Home region advantage in presidential elections in Europe 1990 - 2010.

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Abstract

The study analyzes home region advantage phenomenon developed in US literature from the European angle. By application of linear regression home region advantage is measured in 1990-2010 presidential elections in fifteen European states. In result, statistically the level of home region advantage equals 3.62 pp in Europe and is comparable with US findings. It confirms the assumption that home region is one of information shortcuts used by voters in Europe.

Major three determinants of the degree of advantage are: origin of the candidate, the fact if the region is peripheral or capital and party support in the region. Some important factors such as size of the region or incumbency did not satisfy the level of significance.

In effect, home region advantage does not have universal character and is country-specific. The numbers of outliers detected suggest that Ukraine is the example the most visibly exposed to the effects of home region advantage. Application of home region advantage in political practice remains unclear, however it might be decisive in a situation when two candidates are close to each other in presidential elections.
Map no 1. Europe: countries, in which president is elected popularly

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15 Countries included in the model: Armenia, Russia, Ukraine, Lithuania, Poland, Romania, Bulgaria, Serbia, Macedonia, Montenegro, Croatia, Austria, Slovakia, Ireland, Portugal

6 countries excluded from the model:

- Belarus excluded from the model (non-democratic regime)
- Georgia, Azerbaijan excluded from model (no access to data) and France, Slovenia (incomplete access)
- Iceland excluded from model (too small population of country)
Introduction

Voters use to use some informational shortcuts that help them to cast a vote in presidential election. The most often applicable and most visible shortcut is party identification (e.g. Lupia, 1994; Lau & Redlawsk, 2001). Except party identification the electorate takes an advantage of some other auxiliary shortcuts. One sort of cue that helps voters to cast a vote is the association of candidate with some particulars regions emphasizing closeness of candidate to the local electorate. Candidates themselves use to use all sorts of strategies in their political campaigns to achieve better results in a given region. One of the common strategies is the reference to their origins, education and public service experiences and presenting themselves as “local son” or “hometown boy” (Key, 1949). It aims at convincing the electorate that a candidate is somehow stronger associated with this electorate than the opponent and thus is predestined to represent better interests of the community at the national level. Such a strategy results in gaining the election result advantage over the opponent in the region.

Even if the candidate does not explicitly play a card of regional association, he/she might still be perceived as a member of regional community by the electorate. By the fact of being born, educated and having started political career in the region, the electorate links candidates with different home regions. Therefore what matters indeed is biography of the candidate and the extent to which voters do associate the candidate with his/her home region. In this study voter-oriented association of candidate with the region has been applied.
To my best knowledge the phenomenon of home region advantage has been explained only in case of presidential elections in United States of America. In this sense, effects of home region advantage in presidential elections in Europe remain unexplored. Naturally, the effect of home region advantage is visible under the condition the president is elected popularly.

There are altogether twenty one countries in Europe, in which president is elected popularly (see map no 1). By popularly I mean that electorate directly cast votes for a particular candidate without any other institutions involved in election process.

One thing that has to be borne in mind is political culture and voting system differences between Europe and USA. At least American voter is believed not to use the same preferential voting as European one, taking into account the simple fact of historical and political-administrative differences within Euro-Atlantic space. Secondly, USA represents one federal organism, while Europe (even EU) cannot be considered as one political organism. Thirdly, US president is to some extent popularly elected, however this stays in conflict with definition adopted for this thesis. All European cases investigated in the thesis do have presidents elected directly by voters without institution of electors. The Bush’s case shows clearly that one can win the election even if the absolute percentage of support is lower than this gained by opponent. Fourthly, US political scene is dominated by two parties while in Europe usually we notice multi-party systems.

Additionally, each selected state has got own party system, which do not always necessarily find the ideological equivalent in other states. That is why the theory created through studying American cases cannot be straightly applicable to European case. Nevertheless, American study can give a good foundation to build a new, experimental model for Europe.
There are two approaches in literature to give evidence to existence of home region advantage. First, uses quantitative methods (predominantly statistics) to depict advantage. The second approach focuses on qualitative methods. This study concentrates on both qualitative and statistical explanation of home region phenomenon.

The first problem dealt with in the study is to build a new linear regression model for European countries based on American theory. Noteworthy, statistical methods became extremely popular to tackle home regional advantage between 70’s and 80’s. For the first time in literature phenomenon “home region (town) advantage” was statistically decently tested by Tubbesing (1973). Quantitative measurement of regional advantage was continued in studies of Lewis-Beck and Rice (1983), Rice and Macht (1987), Garand (1988) or Dudley and Rapoport (1989).

All of these scholars came to conclusion that home region advantage exists in US presidential elections and is dependent on party identification. US study result of Rice and Macht (1987) detects the home region advantage to be 3.66 percentage points. On the other hand they vary in their opinions on effects of factors such as: capital region, incumbency, second round of the election, size of the region and level of democracy. The task here is to identify these factors for European case. I assume that European results might differ from US ones.

The second problem dealt with in the study is to explain in qualitative way the effect of home region advantage on European political space with taking into account all possible differences between states. The problem of qualitative method is that none of scholars directly tackles the home regional advantage. Instead, they usually present different effects influencing the regional outcome of election. Nonetheless, I find their works crucial to theoretically explain the phenomenon. First shy attempts were initialized already in late 40’s by indirect studies on

It will be necessary here to search for some geographical dependencies between statistical results. The reasonable historical-political factor would be division of samples into post-socialist countries and others or more adapted to recent geopolitical changes: European Union members and others.

Third question touched upon in the study concentrates on universality of home region advantage and its application in everyday political life. Discussion between scholars concerns not the fact if home regional advantage exists. To some extent all agree that in some cases there will be always visible effect of the advantage. Therefore the debate is focused round the question if home region advantage can be generalized to all cases in one country (statistical explanation) or which variables decide about the advantage and if they have any explanatory power at all (both statistical and qualitative approach). Some scholars like Garand (1988) undermine the home region advantage due to vagueness and too big number of factors, which are supposed to explain it. The task here is to answer the question when home region advantage can help the candidate to win the election. The case study of Ukraine, Russian, Romania and Lithuania has been used.

In the study the data for fifteen European states has been gathered - marked with red color in the Map no 1. Because of difficulty with accessing data from Georgia and Azerbaijan, those two countries although European and with president elected popularly were not included into model. For similar reasons of incompleteness of data access two members of EU – France and Slovenia were excluded. Moreover Belarus was not included in the model as there is no sign
of any democratic voting procedures or institutionalized party system and Iceland as the population and size of the country is too small for recognition of home region advantage.

Categorically ten out of fifteen countries belong to European Union and ten out of fifteen are defined as post-socialist states. Geographically and politically we can use simplified categorization of countries in a following way: four of them are post-Soviet republics (Armenia, Lithuania, Russia and Ukraine), three belong to Western Europe (Austria, Ireland, Portugal), four emerged from the former Republic of Yugoslavia (Croatia, Macedonia, Montenegro, Serbia), two belong to Balkan sphere of political culture (Bulgaria, Romania – by the way two youngest members of EU) and two Central European post-socialist states (Poland, Slovakia – both members of Visegrad Group).

The thesis considers only those candidates who have received more than 10 % of national support. Minor candidates cannot be treated as good samples due to two reasons: 1) difficulty in accessing detailed data about minor candidates especially their education place etc. and 2) even in home regions voters might not support local/preferred candidate taking into account he/she has no chances to be elected and applying rather strategic voting in this case.

The thesis encompasses only elections between 1990 - 2010. Even though in Western Europe it is possible to test how home region advantage developed before 90’, nevertheless it would have non-comparative value with Central and Eastern Europe. Institution of popularly and democratically elected president in Central and Eastern Europe was created only after downfall of iron curtain and socialist model of regime.

One sample is considered as one particular region that was identified during election in a given year with one particular candidate (example: Polish election 2000, candidate Kwasniewski,
home region defined by origin factor: Koszalin). We have to bear in mind that one candidate can be and usually is associated with more than 1 region (maximum producing three samples). Election results of presidents and parties were collected from national election commissions and the website Electoral Geography (electoralgeography.com). Identification of home regions for each candidate was done through research of biographies with use of Internet sources (private sites, political party sites, candidate’s blogs and Internet encyclopedias).

During the research several major limitations have been encountered. Firstly, collection of data for all variables that will be used in the model is sometimes incomplete. In case of Serbia, Croatia, Macedonia and Montenegro the problem of specific nature appeared in the time of collecting data – many presidential candidates were not born in the today’s administrative borders. The fact of being born abroad does not exclude a candidate from the study as he/she still might have finished education in one country region and for sure started political career there. Therefore there are some candidates associated only with one city (usually a capital), in which they were born, educated and started their career. Some candidates might be associated with two or three different regions depending on biographies.

Some of the very first elections in 90’ in post-socialist states were also poorly documented and therefore for some countries only election results from mid 90’ were applied in the model.

Third limitation is administrative alteration of region borders. Some post-socialist countries in 90’s went through the process of administrative-geographical reform (e.g. reduction from 49 to 16 regions in Poland in 1999). Therefore home region advantage computed overall for one country might differ in different elections due to those changes. Fortunately, there is no
example of candidate who runs for the post of president more than once and administrative change took place between elections.

The thesis is divided into three chapters. First presents and adjusts the theory already existing in US to European cases. It gives in-depth explanation of political and social processes in order to better understand “home region advantage” and select variables for statistical models. Second chapter presents the model itself from statistical point of view and discusses the results of linear regression. Third, final chapter interprets outcomes and gives additional explanation to phenomena and statistical outliers, which have been observed with reference to initial theory. Moreover, final part presents case study of several European election cases and discusses the universality and application of home region advantage in political practice.
1. Theory explanation

The first chapter is divided into three main parts. First defines home region based on three characteristics: region of origin, region of higher education and region of political career. There is no unified definition of home region advantage. In all previous researches, in which the term was applied, it should be understood literally and any justified modification of the term is acceptable.

Second part focuses on finding theoretical factors that might be explaining home region advantage. Among them the main groups have been presented: capital – peripheral division of regions, size of the region, allocation of resources, party advantage and incumbency.

Third part compares and adjusts American theory to European political reality and discusses major differences.

1.1 What is home region?

As noted in the introduction, there is no particular scientific definition of home region advantage. In the literature the home region advantage is interchangeably used with the term “localism”. For the purpose of this thesis only the notion home region advantage is used in
order not to confuse the reader with other associations that might emerge around the term “localism”. Rather the notion should be understood here literally as far as all scholars do not stress any contradictions in definitions.

Therefore the definition I adopt is as follows: support for candidates for any post (let it be president, House Member, PM etc.) is higher in the regions they are associated with by origin, education and political career place (home regions) than the average support throughout the whole country (or respectively bigger administrative subject). The interest of the thesis lies in presidential elections. Therefore home region equals the highest administrative subject of any European country.

