The Influence of Ballot Ranking. Preferential Voting in a Nationwide Constituency in Slovakia.

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Abstract

The paper deals with ballot order effect in preferential voting in general elections in Slovakia. The country uses a list PR system with a single nationwide constituency where all members of parliament are elected. Under these conditions the voters face a very numerous lists consisting of 150 candidates. This study covers three consecutive elections from 2006 to 2012 and works with a sample of 2,650 candidates. The results indicate that candidates listed on the top positions strongly benefit from their ranking. The analysis provided outcomes pointing to some advantage also for candidates on the bottom of the list, but this effect is questionable as it was affected by one of the political parties with a largely unique features.

Keywords

Election, list PR system, preferential voting, preferential vote, Slovakia, ballot order effect, primacy effect, recency effect, candidate.

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Introduction

Recent research is becoming more focused on the potential influence of the ballot form on the electoral outcomes. In this area the order of candidates is of primary concern. Although the conducted studies indicate also mixed results, their prevailing findings indicate that positions of candidates on lists may have a relevant role here (Miller and Krosnick 1998; Ho and Imai 2008; Koppell and Steen 2004; King and Leigh 2009; Meredith and Salant 2013). If this is true than some candidates get a rather unfounded advantage which provides them with an increased amount of gained votes.

This paper deals with ballot order effect in preferential voting in general elections in Slovakia. The country uses a list PR system with a single nationwide constituency where all 150 members of parliament are elected. This aspect is of key importance as the authors usually focus on elections with lists of rather smaller amount of candidates. This text thus represents a contribution as it provides an analysis of an electoral system using highly numerous lists.

The structure of the paper is as follows. The first section outlines the theoretical insights into ballot order effect. The next part describes the Slovak electoral system as the respective institutional arena for the analysis. Third chapter defines the used methods and presents the data. Forth section introduces the results and the paper is finished by a discussion and concluding remarks.

Theoretical assumptions of ballot order effect

The concept of ballot order effect assumes that the order of candidates on the list may have an influence on the voters' decision. The voters typically make their decisions with imperfect information, although nowadays these are provided by an increasing number of channels. Under these circumstances the outcome may be the primacy effect when the voters bias their support towards the candidates listed on the front positions or the recency effect when higher amount of votes are cast in favor of candidates listed on the bottom (Brockington 2003; Ho and Imai 2008).

One of the main approaches that explain these effects is the satisficing theory (Miller and Krosnick 1998; Koppell and Steen 2004; Miller 2010; Meredith and Salant 2013). It states that voters do not necessarily choose optimal decisions, but they accept even solutions that are satisfactory enough. Voters thus set their own requirements which they find to be important and when they process through the list they check whether the candidates fulfill these conditions. With every subsequent alternative their attention decreases and their interest fades. In case that more candidates have passed their test, voters are more open to give support to those who were listed on the front positions. This bias is labeled as the primacy effect.

The so called recency effect works on the opposite principle. It may happen when voters do not check the candidates based on reasons why to vote for them, but against them. When processing through the list the increasing fatigue and lower concentration leads voters to find lesser reasons who not to vote for lower ranked candidates. In the final, voters operating under such logic are biased to express their support to the candidates on the bottom of the list.

The ballot order effect may appear even under different circumstances. Miller and Krosnick (1998) state that this phenomenon may occur when uninformed voters want to act as "good citizens" by attending the election. As for these voters it is irrelevant whom they choose, they select the first option on the list. The so called donkey voting documented in Australia is based on s similar principle (King a Leigh 2009). This lies in the fact that voters who are casting more than just one vote give them to candidates in accordance with their order on the list. Here the ballot order effect is thus supported with higher demands put on the voters.

Research of ballot order effect is not only theoretical, but provides solid empirical findings. In his paper Regan (2012) analyzed the results of Irish general elections from 1977 to 2011, where candidates are ordered alphabetically. His sample covered 457 competitions on the district level with the total of 4,807 candidates. Regan's research proved the presence of ballot order effect as he showed that candidates scored on first positions scored better with a plus of 1,27 percentage points.

Bagues and Esteve-Volart (2011) concentrated on Senate elections in Spain from 1996 to 2008. In their work they found a substantial ballot order effect. Their outcomes show that candidates listed on top positions gained more votes while this advantage was more significant for the minor parties. For two major Spanish parties the candidates got a surplus of about one tenth of their support and for minor parties` candidates this benefit added nearly one fifth to their results. These findings about heterogeneous influence of ballot order effect are not rare. Ho and Imai (2008) studied statewide elections in California from 1978 to 2002 and found that the advantage of candidates for being listed first on the list is linked with small parties and non-partisan competitions. On the contrary, their analysis of primaries detected no difference among candidates of various parties.

