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INCUMBENT'S ADVANTAGE IN SLOVAK CITIES: THE EFFECT OF MORE TERMS IN OFFICE ON INCUMBENCY ADVANTAGE

WORKING PAPER¹

Author: Matus Sloboda

*Public Policy Institute, Faculty of Social and Economic Sciences, Comenius University in
Bratislava*

ABSTRACT

Slovak citizens elect their mayors directly through a majority voting system every four years without term limit in mayoral office. This system creates predisposition for incumbents to dominate in election. However, we do not know to what extent do incumbents have advantage over non-incumbents and how it evolves depending on number of terms in office. Incumbents enjoy direct and indirect benefits which significantly increase their advantage over non-incumbents in election. The article focuses on incumbents – mayors in office who run for re-election, and tests to what extent is the incumbency factor important for success in election. The analysis covers 2006 and 2010 mayoral elections in 138 cities in Slovakia, however, to test the effect of long-term incumbency the article investigates incumbency since 1998. Findings confirm strong incumbency effect in Slovak cities, incumbents' chance to win elections is 25 times more likely than non-incumbents'. However, incumbents running for the third re-election have 5-fold lower chance to win than incumbent running for the first re-election. Besides incumbency, political affiliation is also significant factor which positively affects the chance to win election. mayors, incumbents, newcomers, mayoral election, Slovakia

KEYWORDS: MAYORS, INCUMBENTS, NEWCOMERS, MAYORAL ELECTION, SLOVAKIA

¹ Please note that this paper is ongoing research

INTRODUCTION

A success in election may depend on many factors – funding, quality of candidate, political affiliation, popularity etc. However, most political newcomers and voters might not realize that incumbency is very powerful factor in election. As long as current office holders do not have a big scandal or perform horribly, they are usually better off in starting and funding campaigns, name recognition, or inside information. Voters judge candidates' quality, personal characteristics, experiences [23] particularly in majority system, where electorate directly elect political officeholder through electoral system. Therefore, this paper investigates how mayors in office perform in electoral contests if they decide to run for re-election.

The paper tests incumbency effect in all 138 cities in Slovakia. The analysis is based on statistical and electoral data which covers both 2006 and 2010 mayoral elections. Several authors [12; 7; 29] say that incumbents have advantage over newcomers in electoral contest. In other words, incumbents who ran for re-election achieve success in election more likely than newcomers.

Slovak citizens vote in mayoral elections directly through a majority voting system. Approximately 84 percent of mayors run for re-election. Data suggest that incumbency advantage may be relevant issue in Slovak context. The paper answers the main question: to what extent do mayors in office have better chance than non-incumbents in election? Put it simply, how big is the incumbency effect? To answer, the paper applies quantitative approach and uses logistic regression, to test the impact of incumbency, political variable and individual characteristics of candidates.

Many researchers and political analysts focus exclusively on electoral results while they neglect inputs - data about all candidates in electoral contest. However, if one does not analyse all candidates, both winner and those who failed a race, we miss important information. Hence, this paper looks at both inputs and outputs of mayoral election in Slovakia.

Most of the research on incumbency advantage is based in US environment, hence, the paper adds to theoretical literature and knowledge in European area. Since the paper investigates the incumbency advantage depending on number of terms in office, findings illustrate whether the strength of incumbent effect is determined by time spent by mayor in office.

The paper consists of four parts. The first part is briefly discussing the structure of local units and mayoral elections in Slovakia. Second part provides summary of theoretical literature on incumbent effect. Third chapter describes data, methodology, research question and briefly describes statistical approach. The paper continues with presentation of findings and a short discussion.

1 MAYORS AND ELECTION

The Law on Municipalities defines a special status of some local units – the city. According to Law on municipalities, local units with the status of city is an economic, administrative, cultural or tourist centre that is an important transport hub, it has urban character and the number of inhabitants exceeds five thousand [16]. These conditions are fulfilled by 138 Slovak cities. Due to large total sample of almost 3 000 local units, the analysis uses all 138 cities as a research sample.

Both counties and municipalities have high level of fiscal and political decentralization. According to last census, more than 50 percent of Slovak population lives in 138 cities [29]. According to Institute of Economic and Social Reforms [13] database, all almost three thousand cities, towns and villages spend about 3 billion euro yearly on current expenditures and capital expenditures almost six billion euro. More than half of these expenditures are spent in 138 cities. These cities thus cover not only a substantial part of the population but also public finances.