A pending question might be still how we identify which region is particular for which candidate. It is assumed, basing on the explanations of Abramowitz’s (1989) or Lewis-Beck and Rice (1983), Dudley and Rapaport (1989), that home region is the place of birth or current (previous) public service. Those two types of “home regions” are rather self-explanatory. Although the literature does not include it, place of highest education as possible third “home region” additionally have been added. Supposing that candidate spent at least a couple of years and made friendships with local people during the period of his/her highest education, it might be relevant to adopt this point of view. I wondered also if place of military service could be considered as the fourth “home region”. Notwithstanding, I met problems of two kinds. First, it would be incomparable within male-female candidates. Second, in case of the Soviet Union or Yugoslavia there are too many cases, in which candidates served in territories that now belong to other, independent states.
Fenno (1978) in his qualitative research gives a more advanced and multilayer understanding of home region. He concludes that each politician perceives “four concentric constituencies: geographic, reelection, primary and personal” (p.27). Geographic constituency for a candidate means legal administrative division of some territory with its inhabitants, culture etc. This approach would be closest to my simplified definition. Reelection in a politician’s view is to take the effort to convince the electorate to cast the vote for him in the future. Primary and personal perceptions are extremely relevant, however very infeasible in the sense of data collection.

I definitely agree with Fenno (1978) that in home regions there is a higher possibility of finding so called “hardcore supporters”. Nevertheless, candidates can still have some hardcore groups of supporters (primary) in regions they are not logically associated with. I also do not reject the argument that politicians do not share personal feelings with inhabitants of their home region. But they can share some personal feelings with inhabitants of a certain region without being considered as “local son” or “hometown boy” (Key, 1949).

The selection of candidate’s home regions seems to be more objective in the thesis and is based on biographies of politicians rather than their personal connections with the region. Principally, the aim is not to test how much a candidate associates himself with the region, but how voters associate the politician with region. In that sense, the study is much more voter-oriented.

To put it briefly, I found no specific definitions of “home regions” that is why the notion should be understood as it was used in previous qualitative researches.
Why does place of candidate’s identification plays such an important role? In the studies of Black and Black (1973); Key (1949); Rice and Macht (1987) all of them discover that candidates are elected for offices mainly because of their origin and association with the region rather than the real capabilities they have or personal characteristics. This finding helps me to concentrate on the effect of place (region) in home region advantage. Nevertheless, future research on combined impact of place, candidate’s features and his political professionalism on local advantage could be extremely interesting.

1.2 Why home region advantage exists?

In this subsection the theory of “friends and neighborhood” supports the view why local electorate should associate the home candidate with the home region. The main reason is the closeness of the candidate to the local electorate and belief in incorporation of their interests into political activity through social personal networking and developed by local electorate so called perception of “local son” (Fenno, 1978).

All scholars dealing with “home region advantage” and “friends and neighborhood effect” coherently cite Valdimer Orland Key, who for the first time attempted to explain those two phenomena. In his study in 1949 he wrote “[candidates] for state office tend to poll overwhelming majorities in their home counties” (1949, p. 37). Key assumed that the candidate in home region receives more votes because of geographical similarities and exposure to each other.
Key’s first attempt inspired the next generations of scholars: Abramowitz (1989); Black and Black (1973); Campbell (1992); Dudley and Rapaport (1989); Garand (1988); Holbrook (1991); Lewis-Beck and Rice (1983); Rabinowitz and McDonald (1986), Aspin and Hall (1987). They all worked on improvement of Key’s (1949) theory to test using quantitative and qualitative methods that home region advantage exists.

Theory gives significant reasons to support home region advantage. Firstly, supposing that candidates born in the given region used to make their political careers there, one can assume that they developed sufficient social networks in those regions and are backed by local society as well. This is exactly what the literature defines as “friends and neighbors effect” (Aspin and Hall, 1987). In the article Aspin and Hall mention two crucial sociological effects: “politics of acquaintance” and “residential proximity” (page: 713). Through political career all kind of acquaintance is meant that possible influences future election outcome (including fraternizing with business circles, groups of interests, church representatives etc.).

In their final remarks Aspin and Hall recognize that they could not find a visible support for the theory of home region advantage for judicial retention plebiscites (1987, p.714). But this somehow does not discourage me from studying the European case since there is one fundamental difference in retention plebiscites. They, as authors mention do not include external “non-local” candidate, that is why voters do not mobilize themselves to express “local pride, fear, rivalry or animosity“ (page: 713). In other words, in this case preferential voting is based on the same factors as in any type of local elections.

The “friends and neighbors” effect is decently tested by many other scientists, among others by Rice and Macht (1987). They discovered that the average candidate polled 3.66
percentage points more of the general election vote in his or her "home county" than another candidate from the same party but different county could have expected to garner (page: 448). Taking into account differences between European and US political reality, different level of home region advantage is expected to exist in case of Europe.

Although they both admit that research requires further studies with more reliable data, however they appear to think that home region advantage is a combined effect of both mobilization and conversion (page:261). Since many cases of increased turnout has been observed as well as significant number of voters who did not decide to vote on preferential party’s candidate, but chose presidential candidate because of his regional origins. Following Rice’s and Macht’s (1987) logics it would be expected to conduct further studies within one country.

The main problem here is that there are not enough cases within one country to test the hypothesis and on the other hand Europe is so differentiated to simplify the model and narrow it down to several explanatory variables. The relevance of the whole study should be tested in the very end of thesis responding to the question: does home region advantage (if exists) help the candidate to win the election? This will require further, detail assessment of case-by-case election results, in which two candidates were extremely close to each other.

Schmitt-Beck and Mackenrodt stress the importance of social networking within one region. Although their study is to test not the election outcome and decisive process, but electoral turnout it gives the strong argument that personal interactions are stronger in deciding whether to take part in elections than the influence of mass media. They claim that the voter cannot be studied as “atomized individual acting in social vacuum” (2010, p.392) and therefore
the “question whether or not the person goes to the polls is at least in part a function of environmental cues he or she is exposed to from his or her social context” (Ibidem). The last statement seems to be crucial to understand the idea of home region advantage from the angle of environmental discussion between members of the region. It includes closest to candidates persons like spouses, relatives, neighbors or co-workers (p.393). Supposing that the candidate interacts personally with presented above groups, the same groups may spread the support and convince each other to support this particular candidate.

Initial “friends and neighbors” effect gives strong evidence for existence of all other effects influencing home region advantage. Next section will present which factors exactly are responsible for the degree of home level advantage.

1.3 Which factors influence home region advantage?

So far the main focus of the study was to test whether birth, education and political career in a particular home region increases the level of home region advantage. In this part other variables explaining home region advantage are theoretically reviewed. Unfortunately there is no theoretical frame for some of variables included: European Union membership or level of democracy in the country. Those two variables are to some extent interdependent since the level of democracy measured by Freedom House Rankings is higher in EU than in rest of the countries included in the study. In countries not being members of European Union the level of home
region advantage is expected to be higher. Those latter will be discussed in the second chapter under the subsection presenting results of the linear regression.

1.3.1 Central and peripheral regions and size of the region

First group of factors emphasizes the exceptional position of so called central regions (defined as capital city or city of strategic importance e.g. Saint-Petersburg in Russia). The assumption here is that central regions are less likely to support candidates coming from these regions in comparison to peripheral regions of the country.

To my best knowledge, the clearest explanation of phenomenon of the central regions and the size of the region itself from psychological point of view was presented by Fischer (1975). In his article several key remarks might be found. Among main effects of urbanism Fischer enumerates: “social mobilization” increasing the interest in political life via the access to information one hand and the urban anomie which “destroys kinship, friendship bonds, and social norms and creates isolation and rootlessness” on the second hand (1975, p. 559).

The effect of the size of the region is described by Fischer as passiveness of its citizens:

“As size increases, face-to-face political discussion among the citizenry is more difficult, citizen-leader interaction becomes more indirect and one-sided, and citizen involvement is reduced to voting or “consummatory participation” (e.g., reading newspapers).” (Ibidem, p.559)

Finally Fischer concludes that as urbanism increases, the attention to locality decreases. This is probably the strongest argument supporting the hypothesis that central regions and populated urban areas diminish very visibly the effect of home region advantage.
An interesting point of view might be also the claim that possible closeness in results of two or more candidates in one region can be a stimulus to cast a strategic vote (Cann, Cole 2011, p.344). Firstly, it could help to answer the question in the last chapter what is the practical appliance of home regional advantage. Secondly, it could support the argument that in the central region competition and turnout should be higher than in peripheries. Cann and Cole find explanation of closeness in higher number of personal visits and television advertising (2011, p.350). The research is done at the macro level of the whole US, but I find it appropriate for separate regions too. While more resources are spent to advertise different candidates within one region (e.g. central region – capital) and political party competition is higher than in the periphery, then home region advantage, logically, should be less visible. If the claim that one peripheral region is majorly aligned with one party or candidate is true, then what we should receive in results of the model is significantly higher home region advantage in peripheries. Of course, separately one has still to test the influence of political party in the region.

On the other hand Panagopoulos (2011) remains cautious to the community size effect on turnout and civic activities. He argues that social pressure does not necessarily has to be higher in less populated communities and highly-populated communities can be “part of social networks that that impose social constraints on them to comply with civic norms” (p.356). As civic norms Panagopoulos understands taking part in the election. His study undermines to some extent the argument about higher competition in highly-populated (aka central) regions on the one hand and “friends and neighbor” effect on the other. Because the object of study concerned turnout, I will not treat this claim against preferential voting for candidate associated with particular region.
Constructive theory in this respect would stress that 1) strategic regions are divided into numerous political and economical interests – higher pluralism of views, beliefs, existence of political parties supporting candidate etc. 2) usually they are more populated than other regions – that is why social networking and previous political career does not create as visible effect as in the case of lesser populated peripheries, 3) all candidates direct their efforts to achieve the best result in strategic regions, while they do not always pay so much attention to all types of peripheries. The latter point can be also easily explained by fact that vast majority of candidates proceeded with political careers in capitals in the end, what makes the voter indifferent towards capital region identification of candidate (centre of political life). Thus home region advantage, even if existing in strategic regions will not be as visible as in peripheries.

The latter observation was supported to some extent by Powell in his research (2003-2004). He claims that candidates and their campaign staffs usually pay attention to separate state-by-state strategies in order to achieve best results instead of whole state strategy (page:115). To put it shortly, capital region strategy would be part of whole state strategy, while peripheral strategy is rather a part of state-by-state strategy. That would somehow explain that home region advantage takes place because of additional effort of candidates in peripheral regions to convince society of the region he/she comes from to cast a vote on him.

