called *Za slušné Slovensko* (For a Decent Slovakia). This movement then organised the greatest protest rallies in many Slovak cities. The capital of Bratislava hosted the largest protest events since the fall of communism in 1989.

Moreover, the importance of this presidential election intensified the fact that the ruling and most dominant party of the last decade, *Smer-SD*, had faced a constant decrease of votes as exemplified in the 2017 regional election when this party lost its seats of regional governors[13] in four out of six regions. Similarly, in the 2018 municipal election, the party lost 255 seats in municipal assemblies if comparing to the 2014 election. Together with the European Parliament election, this presidential election was meant to test the party of *Smer-SD* before the 2020 general election.

When bearing in mind the presidential election as a clash of the ruling and opposition efforts, two pivotal points in both poles, the governmental and opposition, may be identified.

The first one is linked to a recruiting strategy as in existence within the strongest political party, *Smer-SD*. After having difficulty in rebuilding the coalition underlined by the most massive protest rallies in Slovakia's modern era, the opinion polls implied *Smer-SD*'s continuous diminution. Therefore, they used a very cautious tactics and postponed this announcement of its candidate. Regardless of the opinion polls and its speculations whether Fico wished to run for presidency, his genuine plan, however, was to persuade Miroslav Lajčák to candidate. It seemed that most of the time, the *Smer-SD* Chair tried to convince Lajčák even though he had denied steadily. Furthermore, Lajčák was in an open intraparty conflict with Fico and

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[13] Informally called a "župan".

other party and government colleagues because they refused to promote or even sign the UN document of *Global Compact for Migration*. After this turbulent debate, it was more than obvious that Fico's party would have to choose another person. Finally, *Smer-SD* nominated Maroš Šefčovič, Slovakia's highest representatives within the EU, right a couple of hours before the deadline was due. Šefčovič's nomination gradually acquired more support amongst the MPs of *SNS* with no candidate proposed finally although mentioning its chair, the *NRSR* Speaker, Andrej Danko, as a possible contender quite frequently. The centre-liberal party, strongly oriented towards Hungarian voters, *Most-Híd*, nominated its own party leader, the *NRSR* Vice-chairman, Béla Bugár. This nomination was a pragmatic step to coalition partners on one hand, and Bugár's nomination may be even appraised as a counterweight to the candidacy of Jószef Menyhárt, the leader of *Strana maďarskej komunity* (*SMK,* Party of Hungarian Community).

Secondly, and albeit dissimilar in its characteristics, it is indispensable to consider the tenseness of the ways in which the bloc of opposition parties recruited own candidates. In general, political parties, which had gained the mandates in the general election, remained fragmented in the opposition, and so these parties preferred to captivate the voters separately via their own candidates. The opposition party *Sloboda a Solidarita,* (*SaS*, Freedom and Solidarity, led by Richard Sulík, a member of the European Parliament) introduced its own candidate, Róbert Mistrík (a scientist and *SaS* co-founder) inactive in politics for a long time. The *NRSR* newcomers of the 2016 general election, the populist movement *Sme Rodina*, led by Boris Kollár, a controversial billionaire, had chosen Milan Krajniak as the party's candidate, and the extreme right party, *ĽSNS*, picked its own leader, Marian Kotleba.

Forthwith, the first opinion polls predicted that the contender to be elected the next president was one of the four-some of Maroš Šefčovič, Štefan Harabin, Robert Mistrík, or Zuzana Čaputová. Two of them clearly represented the back then political milieu, whereas the other two declared new beginnings in Slovak politics as well as a different way of policymaking, based on transparency and decency. Since the polling day was announced, from January and the first half of February, Čaputová had pursued Mistrík's in placings. Since the second half of February, she literally took the lead. For that reason, on 26th February, Mistrík followed the prior agreements and stood down from the presidential campaign in favour of Čaputová. At the ensuing press conference, he expressed his support to her and stated that "no mouthpiece of Robert Fico or Vladimír Mečiar shall ever be allowed to

take office as the president". Čaputová achieved a backup from the outgoing President Kiska after that (Mikušovič 2019; Tkáč 2019).

Finally, the candidates may be divided into three categories. First category are marginal candidates who were predominantly unknown to the public, or well-known only in very limited circle of voters, thereby having no support of relevant political parties.[14] Second category are popular public personalities endorsed by the parliamentary or non-parliamentary parties, more or less connected to their political background.[15] Third category comprise active politicians representing parliamentary or non-parliamentary political forces.[16]

4 THE RESULTS, SPATIAL SUPPORT, AND VOTERS' CHARACTERISTICS

The final score of the first round followed and fulfilled the latest predictions of opinion polls (Focus, 2019). Zuzana Čaputová has reached 40.57% and Maroš Šefčovič gained 18.66%. The turnout rate was 48.74% in the first round that is 5 per cent more than in the previous 2014 presidential election, and the second highest since 1999. In the first round, she gained more than twice as much votes as Šefčovič.

