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THE RELATIONSHIP BETWEEN ELECTORAL INSTABILITY AND PROGRAMMATIC CONFIGURATION IN CONTEMPORARY PARTY SYSTEMS

Volodymyr Panov

Abstract

This thesis aims to discuss how electoral volatility is related to party system programmatic configuration. Two types of electoral volatility are expected to explain why some party systems have a wide range of ideological options and distinctive programmatic offers, while other have tight ideological space and low level of programmatic diversity. This work constructs party system programmatic configuration through the concepts of party system polarization and aggregate nicheness. The degree of party system’s ideological dispersion and nicheness show how close parties located to each other, and how much their electoral platforms overlap. Both concepts capture similar phenomenon from the perspective of spatial and issue ownership theory. Relative differences in both dimensions matter when we talk about the possibility of cooperation or future coalition bargaining process. Additionally, work presents an examination of general polarization and aggregate nicheness tendencies in various party systems. The cross-nation study investigated mentioned associations in 48 party systems across the world.

To test the association between two types of electoral volatility and party system programmatic composition, the study employed multiple regression analysis and conducted two separate tests. The first model was intended to investigate supposed to explore a possible relation between two types of electoral volatility and polarization. The second model tested the association between two electoral volatility variables and aggregate nicheness. It was expected that regeneration volatility is positively associated with dependent variables, whereas alternation volatility assumed to be negatively related to aggregate nicheness and polarization.

Results of the analysis did not register any association between variables of interest, which means that regeneration volatility and alternation volatility do not explain variations in party system polarization or aggregate nicheness. An additional finding is that our analysis did not find any evidence in support of the previously assumed association between party system fragmentation and party polarization. Moreover, several socio-economic and system-related factors appeared to be better predictors of party system nicheness and polarization. Annual inflation was the only variable that was negatively associated with polarization and aggregate nicheness simultaneously.

We also investigated the association between polarization and aggregate nicheness, and our results suggest that these two systematic characteristics appear to be related. Polarization and aggregate
niceness move in the same direction, which means that polarized party systems tend to have more diverse programmatic options.
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**Introduction**

This study is intended to explore how two types of electoral volatility shape programmatic characteristics of political parties. Alternation volatility and regeneration volatility capture two different ways of how voters change their loyalties. The first concept illustrates movement between stable parties, whereas the second capture movement between established and genuinely new parties — these two types of electoral instability expected to produce different consequences for political configuration of the party system.

Higher alternation volatility signals parties that a more substantial proportion of citizens move freely between parties that are already in the system. Strategic reasoning suggests that in such situation, parties should take an ideological position and adopt policy profile that would attract as much of those available voters, as it is possible. Considering vote-maximization motives, we expect that greater alternation volatility would motivate parties to move closer to the ideological center of voters’ distribution and include more similar issues in their programmatic offers. To illustrate the possible association between alternation volatility and party system political configuration, we can use the example of Norway. Since 1949 party system in Norway has not experienced regeneration volatility greater than 2.5, so citizens in this country prefer to cast their votes for well-institutionalized parties. Nevertheless, party competition is not frozen in Norway, and in 2013 alternation volatility in this country was equal to 12.6. Considerable aggregate vote-shifts among stable parties here co-exist with relatively tight dispersion of ideological positions (0.66), and low aggregate nicheress of 2.38.

A high degree of regeneration volatility signals that a substantial number of voters prefer to vote for extra-system parties. Elevated support of extra system parties is expected to reconfigure party system and provide citizens with a broader range of ideological and policy options. Even if parties with more extreme positions and more distinctive programmatic offers do not exceed the threshold, the threat of losing votes to such parties would still motivate established parties to accommodate programmatic offer that would attract potential voters of the new influential party. To illustrate the relationship between regeneration volatility and the party system political composition, we can use the case of Italy. In 2013 Italy experienced a profound change in the party system structure. That year regeneration volatility in Italy was equal to 18.7, which is unusually high for Western Europe. It also seems that changes in voters’ preferences were also accompanied by relatively high party system polarization and aggregate nicheress. If we compare results from the year 2013 with results from 2008, we will see that our indicators of interest increase simultaneously in the mentioned case. In 2008 regeneration volatility was equal to 1, aggregate nicheress was equal to 3.07, and
polarization index was 0.99. Five years later, regeneration volatility was equal to 18.7, aggregate nicheress was registered on the level of 7.39, and polarization index was 2.26. This is the only one case, but it suggests that examination of the mentioned association could lead to important findings of how regeneration volatility shapes party competition.