To explain theoretically the hypothesis about much smaller home region advantage in case candidates come from strategic regions, I found article of Lewis-Beck and Rice (1983) extremely relevant. They fully recognize existence of advantage and moreover consider state population as influential factor. What they claim is, that “the smaller the home state, the larger the margin of the candidate's advantage” (1983, p.555). This claim perfectly suits to the first and
second regression model built for the need of this study to prove importance of capital and peripheries region in election outcomes.

Difference in the level of home region advantage can be explained just by population size since strategic regions (capitals) are usually much more populated than peripheries. That is why final effect of advantage is much less visible. Answering the question what explains home region advantage Lewis-Beck and Rice mention local proud, understood as identification with region and effect of “voting for a local son” (page: 552). The latter effect, following Lewis-Beck and Rice, should be more visible in less populated regions (page: 556).

Size as crucial factor is also recognized by Dudley and Rapoport. They give the number of only 0.3 pp more gained in more populated states by vice-president candidates than expected (1989, p. 537). Local society tends to believe as well that candidate from their region can better represent local interests at the state level, which can be called “to have our man/son in the central institutions”. Even if candidate only play with regional feeling of voters and does not intend to represent local interests at all, people will anyway remained seduced by fact of candidate’s origin.

### 1.3.2 Allocation of resources

There are two main resources that a given candidate invests into his home region: finances and time. Finances seem to be self-explanatory while the second should be meant as unit of time spent on building the closeness with local electorate via visits, presence in local media, speeches, caseworks, participation in local cultural or sport events.
Several researches paid attention to financial advantage (campaign fundraising etc.) of candidates in the region. Usually the logic is following, if opponent invests much more resources in home region there is no sense to compete in this region. Or in other words, your resources should be allocated more efficiently in those regions, in which your opponent does not allocate his resources. Actually, I am not going to include financial variables in the model because of the complexity of such a model, which could become blurred. All in all, I believe that those arguments are relevant and there is a need to present them in favor of home region advantage.

Haynes (1997) suggests very clearly that “because candidates do well in their home states, other contenders seldom make an all-out effort on a favorite son’s home ground” in the primaries (p. 218). In turn, Fenno (1978) distinguishes two aspects of finances. First, the allocation of resources (time and money) is much higher because of “personal goals, family residence, distance, established local expectations” (p. 50). Secondly, one of interviewed by Fenno House Members concludes that grassroots support (financial and by voting) comes usually from all “for whom you have done a casework” (p. 108). The casework here means even smallest assistance or favor. Local style reveals in this part its reciprocal benefit from cooperation scheme between representative who helped and electorate who is going to appreciate this assistance by voting.

This local presence of presidential candidate in many cases influences his perception by electorate, which simply consider him/her as more devoted to their interests and understanding of their local problems (in some countries it may concern even cultural, language, religion, historical cleavages). Of course one has to bear in mind that theory does not cover all
cases and there is always a place left for exceptions (in statistical language: outliers), which are going to be discussed at the end of the work.

Furthermore such factors as the presence in local media and participation in local events play a key role to identify the local electorate with a candidate. Candidates usually associate themselves much more with local life (including all types of mass events: sport games, concerts, public debates, charity-fundraising organizations etc.,) because of their sentiment towards region they grew up in, started primary education, left part of family in.

Interesting studies of Pattie and Johnston explained that local residents by socializing with their friends and neighbors use to shape mutually their political views (2000). Neighborhood effect in that sense is presented as “voting response surfaces”, which are based on flow of information through “conversational networks” (Cox, 1969). Pattie and Johnston suggest actually that people do not necessarily “have to talk to each other for a contextual effect to take place” (page: 62). The assumption is that the content of discussion between residents and thus its effect on shaping common political views is not always clear and transparent. Because of two-layer sources of information: local and national it is somehow difficult to detect which factor is decisive to which extent. The suggestions of authors here is that “voters may gather relevant information through isolated and asocial way” (Ibidem).

Anyway presence of a presidential candidate in local media does influence his overall perception in local environment. Supposing candidate is not specifically controversial and is not associated with very ambiguous political views dividing opinions of local society, he or she should enjoy home region advantage.
1.3.3 Party advantage and incumbency

There are lots of studies about importance of party affiliation and incumbency in presidential election. Holbrook (1991) enumerates three main factors responsible for success in election: incumbency and popularity of candidate, state political ideology and partisanship. Practically to the same conclusion came Weisberg in 2002. In turn, Miller, Wattenberg and Malanchuk (1986) pay much attention to personality of candidate itself (including education, orator skills etc.).

Surprisingly, many researchers indicated incumbency as negatively correlated with home region advantage. This is mainly due to the fact that incumbent tickets tend to enjoy larger election margins overall, and it "becomes more difficult for home state [or regional] gains to keep ahead of national gains" (Rosenstone, 1983, p. 554). To the same conclusions came Lewis-Beck and Rice (1983). They hypothesize that incumbency would dampen the home state advantage somewhat because of "ceiling effects." “For example, presidential incumbents usually are not only returned but are awarded a larger vote the second time as well. Given this increased vote in a reelection bid, it becomes more difficult for home state gains to keep ahead of national gains. We may imagine that some who were originally home state voters now vote for the candidate because of his incumbency status” (Ibidem, p:554).

In concern to party advantage, findings of Lundell (2004) seem to be extremely important too. Namely, she points at centralization of the party structures and administrative centralization of country as a factor that influences results achieved by candidates. For obvious reasons I will also control the level of democracy in the country to have better vision of home region advantage.
Lewis-Back and Rice beside state population find political party and incumbency as variables defining home region advantage. They note that Democratic candidates should receive a larger home state advantage than Republican candidates as Democrats are more responsive to hesitating electorate (1983, p.554).

Relevant findings of Karnoven (2004) can be also helpful in order to understand interaction between party advantage and home region advantage. He claims that preferential voting can have significant effect on results when we not only are allowed to chose party we support, but also individual candidates in both local or nationwide elections (2004, p:223). In case of the study, there is always possibility not to follow our party preferences since all presidents, although designated by their parties for the candidacy, may influence preferential voting in any other ways e.g. by personal character, exposing political views that are shared by usual voters of other parties. Preferential voting can be even more important in case of second round elections, when voter do not always have possibility to cast vote for the candidate they wished to (e.g. their candidate did not go to the second round). Then party affiliation can be basically of lesser importance for election results (of course depending on political culture and strength of parties) and rather personal interests and perception of candidate play crucial role as well as origin of candidate.

Gimpel, Karnes, Mc Tague and Pearson-Merkowitz (2008) in their common study explain when party identification can be muted to show real home region advantage gained. They notice that in general state-wide elections (circumstances which match my research) gross home region advantage might be visible when “given the considerable share of weak partisans and independents in the American electorate, whose political choices are less constrained by party
identification” (2008, p.233). Secondly they observe that interrelated “a strong friends-and-neighbors effect might be present in low-information elections, in which more policy-oriented cues are inaccessible” (2008, p.234). The relevance for the thesis is that in some cases I will find clear region advantage I am mostly interested in. Depending on country and year of election I will unfortunately have to admit that home region advantage is highly dependent on party identification of both electorate and politician.

Johnston (1974) studying case of New Zealand noticed that “only a few candidates clearly drew on strong local bases, mainly those standing independently of the main party tickets and those who lived in districts dominated by the opposite party” (p. 418). Therefore pure effect of home region advantage exists only when eliminating party influence.

A similar view is represented by Gimpel, Dyck and Shaw (2004). In their paper by testing sixteen counties in Florida they suggest that not only party affiliation plays a central role, but also information about voters who participate in the election. Supposing we know well which party (candidate) is going to be supported, it may influence average level of motivation to cast a vote for our preferred party (page: 343). McKee and Shaw recognize additionally the factor of the so called suburban voting in presidential election. They stress that because of strong competition in central part of cities, election results can be decided by results from suburban areas (page: 125). This would support also my claim that in peripheries different strategies are applied by candidates and thus final identification with one of the candidates can be much stronger than in the central areas.

Contrary, Garand (1988) represents this circle of scholars who find high level of interdependence between party ticket and home region advantage. He suggests that party
affiliation and local politics are closed circle, in which “presidential and vice-presidential candidates improve the electoral chances of their party ticket within their home states” (p. 101). Furthermore, success of candidate in the region will depend on measure of home “national electoral trends and expected party vote within each home state” (p. 86). What we clearly see is inseparable symbiosis between the candidate promoting party in the region and party supporting candidate.

Similar to Garand strong party interrelation suggested before Black and Black (1973): “the data provide evidence for the persistence of a strong degree of localism in the politics of this one-party state” (p. 733). Being aware, of political party influences in researching home region advantage, I find party advantage as inseparable and major factor affecting level of home region advantage.

1.3.4 Against home region advantage

Opponent to existence of home region advantage is for example James Garand (1988). In his research he tries to explain by constructing linear regression model as well that there are too many independent variables, which can influence actual regional support (incumbency, preferences of the region towards party affiliation, real activity of the candidate in the region and sometimes even his controversy). On behalf of party affiliation, Garand gives the example between average level of home region advantage between Republicans and Democrats.
Eventually, Garand does not reject the hypothesis of existence of home region advantage, but rather calls it “partly correct, but only under specific circumstances” (page: 101).

This is actually a strong argument against universality of home region advantage regardless sample country, which I chose as a hypothesis for my research. According to theory geographical electoral advantage should have rather universal character, regardless country we take as a sample (Rosenstone 1983; Lewis-Beck and Rice 1983; Rice and Macht 1985). However, such variables as partisanship and capital-periphery might interfere with for example Rosenstone’s stance.

Nevertheless, in the final pages he gives numbers of 3-4 pp for presidential home region advantage and 3 pp for vice-presidential (Ibidem). Taking into account, that Euro-Atlantic space might differ greatly in preferential voting, I do not expect similar results for European case. I believe that home region advantage exists in Europe, however I am not sure about its degree.

On the other hand Johnston, author opposing reliability of home region advantage claims that the “friends and neighbor effect” does not necessarily take place in case of studies in New Zealand (1974). By testing elections in 1971 in Christchurch City, he claims that only few candidates received better results in their districts and the dominating factor was still party affiliation (page: 418).

Johnston’s study focuses somehow on one election within one region and one country what differs from my scope of study, in which I test many states and many regions throughout extended period of time. It is likely to believe that in one particular region in one particular year there might be no home region advantage effect, what highly depends on numerous factors like importance of election, competitiveness of candidates etc. Only the
repeated study over period of time tends to provide us with clear picture if there is a phenomenon
called home region advantage.

1.4 American theory and European case

The most demanding task remaining is to adjust and justify American theory to build
European model. There are couples of variables that can be treated as universal and applied to
every study regardless political structure of countries, number of states etc. Among them one can
distinguish incumbency, second round and the definition of home region encapsulating three
factors: origin, education and political career place. On the other hand, majority of variables
require additional comments when comparing US political reality with European. To group of
controversial variables one can classify: size of the region, level of democracy, capital-periphery
effect and party-candidate interrelation.