Table 2: *Complete Results of the 2019 Presidential Election*

Candidate	First round (votes)	First round (%)	Second round (votes)	Second round (%)
Z. Čaputová	**870,415**	**40.57**	**1,056,582**	**58.40**
M. Šefčovič	**400,379**	**18.66**	**752,403**	**41.59**
Š. Harabin	307,823	14.34		
M. Kotleba	222,935	10.39		
F. Mikloško	122,916	5.72		
B. Bugár	66,667	3.1		
M. Krajniak	59,464	2.77		
E. Chmelár	58,965	2.74		
Others (5)	31,274	1.42		

[14] Martin Daňo, Róbert Švec, Bohumila Tauchmannová, Juraj Zábojník, Ivan Zuzula.
[15] Zuzana Čaputová, Štefan Harabin, Eduard Chmelár, František Mikloško, Robert Mistrík.
[16] Béla Bugár, Marian Kotleba, Milan Krajniak, József Menyhárt, and Maroš Šefčovič.

Electrorate	4,429,033		4,419,883	
Turnout	2,158,859	48.74	1,847,417	41.79
Invalid	12,848	0.59	38,130	2.06

Source: Authors, based on the data from the Statistical Office of the Slovak Republic and the Ministry of the Interior of the Slovak Republic.

Čaputová's victory was substantial and supported by the fact that she dominated in all of the eight Slovak regions in the first round, and seven out of eight regions in the second round, respectively. At the same time, however, it was a presidential victory burdened with the turnout of 41.79%, the lowest turnout in the second round ever. Apart from the lowest turnout in history, this presidential election has encountered remarkably the highest number of invalid votes comprising of 2.06% (38,130) in the second round. Slightly smaller numbers of invalid votes nominally represented the first direct election in 1999 accounting for 36,022 of invalid votes. It was, however, with a 73.89% turnout.

Regarding to Čaputová's supportive votes in the first round, as in Graph 2, it is palpable that the most concentrated support appeared in the capital, Bratislava, and other parts of the Bratislava region. Both the southern part of Trnava and the Nitra region were significant strongholds of Čaputová's support; especially palpable in the sub-areas of regional towns, such as Banská Bystrica and Košice. By analogy, next relevant clusters of support took place in the districts of Liptovský Mikuláš, Poprad, and Rožňava. In other regions, however, her electoral support was evenly distributed.

Graph 2: *Valid Votes (%) for Zuzana Čaputová in the 1ˢᵗ Round of 2019 Presidential Election*
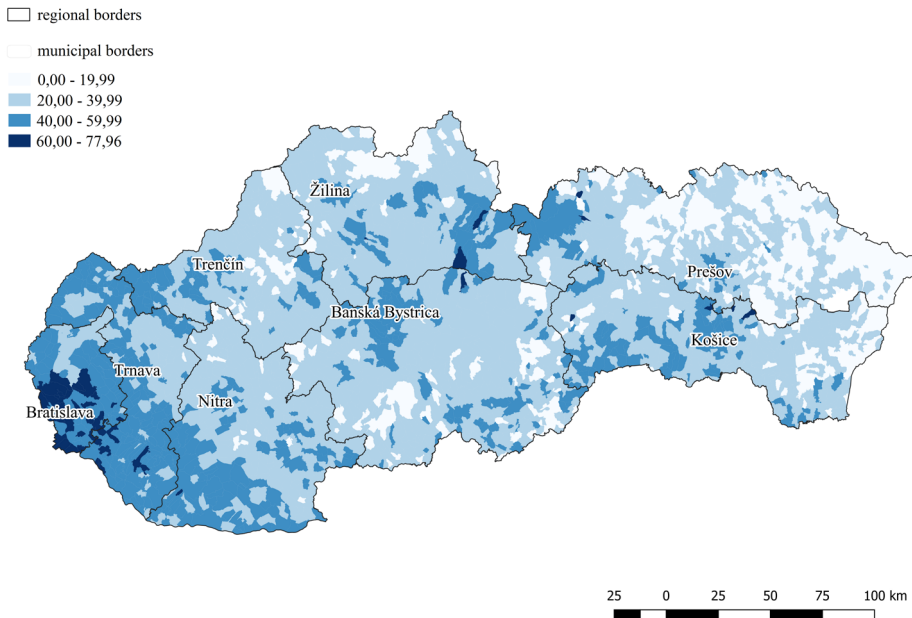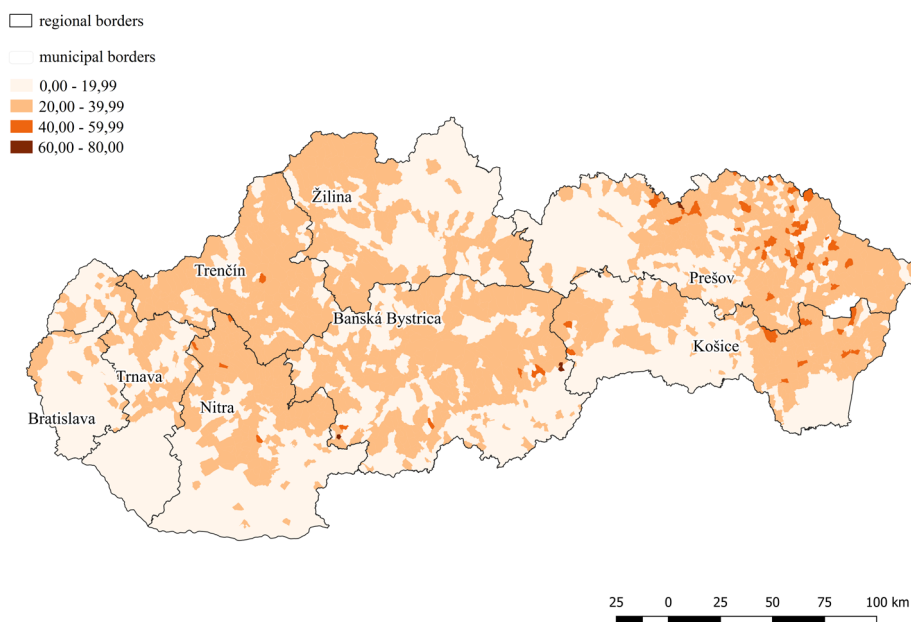