When we identify how close each party is located to rival competitors, we can make meaningful assumptions about general party system tendencies. The degree of party system’s ideological dispersion and segmentation can help us make inferences about the complexity of interactions within the system, predict the coalition bargaining process and possible controversial topics. The difference between political parties in a given context could be viewed from the perspective of party system polarization and aggregate nicheness. These two concepts imply different assumptions about party system, but still, simultaneously capture how diverse variety of options that voters have. Polarization describes a range of available option from the perspective of spatial theory, whereas aggregate nicheness describes the same phenomenon using issue ownership theory.

The relationship between electoral volatility and political composition of party systems deserves to be studied because it could reveal how voters’ decisions can influence the general content of political debates, rather than electoral fortunes of individual parties. Our additional goal is to investigate the association between party system polarization and aggregate nicheness. When we talk about drawing a big picture of electoral competition, both concepts’ contributions are important. Here we expect that polarization and nicheness go hand in hand with each other, as extreme right parties are expected to put higher emphasize on right policies, while extreme left parties should articulate leftist policies. The higher the ideological conflict between two sides of the spectrum, the greater the distinctiveness of their policy profiles.

To realize the mentioned objectives, we conduct a cross-sectional study of 48 elections worldwide. In my research, I employ correlation and multiple regression analysis to test our hypotheses. The study uses regeneration and alternation volatility measurement techniques advanced by Powell & Tucker (2014), party system polarization measurement method developed by Dalton (2008), and authors own calculations of party system aggregate nicheness based on unstandardized individual party nicheness scores estimated using the method suggested by Meyer & Miller (2015). To our knowledge party system segmentation (aggregate nicheness or aggregate distinctiveness) has not been estimated using individual nicheness scores of each party, so in some sense, this is also exploratory research. For this research, we obtained data from various sources (primarily datasets compiled by research groups). It is also worth to mention that all calculations in this research are
done using open source software called ‘R’ (R Core Team, 2019) and ‘Rstudio’ (RStudio Team 2019).

In the first chapter, we illustrate the importance of party competition and present the main theories of electoral competition. Also, this chapter presents different approaches of niche party phenomenon conceptualization and peculiarities of the concept. Then this chapter presents a conceptualization of the electoral volatility concept.

The second chapter explores the causes and outcomes of electoral volatility. Besides, it elaborates on aggregate niteness and polarization as two distinctive characteristics of the party system. Then section discusses similarities between aggregate niteness and polarization. The last part of the chapter presents and explains my hypotheses.

The third chapter provides information and comments on operationalization techniques utilized in this research. The last section consists of our empirical findings and answer whether expected relationships exist. After all, we conclude and give our suggestions for possible future studies.
1. Conceptual background

In this chapter, we discuss the role and general characteristics of electoral competition from the perspective of spatial and issue ownership theory. In addition, I briefly introduce existing conceptualizations of niche party concept and concept of electoral volatility.

1.1 Electoral competition in modern democracies

It is difficult to overestimate the role of political parties in the democratic process. Political parties perform a variety of functions such as conducting electoral campaigns and developing policy programs; coordinating parliament members and supporters; selecting candidates for positions in government; representing their members and supporters (Katz, 2017, p. 211). The last function is a particularly important one because it serves as an essential linkage between government and citizens. In his review of Katz (1997), Müller suggests that electoral connection and political parties are two things that make governments democratic (2017, p.141). Nyblade adds that bargaining among political parties over policies and chairs plays a central role in the process of government formation (2013, p. 14). These negotiations always happen in the light of previous or future elections, and they influence not only the distribution of portfolios but also governing style, government’s viability, and voters’ response.