From the first group incumbency and second round seem to be the easiest to apply. I
realize small difficulties in explaining adopted definition of home region. The problem might be
of geopolitical changes that we were witnessing in 90’s in Europe. In comparison with US, there
have been much more administrative alterations of country and region borders. Practically, every
country, belonging previously to so called socialist camp, changed their administrative division
throughout 90’s. Good example of region merge would be Poland from forty-nine administrative
subjects to sixteen in 1999. In case of former Yugoslavia, not only internal administrative
division has been changed, but state borders as well (for example independence of Montenegro
and Kosovo).

Those geopolitical, administrative changes had a clear impact on a) origin of candidate,
who could have been born in a region which belongs now to other state b) education of candidate
and to lesser extent c) political career. Attention should be paid to highly centralized post-Soviet states and post-Yugoslavia, where in many cases candidates could have been educated in centre of federal structures: respectively Moscow or Belgrade instead of centre of their own federal republic. In result, this difference between US and Europe can deprive the study of ten percent of data to analyze as party local support etc. is incomparable with other candidates then.

However, the second group of variables looks even more problematic. Firstly, size of the region is highly differentiated throughout whole Europe. I do agree that in US there is also differentiation between the sizes of states. Let us exemplify the most populated state California (37 mln) contrasted with the least populated Wyoming (0.6 mln). Nonetheless it does not appear to be so nonstructural. Let us take as an example the difference between one Croatian region used in the model (Sibensko-kninska zupanija inhabited with 112 thousands) and one Ukrainian (Kiev city – round four million) or Russian (Moscow – round thirteen million). In several of USA states size difference is higher than fifty times, while in Europe happens to be in extreme cases more than one hundred times. Moreover the average size of states in USA is much higher than in Europe. From this angle, European model necessitates inclusion of size of region as variable. On the other hand, it is far from clear how to show the real effect of size of the region if same process of recoding into categorical variables would be extremely difficult.

Secondly, level of democracy is not the debatable issue in one country. The problem appears when we want to compare range of different European states with different forms of governments. As long as one is interested in receiving absolute results of home region advantage, one should not care so much about level of democracy. Unfortunately, I am afraid that level of
democracy can influence the results. Therefore Freedom House ranking will be applied as auxiliary, control variable.

Thirdly, capital-periphery effects might differ a lot in US and Europe. All American states are equally decentralized by law, while European countries experience various level of centralization. This puzzle I will not try to answer in European model, simply due to very controversial methods of measurement of centralization. Nonetheless, I wanted everyone to realize such a problem.

Fourthly, what has been already touched upon in the introduction is that party system of US is incomparable with any other in Europe. Also all European party systems are incomparable with each other. In fact, I believe that balanced relation between party support and candidate support can somehow compensate variety of political parties in Europe.

In American case it is logically advisable to go back with collecting data as much as possible, what has been actually done by analyzing home region advantage since XIX century (Tubbesing, 1973). It is shown that in the examined period between 1836-1972 American presidential candidates won in 62 % of cases in their home regions, what basically indicates existence of home region advantage (Tubbesing, p: 705). Tubbesing found also two other important factors. He argues as well that vice-president’s home region advantage is lower than presidential and that party affiliation influences advantage: Republican/Whig candidates tend to win in home state more often than Democrats (Ibidem). Another factor mentioned by Tubbesing, not necessarily useful for European case, is time. By dividing whole period into two subcategories of 1844-1892 and 1896-1972 he realizes that presidents more often gain home
region advantage in 20th century than 19th, but at the same time tendency is exactly opposite for vice-presidents (page: 715).

Unfortunately in European case, most of sample countries had too complicated and unstable history of political systems in order to measure the effect in time. There are few explanations for that fact: 1) till I World War most of countries did not exist formally (Balkans and Eastern Europe but also Ireland), 2) after II WW most of samples became Soviet republics or satellites of Soviet Union (socialist camp) or chose independent socialist path of development (Yugoslavia) and by constitution did not have institution of president (with minor exceptions in different time periods), 3) even if president was directly elected, results would be extremely biased by voting manipulation, use of undemocratic means to force people to cast a vote on president preferred by party leaders (actually referring to vox populi would be only a gesture to legitimize practically former nomination of candidate), 4) only after 1990 former socialist states chose majorly president to be head of the state and in most cases he/she is elected directly-popularly.

In conclusion, several lessons have been learnt from the theoretical overview. Firstly, there is no specific definition of home region advantage and it should be understood literally as in previous studies. Furthermore any logical modification is acceptable. That is why except origin and career place, education factor has been added to the model in this study.

Secondly, major factors influencing home region advantage are: birth, education and career in the region, party identification of voters in the region, size of the region, capital-periphery division, incumbency, second round and allocation of resources. The last factor is not going to be tested in this study because of its complicatedness. While birth, education, career and
party identification are positively correlated with home region advantage, size of the region, incumbency, capital region and second round diminish the level of home region advantage.

Thirdly, there is no robust study on the universality of home region advantage in different political-geographical circumstances. This study might be the first one answering this question.

Fourthly, differences between US and Europe do not allow expecting the same factors to be significant, although some similarities should be visible.
2. Model designing and results

Second chapter is divided into two main parts. First part presents the selection of variables for linear regression with their characteristics. Second part presents results of two linear regression models. While the first model includes all cases, second excludes significant number of outliers to see if the whole effect was not biased by them. Each model is summarized with interpretation and examples. In the end the question why some of the variables were not significant is discussed.

2.1 Model design

Data has been collected from fifteen national central commissions (websites) and useful website collecting last results http://www.electoralgeography.com/new/ru/. In the study several variables, theoretically most influential, have been modeled:

1) **home region advantage treated as the outcome** – mathematical difference in percentage received in the region of association and at the state level,

2) capital – defining candidate coming from strategic city as 1 and from periphery as 0,

3) second round – defined as 1 if given type of election was a second round and 0 if not.
4) European Union – dummy variable assigning the value 1 to country from European Union and 0 to country outside European Union

5) Origin, 6) education and 7) political career as dummy variables. If candidate was born, educated and started political career in the same city then all of them are given value 1. If a candidate was born and educated abroad but started career in the capital city then origin and education are given value NA what means they will be dropped from the model (because we cannot measure the home region advantage) and career value 1.

8) incumbency – dummy variable defined as 1 for a incumbent candidate

9) level of democracy in the country measured by Freedom House rankings\(^1\) in 2011 as continuous variable

10) size of the region measured by number of population in million recorded into dummy categories

   a) small region – inhabited by less than or equal to one million (value 0),

   b) large region – inhabited by more than one million (value 1)

\(^1\) So called Democracy Index measured on the 0-10 scale meaning

1. Full democracies—scores of 8 to 10.
2. Flawed democracies—scores of 6 to 7.9.
3. Hybrid regimes—scores of 4 to 5.9.
4. Authoritarian regimes—scores of 0 to 3.9

Source: http://www.freedomhouse.org/
The unit of analysis used in the linear regression model is separate round of election in a given year in one of home regions associated with one candidate for president. Let us exemplify it with Ukrainian 2004/2005 election case. The candidate Yushchenko is associated with three home regions – Kiev (by political career), Ternopil (by higher education) and Sumy (by birth) and additionally Ukrainian presidential elections 2004/2005 is divided into first and second round. In such a case, one candidate produces six separate samples for the model as there are two rounds multiplied by three home regions. We have to bear in mind that not all candidates are associated with three regions and not all of them took part in the second round. Naturally, this definition of sample is followed by some crucial consequences for the whole study.

Firstly, party advantage in the region is strictly correlated with the election results. There is no change in national and regional parliamentary election results between first and second round of presidential election since data was taken from the parliamentary election that took place before presidential one. The only value that might change is home region advantage, but usually second round of election increases even the advantage.

Secondly, one and the same candidate might be sample of the study. This requires one of following conditions: a) candidate is associated with more than one home region, b) candidate took part in first and second election in a given year, c) candidate took part in different elections in different years. The selection above might be biased to some extent since the same personalities are studied in the model. On the other hand, the focus of the study is the home region and advantage in each region might differ.
Thirdly, the independence of data cannot be fully measured. The Durbin-Watson test does not help a lot if we take into account that this study does not have time series data. Therefore effects of some variables might be biased and repeated by the same candidate.

In conclusion, samples are not really comparable between different countries in Europe and are not fully independent. This limitation probably will need to be addressed in the future research. As long as we define home region at its three layer understanding (origin, education and career) we should accept above model design as explaining enough which factors significantly influence home region advantage. Whole research has been divided into two models. First model presents all gathered cases, while second excludes quite significant number of detected outliers.

2.2 Results

This subchapter includes two linear regression models with outliers and without outliers. Both model reach relatively high level of R square. At the beginning the normality of distribution of variables and linear assumption is tested.

In the model including outliers the mean of the home region advantage is around 3.6 pp, while party advantage is 2.6 pp. The linear regression detected three significant factors explaining home region advantage: 

**party advantage, region of origin and capital region.**

In the model excluding outliers the mean of the home region advantage and party advantage dropped respectively to 2.27 pp and 1.57 pp. Only two variables were detected as significant: 

**party advantage and region of origin.**
2.2.1 1st regression model

In the first model the results of linear regression are presented and interpreted below. The first model includes dependant variable, which is home region advantage and nine independent variables described in detail in model design section: party advantage, birth place, education place, political career place, European Union membership, capital region, second round of election, incumbency and the level of democracy in the country.

Table 1. Distribution of dummy variables in the model

<table>
<thead>
<tr>
<th>Independent dummy Variable</th>
<th>Value 0 *</th>
<th>Value 1 **</th>
</tr>
</thead>
<tbody>
<tr>
<td>Capital region</td>
<td>147</td>
<td>146</td>
</tr>
<tr>
<td>Second round</td>
<td>211</td>
<td>82</td>
</tr>
<tr>
<td>Career in the region</td>
<td>119</td>
<td>173</td>
</tr>
<tr>
<td>Education in the region</td>
<td>110</td>
<td>180</td>
</tr>
<tr>
<td>Incumbency</td>
<td>241</td>
<td>52</td>
</tr>
<tr>
<td>European Union membership</td>
<td>179</td>
<td>114</td>
</tr>
<tr>
<td>Birth place</td>
<td>128</td>
<td>165</td>
</tr>
<tr>
<td>Size of the region</td>
<td>140</td>
<td>152</td>
</tr>
</tbody>
</table>

*Value 0 meaning how many samples overall were not capital regions, second rounds, in how many cases candidate was not born or educated or started political career in the region, how many of them were not incumbents, how many cases are outside UE

**Value 1 meaning opposite

All of dummy variables (birth place, education place, political career place, European Union membership, capital region, second round of election, incumbency and size of the region)
are normally distributed, what can be measured by frequencies of those variables presented in simplified table 1.