Source: Authors, based on the data from the Statistical Office of the Slovak Republic

By contrast, Čaputová then received a low level of support from voters located in the north (Kysuce) and northeast of Slovakia (Prešov and the eastern part of the Košice region) wherein the *Smer-SD* party usually dominates the elections. As depicted in the respective map, her electoral support ranging between 0 and 19.99 per cent prevailed in 558 municipalities; 20.00–39.99 per cent support in 1,702 municipalities; 40.00–59.99 per cent in 612; 60.00–79.99 per cent in 54 municipalities. Čaputová did not gain more than 80.00 percent in any municipality in Slovakia

In comparison with Čaputová, Šefčovič predominantly won only in the eastern part of Slovakia; namely in the eastern areas of the Košice and Prešov regions, while including the districts such as Bardejov, Svidník, Medzilaborce, Humenné, and Stropkov, all of which previously long-dominated by *Smer-SD* party in all the types of elections. As evident in Graph 3 showing Šefčovič's electoral support, the average figure oscillating between 20–40% may be found in the Trenčín region (Považie) and the northern part of the Nitra region and northern part of the Žilina region (Kysuce). Interestingly,

moreover, Šefčovič did succeed on the outskirts of regions, but not in the regional towns as such. On the other hand, a very marginal level of support occurred in the Bratislava region, the southern part of the Trnava region, near the Hungarian borders inhabited by the Hungarian minority, and in the south of Slovakia as a whole. Relatively low figures of support ranging up to 20 per cent were in the regions where the *Smer-SD* party frequently wins the elections, as for instance in the regions of Spiš and Orava.

Graph 3: *Valid Votes (%) for Maroš Šefčovič in the 1ˢᵗ Round of 2019 Presidential Election*
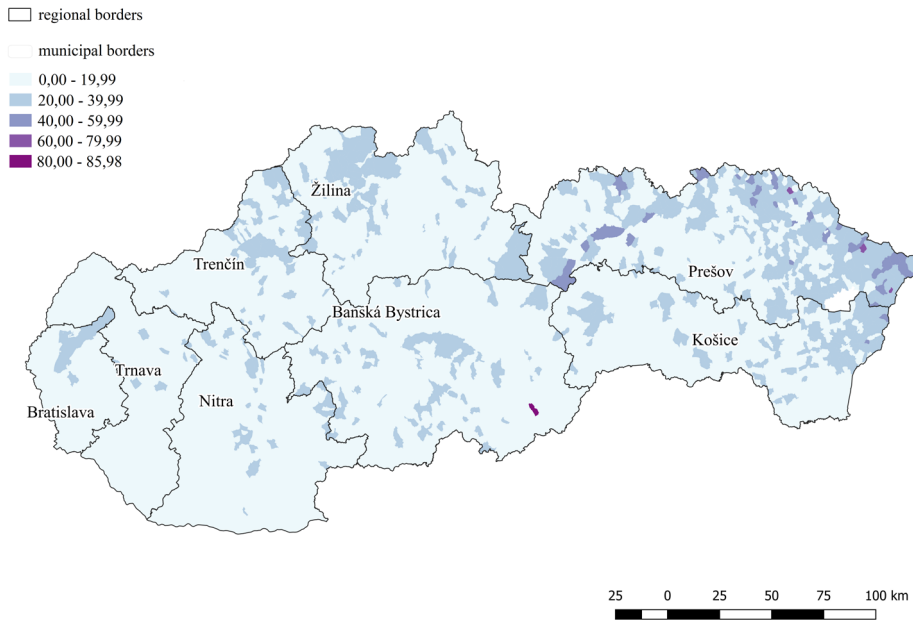