Being in the cabinet or having an impact on State policies are commonly perceived as parties’ ultimate goals. However, it is rarely possible to achieve the mentioned objectives when parties have not enough supporters. Aims like vote, office or policy seeking are always connected, as extensive support leads to seats in government and control over public policies, while successful public administration, in turn, is rewarded by voters in the next elections. We can assume that policy or office benefits are less achievable without good electoral performance, hence vote seeking becomes a fundamental challenge for political parties. Regardless of parties’ underlying reasons to participate in the electoral competition, vote-seeking behavior is something that all parties have in common.

In the electoral competition, political parties behave as vote maximizers, which means that they try to get as much electoral support as it is possible. In this sense, we can view space where parties compete as a ‘market’. Anthony Downs (1957a) was the first one who used market analogy and assumed that political actors could be rational. In his book ‘An Economic Theory of Democracy’, he argues that economic analysis applies term rational to actor’s means, without applying it to actor’s ends. In other words, economists do not analyze the qualities of a person’s goals, but they
analyze how he or she pursues these goals. Rationality means that actors can choose tracks towards their goals that would maximize their outputs and minimize their inputs. Besides, rationality implies that actors are informed about alternatives and can rank options from the most preferable to the least preferred. Like any other market, the electoral market has two sides – demand and supply. There are voters on the demand side and political parties on the supply side. According to market ideas, parties maximize their utility in terms of support, while voters maximize their efficiency through the adoption of policies that reflect their demands and values (Caramani, 2017, p. 237). So, rational choice theory or economic theory assumes that all actors of the electoral competition act rationally, and voters choose political parties whose programs fit them the most, while political parties adjust their issue appeals following voters’ demands and programmatic statements of rival political parties.

Another essential characteristic of the electoral competition is that it can be interpreted through the prism of spatial ideas. Politics as space has nothing to do with the physical world. Instead, here, we talk about space as a metaphor. Benoit & Laver (2006, p. 11) argue that spatial imagery is inherited in the way most of us view and interpret political debates. Even those who haven’t received training in political science are conscious of their interests and able to match them with the interests of others. Also, most of us undoubtedly able to identify the direction of political attitudes changes.

Spatial perceptions in politics have a long history that can be traced back to the period of the Constitutional Assembly after the French Revolution (Benoit & Laver, 2006, p. 12). Members of the Assembly chose to sit on the left or the right following their political opinions. Current research on party politics in one way or another associated with marketing ideas and findings of Hotelling (1929), Smithies (1941) and Downs’s (1957a, 1957b).

Hotelling (1929) used a spatial metaphor to show that proximity (physical distance in his example) between buyers’ and sellers’ positions determine supplier selection in the absence of any other preference except price and freight costs. Another important finding is that ‘competing sellers tend to become too much alike’ (Hotelling, 1929, p. 54). In other words, manufacturers have a strong incentive to produce new goods that are very similar to those already on the market, because they want to get customers, who buy rival firms’ products. This idea is well reflected in contemporary party systems where usually we see a few dominant parties that are quite similar in their appeals and located not far from each other in the ideological space. Smithies (1941) slightly improved Hotelling’s model and proposed that competitors’ shift towards center increases transportation costs for customers located on extremes. Thus, when demand is elastic at any point of the scale,
and competitors are located close to the center, in this situation, new competitors could appear and take customers on the margins. In the language of political scientists, it means that voters who feel that both parties are distant from them are more likely to abstain than support existing competitors (Stokes, 1963, p. 369).