Mayoral elections and election to local councils are held every four years and are without term limits. Slovak law allows run for an elected office as partisan and non-partisan candidates in various elections. Independent candidates can run for office in elections with majority system – mayoral election, municipal council election, presidential election.

The Law on municipalities defines the position of mayor as the highest executive representative of a municipality in relation to state authorities and other legal entities. Mayor is executive authority responsible for municipal administration. Naturally, the distribution of mandates in city council affects mayor's position and power. Anyhow, mayors are managers of limited resources in city and they are also responsible for development of city. Hence, mayoral office and its decisions may be crucial for any success or failure in the city.

Due to relatively high number of Slovak municipalities, the paper analyses mayoral elections in 138 local units, which have the status of city defined by Slovak law. Since directly elected mayor is executive authority of a city and its highest executive representative, the analysis focuses mainly in whether candidates who hold the office and seek re-election have better chances than other candidates.

2 INCUMBENT EFFECT – THEORY AND PRACTICE

This part provides state of art in incumbency effect and incumbency advantage literature as well as summary of previous findings in this field in Slovakia and Central Europe. The theoretical literature offers clear evidence that incumbents have a significant advantage over non-incumbents, candidates who are not officeholders, in election. The incumbency effect is substantial, especially in majority election systems.

Voters across the world apply retrospective evaluations of politician's performance while they decide to vote for any candidate. Campbell, Dettrey and Yin [6] analysed US presidential elections and individual-level survey data. They find out that electorate's retrospective evaluations matter significantly more to the vote for an incumbent than for a successor candidate of the same party. The voter's decision is based on whether he or she is satisfied with the performance of incumbent or not. Certainly, voters for obvious reasons do not look at an incumbent's entire record during the whole period in office. However, at election time, voters have a picture what an incumbent has done, satisfactorily or not, for them. The reader should be aware that presented paper focus solely on incumbent's success in elections and does not analyse electoral results of incumbent's successor.

Gordon and Landa [9] describe the incumbency advantage as the electoral margin a candidate enjoys because of his or her status as an incumbent running for re-election. Basically, the electoral margin is about direct and indirect benefits. Direct benefits or specific benefits of holding office correspond to easier access to media and various events usually with speaking position, what increases their visibility. The office opens the window of opportunity to build ties and maintain relationships and agreements with influential groups or/and with individuals. In other words, mayors with an ambition to run for re-election can spend their terms effectively campaigning year-round, not just at election time. More specifically, a mayor has a room to present plans and successes in local media (radio, TV, or newspaper) in many cases owned by municipality. Mayors have also staff in office which can provide them support and information also during campaign for re-election. Lee Hamilton [10] adds that one of the relevant direct benefits is very good salary of most of incumbents, so they don't have to worry about supporting their families while they campaign. Slovak mayors are paid a relatively good salary. Their salary is calculated as a multiple of average monthly salary in the national economy and population index. For example, a salary of mayor in city with ten thousand inhabitants is approximately 2.3 to 2.5 times the average salary in national economy. Moreover, the city council has a competence to increase this salary by up to 70 percent [22]. This is well above average salary is also a comparative advantage of incumbents.

The indirect benefits are associated with quality of incumbent itself. Cox and Katz [7] analysed U.S. House election data from 1948 to 1990. Their results suggest that most of the increase in the incumbency advantage came through increases in the quality effect. The quality of candidate is recognisability of candidate's name, support of political party, ability to accumulate resources for campaign, ability to solve problems and cooperate with leaders. Other researchers conducted surveys to gather data on how potential challengers rate incumbents' quality. Stone, Maisel and Maestas [27] point out that quality works also vice versa and bad quality incumbent may encourage more rival challengers. In other words, not only costs for campaign against incumbent, but also quality of incumbent are important factors which can deter potential good challengers. The attributes such as recognisability of candidate's name, skills and

experiences may be very important especially in very personalized elections, such as election of mayors. Levit and Wolfram [18] also confirm the existence of incumbency advantage and say that incumbents generally deters strong potential challengers from running in elections. Jennifer Lawless [17] researches political ambitions and states that incumbency advantage inhibits electoral opportunities for previously excluded groups from politics like women and racial minorities.