Source: Authors, based on the data from the Statistical Office of the Slovak Republic

Šefčovič's electoral support may be found in Graph 3, and numerically it stands as follows. His electoral support ranging from 0 to 19.99 per cent rose up in 1,362 municipalities; 20.00–39.99 per cent in 1,506 municipalities; 40.00–59.99% in just 55 municipalities; 60.00–79.99% in 2 municipalities; and finally, in 1 municipality his electoral support exceeded 80 per cent.

A truly unforeseen number is represented by the total of Harabin and Kotleba's votes accounting for nearly 25 per cent. The roots of Harabin's voters are akin to Šefčovič's in the eastern area of the Prešov and Košice

region, and particularly in the districts such as Svidník, Medzilaborce, and Snina. Not negligible cluster of support was revealed in the region of Poprad and on its outskirts, or in the district of Kežmarok.

Graph 4: *Valid Votes (%) for Štefan Harabin in the 1ˢᵗ Round of 2019 Presidential Election*
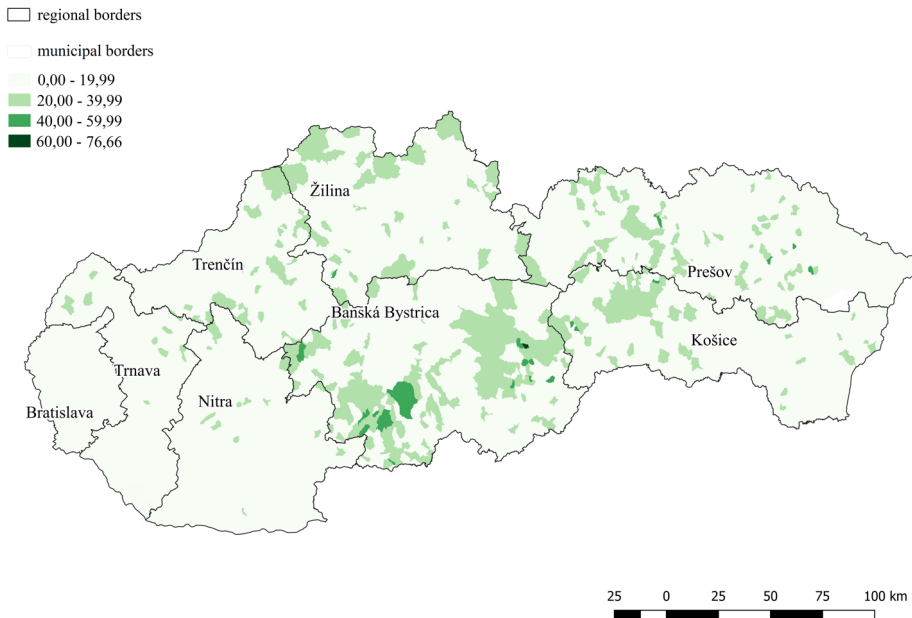

Source: Authors, based on the data from the Statistical Office of the Slovak Republic.

Harabin's core supporters also emerged in the northern area of the Žilina and Trenčín region. The greatest overlap of Harabin and Kotleba's voters was spotted in the region of Banská Bystrica. Apart minor exceptions, Harabin did not obtain any votes from the regions of Bratislava, Trnava, and Nitra. Harabin's ca 308,000 voters from the first round were segmented as follows: 0–19.99 per cent in 2,301 municipalities; 20.00–39.99 per cent in 587 municipalities; 40.00–59.99 per cent in 34 municipalities; 60.00–79.99 in 4 municipalities, and finally 80 per cent and more in no municipality.

Kotleba's most conspicuous landslide victory occurred in the Banská Bystrica region where he took a position of a regional governor from 2013, and in the north of the Žilina region then.

Graph 5: *Valid Votes (%) for Marian Kotleba in the 1st Round of 2019 Presidential Election*

Source: Authors, based on the data from the Statistical Office of the Slovak Republic.