Hotelling and Smithies used a political analogy to illustrate their findings. Still, they treated it more as an illustration to the mentioned economic model, while Downs (1957a) applied it to understand how this model helps us to understand electoral competition in party systems different from the United States one. Additionally, he suggested that voters are not evenly distributed along political space and addressed the question of which role ideology plays in electoral competition and how parties connect policy issues and ideology. He assumed that parties in any party system could be ordered on a scale from left to right in a manner understandable for all voters (Downs, 1957a, p.115). In his framework Downs used a now classic economic left-right dimension where parties are ordered following their attitude towards the state-owned economy. He also proposed several models of how the electorate can be distributed along this dimension. From his point of view, the distribution of voters has a direct impact on the number of parties in the system (Downs, 1957b, p. 143-144). Downs also briefly talks about ideology and its connection to policies. He defines ideology ‘as a verbal image of the good society and of the chief means of constructing such a society’ (Downs, 1957a, p. 96). We can also say that achieving ‘good society’ is impossible without certain governing practices and decisions. Thus, it makes more sense to vote based on policy preferences rather than ideological positions. This statement can be reinforced with Downs’s idea that in his model, ideologies are no longer attributed to social groups or classes and treated as ‘means to power’ (ibid, p. 97). Vote-seeking and inability to communicate with voters directly encourages parties to adopt ideologies even if they are not particularly interested in specific governing philosophy per se. Nevertheless, the idea of ideology as useful voting instrument resonates among voters, as it frees up time that otherwise would have been spent comparing every policy with their vision (ibid, p. 98).

Even though the rational choice model is a powerful research tool that provides a framework for party competition, it is not immune to criticism. Caramani summarized main criticism points and suggested that voters are not always rational, not always fully informed about alternatives, and space of competition is usually multidimensional (2017, p.240). Also, he submits that parties’ voter-maximization behavior also questioned by the variety of authors (Müller & Strøm, 2000; Riker, 1962; De Swaan, 1973). Another issue is that if parties choose specific policies to fashion ideologies preferred by voters, they have no real policy preferences and they are driven solely by the desire to win elections. Most likely voters would punish such behavior as ideologies
constructed entirely on voters’ preferences consist of no information about future policy outcomes (Hinich & Munger, 1992, p. 10). Another problem that was not adequately addressed by Downs is that positions on the economic dimension does not tell us much about content of parties’ programs and voters’ stances towards issues, as the party’s position on the ideological scale is a weighted average of positions on all policies it supports, while citizens value each policy differently (Downs, 1957a, p. 132-133).

It is evident that Downs made necessary simplifications and adjustments to put voters and parties together on one scale and explain underlying reasons for their decisions. It is hard to deny that in practice, we can find a variety of voters’ behavior patterns that could not be called rational in Downsian sense. In addition, famous paradox suggests that it is not rational for citizens to participate in elections if it costs at least something, as most likely single vote would not make a difference (Benoit & Laver, 2006, p. 38). Considering the mentioned arguments, we can say that the overall rationale of voting goes beyond pure utility maximization.

Political scientists who discuss rational choice theory are a lot less concerned about the rationality of political parties, and there is a good reason for that. Political parties usually spend time and resources to learn as much as it is possible about their core electorate and potential voters. Hired specialists conduct researches similar to those private sector organizations undertake. Using a business analogy, we can say that sellers usually know more about potential customers than consumers know about possible alternatives. Remembering the electorate’s preferences, parties adopt different strategies and use insights from the marketing discipline to bring more votes. Butler & Collins note that widespread adoption of marketing ideas moves marketing influence in politics beyond simple matters of communication and presentation (1996, p. 27). At the beginning of the electoral campaign, political parties differ from each other in terms of size, age, ideological positions, structure, and core electorate. Therefore, they adopt different strategies and assume different roles to compete over different sets of policy issues. Butler & Collins (ibid, p. 26) applied marketing positioning categories (market leader, challenger, follower, nichers) and showed how marketing segmentation theory could help us understand the way how parties work with different issue segments. Bischof also uses market analogy and notes that party systems have various segments. Segments, in turn, can include numerous policy issues (Bischof, 2017, p. 223). Every party system has traditional segments that are highly competitive, and all parties that compete in traditional segments provide their answers on common issues. In contrast, niche segments are located at the periphery of a party system and largely ignored by main competitors. (ibid, 2017, p. 224). Thus, niche segments can be occupied by one party, while several competitors always incorporate traditional (mainstream) segments.
Typically, traditional segments consist of social or economic issues. Why economic issues usually play a central role in party systems? To address this question, we should define what economic voting is, and why many citizens perceive the economy as the most critical area of domestic politics. Economic voting is a widespread form of policy voting. This instrumental act implies that citizens evaluate government’s performance based on different economic indicators such as unemployment, GDP growth, inflation and other indices directly or indirectly influenced by governmental decisions (Whitten & Palmer, 2007, p. 66).