Interesting findings were provided by Koppell and Steen (2004) who focused on primaries of Democratic Party in New York City. Their results show that in 71 out of 79 individual competitions a bias toward the candidates on the first position occurred. What is more, in seven out of these 71 races the ballot order effect exceeded the winner's margin of victory. In these cases the order of candidates thus might have determined the electoral outcomes in respect to the identity of the winner.

The influence of ballot order effect varies among the authors. Miller and Krosnick (1998) conducted an analysis of Ohio election and concluded that being first on the list added

the candidates an average of 2.5 per cent of votes. A slight stronger effect was found by Meredith and Salant (2013) in their study of California city council and school board elections. They showed that candidates ranked first got a surplus of four to five per cent of votes. Finally a different impact was measured by King and Leigh (2009) in their paper about federal elections in Australia. According to them the support of candidates on the top position on the list was increased by approximately one percentage point.

The existing research shows the relevance of ballot order effect and mostly links it to advantage for candidates listed on the first position on the list. The topic itself exceeded the theoretical environment and entered even into legal framework as it became the subject of several court decisions.² In respect to geographic means, the research primarily focuses on USA while the other countries and regions are rather underrepresented. What seems to be more important is that the authors have mainly focused on elections where lists with rather small number of candidates are used. Regan's paper about Irish elections worked with competitions of 4 to 24 candidates (average of 11.53). In districts of Australian federal elections analyzed by King and Leigh about two to fourteen candidates competed (with an average of six persons per district). Similarly the number of candidates contesting in California city council and school boards elections studied by Meredith and Salant ranged between two and nine. Assuming that ballot order effect should be stronger when higher demands are put on voters, the further research should take more attention towards elections with lists composing of higher amount of candidates. One of such examples is provided by general elections in Slovakia, which are the topic of this paper.

Electoral system in Slovakia

After the fall of the communist regime Slovakia³ introduced a list PR system for its general elections. The country's territory was divided into four constituencies matching the borders of regions. The threshold was set at three per cent thus allowing also the smaller parties to obtain seats. This original framework contained flexible lists what gave the voters an option to interfere also to the intraparty level of competition. During the next development several modifications of the electoral system were adopted, but its basic proportional logic remained unchanged. One of such examples was the raising of threshold from three to five per cent before the election 1992.⁴

 $^{^2}$ In town of Compton in California an unsuccessful candidate requested the court to change the results of the local mayoral election. He argued that the town officials failed to apply the randomization of candidates` order required by the state law. The trial court firstly declared the losing candidate to be the winner but appellate court changed this decision. (Alvarez, Sinclair and Hasen 2006)

³ Until 1992 Slovakia was part of the Czechoslovak Federation where federal and two national (for both republics) elections were held in the same time. Electoral systems for these elections were nearly identical.

⁴ Raise of the threshold led to the historically highest amount of wasted votes. In election 1992 nearly one quarter of votes was cast for parties which did not cross the threshold. (Statistical Office of the Slovak Republic)

The most important reform until now was introduced in 1998. The government led by Prime Minister Mečiar, characterized by its problematic way of executing power, enforced a change of electoral rules shortly before the elections with an aim to increase its chances to succeed. The key intervention was the abandonment of the existing four constituencies and adoption of a single nationwide constituency. Besides that some other measures were taken to weaken the opposition, but these were all removed after Mečiar's lose in election 1998. As such the nationwide constituency remained as the only relict of this electoral reform.⁵

This framework is valid until present time. Slovak parliament composes of 150 members who are, since election 1998, elected in one district. Political parties thus create only one candidate list. Although the electoral law does not set any minimal amount of candidates, the relevant parties generally occupy the list with the maximum of 150 names. The order of candidates is fully at disposal to the parties and it is constant for the whole territory of the country. The ballots are thus subject to no rotation and they remain completely identical for all voters.

As mentioned above, Slovak electoral system has used flexible lists since 1990 and voters are allowed to cast preferential votes. The original framework of the system operated with conditions which strongly limited the possibilities of voters to modify the order of candidates set by political parties. Before election 1994 these conditions were weakened, but the shift to one nationwide constituency in 1998 had exactly the opposite effect. To move to the top of the list, the candidates needed to obtain such an amount of preferential votes which was at least equal to ten per cent of the votes of their party. This condition proved to be devastating and before 2006 election this threshold was reduced from ten to three per cent. This last modification of the electoral system returned the voters some potential to interfere also to the intraparty level of competition.