In the region of Banská Bystrica, Kotleba dominated the two upper quartiles ranging from 40.00 to 80.00 per cent, especially in the municipalities of Krupina, Detva, Rimavská Sobota, Rožňava, Revúca, and Žarnovica. Regarding to the area of northern Slovakia, he succeeded in the regions of Trenčín (Horné Považie) and Žilina (Kysuce), particularly in the territory under the towns of Považská Bystrica, Čadca, and Bytča. Overall, the electoral support of the three aforementioned candidates mostly overlapped. Contrarily, Kotleba´s failure was even greater than Harabin's in the regions of Bratislava, Trnava, and Nitra. Kotleba's campaign was not successful in the northern area of Slovakia, northern part of Prešov, and southeast part of the region of Košice. Overall, nonetheless, the highest share of electoral support may be found in the margin of 0–19.99 per cent, and it was in 2,487 municipalities; the electoral support between 20.00–39.99 per cent appeared in 415 municipalities; 40.00–59.99 per cent in 22; 60.00–79.00 per cent in just 2 municipalities. He failed to obtain votes over 80 per cent in any municipality.

Considering the electoral maps, two points are to be foregrounded. First, it is feasible to observe a geographical division in case of Slovakia. This division then results in the political cleavage, mostly urban-rural based one. This urban-rural cleavage has been persistent in the Slovak presidential elections (Pink, Spáč, 2012). And the question is, what are the effects of the 2019 presidential election on the spatial patterns in a long run. Whether, against all odds, a new trajectory based on Čaputová's victory is to be followed or remains unchallenged instead as in case of mainstream centre-right candidates (e.g., Kukan, Radičová) or civic centre-right candidates (e.g., Vašáryová, Bútora), who did not succeed in predominantly conservatively nationalistic areas of Slovakia, as previously delineated by Pink and Spáč (2012). Second, there are polygons of higher electoral support towards particular candidates and these correspond to higher electoral results for political parties endorsing the given candidates. This aspect will be further elaborated in the paper. However, due to the highly personalised form of elections, there are many polygons with merely "around average" electoral results. Moreover, contrary to the parliamentary elections, medium-scale or large areas with no support might be spotted when using the certain method in geographic visualisation. These "blank spots", more frequently than ever, do not correlate. This is the reason why in the following model regressing election results of presidential candidate by the party election results does not yield any satisfying results.

The resultant models of binomial regression, however, have not provided sufficiently significant outcomes. Albeit in a correct utilisation, the models have manifested solely frail or no relations amongst independent and dependent variables. There are two explanations to be pondered upon. First, it had been caused by the personalised form of voting in presidential elections per se, as further in this text. Secondly, the data aggregated at the municipal level do not allow exposing the connexions within the analysed units, and thus have biased the results. Nevertheless, when considering even the lower figures of the coefficients acquired in the party model, it is palpable that the candidates, who were official members of political parties or merely endorsed thereof, have obtained higher figures of given coefficients as in the cases of, for example, Maroš Šefčovič's *Smer-SD* and Kotleba's *ĽSNS.*

As in Table 3, the model did not yield any sufficient results. Some certain trends, however, might be observed. Education represented by the level of university degree is proved the highest amongst the voters of Čaputová. By contrast, this variable has scored lower in case of other candidates. At

the same time, the age of 61+, as a variable, is present mostly across the electorate of Šefčovič.

Table 3: *Socio-Economic Model for the 1st Round of Election: The Negative Binomial Regression*

Variable	Zuzana Čaputová			Maroš Šefčovič		
university degree	0.034	(0.000)	***	-0.028	(0.000)	***
aged 61+	-0.002	(0.000)	***	0.016	(0.000)	***
unemployed	-0.010	(0.000)	***	0.000	(0.000)	*
divorced	0.010	(0.000)	***	0.006	(0.000)	***
Roman Catholic	0.000	(0.000)	***	-0.002	(0.000)	***
Hungarian	0.006	(0.000)	***	-0.017	(0.000)	***
Constant	3.259	(0.001)	***	3.082	(0.001)	***
Pseudo Rsq	0.097			0.138		
No. of observations	2926			2926		
Variable	Štefan Harabin			Marian Kotleba		
university degree	-0.022	(0.000)	***	-0.066	(0.000)	***
aged 61+	-0.006	(0.000)	***	-0.004	(0.000)	***
unemployed	-0.002	(0.000)	***	0.005	(0.000)	***
divorced	0.001	(0.000)	***	0.017	(0.000)	***
Roman Catholic	-0.002	(0.000)	***	0.003	(0.000)	***
Hungarian	-0.015	(0.000)	***	-0.015	(0.000)	***
Constant	3.211	(0.001)	***	2.837	(0.001)	***
Pseudo Rsq	0.110			0.157		
No. of observations	2926			2926		

Source: Authors, based on own calculations.
All models are weighted by the population. (* = p ≤ 0.05; ** = p ≤ 0.01; *** = p ≤ 0.005).