Moreover, even if citizens do not choose between specific left/right policy packages directly, an economy as context can influence the decisions of voters (Stevenson, 2007). The luxury-goods model of economic voting suggests that even if voters fail to recognize direct policy outcomes, still, the state of the economy changes the way we view different policies. Some policy packages are preferable under a good economy, while others are preferable under a lousy economy (ibid). Considering mentioned, we can say that economic issues don’t have a specific nature that makes them automatically mainstream. However, if voters believe that the government can control the economy, economic and social topics will have strong salience in a party system. The main idea here is that the economy is a mainstream simply because the median voter cares about the economy the most. Unlike the economic ones, niche segments are composed of old ignored or newly introduced issues which have not generated a lot of publicity (Bischof, 2017, p. 224).

1.2 The evolution of the concept: from niche party to party niveness
Most of us intuitively sense that only things appealing to a specific section of a population can be called niche. From the framework suggested by Butler & Collins (1996), we know that nicher’s behavior is fundamentally different from the practice of other market actors. The main tasks for nicher are creation, expansion, and defense of the niche. Market competitors, who choose nicher strategy, establish strong, lasting relationships with their clients. Further, we will see that various studies similarly describe niche parties.

Surprisingly, a lot of uncertainty exists when we talk about a niche party definition. Term niche party entered political science discipline not so long ago, but scientists have already created various interpretations of this concept. The niche party concept definition and its operationalization have become a cause of much soul searching for those who study this phenomenon since none of the existing definitions are entirely wrong. An absence of a common conceptual background is the most important reason why we should carefully examine existing frameworks, as scholars define and measure niche parties differently.
Bonnie Meguid (2005) was the first one who studied niche party phenomenon as a separate research subject. Her article ‘Competition Between Unequals: The Role of Mainstream Party Strategy in Niche Party Success’ can be seen as the first attempt to conceptualize and define borders of niche party phenomenon. Most subsequent investigations of niche parties are partially built on her ideas. Until today her book ‘Party competition between unequals: Strategies and electoral fortunes in Western Europe’ remains the most comprehensive account of niche political parties.

According to Meguid (2005), narrow specialization and issues outside of traditional segments of party competition are two things that characterize niche party. Also, she suggests that niche parties differ from mainstream parties in three significant ways. First, niche parties prioritize issues located outside of existing dimensions of electoral competition. Niche parties ignore economic discussions and draw voter’s attention to issues like environmental protection, traditional family values, and immigrant-free way of life. Second, niche parties exploit new policy issues appealing to groups that may cross-cut traditional dimensions of electoral competition. Third, niche parties use limited and very specific programmatic statements to be different from mainstream parties. They have highly specialized electoral platforms, rather than comprehensive ones. Supporters, in turn, always see their parties as single-issue parties, even if the number of issues increases in their program (Meguid, 2005, p. 347-348). Here we deal with quite a complex definition of a niche party that is uneasy to implement. Wagner (2012) criticized Meguid’s vision of ideological space as too complicated. He notes that new issues not necessarily cross-cut traditional cleavages and parties rarely occupy positions that introduce independent issue dimension (Wagner, 2012, p. 850).