All of those variables contain about 300 study samples. The most unbalanced distribution is between incumbency and the second round, which positive 1 values are much less than value 0. This is because there are not so many examples in last twenty year of presidential elections in European countries, where incumbent took part in the next election. All states studies in the research had constitutional limitation of one reelection possibility. Additionally, not all states have got constitutionally defined second round of election, that is why this variable might be a bit biased. Nevertheless, number of samples in each case is larger than fifty.

The variable which has not been recorded is the level of democracy in a given country treated as continuous variable. The distribution of this variable is normal too.

In the regression there is one numerical variable which is not categorical – party advantage.

According to previous studies presented in the literature review section, party advantage will always have an enormous effect on home region advantage. Scatter diagnostics graph below presents quite significant correlation and colinearity of party advantage and home region advantage.

Table of correlations (Table 2) indicates how much dependant variable home region advantage is correlated with other variables through using Person correlation method. The interpretation is that values of party advantage, capital region, birth place and career in the region are strongly correlated with home region advantage. If the relation between independent
variables and dependent variable has got linear character, then they are also expected to be significant in the regression results.

Graph 1. Linear relation between home region advantage and party advantage in the region
Table 2. Pearson’s correlations between home region advantage and independent variables

<table>
<thead>
<tr>
<th>Independent variable</th>
<th>Correlation and significance detection</th>
</tr>
</thead>
<tbody>
<tr>
<td>Party advantage</td>
<td>0.681**</td>
</tr>
<tr>
<td>Capital region</td>
<td>-0.345**</td>
</tr>
<tr>
<td>Birth in the region</td>
<td>0.237**</td>
</tr>
<tr>
<td>European Union membership</td>
<td>-0.113</td>
</tr>
<tr>
<td>Level of democracy</td>
<td>-0.149</td>
</tr>
<tr>
<td>Second round</td>
<td>0.130</td>
</tr>
<tr>
<td>Incumbency</td>
<td>0.007</td>
</tr>
<tr>
<td>Career in the region</td>
<td>-0.167**</td>
</tr>
<tr>
<td>Education in the region</td>
<td>-0.094</td>
</tr>
<tr>
<td>Region size</td>
<td>0.019</td>
</tr>
</tbody>
</table>

** significant level of correlation p<0.01

Before the regression results are presented, it is interesting to pay attention to means of home region advantage and party advantage (Table 3). This might be useful to compare those means with other types of models. Among all samples (N=207) used in the model the mean of the home region advantage is around 3.6 percentage points, while party advantage is 2.6 percentage points. In other words, statistically each candidate associated with home region should gain 3.6 percentage points more votes in his/her home region than at the state’s level. Similarly, party supporting the candidate in the home region receives statistically 2.6 percentage points more votes than at the state level. Those means reveal that party advantage is correlated strongly with home region advantage. The most important question remains open whether party affiliation improves the results of presidential election in the home region or is it the other way round.

Statistically, home region advantage of 3.6 percentage points is remarkable. On the other hand we could speculate if the home region advantage of 3.6 percentage points substantially
improves chances of the candidate to be elected. The answer probably would be that it does not, which is going to be discussed in the last chapter.

Practically European result matches US study result of Rice and Macht (1987), who expected the home region advantage to be 3.66 percentage points.

According to methodology, the results of legislative elections are preceding the election of presidents. In the research party advantage is constructed from the nearest legislative election in the country before or after presidential election. It would interfere that rather the party affiliation is decisive about the home region advantage than other way around. The explanation of this fact is that party receiving more votes in the home region than throughout the country, successfully promotes its candidate for the post of president in the next election so that he/she receives more votes in the home region than throughout the state too. Secondly, supportive argument comes from the theory of using partisanship by voter as one of the most natural heuristics or cues (e.g. Lupia, 1994; Lau & Redlawsk, 2001). At the same time the electorate is willing to support more the candidate of the party which had previously advantage in the region.

What draws the attention is a very high level of standard deviation between home region advantage and party advantage, which suggests that other factors were also decisive and influential on the home region advantage itself. High standard deviation informs us also about the danger that not in all cases the generalization of results is clear and possible.

The means of dummy variables are not significant here and they inform mostly about normal distribution. The closer to 0.5 mean the dummy variable is the more balanced the frequency of samples is.

The mean of the level of democracy which is the mean of Freedom House Democracy Index indicates the group of country which was selected for the research. Most of the
states in the research belong to Central-Eastern Europe category and are defined by Freedom House on 0-10 scale as flawed democracies, contrary to Western European states defined mostly as full democracies.

### Table 3. Means and standard deviations of independent variables used in the regression

<table>
<thead>
<tr>
<th></th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>Advant</td>
<td>3.62</td>
<td>10.431</td>
<td>207</td>
</tr>
<tr>
<td>party advant</td>
<td>2.57</td>
<td>9.599</td>
<td>207</td>
</tr>
<tr>
<td>Birth</td>
<td>.55</td>
<td>.499</td>
<td>207</td>
</tr>
<tr>
<td>Educat</td>
<td>.59</td>
<td>.493</td>
<td>207</td>
</tr>
<tr>
<td>career in region</td>
<td>.61</td>
<td>.489</td>
<td>207</td>
</tr>
<tr>
<td>Eunion</td>
<td>.4396</td>
<td>.49754</td>
<td>207</td>
</tr>
<tr>
<td>Incubent</td>
<td>.15</td>
<td>.362</td>
<td>207</td>
</tr>
<tr>
<td>Secround</td>
<td>.29</td>
<td>.453</td>
<td>207</td>
</tr>
<tr>
<td>Capital</td>
<td>.50</td>
<td>.501</td>
<td>207</td>
</tr>
<tr>
<td>level of</td>
<td>6.6341</td>
<td>.95910</td>
<td>207</td>
</tr>
<tr>
<td>democracy</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Size of the region</td>
<td>.524</td>
<td>.500</td>
<td>207</td>
</tr>
</tbody>
</table>

The linear regression model tests which of ten independent variables are significantly influencing on the dependent variable - home region advantage. The model summary shows relatively high R square and adjusted R square. It means that in about 50% the model is able to predict/explain variance and has satisfactory level of goodness of fit.

A correlation analysis shows that among all nine variables only three of them are significant and explain the variances of home region advantage (table 3). The most significant as predicted before is party advantage due to strong correlation of values. Slightly less significant is capital region. If we accept the level of significance at p<0.1 then birthplace can be considered
as significant. As it is easy to notice in the model there are seven variables (European Union membership, education in the region, career in the region, incumbency, second round, size of the region and level of democracy) that failed to reach acceptable level of significance.

Table 4. The effect of independent variables on home region advantage

<table>
<thead>
<tr>
<th>Variables</th>
<th>B</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Constant)</td>
<td>-.1253</td>
</tr>
<tr>
<td>party advantage</td>
<td>.684 ***</td>
</tr>
<tr>
<td>Birth in the region</td>
<td>2.428 *</td>
</tr>
<tr>
<td>Education in the region</td>
<td>.274</td>
</tr>
<tr>
<td>career in region</td>
<td>.701</td>
</tr>
<tr>
<td>Incumbency</td>
<td>.230</td>
</tr>
<tr>
<td>Second round</td>
<td>-.115</td>
</tr>
<tr>
<td>Capital</td>
<td>-4.452 **</td>
</tr>
<tr>
<td>Level of democracy</td>
<td>.552</td>
</tr>
<tr>
<td>Size of the region</td>
<td>-.517</td>
</tr>
<tr>
<td>EU membership</td>
<td>-1.836</td>
</tr>
</tbody>
</table>

R square = 0.532

*significant for p <0.10
** significant for p<0.05
*** significant for p<0.01

Regression model is free of multicollinearity as tolerance of VIF is in all three cases lower than 0.5 (Table 4). It means that those three independent variables are indeed not
dependant on each other but predict purely the value of home region advantage. We can be 95 %
confident with separate effects of variables:

a) 1 % higher party advantage in the region results in the growth of the home region
advantage statistically by 0.6 – 0.8 %

b) If candidate was born in the region statistically his/her home region advantage should
grow/diminish from -0.2 % to 4.75 % (more/less votes than the average percentage score
in the whole country)

c) When the candidate is associated by birth, education or political career with capital region
statistically his/her home region advantage should diminish from -1.2 to -6.1 % (less
support than his/her average in the whole country)

Equation of regression :

\[
\text{Home region advantage} = 2.423 + 0.684 \text{ party advantage} + 2.428 \text{ birth} - 4.452 \text{ capital}
\]

Interpretation of the regression:

It is relatively easy to notice that 95 % of confidence interval tests the separate
effect of those three variables. The simplification of 95 % confidence interval would be equation
of linear regression. With the use of constant for home region advantage we could make the
general statements:

a) 1 pp of Party advantage increases home region advantage by 0.7 pp

b) Fact of being born in the region increases the home region advantage by 2.3 pp
c) Capital regions use to have home region advantage lower by 3.7 pp than peripheral regions

Let us consider the example that candidate X was born in the region Y that is not capital region and is supported by party Z, which receives in last parliamentary elections 2 pp of advantage in region Y. It means that candidate X receives in his home region round 6 pp of home region advantage. If the same candidate was born in capital region he receives only 2.4 pp advantage.

The problem still remains with extremely high range of 95 % confidence interval. It is not much helpful to say that with 95 % confidence the home region advantage will grow from 0 pp - 4.7 pp. Statistically there is naturally positive trend to gain home region advantage however substantively the candidate is interested in pure statement whether at least he can count on some percentages of advantage.

The problem of extreme ranges in confidence interval is generated, first of all, by outliers in home region advantage and secondly by the mutual reduction of effect of capital region and birthplace. That is why general equation makes more sense in the interpretation of results here than confidence intervals. There was probably significant number of cases, in which the candidate was born in the capital region. Although, tests for independence of variables and multicollinearity did not detect this relation, once again substantively it could have biased the result.

However, it is perfectly natural that the candidate is affected by two opposite effects of the same time. Some voters might consider the fact of being born in capital region as an advantage that helps them to cast a vote for a particular candidate. On the other hand, the
competition between many political environments, parties and groups in the capital region particularly decreases this effect.

2.2.2 2nd model without outliers

In the last model all outliers were detected and excluded from the model to see the effect on final coefficients, goodness of fits and the equation of the regression. The outlier is defined here as each value distanced further than two standard deviations from the mean. If we take a look at previous models standard deviation for home region advantage it equates = 10.4 % and the mean equates 3.6 %. It means all home region disadvantages lower than -17.2 % and higher than 24.4 % are recognized as outliers in the model. Altogether there were fourteen outliers detected.