The current preferential voting in Slovak general elections works as follows. Voters have four preferential votes which they may cast to candidates of that party which they voted for.⁶ Preferential voting is fully optional and in case that the voters do not use this option, only their vote for the party counts. After the polling stations are closed, the votes are calculated and using Hagenbach-Bischoff quota the seats are allocated to the parties. It is now when the preferential votes come to scene. At first it is detected which candidates have crossed the threshold of three per cent of their party's votes and these are ranked at the top of the list based on their results. The remaining candidates are placed below them but according to their original order.⁷ This newly created order determines which candidates will obtain the seats and will represent their party in the parliament (Spáč 2013).

⁵ One example of such measures was the higher threshold for electoral coalitions in which the majority of opposition parties was formed. The new rules stated that each party of the coalition has to gain five per cent of votes individually or its support would be wasted. Theoretically, if an electoral coalition of 21 parties would be formed, it would need to get at least 105 per cent of votes to have a chance that none of its votes would be wasted. (Spáč 2010)

⁶ Each candidate may obtain only one preferential vote per voter. It is thus not possible that voters would give two, three or all four of their preferences to the same candidate.

⁷ This means that for candidates whose amount of preferential votes was lower than three per cent of their party's votes, the number of their preferences is irrelevant. For example if only candidates listed on positions 5 and 7

This implies that Slovak electoral system works only with those preferential votes which are actually cast. If voters decide to support only the political party without giving any preferential votes to its candidates, they do not implicitly approve the order of candidates set by the party and their not used preferences will not be calculated by any means. Slovak system thus differs from models used in other countries like Belgium where voters may support a candidate using a preferential vote or cast a vote for the party list as a whole. In Belgium both types of votes are used for seat allocation as list votes help the candidates placed on the top positions (De Winter 2005). In Slovakia no such mechanism is applied and only the actually cast preferential votes are calculated.⁸

Data and methods

This study covers the results of preferential voting in Slovak general elections. The sample is represented by three most recent elections in 2006, 2010 and 2012. This choice was done due to several reasons. First, the respective elections were run under identical electoral rules. This fact excludes any potential influence of electoral law modifications done during the analyzed term. The last reform of the Slovak electoral system was done before election 2006. In later years further possible changes of the system were discussed but until the election 2012 none were applied. Second, in elections 2006-2012 the turnout of voters on preferential voting was quite stable. Since implementation of preferential voting in 1990 the turnout on this part of elections has been continuously growing and the most recent elections indicate its stabilization. Throughout elections 2006-2012 it oscillated around three quarters with the top in election 2012 when it reached 80,55 per cent. For an illustration, in the second half of the 90s only slightly more than one half of the voters was using preferential votes.

From the beginning of the 90s Slovakia has permanently a multiparty system with typically six or seven parliamentary parties. Much more parties compete in elections, however most of them with a marginal support. Based on this, only those parties, who were able to cross the threshold and maintain seats, will be included in this study. This reduction creates no significant problem as voters may give preferential votes only to candidates on the list of the party for which they cast their vote. In other words, the voters of party Smer-SD, who won elections 2012, may give preferential votes only to candidates of this party but not to persons nominated by other formations. This means that distribution of the preferential votes among candidates of each party is fully independent from other parties and their candidates.

The selected sample comes from three elections, in which 18 parties were able to maintain parliamentary seats. In each election six parties fulfilled this aim. Relevant parties in

cross the threshold, they are shifted to two top positions on the list based on the amount of preferential votes they obtained. Below them the remaining candidates are ordered starting with the candidate whom the party set as the leader of the list, followed by number 2, 3, 4, 6, 8, 9, etc.

⁸ On the other hand, if voters do not use any preferential votes, they indirectly contribute to conservation of the original order of candidates. In case that none of the candidates would cross the threshold of three per cent of their party's votes, the original order would remain without any change.

Slovakia create lists of 150 candidates, although in some occasions these numbers may be different. Typically some candidates willingly leave the list or they are kicked out by the parties. Such actions are rather scarce and the lists usually consist of 150 candidates or they are very close to this amount what fully accounts for the sample in this paper. The only exemption here is the party Ordinary People and Independent Personalities (OLaNO) which competed only in election 2012. Originally it filled the list with maximum amount of candidates, but before the election an internal conflict erupted leading to withdrawal of part of the candidates. Finally the party had 110 valid candidates. Altogether this study analyzes the results of 2,651 candidates.⁹

The dependent variable represents the candidate's preferential votes. It is defined as the share of gained preferential votes out of the amount of votes of the political party on whose list was the candidate nominated. For each candidate this value may range between zero and hundred. The former case appears if none of the party voters gives a preferential vote to the candidate. The latter case is the opposite and it may happen if a candidate receives one preferential vote from all voters of his or her party. As the values of the dependent variable were not set as absolute gains of preferential votes, they are fully compatible among candidates from different parties. It is thus fully irrelevant how many votes the parties receive as for all candidate has the same basis for the analysis, what the application of absolute number of preferential votes would not be able to secure.