Table 4: *Party Model for the 1ˢᵗ Round of Election: The Negative Binomial Regression*

Variable	Zuzana Čaputová			Maroš Šefčovič		
SaS	0.023	(0.000)	***	0.005	(0.000)	***
#Sieť[17]	0.000	(0.000)	***	0.006	(0.000)	***
ĽSNS	-0.011	(0.000)	***	0.003	(0.000)	***
Smer-SD	-0.009	(0.000)	***	0.025	(0.000)	***
SNS	-0.010	(0.000)	***	0.018	(0.000)	***
Most-Híd	0.005	(0.000)	***	-0.003	(0.000)	***
Sme rodina	0.022	(0.000)	***	0.013	(0.000)	***
OĽaNO	0.005	(0.000)	***	0.007	(0.000)	***
Constant	3.574	(0.001)	***	1.739	(0.002)	***
Pseudo Rsq	0.191			0.203		
No. of observations	2926			2926		
Variable	**Štefan Harabin**			**Marian Kotleba**		
SaS	-0.005	(0.000)	***	-0.036	(0.000)	***
#Sieť	0.015	(0.000)	***	0.008	(0.000)	***
ĽSNS	0.017	(0.000)	***	0.063	(0.000)	***
Smer-SD	0.017	(0.000)	***	0.008	(0.000)	***
SNS	0.019	(0.000)	***	0.017	(0.000)	***
Most-Híd	0.002	(0.000)	***	0.001	(0.000)	
Sme rodina	0.011	(0.000)	***	0.015	(0.000)	***
OĽaNO	0.013	(0.000)	***	0.003	(0.000)	***
Constant	1.619	(0.002)	***	1.645	(0.002)	***
Pseudo Rsq	0.136			0.192		
No. of observations	2926			2926		

Source: Authors, based on own calculations.
All models are weighted by the population. (* = $p \le 0.05$; ** = $p \le 0.01$; *** = $p \le 0.005$)

The tranquil character of this election was evident especially in comparison with the 2014 presidential election, when Fico had permanently attacked Kiska at the personal level. (ČT 24, 2019). In the meantime, Čaputová's campaning focused on her future national agenda, especially on

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[17] #Sieť as a political party was dissolved after the 2016 parliamentary election.

employing presidential soft power. Šefčovič had a television spot aimed at convincing the voters about his respectable status and political networks in international politics.

The first round of Čaputová vs Šefčovič presidential contest signified a clear outcome for both candidates. Only Fico in the 2014 election and Mečiar in the 2004 election did not defend victory from the first round and lost the election. In the first round, President Kiska lost to Fico just by 4 per cent, and it was by 10% in case of Gašparovič to Mečiar respectively. Diverse yet supportive speeches delivered by defeated candidates were of significant importance for Čaputová's victory in the second round. Initially, Béla Bugár, the leader of *Most-Híd*, openly backed Čaputová. Divergently, Šefčovič attempted to attract conservative voters and to mobilise the electorate of *Smer-SD*. Despite the fact that Šefčovič managed to mobilise more voters between the first and second round and thereby obtaining over 350,000 new votes, Čaputová received 186,000 new votes in total. Yet she experienced a landslide victory as in the first round and reached 58.4% to Maroš Šefčovič's 41.59%.

In order to address the third research question, the authors have opted for the latter, since enables them to geographically demonstrate significant losses, or gains in a comparative way to the first round, respectively. As evident from Graph 6, that shows the above-described aspects in case of Čaputová, she managed to preserve her electoral support or even slightly soar in the margin of 0–20.00 per cent. Noticeably, at the level of 20.00–40.00%, she even mobilised the voters in the Žilina regions (Liptov, Turiec, Orava), and the eastern part of the region of Prešov. In comparison with the first round, a crucial voters' shift, associated with the margin of 80.00–93.00%, took place in the southern part of Trnava, Nitra, Banská Bystrica, and the region of Košice, inhabited by the Hungarian minority. The greatest losses in minor units maximised at the level of -17.64 per cent against the first round. This situation was spotted in the region of Prešov where the opposing candidate mobilised the voters more signally. In defiance of that, Čaputová's gains evinced a comparatively puissant growth of support, ranging between 20.00–40.00 per cent when compared to other candidates.