Once more the linear regression is used to see what the changes are after exclusion of outliers. The presentation of the alteration of means should be helpful too. It is noteworthy that home region advantage after exclusion of outliers decreased by 1.3 % and party advantage in the region decreased by 1 % (Table 5). Taking into consideration that the standard deviation itself is very high in both cases of home region advantage and party advantage, it is noteworthy that still we identify fourteen outliers. The common decrease in means of those two variables indicates that party advantage is strictly correlated with home region advantage even among outliers.
Table 5. Means and standard deviations of independent variables in the model

<table>
<thead>
<tr>
<th></th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>Advant</td>
<td>2.27</td>
<td>7.674</td>
<td>197</td>
</tr>
<tr>
<td>Eunion party advant</td>
<td>0.446</td>
<td>0.498</td>
<td>197</td>
</tr>
<tr>
<td>Birth</td>
<td>0.54</td>
<td>0.500</td>
<td>197</td>
</tr>
<tr>
<td>Educat career in region</td>
<td>0.59</td>
<td>0.492</td>
<td>197</td>
</tr>
<tr>
<td>Incubent</td>
<td>0.15</td>
<td>0.360</td>
<td>197</td>
</tr>
<tr>
<td>Secround</td>
<td>0.27</td>
<td>0.447</td>
<td>197</td>
</tr>
<tr>
<td>Capital level of democracy</td>
<td>6.67</td>
<td>0.935</td>
<td>197</td>
</tr>
<tr>
<td>The size of the region</td>
<td>0.51</td>
<td>0.500</td>
<td>197</td>
</tr>
</tbody>
</table>

In the corrected model without outliers there are only two significant variables: party advantage in the region, birth in the region (Table 6). The capital factor is not significant anymore. The probable mathematical explanation for this finding is that majority of outliers were candidates associated with peripheral regions. After removal of those, in many cases extreme values, capital factor lost its significance. VIF did not change so that we can claim there is no mathematical collinearity between those three variables.

There are several small changes in the outcome of the model:

a) Capital factor lost statistical significance

b) There is no negative value for lower confidence interval for birth in the region predictor

c) Significance of birth factor increased and can be treated with threshold $p=0.05$
d) Respectively intervals of 95% confidence shrank

However the main change that can be noticed appeared in the area of goodness of fit of the model. R and R square respectively and significantly shrank. We can claim that outliers were lifting up significantly the significance of the whole model as they were probably of positive high value. Partially significance of whole model decreased as the sample size decreased, which is natural effect in statistics. I am going to take insight look into outliers a bit further.

**Table 6. The effect of independent variables on home region advantage after removal of outliers**

<table>
<thead>
<tr>
<th>Variables</th>
<th>B</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Constant)</td>
<td>1.118</td>
</tr>
<tr>
<td>party advantage</td>
<td>.505 **</td>
</tr>
<tr>
<td>Birth in the region</td>
<td>2.665 *</td>
</tr>
<tr>
<td>Education in the region</td>
<td>-.523</td>
</tr>
<tr>
<td>career in region</td>
<td>-.473</td>
</tr>
<tr>
<td>Incumbency</td>
<td>1.088</td>
</tr>
<tr>
<td>Second round</td>
<td>-.027</td>
</tr>
<tr>
<td>Capital</td>
<td>-2.062</td>
</tr>
<tr>
<td>Level of democracy</td>
<td>.107</td>
</tr>
<tr>
<td>Size of the region</td>
<td>-1.01</td>
</tr>
<tr>
<td>EU membership</td>
<td>-1.057</td>
</tr>
</tbody>
</table>

R square = 0.387

*significant for p <0.05

** significant for p<0.01
Equation of regression:
Home region advantage = 1.118 + 0.505 party advantage + 2.665 birth

Interpretation of the model:

If we consider that there is no substantial collinearity and reduction of effect between capital region and birth region then we can use interpretation of 95% interval confidence:

a) When the party result in home region grows by 1% it results in growth in home region advantage from 0.4 to 0.6% 
b) If the candidate is born in the region the home region advantage grows by from 0.4 to 4.8% for different candidates

For the generalization purposes we can use home region advantage new equation to interfere conclusions:

a) When the party result in home region grows by 1% it results in growth in home region advantage by 0.5%
b) If the candidate is born in the region the home region advantage grows by 2.6%

Unlike in the regression model including outliers there is only one possible scenario to illustrate how high the home region advantage should be:

Candidate X was born in the region Y and the party supporting him received 2% of advantage in the region Y

In the scenario the home region advantage gained by the candidate X equates 5%. Supposing that party advantage is always positively correlated (what we assume from
correlation graph) with the home region advantage, then birth is the only dummy variable explaining the level of this advantage.

### 2.3 Discussion why the rest of variables did not matter

The most interesting question is why only three independent variables (party advantage, birth in the region and capital region) explained the variance of home region advantage in the first regression model. In the second model the number of explanatory variables even shrank to two variables – party advantage and birth in the region. Let us consider briefly seven independent variables that were excluded from the model because of insignificance:

a) The size of the region  
b) European Union membership  
c) Incumbency  
d) Second round  
e) Political career in the region  
f) Education in the region  
g) Level of democracy in the country

The precious question here might be why the size of the region (number of inhabitants) did not matter while capital factor mattered. According to the theory the size of the region should matter, and capital region is usually more populated than any other region in the country. The preliminary answer to this question lies probably in the diversity of region sizes in Europe and the problem with recoding them into meaningful variables.
I will repeat partially what I already stated in the theoretical party. Let us exemplify the difference between one Croatian region used in the model (Sibensko-kninska zupanija inhabited with 112 thousands) and one Ukrainian (Kiev city – round four million) or Russian (Moscow – round thirteen million). In almost US none of states size difference is higher than ten times, while in Europe happens to be in extreme cases more than one hundred times. I argued that due to those differences inclusion the size of region as predictor was a natural decision. It turned out that the same difference is simply dispersing the effect of the size as there is no visible pattern. To be sure I did not make the error of recording I tried with six or three size categories but result was the same: insignificance.

Also the size of the region left as raw data without any recording (measured in mln of inhabitants as continuous variable) did not give any significant result. The mean of all regions used in the model is 1.48 mln of inhabitants with standard deviation of 1.6.

The recording used in the model with the division of regions into two categories (inhabited by less or equal and more than 1 mln) was the only reasonable choice to combine the effect of size with the effect of capital region. In fact, vast majority of capital regions’ population exceeds 1 mln. The problem however remained in the disparity between bigger and smaller states. While in Russia, Poland, Ukraine, Romania each separate region’s population is always higher than 1mlin for rest of the countries only capitals’ population exceeds 1 mln.

Naturally, there was no previous theory on European Union membership that is why I only could expect with certain probability that this predictor is significant. Although significance level was very low, however t-test (t=-1.225) and unstandardized coefficient (-1.636) seems to be in the end substantially visible. The limitation of the study is the number of republics in Western Europe, in which the president is elected popularly. It could be interesting comparison
between Western and Central-Eastern Europe in home region advantages, but because of uneven frequencies this does not make much sense in my research. The exclusion of EU membership as a factor does not mean that it does not have any substantial significance. It shows clear trend that candidates from countries outside European Union (mostly Balkans and post-Soviet space) tend to gain higher home region advantage.

Incumbency did not play any role in the model mostly because the sample was too small (slightly more than 50 cases). In turn, in second round voters use the strategic voting and have different priorities, which do not necessary correlate with the power of “local politics”.

Two next independent variables: career in the region and education are also kind of problem of the research. I tried even to combine education with birth and career with birth and education but the result was insignificant. Secondly, such combination shed the light on another problem, which is multicollinearity. It is curious how in first model all values of tolerance for collinearity for capital, career and education were close to 0.5, which is secure level to state that their values were not excluding themselves.

Person’s correlation indicates very strong dependence between these four variables (see Table 7).

Table 7. Pearson’s correlation between birth, education, career and capital region variables

<table>
<thead>
<tr>
<th>Variables</th>
<th>Birth</th>
<th>Education</th>
<th>career</th>
<th>Capital</th>
</tr>
</thead>
<tbody>
<tr>
<td>Birth</td>
<td>1</td>
<td>-.287**</td>
<td>-.452**</td>
<td>-.512</td>
</tr>
<tr>
<td>Education</td>
<td>-.287*</td>
<td>1</td>
<td>.508</td>
<td>.501</td>
</tr>
<tr>
<td>Career</td>
<td>-.452*</td>
<td>.508**</td>
<td>1</td>
<td>.573**</td>
</tr>
<tr>
<td>Capital</td>
<td>-.512*</td>
<td>.501**</td>
<td>.573**</td>
<td>1</td>
</tr>
</tbody>
</table>

** level of significance p< 0.01
It is easy to test this dependence if we constructed the model containing only these variables that were significant in the whole regression. Thus if we replaced capital with career or education, we would receive similarly significant, slightly worse in goodness of fit results presented below in Table 8 and Table 9.

**Table 8. Significance of education when capital and political career variables excluded**

<table>
<thead>
<tr>
<th>Variables</th>
<th>B</th>
</tr>
</thead>
<tbody>
<tr>
<td>Constant</td>
<td>.798</td>
</tr>
<tr>
<td>Birth</td>
<td>3.641 *</td>
</tr>
<tr>
<td>Party advantage</td>
<td>.471 *</td>
</tr>
<tr>
<td>Education</td>
<td>-1.947 **</td>
</tr>
</tbody>
</table>

*P<0.01, ** p<0.05

**Table 9. Significance of career in the region when capital and education variables excluded**

<table>
<thead>
<tr>
<th>Variables</th>
<th>B</th>
</tr>
</thead>
<tbody>
<tr>
<td>Constant</td>
<td>.798</td>
</tr>
<tr>
<td>Birth</td>
<td>3.641 *</td>
</tr>
<tr>
<td>Party advantage</td>
<td>.471 *</td>
</tr>
<tr>
<td>Career</td>
<td>-1.916 ***</td>
</tr>
</tbody>
</table>

*P<0.01, *** p<0.1

In this very simplified replacement we notice surprisingly that education and career also matter and are significant.

To solve the puzzle we have to ask ourselves what is more probable to be causal relation:

a) Whether career and education influence negatively home region advantage
b) Whether capital factor diminishes home region advantage (and simply in most cases political elites were educated in capital regions and started their political career there too)

More reasonable seems to be option b). To be sure let us try to interpret the last two results. Once more we will use the example of candidate X, born in region Y with party advantage 2%) and he/she 1) was educated in this region or 2) started political career there.