Other researchers studied potential influence of structural factors such as population or participation. For example, Robert Hogan says that population has negative influence on incumbency challenge. As population increases, the probability of challenger emergence decreases. The negative effect may be due to more expensive campaigns in larger cities, where a candidate must cover large areas with huge number of potential voters [12]. Although large cities might contain a greater number of potential candidates due to developed civil society or higher share of young educated inhabitants. In fact, more voters mean serious difficulties for reaching critical share of electorate. However, this indicates a little about the success of candidates because only one strong challenger can be sufficient for defeat of an incumbent.

Some researchers also argue that incumbency advantage generally lowers electoral responsiveness. For instance, Jessica Trounstein [30] analysed more than seven thousand US cities and found the evidence that low-information and low-participation (low-turnout) environments increase the proportion of incumbents running for re-election and their chance to win elections. Gomez and Hansford [11] studied Congressional elections and found out that higher turnout decreases vote shares for incumbent candidates and parties. However, Trounstein [30] points out that even low turnout has in some cases a positive relationship with re-election. For instance, if a part of eligible voters is more supportive of challenger or in case when voters are not satisfied with a status quo. In sum, theoretical literature suggest that turnout might influence advantage of incumbents.

Matland [19] says that candidates of political parties are more successful in electoral competition than independent candidates. However, Matland's findings apply for elections with closed ballots in proportional systems. Ballots are open in mayoral election in Slovakia. According to electoral data from 2006 and 2010 mayoral election in Slovakia, about 50 percent of candidates were independent and a share of independent candidates increases in time and so does the success rate of independent candidates [26]. However, candidates who ran under political party or coalition of parties had higher success rate in medium sized and small cities than independent candidates. Contrary to Sloboda's findings, Bernard [5] and Klimovsky [15] state that independent candidates have potential to be relatively more successful in small cities and candidates of political parties have predisposition to be more successful in large cities. Klimovsky [15] says that independent candidates significantly lagging in regional cities and the success rate in municipalities with urban character is below the average. Bernard's [5]

research of local elections (city councils) indicates that independent candidates have better chances to succeed in election in small size municipalities. This paper focus on incumbency advantage, however, it also analyses political affiliation of incumbents and their contenders. Therefore, presented paper also answers how political affiliation influences a success in mayoral election in Slovakia.

Majority of the research on incumbency advantage has been done in US. According to OpenSecret.org, the percentage of incumbents who win re-election after seeking it in the U.S. House of Representatives has been over 80 percent for more than 50 years, and is often over 90 percent. The re-election rate of incumbents in Senate is between 70 and 90 percent [22, 26]. Karnig and Walter [14] analysed likelihood of the re-election of mayors in US cities. They found out that the re-election rate of mayors was 70 percent.

Only a few researchers in Eastern and Central Europe had analysed the re-election rates of incumbents and the possible consequences of this phenomenon. However, Czech researcher Bernard, who analysed elections of city councillors, brought some interesting findings in this field. According to Bernard [5], the incumbency is the most important independent factor which increases the chances of getting elected. It is important to add that Bernard did not analyse the strength of the incumbency factor of Czech mayors since mayors are not elected directly but they are elected by city council. However, other researchers from Czech Republic had studied re-elections of mayors since 1994. They found out that more than 60 percent of mayors had political experience as councillors in middle size cities [4]. Moreira [23] also provides a study on re-election rate of incumbent mayors in Brazil. There are directly elected mayors in more than five thousand municipalities. Moreira found out that while in 2004 the re-election rate of incumbents was about 58 percent, in 2008 it was 69 percent. Presented paper analyses only incumbency (being a mayor) and does not analyse previous political experience such as previous position in local or national council. This is a challenge for the further research in this field.

According to Sloboda [26], almost nine 9 out of 10 incumbents ran for re-election in 2006 and 2010 mayoral elections. Roughly 7 of 10 incumbents were successful. On contrary only 1 of 10 political newcomers succeed in election. In comparison of success rates, incumbents were almost seven times more successful than non-incumbents. Descriptive statistics also suggest that the incumbency advantage is significantly high also for incumbents serving more terms in office. Presented findings are clear evidence of strong incumbency advantage of mayors in Slovak cities. One of the reasons might be the size of local units and electoral system. Smaller units can be a fertile ground for incumbent effect phenomenon. Therefore, presented article investigates also the size of cities. The author would like to stress that the strong incumbent effect might be caused also by electoral system itself – majority system, first-past-the-post, winner-takes-all.