In accordance with the theoretical assumptions the independent variable is defined as the order of the candidates on the list. Although the majority of authors conclude a benefit for candidates listed on the top of the lists, the analysis will focus on mapping both primacy and recency effect. Aside from the independent variable several control variables will be used. These come out from the information about the candidates either provided explicitly on the ballot or those which may be identified by the voters based on the content of the list. These variables include the gender of the candidates, their age, academic title and occupation. Relevance of these variables is not given only because of their presence on the ballot, but also due to their inclusion in the previous research as factors with a potential influence on the support of candidates (Cutler 2002; Dolan 2010; Matson and Fine 2006; Voda and Spáč 2013; Kelley and McAllister 1984; McDermott 2005; Smith and Fox 2001).

Out of these control variables all but one are directly stated on the ballot. The only exemption here is the gender, which however may be easily distinguished. According to rules of the Slovak language the prefix "ova" is added to the surnames of women. This does not apply to women candidates of several ethnic minorities, mainly the Hungarian one, but here the first name provides a comfortable way how to assess the gender of the candidate. The voters thus have no problem in distinguishing the candidate's gender. The remaining control variables are explicitly on the ballots.

⁹ If all eighteen parties included in this study would create lists with maximum of 150 names, the sample would cover results of 2,700 candidates.

For the analysis the control variables will be transformed to dummy variables. For the variable age three categories will be created, covering the groups of different age groups, namely 21-35, 36-49 and 50 and more years of age.¹⁰ In case of academic titles only those awarded by universities are stated on the ballot. This means that if candidates have no title by their names the voters are unable to recognize whether they have primary or secondary education. The ability of voters to differ thus starts with at least some university titles of the candidates. The dummy variables representing the education are defined in accordance with standard country's ranking of titles. First category are the candidates without a title, second composes of those holding a bachelor or master degree. The third variable encompasses persons with doctoral title and the last category joins those candidates who have one of two highest possible titles – the associate professors and professors. The last control variable is the occupation. Here the first dummy variable covers politicians where holders of high state or elected offices as MPs or members of government will belong together with high party officials. The second dummy variable includes the local politicians, a group consisting of representatives of the elected regional or municipal self-government. This is followed by the dummy of entrepreneurs and finally all other occupations dominated by the employees are joined in one category. The presence of control variables should improve the relevance of the outcomes of this analysis. Appendix 1 provides a list of all control variables and shows the average shares of gained preferential votes for candidates of all categories.

This study will apply the OLS regression. This technique belongs to those which are used for analyzing the ballot order effect, but it also faces some criticism here. One of the main objections is the fact that the results of candidates are not independent on each other Alvarez, Sinclair and Hasen 2006). In case of Slovak elections this aspect may be present only to some limited extent. As it was mentioned above, voters may cast up to four preferential votes and they may give them exclusively only to those candidates who are on the list of the party which they supported. This means that in interparty level the results of candidates are not bound by any means. What is more, the fact that voters may cast not only one, but up to four preferential votes, limits these connections also in the intraparty level. According to official data those voters who use preferential voting, cast three preferences on average. The conclusion here is that for vast part of the voters the maximum of four preferential votes is not a factor which would limit them from giving support to even more candidates.¹¹

As for the results, I expect the following. First, the order of candidates will be the strongest predictor affecting their gains of preferential votes. Second, in case that both primacy and recency effect will be identified, the former will have more significant influence. The logic of both hypotheses is built on the presumption that numerous lists used in Slovakia should create a sizeable burden for the voters. The high amount of candidates may demotivate the voters, thus refrain them from moving through the whole ballot. It may be presumed that such conditions would lead to a bias especially advantaging the candidates on the top

 $^{^{10}}$ The lower limit of 21 years is set by the Slovak law as the necessary minimum age condition for being a candidate.

¹¹ In election 2006 those voters who used preferential votes casted 3.02 preferences on average. In years 2010 and 2012 this amount remained on a nearly identical level as it reached 2.95 and 3.07 votes respectively. (Statistical Office of the Slovak Republic)

positions. The following parts of the text will present the results of the analysis and the concluding remarks.

Results of analysis

The regression analysis provided interesting results. An important note is needed to address about the independent variable, the order of candidates. This variable could be included to the analysis with its original values, so that for each candidate the value would be the same as their ranking on the lists. However, based on the graph displaying average share of gained preferential votes for all positions on the lists (see Appendix 2), the results of such analysis would not be relevant enough.