In her studies, Meguid emphasized the role of salience, ownership, and programmatic dimensions of party competition. She suggested that special interplay exists between niche and mainstream competitors. She points out in her findings that the electoral success of niche parties strongly depends on mainstream parties’ strategies. To reinforce their positions, mainstream competitors have a large capacity to manipulate issue salience and ownership to override a niche party’s problem or reduce its importance (Meguid, 2008, p. 28 – 29).

Adams et al. (2006) presented a different vision of a niche party concept. They define niche parties through the ideological prism and state that niche parties are members of particular party families. They point out that either parties are located on the extremes of the ideological spectrum or parties that present noncentrist ideologies are labeled niche (ibid, 2006, p. 513). In their study, scholars test several hypotheses regarding differences in the way niche and mainstream parties respond to changes in public opinion. Elaboration of niche party concept is not their primary concern in this
research, so they don’t distinguish explicitly major characteristics of niche parties, instead they assume that ideological extremes are less populated and more ideologized and thus parties located there are should be niche.

Wagner (2012) proposes a simplification of Meguid’s definition. Wagner states that ‘niche parties are best defined as parties that de-emphasize economic concerns and stress a small range of non-economic issues’ (ibid, p. 846). To define niche parties, Wagner uses two criterions: niche parties do not work with economic issues; their issue emphasis consists of a narrow range of issues (ibid, p. 847). Parties have to fulfill both criteria to be defined as niche parties, which means that parties which work equally with economic and non-economic topics cannot be included in the list of niche parties. Wagner states that niche parties should be defined solely based on their programmatic offer. The only thing that matters when we talk about niche parties is their platforms. (ibid). As an example, he provides the idea that ‘what would make a Green party a niche competitor is not the fact that its supporters share a strong concern for environmental protection, but rather that its program concentrates on that topic’ (ibid, p. 848). Another essential idea of Wagner’s approach is that parties can change status from niche to mainstream and vice versa (ibid p. 849). This aspect differs from previously existed definitions. Meguid and Adams et al. see party status as a fixed binary characteristic because niche parties are fundamentally different from the mainstream, while Wagner’s approach implies that parties could change their profile over time.

Each of mentioned authors defines niche party concept differently, but all of them share the idea that economy is the central dimension of political contestation, so if party emphasizes economic matters, it automatically becomes a mainstream party that follows the main direction of political debates. This approach can be contested as such because it implies that economic niches have a specific nature that fixes their mainstream status forever. In addition, sometimes, the economy can be used as a context or an instrument to draw voters’ attention to other non-economic problems (Meyer & Miller, 2015, p. 261). Additionally, Meguid (2005) states that niche issues are always new, as old problems are already incorporated by mainstream parties. Meyer & Miller contest this idea and suggest that in some cases, parties take advantage of issues that are already outside the focus of interests of mainstream parties (ibid). Whether a topic is a part of the mainstream segment or niche should be distinguished by how much attention parties draw to this topic solely. Universally applicable conceptualization of niche parties must capture dynamic changes that happen within the party systems, while abovementioned frameworks are time blind in some respects. They give quite vague explanations of why we should exclude either economic topics or old issues.
Meyer and Miller (2015) support Wagner’s idea of minimal definition and propose their own more context-oriented version of minimal niche party definition. Three main characteristics determine a party’s status as a niche or mainstream. First, niche party status depends on the mainstream parties’ self-placement. In order to stay niche, party’s programmatic statements always have to be distinctive from other parties within the system. Party loses its niche status if rival parties start entering its issue space and adopt a position on issues used by niche party (ibid, p. 261). So, the innovation of their approach is that technically, niche parties can highlight any topic and remain niche if other competitors ignore this topic. Here the distribution of issues in a particular party system matters more than parties’ ideological positions. Second, niche parties can be defined only if there are three or more parties in the system (ibid). It is understandable that none of the parties can be niche in a two-party system, as an electoral market is divided between two competing actors, and their appeals automatically become mainstream. Third, the authors’ approach focuses primarily on the party’s profile and behavior, so they advocate elite-centered definition. Voters’ perceptions constitute a less reliable source than parties’ manifestos, as voters do not always see changes in political party behavior or profile. (ibid).