In the first and second option the candidate is going to gain 3.4% home region advantage. If we excluded career and education at all it would mean that he is going to 5.4% of home region advantage. It does not sound consistent if the candidate was born and educated in one region, his support is lower than if he was only born in the region, but educated in other place. To put it simply, no one would expect negative coefficient for career or education in the region as they are obvious advantages to the candidate he/she can use in the election to motivate local electorate.

Therefore, unfortunately it is impossible to separately test the effect of career and education in the region. Secondly, capital factor is the only reasonable explanation for negative coefficient.

The last variable – level of democracy in the country was not expected in any theory to be significant. It was rather my guess that countries that have similar political system in theory (republic with the president elected popularly) might in fact face different political reality (hybrid regimes in post-Soviet states, flawed democracies in Central Europe and Balkans and full democracies in Western Europe). Even recoding Freedom House ranking into categories did not help a lot. The problem lies here in ranking itself and small visibility of this difference in the linear regression.
In conclusion, the level of home region advantage in Europe correlates with one in US and equals 3.62 pp in the model including outliers. Similarly, origin of the candidate was an important factor. The problem remains with two other factors defining home region advantage: education and career in the region.

Many variables in the model were not significant for Europe. Surprisingly, the size of the region and incumbency did not achieve the level of significance, although capital factor did. According to US theory size of the region should be one of the most visible effects.

Moreover, political-geographical factor dividing samples into EU and non-EU countries also did not matter. Differences in results between separate countries and elections give the clear picture that home region advantage is rather not universal.
3. Discussion of the results

The last part of thesis is devoted firstly to explanation of extreme home region advantages. All of outliers from the dataset and the model are elections in post-socialism states, among them majority in Ukraine. Majority of outliers concern candidates born in the region, which is peripheral. The last finding correlates with findings of the linear regression model. The question why in some particular states home region advantage might be so extreme is discussed.

Secondly, it argues that home region advantage has got substantial importance however it should not be treated as exclusive factor, which helps the candidate to win the election.

3.1 Explaining outliers

In order to better understand the effect of home region advantage it is necessary to take a look at outliers detected in the model. Three approaches have been applied to list those outliers.

First, if we strictly examine only the cases from the model, then we are able to discuss only those cases for which party advantage factor is available. This means only 7 outliers
have been detected in the model according to definition applied that outlier is any value located on the regression further than two standard deviations from the mean of all cases.

In the previous chapter the mean of home region advantage in Europe equals 3.62 pp and standard deviation equals 10.4 pp. Outlier according to above values would be every candidate that respectively gained/lost more than 24.4 % (advantage) or 17.2 % (disadvantage) of home region advantage.

Secondly, to provide the reader with full and clear picture of the home region advantage also cases without party advantage factor are presented and classified as outliers. Mostly they were excluded from the model because candidates officially run for the post of president without party support and declared themselves as independent. The number of outliers in such a case amounts to fifteen cases. As long as in this chapter the focus is to discuss extreme values of home region advantage it might be useful to list independent candidates from the initial dataset too.

Thirdly, substantial significance of the outlier has been applied meaning each candidate that respectively gained/lost more than 20% and 15 % support in the region. According to this substantial difference between country and regional support altogether 23 cases were selected and divided into extreme home region advantage (Table 10) and extreme home region disadvantage (Table 11).

Most expanded third approach is discussed in this chapter. It is noteworthy that among 23 cases there are only post-socialism countries and 18 times extreme values of home region advantage were noticed outside European Union. In years 1990-2010 fourteen outliers
were detected in Ukraine, four in Lithuania, four in Russian Federation and one in Romania.

Table 12 summarizes five dummy variables that were assigned to particular cases: birth place, education in the region, political career in the region, second round and capital region. Among 23 outliers there is no particular disparity in distribution of education in the region, political career in the region and second round.

On the other hand this sort of disparity can be noticed in distribution of two dummies: birth in the region and capital region. Vast majority of extreme differences between country and region support were detected among candidates born in the region and among regions that are non-capitals or in other words in peripheries. Those results definitely support results from linear regression model, in which birth in the region and capital variables were classified as significant.

Based on the analysis of outliers and linear regression we might come to the conclusion that only in peripheries the effect of home region advantage purely exists and mostly because of the fact that candidate was born in the given region.

The main questions that arise out of the analysis of outliers: why Ukraine and why post-socialism states in general are subjects of such extreme home region advantages/disadvantages. Firstly cases from each state will be analyzed separately and furthermore similarities of post-socialism states will be enumerated as possible explanation of the phenomenon.
Table 10. Positive outliers

<table>
<thead>
<tr>
<th>Name</th>
<th>Country/region</th>
<th>Year</th>
<th>Adv</th>
<th>Party name</th>
<th>Party adv</th>
<th>birth</th>
<th>educ</th>
<th>career</th>
<th>Sec round</th>
<th>cap</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yanukovych</td>
<td>Ukraine/Donetsk</td>
<td>2004</td>
<td>49,34</td>
<td>Party of Regions</td>
<td>41,51</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Yushchenko</td>
<td>Ukraine/Ternopil</td>
<td>2004</td>
<td>47,62</td>
<td>independent</td>
<td>-</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Yanukovych</td>
<td>Ukraine/Donetsk</td>
<td>2004</td>
<td>47,48</td>
<td>Party of Regions</td>
<td>41,51</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Yushchenko</td>
<td>Ukraine/Ternopil</td>
<td>2004</td>
<td>44,04</td>
<td>independent</td>
<td>-</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Kravchuk</td>
<td>Ukraine/Rivne</td>
<td>1994</td>
<td>42,19</td>
<td>independent</td>
<td>-</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Yanukovych</td>
<td>Ukraine/Donestsk</td>
<td>2010</td>
<td>41,49</td>
<td>Party of Regions</td>
<td>37,8</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Yanukovych</td>
<td>Ukraine/Donestsk</td>
<td>2010</td>
<td>40,7</td>
<td>Party of Regions</td>
<td>37,8</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Butkevicius</td>
<td>Lithuania/Vilkavickio</td>
<td>2009</td>
<td>40,21</td>
<td>Social Democratic Party of Lithuania</td>
<td>20,13</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Kravchuk</td>
<td>Ukraine/Rivne</td>
<td>1994</td>
<td>38,94</td>
<td>independent</td>
<td>-</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Prunskiene</td>
<td>Lithuania/Svecionys</td>
<td>2004</td>
<td>27,71</td>
<td>Peasants and New Democratic Party Union</td>
<td>3,34</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Yeltsin</td>
<td>Russia/Sverdlovsk</td>
<td>1991</td>
<td>27,5</td>
<td>Democratic party of Russia</td>
<td>0</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Yushchenko</td>
<td>Ukraine/Sumy</td>
<td>2004</td>
<td>27,46</td>
<td>Independent</td>
<td>-</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Yushchenko</td>
<td>Ukraine/Kiev</td>
<td>2004</td>
<td>26,38</td>
<td>independent</td>
<td>-</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Name</td>
<td>Country/region</td>
<td>Year</td>
<td>Adv</td>
<td>Party name</td>
<td>Party adv</td>
<td>birth</td>
<td>educ</td>
<td>career</td>
<td>Sec</td>
<td>round</td>
</tr>
<tr>
<td>---------------</td>
<td>----------------</td>
<td>------</td>
<td>-----</td>
<td>---------------------</td>
<td>-----------</td>
<td>-------</td>
<td>------</td>
<td>--------</td>
<td>-----</td>
<td>-------</td>
</tr>
<tr>
<td>Kuchma</td>
<td>Ukraine/Chernichiv</td>
<td>1994</td>
<td>-</td>
<td>independent</td>
<td>-</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Iliescu</td>
<td>Romania/Timis</td>
<td>1996</td>
<td>-</td>
<td>PDSR</td>
<td>-</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Tymoshenko</td>
<td>Ukraine/Dnepropetrovsk</td>
<td>2010</td>
<td>-</td>
<td>Block of YT</td>
<td>-9,8</td>
<td>1</td>
<td>1</td>
<td>0</td>
<td>1</td>
<td>0</td>
</tr>
</tbody>
</table>

Table 11. Negative outliers

Table 12. Frequency of dummy variables among 23 outliers summarizing columns from table 10 and 11

<table>
<thead>
<tr>
<th>Birth</th>
<th>Education</th>
<th>Career</th>
<th>Sec round</th>
<th>capital</th>
</tr>
</thead>
<tbody>
<tr>
<td>17</td>
<td>11</td>
<td>12</td>
<td>14</td>
<td>3</td>
</tr>
</tbody>
</table>
3.1.1 Why Ukraine?

The problematic issue here is that Ukraine belongs to countries with one of the most geographically divided societies in Europe, what has a very transparent impact on election results (Sasse 2010, Hale 2010, Kubicek 2000, Klobucar-Miller-Erb 2002). Russian speaking East-South and Ukrainian speaking West plus capital city – Kiev as combination of both is only one of noticeable cleavages.

As all citizens of Ukraine passively understand Ukrainian language, the dispute point remains the relation towards official state language. In the Eastern part or Crimea region the question of introducing Russian language as the second one seems to be essential in everyday political discourse. On the other hand Western Ukrainians do not see the necessity of accepting Russian as second official language. Except Western and South-Eastern stances the capital city Kiev fills in the picture with its unique combination of promotion of Ukrainian language from above and population using two languages parallel on every day basis.

Additionally one cannot forget about historical (political) differences. Western Ukraine use to be part of Commonwealth of Poland and Lithuania, then Habsburg Empire and II Republic of Poland till the end of II WW, while Eastern Ukraine was from the end of XVII century entirely and systematically dominated by Russian Empire, then Soviet Union. This historical experience has got enormous impact on public opinion making Western Ukrainians pro-European, while leaving Eastern Ukrainians politically integrated with Russia.

Except language, ethnicity and historical experience we could add list of many others division points such as economic structure, urbanization level and national feelings level. Comparison of more industrialized and urbanized East with agriculture and services oriented
West can be the most transparent example. Naturally, national feeling are strongly interdependent with the relation towards official language dividing society into nationalistic-patriotic West and pragmatic, state neutral East or South.

Last, but not least cleavage appears in religion question. Western Ukraine was usually dominated by Catholicism and later by Greek-Catholicism, while Eastern (starting from Cossacks time) by Orthodox religion (later fully dominated by Russian Church).

As a result we observe now the theoretical division of Ukraine into many groups of regions. Same Ukrainians quite often “are wont to say that there is no single Ukraine, although they may disagree on precisely how many 'Ukraines' there are” (Kubicek, 2000, p.274).

3.1.2 Why Russia, Lithuania and Romania?

Russian outliers cannot be explained by the same theory of geographically divided state as in case of Ukraine. We should not seek any generalized theory. It is rather individual and personal characteristics of two candidates- Yeltsin and Zyuganov that explain extreme home region advantage.