Because of this the independent variable was transformed into dummy variables. Each of these variables mirrors the groupings of candidates on particular parts of the lists. For Model 1 the candidates were divided into groups of ten. For the first dummy variable the value one was given to candidates on positions one to ten, for the second to candidates on positions eleven to twenty etc. For Model 2 the used technique was the same with only one difference, which was that the dummy variables were created by dividing candidates into smaller groups of five. For the first dummy variable here the value one was given to candidates on positions one to five, for the second variable to candidates on positions six to ten etc.

This approach allows covering the potential nonlinear trends in relationship between the variables. What is more it opens the possibility to identify the influence of ballot order effect on amount of gained preferential votes on both ends of the list. For both models ten dummy variables representing the candidates` order were created, five for the upper and five for the lower part of the lists. The base line (excluded) includes all the remaining positions which represent the middle of the list. For Model 1 these are the positions 51-100 and for Model 2 the positions 26-125.

		В	Beta	Sig.
	Constant	-,043		,901
Gender	Women	,113	,007	,654
Age	36 - 49	,083	,006	,760
	50 and more	-,160	-,012	,568
Education	Master	,165	,013	,544
	Doctor	,358	,023	,279
	Professor	3,701	,096	,000
Occupation	Politician	2,289	,120	,000

Figure 1. OLS Regression (Model 1)

	Local politician	,204	,009	,577
	Entrepreneur	-,108	-,005	,752
Position	1 – 10	13,832	,542	,000
	11 – 20	,986	,039	,024
	21 – 30	,269	,011	,524
	31 – 40	,204	,008	,623
	41 – 50	,039	,002	,925
	101 - 110	,018	,001	,965
	111 - 120	,033	,001	,936
	121 - 130	-,036	-,001	,931
	131 - 140	,011	,000	,980
	141 - 150	,948	,037	,024
Adj. R ²			,380	
Ν			2,650	

Figure 1 displays the results for Model 1. The model has a solid value as it is able to explain 38 per cent of variability of the dependent variable. From the control variables only two proved to be statistically significant and both provide some benefit in gains of preferential votes. First is the category of candidates holding the highest academic titles and the second is the occupation in politics. All other control variables showed no significance at all.

As the results in the figure show, the key predictor of the dependent variable is connected to the order of candidates. The findings point to enormously strong influence of the ranking of candidates on the top positions who gained a nearly 14 percentage points plus to their amount of preferential votes. Candidates on positions eleven to twenty also profited from their order, although in a much lesser degree. Starting with the third ten the influence of ballot order diminished and it may be concluded that ranking in these parts of the list did not bring any more preferential votes to the candidates holding these positions.

On the other end of the list the situation was quite different. Except the last ten positions all the included categories had no statistical significance. The only group which was significant here is the one that represents positions 141-150. For this category the found effect is comparable to that one which was identified for positions eleven to twenty. It means that if ballot order effect is present and has influence on gains of preferential votes, the most appropriate positions in Slovak elections are those which are on the top of the lists.

		В	Beta	Sig.
	Constant	,050		,850
Gender	Women	,163	,010	,436
Age	36 - 49	,214	,017	,344
	50 and more	-,138	-,011	,553
Education	Master	,122	,009	,588

Figure 2. OLS Regression (Model 2)

	Doctor	,180	,012	,511
	Professor	1,818	,047	,001
Occupation	Politician	1,749	,092	,000
	Local politician	,243	,010	,425
	Entrepreneur	-,086	-,004	,763
Position	1 – 5	25,173	,708	,000
	6 – 10	3,556	,101	,000
	11 – 15	1,637	,047	,000
	16 – 20	,809	,023	,084
	21 – 25	,478	,013	,302
	126 - 130	-,127	-,004	,783
	131 - 135	-,061	-,002	,896
	136 - 140	-,126	-,003	,786
	141 - 145	-,138	-,004	,767
	146 - 150	1,878	,053	,000
Adj. R ²			,573	
Ν			2,650	

The data from figure 2 support the previous findings. Model 2 is even more powerful as it can explain more than 57 per cent of the variability of the dependent variable. This is quite a shift when compared to Model 1. As for the control variables, no major change occurred as the only significant remained the categories of professors and politicians.

The main focus has to be given to the ballot order as the dummy variables representing this factor where created from smaller amounts of positions, when compared to Model 1. As figure 2 indicates, this modification provided much more sensitive results that may better evaluate the ballot order effect. The most important gain of votes was connected to the top positions. Candidates occupying these ranks ended with 25 percentage points better results on average than those in the middle of the list. This difference is really striking. The profit for candidates in two more groups (positions 6-10 and 11-15) gradually decreased and in case of the group on ranks 16-20 it did not even reached the statistical significance. This trend was confirmed by the result of the dummy variable mapping positions 21-25 which was also insignificant.