The definition presented by Mayer and Miller significantly changed the way how niche party phenomenon should be studied, because it allows us to capture and distinguish niche parties in almost any party system. Also, it considers dynamic changes of party status. The main weakness of previously mentioned approaches is that they are attached to different sets of assumptions about niche parties. Such assumptions do not necessarily represent reality. For example, Meyer and Miller argue that non-economic ideological profile or novel issues are rather niche party’s ‘empirical correlates’ than characteristics that determine the party’s status (ibid). Technically, big successful parties can concentrate their efforts on non-economic problems, and at the same time, specialized parties can highlight economic problems. Such approach suggests that the party’s distinctiveness from rivals is a defining element of a niche party. A continuous definition is also suitable because it illustrates how party nicheness changes over time.

Bischof (2017) proposed some methodological changes to the definition presented by Meyer and Miller. He states that niche parties are ‘predominantly competing on niche market segments neglected by their competitors’ and ‘not discussing a broad range of these segments’ (ibid, p. 223). In contrast to Mayer and Miller, who treat issues equally, Bischof brings back the idea that some topics are niche, while others are not. He mentions that a party family approach is not flexible enough to identify niche parties, so we should not draw any conclusions using exclusively this approach (ibid). However, he suggests that a party family approach gives us important information about niche market segments. Niche market segments should reflect original party families’
appeals, as people associate niche market segments with certain party families (ibid, p. 224). He advocates that this strong bond between specific issues and certain parties is the reason why an only limited number of niches should be included in the definition and operationalization of niche party concept. He also suggests that niche parties cannot have broad appeals as it undermines their market advantages.

Bischof’s approach is strongly influenced by both marketing theories and Meguid’s (2005, 2008) Position, Ownership, and Salience theory. His work is intended to close gaps of previous definitions and to present a common vision of niche party concept. He criticized the framework presented by Meyer & Miller for using issue dimensions that were not designed for the niche party studies and missing essential advances related to party family approach. Besides, he suggests that they should have considered how broad parties’ issue appeals are.

Bischof explicitly shows that his assumptions about niche market segments are based on voters’ and researchers’ perceptions of these segments (Bischof, 2017, p. 225). In his research, only five issue segments are labeled niche, because they are located at the periphery of the party system, attempt to destabilize existing alignments and constitute a set of non-economic segments (ibid). This brings us back to the question of whether we should treat some policy issues as having a specific nature that makes them niche. Segments distinguished by Bischof could help us to identify niche parties in Western European countries, while party systems in other parts of the world may not have similar cleavages while having parties with unique profiles. To put it another way, a set of mentioned market segments must be revised every time we conduct research in countries significantly different from those we can find in Europe. Anyone who wants to expand analysis of niche party concept and study niche party concept outside of the European region has to address this issue, as it limits possible research area.

Both Bischof and Meyer & Miller represent an inherently quantitative approach to the problem of party nicheness. It might appear from the first sight that scientific discussion on this problem is primarily related to the amount of policy issue that must be included in the measurement. Still, it is not entirely true. Bischof and Meyer & Miller based their frameworks on different sets of assumptions about the niche party concept. As it was mentioned previously, for Meyer & Miller the only thing that matters is how party distinctive from its rivals, while Bischof suggests that niche parties are parties that narrowly emphasize 5 issues that somehow reflect specific cleavages rooted in European party systems.
1.3 Electoral volatility concept