Graph 6: *Differences in valid votes (%) for Zuzana Čaputová Between the 1st and 2nd Round in the 2019 Presidential Election[18]*
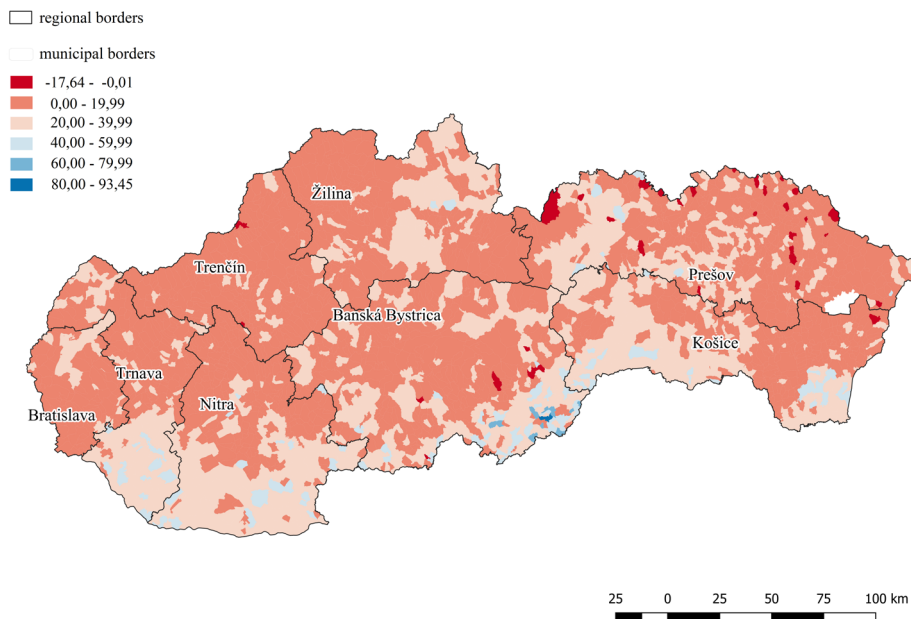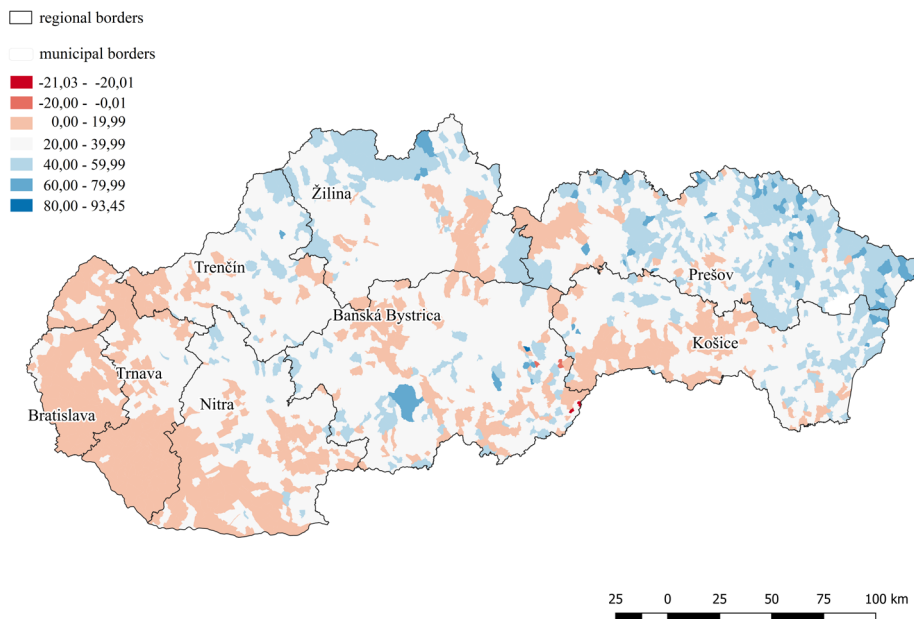

Source: Authors, based on the data from the Statistical Office of the Slovak Republic.

In contrast to the first round, she lost just one region; in the prospect of districts, she beat Šefčovič in a ratio of 49:30. Most certainly, in the 2nd round, a low turnout rate could not even help Šefčovič because it usually only benefits strong and party-endorsed candidates. It is not safe to say that Šefčovič substantially lost his support in certain territories. By contrast, as Čaputová strengthened her electoral base in eastern parts of Slovakia up to 20.00 per cent, so did Šefčovič in the regions of Bratislava, Trnava, and Nitra.

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[18] Calculated as the second round minus the first one.

Graph 7: *Differences in valid votes (%) for Maroš Šefčovič Between the 1*st *and 2*nd *Round in the 2019 Presidential Election.*[19]

Source: Authors, based on the data from the Statistical Office of the Slovak Republic.