Based on the above, incumbents are more likely than their opponents to win election. However, it is still important to study incumbency advantage in different contexts since it might have some implications on performance of those holding office, for example on increasing transparency and openness. According to Slovak research, incumbent mayors tend to improve transparency and openness of cities less than newcomers by almost 6 percentage points [25].

Theoretical literature as well as research based on descriptive statistic methods suggest that incumbency advantage in direct election of Slovak mayors is relevant issue. This paper provides more reliable and credible results since it uses logistic regressions and analyse several variables simultaneously. Based on literature mentioned above, incumbents may have comparative advantage in electoral competition over non-incumbents. Based on results of previous research and theoretical literature, we might expect that incumbency have a positive influence on winning elections and the paper answers, how big is the incumbent effect.

3 DATA AND METHODS

The paper explored one main research question:

How big is incumbency advantage in mayoral elections?

Based on literature mentioned above, incumbents may have a comparative advantage in electoral competition over non-incumbents due to direct and indirect benefits. According to Sloboda [26], in Slovakia based on descriptive statistic methods suggests that there is certain advantage of the incumbency in election of mayors in Slovakia. Therefore, it is expected that incumbency has a positive influence on winning elections.

The purpose of this paper to test which individual characteristics affect the chance to win election, each calculation works with different samples. To test the effect of incumbency advantage, the sample contains only cities where incumbent one, two or more terms ran for re-election. In total, eight separate logistic regressions were conducted - separate regression for each level of incumbency and the same repeated with the sample of cities up to 10,000 inhabitants. Dependent variable was electoral result (dummy coding) win/loss. Major independent variable was categorical variable (dummy coding) incumbent/non-incumbent. Models contains control variables that might affect a success of incumbents in election – partisanship, age, gender, education.

To test the above given research questions quantitative analysis, namely regressions (Minitab 17 software) are used. This methodological approach enables to calculate whether any of independent variables significantly influence a success in election. Via this approach it is possible to identify, which individual characteristics increase or decrease the chance to win elections.

The primary data are electoral data of local election in Slovakia in 2006 and 2010. The source is the Slovak Statistical Office. The data from the Slovak Statistical Office provides information about the success and failure in election of candidates in each city, number of votes for each candidate, gender, and political affiliation - independent vs candidate of political party or coalition. The second source of data are electoral ballots. Ballots provide information about previous work position of candidates, age and education. The collection of ballots was both through e-mail requests and searching on city's websites since ballots for each city and election are not available online on one website. The completeness of collected data for 2006 and 2010 is 99 percent. Unfortunately, nor Statistical Office nor local institutions have ballots from 2002 back.

The paper primarily analyses incumbency effect and the effect of multiple incumbency. To find whose incumbents are in office for several terms in row, we checked each incumbent mayor in open database of mayors [8]. The database provides information about elected officials in Slovakia since 1994. Unfortunately, it does not provide information about all candidates in elections since 1994, only elected official. However, for the investigation of incumbency effect the database provides sufficient information.

4 RESULTS

Slovak mayors are very keen to seek one, two, or even more re-elections. In general, mayors ran for re-election in 85 percent of 138 analysed cities in 2006 and 2010 mayoral elections.

The Table 1 provides results related to success rate of incumbents and non-incumbents in 2006 and 2010 mayoral elections in Slovakia. About 7 out of 10 incumbents, who ran for re-election for the first time, were re-elected in 2006 and 2010 mayoral elections (see Table 1). The success rate of incumbents with only one term in office was 66 percent in 2006 and 73 percent in 2010 mayoral election. Incumbents were more successful than non-incumbents, almost six times in 2006 and seven times in 2010 than non-incumbents. This significant difference in success rate between incumbents and non-incumbents suggests strong incumbency advantage in Slovak cities.

Interestingly, calculations of success rates do not clearly indicate that multiplicity of incumbency increase incumbency advantage in terms of electoral success. On the other hand, incumbent mayor running for the second re-election won in 75 percent of cities. However, the success rate of incumbent mayors running for the third or more re-election (already three terms in mayoral office) was only 53 percent. These long-term mayors suffered above the average number of defeats in 2006, when they lost in more than 50 percent cities.