The findings about the bottom of the list did not heavily changed when compared to Model 1. The only category with a relevant influence on the dependent variable was the one which covered the last five positions. All the other dummy variables, including the one which mapped ranks 141-145, had no significance. The profit for the candidates on the last five positions on the list was only slightly bigger than those on positions 11-15 and it was clearly smaller than those on ranks 6-10, not to mention the comparison with the top five positions.

These findings indicate the presence of both the primacy and recency effect in Slovak elections. Especially the former has a stronger background. First, the statistical significance was proved for more groups in the upper part of the lists. Second, in accordance with the satisficing theory, the profit for the candidates holding the front positions was gradually

decreasing when moving to those with worse ranks. This may mean that the highly numerous lists put a too heavy burden on the voters and thus demotivate them to take care of more than just several candidates listen on the top positions.

As for the potential recency effect, its influence was measured as not especially strong. With the exemption of the very last positions the other groups in the lower parts of the lists were statistically insignificant. Thus the results for the bottom of the list were not just a weaker mirror reflection of the outcomes calculated for its upper part. What is more, the whole thing is complicated by the above mentioned party OLaNO which took part only in the election 2012. This subject is very specific, as it is not a party in its classical sense, but rather a protest formation which profiles itself as a platform for independent candidates. The party as such has only four members who are its founders. They did not use the classical approach of Slovak parties when building up the list, but decided to occupy the last four positions (147-150) while other ranks were given mostly to non-partisans. The campaign of the party was based on this logic as it strongly concentrated on the untraditional position of its leaders on the list. In the final the leader of OLaNO listed on the last position gained the biggest amount of preferential votes while his three companions ended behind him with far worse results. Even in case of this party the candidates on the top positions gained much more votes than those who occupied the position in the middle of the list. As such the anomaly of this party could interfere in the results of analysis done in this paper.

This insight is supported by a calculation done on the same grounds only with an exclusion of the party OLaNO. If the regression analyses would be realized in such a way (N = 2,540) the effect of the last group would lose its statistical significance in both models. Figures 3 and 4 present these outcomes. Based on this it may be concluded that the measured recency effect had its origin in a specific outlier case and it may not be universally supported. On the contrary this does not affect the findings about the primacy effect as in this case we may speak about a general trend supported by all of the analyzed political parties.

		В	Beta	Sig.
	Constant	,056		,871
Gender	Women	,185	,011	,460
Age	36 - 49	-,051	-,004	,850
	50 and more	-,190	-,015	,495
Education	Master	,127	,010	,638
	Doctor	,411	,027	,213
	Professor	4,011	,105	,000
Occupation	Politician	1,503	,081	,000
	Local politician	,194	,009	,588
	Entrepreneur	-,102	-,005	,764
Position	1 – 10	14,703	,581	,000
	11 – 20	1,235	,049	,005

Figure 3. OLS Regression (Model 1 – party OLaNO excluded)

	21 – 30	,448	,018	,288
	31 – 40	,264	,010	,523
	41 – 50	,059	,002	,887
	101 - 110	-,032	-,001	,937
	111 - 120	-,022	-,001	,958
	121 - 130	-,087	-,003	,832
	131 - 140	-,026	-,001	,950
	141 - 150	,221	,009	,593
Adj. R ²			,407	
N			2540	

Figure 4. OLS Regression (Model 2 – party OLaNO excluded)

		В	Beta	Sig.
	Constant	,197		,445
Gender	Women	,235	,015	,244
Age	36 - 49	,039	,003	,860
	50 and more	-,208	-,016	,355
Education	Master	,057	,004	,795
	Doctor	,205	,013	,439
	Professor	2,316	,060	,000
Occupation	Politician	1,016	,055	,000
	Local politician	,277	,012	,337
	Entrepreneur	-,081	-,004	,766
Position	1 – 5	26,328	,749	0,000
	6 – 10	3,931	,112	,000
	11 – 15	1,857	,053	,000
	16 – 20	1,055	,030	,019
	21 – 25	,665	,019	,140
	126 - 130	-,186	-,005	,671
	131 - 135	-,087	-,002	,842
	136 - 140	-,172	-,005	,695
	141 - 145	-,168	-,005	,701
	146 - 150	,453	,013	,304
Adj. R ²			,615	
N			2540	

Discussion and concluding remarks

This paper dealt with the topic of ballot order effect in general elections in Slovakia from 2006 to 2012. The results of the regression analysis indicated that the ballot order is the strongest factor influencing the amount of candidates` preferential votes. However, only small

groups of candidates benefit from this factor, specifically those who are ranked on the first ten or fifteen positions. Particularly this part of the list leads to higher gains of preferential voting with the biggest benefit to candidates on the top positions. This finding is consistent with the satisficing theory.