In total, Šefčovič gained the votes predominantly in the most Catholic parts of Slovakia, he lost in bigger towns or within the Hungarian community. Especially in a traditional bastion of the *Smer-SD* party, i.e. in the eastern part of Slovakia there was an increase of 40.00–60.00% and 60–80%; then in the region of Orava and Kysuce in the north, and on the borderland between the regions of Trenčín and Žilina. Čaputová managed to remain ahead thanks to a wider scope of electorate comprising liberal voters in the towns of Bratislava, Košice, Banská Bystrica, and Žilina. Furthermore, she was successful more than expected in concrete areas of northern Slovakia, in the realms of Catholicism, as for instance in the Orava region or the town or Ružomberok, and eventually in the eastern part of the region of Prešov.

Regardless of Šefčovič's attempts to mobilise the voters, he did not achieve any success in obtaining enough voters in highly urbanised towns and cities. The key quartile of 0–20.00 per cent proved its significance in

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[19] Calculated as the second round minus the first one.

case of Čaputová. Not only she kept the electoral support from the first round, but she also augmented her electoral base across the whole country. Šefčovič's quartile of 0–20.00 per cent, on the other hand, did not attain this robust disposition.

CONCLUSION

This study aimed to the 2019 presidential election in Slovakia and its four strongest candidates in the main strongholds of their electoral support and respective socio-economic characteristics of their electorate at the level of municipalities whilst employing the aggregated data. The authors have revealed that Čaputová, the winning presidential candidate, gained the most significant support in highly urbanised areas, such as the region of Bratislava, Nitra, and Trnava in the first round. This candidate, however, received a low level of support on the outskirts of the Prešov and Košice regions. Šefčovič, the candidate defeated in the second round, was endorsed by regions traditionally supporting the *Smer-SD* party in the northeast of Slovakia, then in more religious, and less prosperous areas as Orava, Spiš, and Kysuce. Hungarian and southern areas were lukewarm towards the candidate in the first round. The levels of electoral support for Harabin and Kotleba overlapped in the region of Banská Bystrica and other northern territories as Kysuce and Orava. In contrast to Kotleba, Harabin's voters were akin to Šefčovič's in the eastern areas of Prešov and Košice.

Addressing the second research question has not been fruitful at first sight. In the course of research, it became obvious that presidential elections are so personalised that simply correlating electoral results by various socio-economic factors has proved unnecessary, since no satisfactory results could be identified. Eventually, personalised datasets might reveal further correlations. These, however, cannot be analysed at the level of towns.

Finally, when observing the voters' shifts between the first and second round, authors made the following observations. Both candidates mobilised their voters and supporters significantly, and none of them experienced any significant shrinkage in respect of supporting areas. However, Čaputová proved to be more successful due to a continual ability to sustain the electoral support, and on top of that, she even increased it up to 20 per cent in a vast majority of Slovakia's regions. And this also included the regions in which the *Smer-SD* party used to dominate (i.e., Prešov, Trenčín, northern parts of Žilina). And finally, a significant accumulation of votes for Čaputová arose in the south of Slovakia, and thus with the Hungarian

minority. Šefčovič's rise in votes was only marginal in the western areas. Most importantly, though, he concentrated, albeit in an insufficient way, on traditional and conservative areas of Orava and Spiš. Consequently, he lost significant voters in the southern belt close to the Hungarian borders. Although Šefčovič turned at least one region to his advantage, it was not enough since the loss of ca 470,000 voters from the first round was reduced to just 304,000 voters in the second round.

On the one hand, the run-off system of voting, as used in the presidential elections, inclines towards a natural division of society into two blocks. On the other hand, this election has also demonstrated the existence of regional patterns of electoral support in both rounds of voting. Whereas Čaputová strongly relied on voters from the western part of Slovakia and other greater urbanised regional towns, Šefčovič's voters are found in the northeastern or central and less urbanised parts of Slovakia.

Albeit previously labelled as a liberal candidate due to her moderate points of view in terms of values and ethical issues (such as religion, abortions, euthanasia, etc.), Čaputová stayed able to obtain sufficient electoral support throughout. The lack of support towards Šefčovič in the south of Slovakia follows the nationalist and populist map of Vladimir Mečiar's electoral support in the second round of presidential election in which he stood against Rudolf Schuster, or alternatively, in 2004, when Mečiar ran for office in the second round of the same type of elections.

Čaputová's election victory indicates and affirms, among others, that the candidates with apolitical personal history or non-party, and thus independent, endorsed a long-standing trajectory of personalised politics, which has been widespread and popular in the Western democracies (Karvonen, 2010; Rahat, Shaefer, 2007; Garzia, 2011).

Needless to say, Čaputová may inspire other women, and thus become an incentive for them to take part in politics, albeit not at the highest level necessarily. On the other hand, citizens' disagreement with the results, as expressed by the low turnout in the second round, may turn out to be a trigger for a unification of populist and extremist forces in the Slovak political environment. Also, an essential determinant of Čaputová's future mandate will lie in her use of soft power more than ever during the Covid-19 era.

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