Table 1 The success rate of incumbents

	Mayoral election 2006	Mayoral election 2010	Both (2006 and 2010)
No. Incumbents (all incumbents)	121	115	236
The success rate of incumbents	62 %	72 %	67 %
No. Incumbents 1*	64	55	119
The success rate of incumbents 1	69 %	73 %	71 %
No. Incumbents 2**	30	35	65
The success rate of incumbents 2	67 %	71 %	69 %
No. Incumbents 3***	27	25	52
The success rate of incumbents 3	41 %	72 %	56 %
The success rate of non-incumbents	11 %	9 %	10 %

Source: Author Note: The success rate of incumbent is the ratio of mayors who won following mayoral election to all mayors who ran in following election. The success rate of non-incumbent is calculated likewise.

* Mayor with only one term in office prior running for first re-election (second term)

** Mayor with two terms in office in row prior running for second re-election (third term)

*** Mayor with three or more terms in office in row prior running for third and more re-elections (fourth or more terms)

Then, how big is incumbency advantage in mayoral elections in Slovakia? If we look at success rates, the answer would be that an incumbent has on average six to seven times higher chance to win elections. Following section provides more reliable and credible results since it uses logistic regressions and analyses several independent variables simultaneously.

The result based on sample of all cities where an incumbent ran for re-election (see Table 2) have proven the hypotheses that incumbents win elections substantially more likely than non-incumbents.

The odds of success in election for mayors (no matter how many terms in office) are 25.5 that of non-incumbents. In other words, incumbents' chance to win mayoral elections in Slovakia is approximately 25 times higher than the chance of non-incumbents. Pseudo R of both models is 0.34 respectively 0.35 what indicates that the model explains about 34 respectively 35 percent of variance of success in 2006 and 2010 mayoral elections in Slovakia.

This effect is very similar also in smaller cities with less than 10,000 inhabitants. Candidates older than 60 are less likely to win elections than younger candidates. The odds that candidates older than 60 years win election are 0.438 that of younger candidates. Put in in other words, younger candidates are slightly about 2 times more likely to win election than 60 years old and older candidates. Doctors of medicine are 2 times more likely to win election as candidates who hold other degrees or no university degree. However, both variables turned out to be not statistically significant in smaller cities up to 10,000 inhabitants. Political affiliation of candidates matters too, however, the odds do not exceed 2.0. On the other hand, the odds that candidates of strongest party SMER (social democrats) win election are 5 that

of any other candidates. It is important to add that about one fourth of all incumbents are candidates for SMER party. Interestingly, the odds that female candidates win election are 2.154 that of male candidates in cities up to 10,000 inhabitants.

Table 2 Logistic Regression Analysis of Factors Affecting Odds of Success in Mayoral Elections in Slovakia

	<i>Incumbency ALL</i>			
	ALL			
	Coef.	Odds ratio	Coef.	Odds ratio
Incumbency	3.239** (.202)	25.519	3.274** (.298)	26.424
Age up to 44	.284 (.222)	1.329	.129 (.346)	1.138
Age 60 +	-.827** (.400)	0.438	-.522 (.526)	.594
MUDr. (doctor)	.753** (.386)	2.124	-1.32 (1.20)	.2668
Postgradual education	.477 (.401)	1.612	.201 (.688)	1.222
Gender (Female)	.284 (.298)	1.328	.767* (.397)	2.154
Independent candidate	.468* (.264)	1.597	.296 (.376)	1.344
Political party SMER	1.614** (.281)	5.021	1.182** (.407)	3.259
Right wing party	.626** (.291)	1.871	.856** (.437)	2.354
Election (control)	.054 (.187)	1.055	-.019 (.279)	0.9813
N	1196		522	
Pseudo R	.34		.35	

Source: Author. Notes: Standard errors in parentheses. Double asterisks (**) denote p values of .05 or better in two-tailed tests of statistical significance. Single asterisks (*) denote p values of .10 or better in two-tailed tests of statistical significance. For both models, Hosmer-Lemeshow test is not statistically significant. Reference level for incumbency is non-incumbent, for gender is male, for independent candidates is partisan candidates, for election (control) is 2006 election.

The dummy variable that represents the effect of election 2006 with reference level mayoral election in 2010 turned out to be statistically not significant and it does not improved level of variance of model. Therefore, it is not included in regressions.

How do number of terms in office affect chances to win in election? Series of six logistic regressions for each level of incumbency and cities up to 10,000 inhabitants (see Table 3) shows that each additional term in office reduces the incumbency advantage in terms of chance of re-election. However, regressions have proven the hypotheses that incumbents win elections substantially more likely than non-incumbents.