The outcomes indicate that candidate lists containing 150 names put an enormous burden on the Slovak voters who are thus not paying relevant attention to their whole content. The big amount of names probably demotivates the voters to move thoroughly through the whole list. As a result a strong bias toward casting votes to candidates listed on the front positions emerges in Slovak elections. The primacy effect seems to be confirmed on this.

The outcomes pointing to presence of the recency effect represent quite a challenge. The analysis has shown its potential and not too strong influence. However its more specific insight showed that the result was affected by a specific case of a protest formation OLaNO in election 2012. This fact opens the question whether and to what extent may the candidates in Slovak elections benefit also from ranking on the bottom of the list. It seems that for more general conclusions a recurrence of similar cases would be needed and not just a unique phenomenon of this type. The reason is that the success of the OLaNO's leadership could be caused by a combination of unique features that they were the only real members of the party, they were its new founders and that the prevailing part of the campaign was concentrated on them. This leads to a finding that the electoral system in Slovakia cannot automatically evoke the recency effect if the last positions are occupied by ordinary party members. However it may also not be certainly concluded that conditions under which the leadership of OLaNO competed may lead to such an effect as more similar cases to form such an outcome would be needed.¹² These effects thus deserve further testing with the subsequent elections.

Following the findings in this text, some of its limits have to be pointed out. The main fact is that the Slovak electoral system does not use any randomization or rotation of candidates. This means that the candidates` ranking is identical on all ballots. These features make some limitations as systems using rotation objectively create better conditions for research purposes. A question might be raised, whether the high amount of preferential votes gained by the top candidates is not due to their affiliation as high party officials and not based on their order. It is true that this might partly work for the party leaders who were listed on the first position in all cases but one. However, this potential effect was controlled by the dummy politicians which includes the holders of central country`s offices and top party members. Of course, without a proper rotation of the candidate`s order, it is impossible to control specifically for party leaders due to their nearly unchallenged constant presence on the top of the list. Anyway, the primacy effect seems to be undoubtedly present as its decreasing power was identified also for wider groups of candidates outside the prominent inner circle of the top five or top ten respectively. As such the higher amounts of preferential votes for candidates in

¹² Four members of the OLaNO's leadership used a similar tactics in election 2010 when they occupied the last four positions on the list of a different party as nonpartisans. With the help of a massive media campaign organized by the leader of the group who is an owner of a popular network of regional media, they managed to get parliamentary seats. In this election they got considerably lower amount of preferential votes when compared to year 2012 when they were leaders of their own party. Apart from similarities these two situations were not identical.

the upper parts of the lists may not be attributed only to their elite status as most of them do not possess such profile. The elite party officials thus might score better also due to their rank in their parties, but if ballot order would be irrelevant, no benefit for candidates not enjoying this privileged party status would be measured, which did not happen.¹³ Pointing to this, the used method in this paper has its relevant justification.

A potential alternative would be an experiment, which would however face a problem with external validity (Ho and Imai 2008). To simulate conditions close to real Slovak elections seems to be impossible in an experiment based on the enormous size of the candidate lists. Due to number of candidates on the list a proper rotation would significantly raise the organizational demands on the required amount of participants on the experiment. A possible reduction of the size of lists in order to rationalize the costs of the experiment could be done, but this would subsequently jeopardize the possibility to apply the results on the real Slovak case.

To sum up, it may be concluded that in case of preferential voting in general elections in Slovakia a significant ballot order effect was identified. The ballot ranking proved to be the most important factor influencing the gain of preferential votes of candidates. It is true that the key benefit is linked to the top positions on the list and when moving to lower positions it declines until it finally disappears. This logic corresponds to the approach of the satisficing theory and it creates important incentives to expand the research of ballot order effect on other electoral systems which use lists consisting of more than just small number of candidates.

¹³ This means that for the inner circle of the top party elites the primacy effect itself may be somewhat weaker than the regression analysis showed. On the other hand, for the wider groups of candidates without such elite status and who according to the analysis should benefit from their ballot order, no such doubt exists.

References

Alvarez, R. M. – Sinclair, B. – Hasen, R. L. (2006): How Much is Enough? The "Ballot Order Effect" and the Use of Social Science Research in Election Law Disputes, *Election Law Journal*, Vol. 5, No. 1, pp. 40-56.