Both of them could be perfectly defined as theoretical “local son” or “hometown boy” (Key, 1949). They are associated by three factors with home region at the same time – origin, education and career. Moreover what seems to play an important role, their home regions are peripheral – Yekaterinburg (Sverdlovskaya Oblast) and Orlov (Orlovskaya Oblast). Makarychev decently explained that periphery-centre oppose each other in Russia basing on the theory of localism and federal state (2012).
Probably the connections they developed within one region helped them to create hardcore supporters groups. Those supporters believed that by electing the candidate they will be given some incentives in return including economic subsidies, increase in political importance of the region etc.

One crucial difference between Yeltsin and Zyuganov lies in party advantage in the region. While Democratic Party of Russia supporting Yeltsin in the election in 1991 did not gain any advantage in Sverdlovskaya Oblast, Zyuganov’s success is correlated with the success of the party. The Communist Party of Russian Federation is structurally associated with its leader Zyuganov and Orlovskaya Oblast became to some extent political centre of this party. In the next 1996 election Yeltsin run as independent candidate what confirms the independency of his home region advantage from party structure.

Lithuanian outliers can be mostly explained by very strong identification with the region in Lithuania. As the country itself is relatively of small size in European measures such an effect should not be so transparent. Probably it derives from the history of Lithuania and strong domination of central Kaunas and Vilnius regions.

None of Lithuanian home regions presented in the Table 11 is a central region. Except Butkevicus, three other candidates were born in peripheral regions what might explain high results. Once more, except Butkevicus all other candidates are independent from the party advantage. Their parties did not gain any significant advantage in the region. Rather origin factor is decisive in case of Lithuanian outliers.

There is only one Romanian outlier and it can be only explain by the coincidence that Iliescu is associated with Timis County. Born in Calarasi County, which is located
geographically on the other side of Romania than Timis and educated in Bucharest, in fact Iliescu does not have any primary connection with Timis. In communist time he only served as vice-president of Timis complying with the decision of Ceausescu.

There is not any consistent argument why post-socialist states experience such a high level of home region advantage or disadvantage. In conclusion Ukrainian case is fairly explained by historical factor, Russian by personal characteristics of leaders, Lithuanian by dominant position of Vilnius and Kovno regions and Romanian by coincidence.

The only possible common explanation is the process of institutionalization of party system in the post-socialist states. In comparison to Western European states party systems in post-socialist space are much less developed. Moreover in Russia and Ukraine democratic process of election might be also questioned.

3.2 Is the home region advantage substantially important for the candidate?

The most pragmatic question that have been already stated in the introduction is whether home region advantage theory has any significant practical application in wider voting behavior and election theory.

Taking into account that one particular region is not so much likely to alter the history of elections; we should not expect huge impact of home region advantage on the success in the election. In Europe one region represents usually from 5-10 % of country’s population. Therefore home region advantage would be substantially significant only in those elections, in which two candidates were very close to each other and under condition of existence of extreme positive disparity between voting results at country and region level.
So far only two elections in the period 1990-2010 in Europe meet above requirements. Both of those elections took place in Ukraine: first in 2004 and second in 2010. Furthermore the real effect of home region advantage was decisive only in the second round. The second round is a crucial prerequisite to accumulate advantages among only two candidates. In the first round in Ukrainian presidential election home region advantage was diminished by dispersion of votes among all other candidates. In effect, only second round resulted in the polarization of opinions and the application to some extent the strategic voting.

Home region advantage is defined as difference between support in the whole country and in the home region. In this sense home region advantage is independent from other candidate’s results in their home regions. To answer the question whether home region advantage helps the candidate to win the election we would need to measure net advantages over the opponent in home regions (Table 13).

In 2004 Yushchenko won the national election with advantage 2,3 mln of votes. While he gained sum of 2,2 mln sume of net advantage in his three home regions (Kiev, Ternopil, Sumy) over Yanukovych. Yanukovych on the other hand gained 2,8 mln advantage over Yushchenko in his one home region – Donetsk (see Table 14). Comparing those two sums of net advantages, Yanukovych gained 0,6 mln more in his home region than Yushchenko.

In 2010 Yanukovych won the national election with 1 mln advantage of votes. While he gained sum of net advantage 2,3 mln in his home region Donetsk over Tymoshenko, Tymoshenko did not gain any advantage in her two home regions Kiev and Dnepropetrovsk. Comparing those two sums of net advantages, Yanukovych gained 2,3 mln votes more in his home region than Tymoshenko.
We should pay particular attention to the fact that net advantage over the opponent that Yanukovych gained in Donetsk in 2004 or 2010 makes up about 10% of all votes casted for him in those two elections. In 2010 we could even conclude that home region advantage was one of pillars of his election success.

**Table 13. Second round Ukrainian presidential election 2004 and 2010**

<table>
<thead>
<tr>
<th>Election</th>
<th>Candidates</th>
<th>Total votes in the country (mln)</th>
<th>Net advantage in the country (mln)</th>
<th>Net Advantage over the opponent in home regions</th>
<th>Sum of net advantage – sum of net advantage of the opponent</th>
</tr>
</thead>
<tbody>
<tr>
<td>2004</td>
<td>Yushchenko</td>
<td>29</td>
<td>2,3</td>
<td>Kiev + 1</td>
<td>-0,6</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Ternopil +0,7</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Sumy +0,5</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>= 2,2</td>
<td></td>
</tr>
<tr>
<td>2010</td>
<td>Yanukovych</td>
<td>29</td>
<td>-2,3</td>
<td>Donetsk 2,8</td>
<td>+ 0,6</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2010</td>
<td>Tymoshenko</td>
<td>25,5</td>
<td>-1</td>
<td>Kiev 0,6</td>
<td>-2,3</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Dnepropetrovsk - 0,6</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>= 0</td>
<td></td>
</tr>
</tbody>
</table>

These two Ukrainian elections clearly show the importance of home region advantage in wider political scope. In order to illustrate these examples we would need to create two scenarios:
1) In 2004 in Ternopil and Sumy none of candidates gains an advantage

2) In 2010 Tymoshenko starts to identify herself so strongly with Dnepropetrovsk and invest in the campaign in this region so that none of candidates gains an advantage in this region

In both scenarios such a small correction and neutralization of home region advantages would result in the change of the history of whole elections in a given year. Politically first scenario is rather difficult to imagine as there is no ideological explanation why in Western Ukrainian regions people would not vote for Yushchenko. Second scenario sounds more realistic that Tymoshenko decides to play the card of origin in the region that is ideologically reluctant to her party.

Unfortunately except two Ukrainian election cases, there is no more strong evidence for wider political importance and practical success of home region advantage in presidential elections. Nevertheless one has to keep in mind that home region advantage itself is not supposed to change the history of elections. It is rather one of the factors that can be easily applied to slightly improve the chance of being elected.

Naturally, case of Yanukovych who gains 10% of national votes because of strong identification with one region appears to be very extreme. Notwithstanding, none of candidate should complain even when gained 1-2% advantage of national votes from home regions.

The net advantages in home regions in second round elections would be a decent proposal for further research.
Conclusions

The study answers several major questions that emerge when analyzing home region advantage in Europe. There is no previous reference to European study in this field that is why all findings have got pioneer character and can be compared only with previous US findings.

First puzzle it solves is the level of home region advantage. The study shows that the mean of 3.62 percentage points in the model including outliers and 2.27 in the model excluding outliers is comparable with US results. In other words, statistically the candidate is expected to gain 3.62 percentage points more in the region he was born than at the national level. Actually, I did not expect this result to be so close to US results.

Second question the study answers is the significance of variables which influence the level of home region advantage. All things considered, this study shows that voters tend to use home region as an information shortcut. They believe that candidate associated by them with the region, they are residents of, better meets their expectations.

One of the main cues applied by voter according to results of this study is birth in the region. Birth in the region has been found significant in both first and second model. Unfortunately the study does not find finishing higher education or starting political career in the region as a significant advantage. These two last were inseparable parts of the definition of home
region advantage. Their significance remains a debatable question as they are strongly interrelated with themselves, origin and capital region factor.

Beside the origin of the candidate, party advantage in the region and the fact if the region is capital or peripheral plays a central role. Capital region factor lost its significance in the second model without outliers. It indicates the importance of outliers in the whole study, among which majority were peripheral samples.

Surprisingly, many factors detected in previous US studies did not matter in European model. This study rejected the significance of size of the region or incumbency. In essence, size of the region remains a problematic issue in Europe because of its differentiation across all states. Contrary to US studies, incumbency was positively correlated with home region advantage.

Third question was concentrated on finding universal character or political-geographical dependencies of home region advantage. In result, there is no universal character of home region advantage in Europe. Due to long lists of differences between countries and geographically scattered or extremely high home region advantages we need to exclude universality hypothesis. In other words, Europe or even European Union cannot be treated as one unified political organism that is why there is no universal application of home region advantage in any circumstances.

Although division into EU and non EU states in the model did not matter, there is a visible trend showing that non EU states and those states which recently joined UE notice much higher level of home region advantage. The same long list of outliers indicates the problem of extreme home region advantages or disadvantages taking place in Ukraine, Russia, Lithuania and Romania. In that sense home region advantage is geography dependent. On the other hand, case
studies analyzed in third chapter of this thesis do not have one coherent explanation and rather each case can be explained by different country-specific factors. Among all study cases predominantly Ukraine is exposed to extreme effects of home region advantage.

Last, but not least the study answers the question what is the application of home region advantage in the political practice. Unfortunately, home region advantage itself cannot alter the history of election as there are dozens of other factors that decide upon the victory. Nonetheless, we have to bear in mind that home region advantage in some specific circumstance might play an important role. In elections, in which two candidates remain very close to each other each additional percent gained at the national level from home region advantage might be decisive. Again Ukrainian case study perfectly documents that regional advantages were one of pillars of election successes of Yanukovych in 2010 or Yushchenko in 2005.

This research opens a new debate how can we measure and analyze home region advantage in Europe. During the study several ideas of further research emerged. Firstly, post-socialist countries have very short experience with institution of presidents elected popularly. The study took into account only last twenty years, but in practice many samples were gathered starting from mid 90’. In ten years time collection of data would enable to double the number of samples and thus analyze the phenomenon of home region advantage in some specific regions of Europe. So far this thesis treated Europe as a whole study case, because each separate country did not have enough samples. Moreover, I believe that in the nearest future the level of institutionalization of party system and sophistication of voters in post-socialist countries will increase contributing to lowering the number of outliers.
Secondly, the research space remains open for net advantages. This study focused only on differences between home region results and nationwide results. The new approach would include advantages over the opponent in the home regions.

Third suggestion is to enrich the voter-oriented approach with techniques that candidates use themselves to be perceived as local sons. While this study applied only voter-oriented approach, it would be precious to test home region advantage from the election campaigns point of view. This naturally requires much more time and resources to conduct such a study.
Reference list:

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