Specifically, the odds of success in election for incumbent mayors who ran for first re-election are 56 that of non-incumbents. The odds of success in election for incumbents who ran for re-election in smaller cities up to 10,000 inhabitants are 68 that of non-incumbent candidates in mayoral election. In other words, incumbents who ran for first re-election are 56 times more likely to win than non-incumbents. This effect is even twofold in cities with up to 10,000 inhabitants. Both models have relatively high pseudo R, 0.45 respectively 0.54 what indicates that the model explains about 45 respectively 54 percent of variance of success in 2006 and 2010 elections in Slovak cities.

The dummy variable that represents the effect of election 2006 with reference level mayoral election in 2010 and 2010 turned out to be statistically not significant in each conducted regression, and it does not improved level of variance of model. Therefore, it is not included in regressions.

Results suggest that voters prefer younger candidates. The odds of success in election for candidates younger than 45 are 1.9 that of candidates older than 45 years. However, this is also because candidates older than 60 years are substantially less likely to win elections than any other candidates. The odds that candidates older than 60 years won election are 0.15 that of younger candidates. In other words, candidates younger than 60 years are 6 times more likely to win election than candidates older than 60.

Candidates' education and gender also plays a role. Doctors of medicine are 5 times and candidates with postgraduate education are 3 times more likely to win election than candidates who hold other degrees or no university degree. Positive effect of postgraduate education is double in cities up to 10,000 inhabitants. Male candidates enormously dominate in mayoral elections in Slovakia, almost 9 out of 10 mayoral candidates are men. Interestingly, results show that female candidates are 2.3 times as likely to win election as male candidates. This effect is almost doubled in cities with less than 10,000 inhabitants.

There is an increasing number of candidates who run as independent candidates in municipal elections [30] in Slovakia. The odds that independent candidates win election are about 1.5 that of candidates of any other parties, however, this variable turned out to be statistically not significant. The odds that candidates of strongest party SMER² are successful are 6.5 that of any other candidates. Moreover, the odds slightly increase to 8.5 in cities up to 10,000 inhabitants. Compare to candidates of right wing political party or coalition, SMER candidates has better chances in election, however, this difference in odds is not abysmal. It is important to note that since SMER is preferentially strongest party since 2006, approximately one out of four incumbents are SMER candidate.

² Officially social democrats, however, also with profound nationalist and conservative agenda

Table 3 Logistic Regression Analysis of Factors Affecting Odds of Success in Mayoral Elections in Slovakia

	<i>Incumbency 1</i>				<i>Incumbency 2</i>				<i>Incumbency 3</i>			
	ALL		Cities up to 10K		ALL		Cities up to 10K		ALL		Cities up to 10K	
	Coef.	Odds ratio	Coef.	Odds ratio	Coef.	Odds ratio	Coef.	Odds ratio	Coef.	Odds ratio	Coef.	Odds ratio
Incumbency	4.050** (.332)	56.005	4.223** (.626)	68.252	3.274** (.422)	26.426	3.397** (.619)	29.875	2.299** (0.423)	9.969	2.410** (.560)	11.136
Age up to 44	.625* (.322)	1.869	.709 (.543)	2.033	.215 (.455)	1.240	.441 (.663)	1.554	-.415 (.551)	.661	-.853 (.819)	.426
Age 60 +	-1.911** (.751)	0.148	-.7 (1.09)	0.495	.493 (.752)	1.637	.56 (1.16)	1.756	-.567 (.640)	.568	-.672 (.762)	.511
MUDr. (doctor)	1.678** (.543)	5.355	-.18 (1.32)	0.835	.218 (.800)	1.244	-	-	-.130 (.893)	.878	-	-
Postgradual education	1.184** (.534)	3.268	1.948* (.904)	7.015	-.38 (1.28)	.681	-	-	.303 (.896)	.7387	-	-
Gender (Female)	.747* (.435)	2.111	1.338 (.621)	3.812	-.681 (.690)	.506	-.092 (.884)	.912	.424 (.569)	1.528	.067 (.725)	1.069
Independent candidate	.380** (.342)	1.462	.424** (.553)	1.528	1.227** (.633)	3.412	-.172 (.821)	.8416	-.325 (.488)	0.722	-.339 (.639)	.7124
Political party SMER	1.874** (.414)	6,512	2.151** (.690)	8,594	3.164** (.622)	23.6548	1.689** (.845)	5.4155	.056 (.548)	1.058	-.065 (.694)	.937
Right wing party	1.442** (.478)	4.228	4.23** (1.21)	5.603	.281 (.606)	1.324	.111 (0.863)	1.1174	.478 (.511)	1.613	.037 (.645)	1.038
N	634		241		311		127		248		151	
Pseudo R	.45		.54		.42		.40		.19		.21	