Bagues, M. - Esteve-Volart, B. (2011): The Effect of Ballot Order: Evidence from the Spanish Senate.

Brockington, D. (2003): A low information theory of ballot position effect, *Political Behavior*, Vol. 25, No. 1, pp. 1-27.

Cutler, F. (2002): The Simplest Shortcut of All: Sociodemographic Characteristics and Electoral Choice, *The Journal of Politics*, Vol. 64, No. 2, pp. 466–490.

De Winter, L. (2005): Belgium: Empowering Voters or Party Elites? In. Gallagher, M. - Mitchell, P. (eds.): *The Politics of Electoral Systems*, New York: Oxford University Press, pp. 417-432.

Dolan, K. (2010): The Impact of Gender Stereotyped Evaluations on Support for Women Candidates, *Political Behavior*, Vol. 32, Issue 1, pp. 69–88.

Ho, D. E. – Imai, K. (2008): Estimating the Causal Effects of Ballot Order from a Randomised Natural Experiment: the California Alphabet Lottery, 1978-2002, *Public Opinion Quarterly*, Vol. 72, pp. 216-240.

Kelley, J. - McAllister, I. (1984): Ballot Paper Cues and the Vote in Australia and Britain: Alphabetic Voting, Sex and Title, *Public Opinion Quarterly*, Vol. 48, pp. 452-466.

King, A. - Leigh, A. (2009): Are Ballot Order Effects Heterogeneous?, *Social Science Quarterly*, Vol. 90, No. 1, pp. 71-87.

Koppell, J. - Steen, J. A. (2004): The Effects of Ballot Position on Election Outcomes, *Journal of Politics*, Vol. 66, pp. 267–281.

Matson, M. - Fine, T. S. (2006): Gender, Ethnicity, and Ballot Information: Ballot Cues in Low-Information Elections, *State Politics and Policy Quarterly*, Vol. 6, No. 1, pp. 49–72.

McDermott, M. L. (2005): Candidate Occupations and Voter Information Shortcuts, *The Journal of Politics*, Vol. 67, No. 1, pp. 201–219.

Meredith, M. – Salant, Y. (2013): On the Causes and Consequences of Ballot Order Effects, *Political Behavior*, Vol. 35, No. 1, pp. 175-197.

Miller, J. M. – Krosnick, J. A. (1998): The Impact of Candidate Name Order on Election Outcomes, *Public Opinion Quarterly*, Vol. 62, pp. 291–330.

Regan, J. (2012): Ballot order effects: an analysis of Irish general elections. MPRA Paper No. 38304.

Smith, E. R. - Fox, R. L. (2001): The Electoral Fortunes of Women Candidates for Congress, *Political Research Quarterly*, Vol. 54, No. 1, pp. 205-221.

Spáč, P. (2010): Priama a zastupiteľská demokracia na Slovensku. Volebné reformy a referendá po roku 1989. Brno: Centrum pro studium demokracie a kultury.

Spáč, P. (2013): *Tichý hlas voličov. Preferenčné hlasovanie v slovenských parlamentných voľbách.* Brno: Centrum pro studium demokracie a kultury.

Statistical Office of the Slovak Republic (http://slovak.statistics.sk/).

Voda, P. - Spáč, P. (2013): Gender and representation in flexible list system: The study of preferential voting in elections on different levels in the Czech Republic. Paper presented on 41th ECPR Joint Sessions of Workshops, Mainz.

Appendix 1. List of control variables.

		N	Mean	St. Deviation
Gender	Men	2148	1,68	6,56
	Women	503	1,37	5,50
	21 - 35	513	0,69	2,99
Age	36 - 49	1146	1,83	6,86
	50 and more	992	1,86	7,01
	No title	474	0,49	1,46
Education	Master	1536	1,40	5,70
Euucation	Doctor	566	2,24	7,39
	Professor	75	8,56	16,97
Occupation	Politician	342	7,47	14,52
	Local politician	218	0,97	4,52
	Entrepreneur	263	0,36	0,59
	Other	1828	0,79	3,12

Note: The figure shows the results of types of candidates in preferential voting based on their characteristics. The result of each candidate is calculated as share of preferential votes of candidates compared to the votes of his or her political party.

Source: Statistical Office of the Slovak Republic.





Note: The graph shows the average results of preferential voting in elections 2006-2012 for each position on the list. The amounts are calculated as share of preferential votes of candidates compared to the votes of their political parties. On the horizontal axis the positions on the list are displayed, the vertical axis displays the share of gained preferential votes. The thick horizontal line displays the threshold (3 per cent of the party's votes) which the candidate needs to cross to move to the top of the list.

Source: Statistical Office of the Slovak Republic.