Source: Author

Notes: Standard errors in parentheses. Double asterisks (**) denote p values of .05 or better in two-tailed tests of statistical significance. Single asterisks (*) denote p values of .10 or better in two-tailed tests of statistical significance. For each model Hosmer-Lemeshow test is not statistically significant. Reference level for incumbency is non-incumbent, for gender is male, for independent candidates is partisan candidates, for election (control) is 2006 election.

Coming back to incumbency, it seems that additional terms in office do not increase incumbency advantage. In fact, the chance of mayors who run for second and more re-elections to win election are lower than chances of incumbents who run for first re-election. The odds of success in election for incumbent mayors who ran for second re-election are 26.4 that of non-incumbents. Likewise, mayors who serve more than three terms in office and are seeking their third re-election in row have better chances than non-incumbents.

The odds of success in election for incumbents who ran for third or more re-elections are 10 that of non-incumbent candidates in mayoral election. The odds of success in election for incumbents with more terms in office are slightly higher in cities 10,000 inhabitants. Both models have pseudo R about 0.4 respectively 0.2 what indicates that the model explains about 40 respectively 20 percent of variance of success mayoral elections in Slovakia. Like the above-mentioned case, SMER candidates have comparable chances to win as incumbent mayors. The odds that candidates of strongest party SMER (social democrats) are successful are 23.7 that of candidates who ran for any other party or as independent. However, most of independent variables turned out to statistically insignificant in models for long-term incumbents. This may be also due to smaller sample size compare to the sample which contained cities where incumbents ran for first re-election (incumbency 1).

This paper and presented statistical approach does not provide clear answer why number of terms in mayoral office is strong determinant of later success in elections. We can suggest that long-term mayors probably provide a room for emergence of potential challenger and that the age of mayors is a strong determinant of later success in election. Electorate may be less willing to vote from mayors at relatively high age and rather prefer younger candidates. To confirm these assumptions, qualitative research methods should be applied.

CONCLUSION

How big is incumbency effect in Slovak cities? To answer this question, we used electoral data and open data about elected officials, and conducted series of logistic regressions to test the impact of individual characteristics. Since most of the research on incumbency advantage is based in US environment, this paper adds to theoretical literature and specifically to knowledge in European area.

The success rate of Slovak mayors who for the first re-election about 70 percent. Incumbents had seven times better chance to win mayoral elections. Descriptive statistics approach indicates that multiplicity of incumbency still increase the chance to get the office,

however, long-term mayors who run third and more re-elections are not more successful than mayors with less terms in office.

Based on several authors (14, 23, 20, 5, etc.) the hypothesis suggests positive relationship between incumbency and likelihood of winning elections. Findings confirm strong incumbency effect in Slovak cities, incumbents' chance to win elections is 25 times more likely than non-incumbents'. However, incumbents running for third re-election have fivefold lower chance to win than incumbent running for first re-election. Besides incumbency, political affiliation is also significant factor which increases the chance to win election. Candidates who run in cities, where an incumbent seeks for re-election perform similarly good or better than independent candidates. Results suggest that the size of cities do not substantially change incumbency advantage, with only one exception for incumbents who ran for the first re-election in smaller cities up to 10 thousand inhabitants, the odds are 68 that of non-incumbent candidates in mayoral election.

This paper does not provide clear answer whether the age of mayors is a strong determinant of later success in election. However, the age more than 60 turn out to be statistically significant in two out of six logistic regressions. Both results suggest, that 60 years old and older candidates win elections less likely than younger candidates.

The research on incumbency advantage and the effect of multiple terms in office requires more work to be done. Larger sample will significantly increase credibility each of presented models. Also, it might be useful to look closely at cities where incumbents ran for re-election to test whether structural and socio-economic data do not explain certain aspects of incumbent's success in election.

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CONTACT TO THE AUTHOR

Matúš Sloboda

Mlynské luhy 4

+421907862460

matus.sloboda@fses.uniba.sk