The concept of electoral volatility is generally agreed as one of the most important indicators of party system change. Electoral volatility constitutes a very mathematical and direct method of studying political change and stability (Bartolini & Mair, 2007, p. 28). In terms of conceptualization, electoral volatility is quite intuitive. One doesn’t need a political science degree to understand that this concept has something to do with variations in electoral performance. Pedersen (1979) used findings of Ascher & Tarrow (1975) and developed his well-known index of electoral volatility. He defined volatility ‘as the net change within the electoral party system resulting from individual vote transfers’ (Pedersen, 1979, p. 3). In other words, all changes in individual party preferences taken together constitute electoral volatility. In his article ‘The Dynamics of European Party Systems: Changing Patterns of Electoral Volatility’, Mogens Pedersen contested a popular in 1960th view that European party systems are stable structures that represent cleavages of the past and his findings questioned existing classifications of European countries. Pedersen findings suggest that European party systems evolve and patterns of volatility in individual nations tend to change over time. Party systems that were considered highly volatile are becoming less so, while party systems that were previously classified as stable changed their characteristics over time and became more volatile (ibid, p. 24).

Even such a clear concept like electoral volatility leaves us some conceptualization questions. The big question here is what electoral volatility tells us about party systems? Some might say that we should not use the concept of electoral volatility and party system change interchangeably, as in reality, electoral volatility shows changes in patterns of electoral support. Such one-sided vision of party system stabilization views political parties as passive actors. In their studies of emerging party systems, Kreuzer & Pettai (2004) emphasize the role of party elites and argue that organizational disloyalty of politicians plays an essential role in party system instability. In his article, Pedersen mentioned that party systems are complex multilevel structures that can be described in terms of various theoretical concepts such as polarization, institutionalization, and fragmentation. So, it is ambitious to reduce party system change to vote shifts only. It is better to view party system change as an aggregate change in patterns of interaction at all levels as well as between them. Unfortunately, it is impossible to create an index that would encompass every level and aspect of interaction (ibid, p.3). Also, in contemporary democracies elections determine competitors strength, so all processes in domestic politics directly or indirectly related to elections. If something happens on a governmental level or the level of party elites, elections will register this change. It is also worth mentioning that electoral volatility deals with solidly reliable data that precisely illustrates change within the party system.
Bartolini & Mair (2007) assert that two interpretations of electoral volatility exist, and it is essential to make a distinction between them. First interpretation refers to electoral volatility as a ‘system property’, while the second one refers to it as an ‘indicator of the cumulation of individual voting shifts’ (ibid, p. 32). First conceptualization treats electoral volatility as a factor on its own. Party leaders and voters could draw conclusions about the political environment based on aggregate electoral volatility and consequently adapt their strategies (ibid, p. 33–34). Second interpretation suggests that electoral volatility is an indirect ‘indicator of the amount of individual voting shifts’ (ibid, p. 32).

In this research, electoral volatility is viewed as an influential factor on its own that inextricably linked to party system stability. Powell & Tucker (2014) developed existing ideas about electoral volatility and noted that different types of volatility exist. The original framework presented by Pedersen (1979) simultaneously refers to two distinctive phenomena. The first phenomenon is volatility associated with vote switching between existing parties, while another phenomenon is volatility connected to the ‘entry and exit of parties from the political system’ (Powell & Tucker, 2014, p. 124). Like any other organization political parties have their ups and downs because voters’ preferences change from one election to another. So, poor electoral performance is not that much of a problem, if a party stays within the party system. Vote shifts are commonly perceived as a natural outcome of political parties’ interplay, which does not signal about some historical changes in a given party system. In contrast, volatility associated with party entries and exits can serve as a clear sign of party system instability.

A party system entering is usually associated with strategic decisions. Issues ignored by main competitors or general electoral disappointment create a window of opportunity for parties to join the system. Sikk (2012) developed four types of new political parties based on their issue coverage and ideological motivations. In Sikk’s framework, new parties appear because existing parties give inadequate answers on issues that have strong salience within the system or simply ignore topics important for a substantial share of the population. Mentioned findings suggest that volatility caused by parties entering or exiting the system indicates that previously successful parties are now unable to represent voters’ interests and lose support.
2. Electoral Volatility and Political parties’ electoral platforms

Each party system is shaped by the variety of factors, and some of them are qualitative in their nature (electoral laws for example), while others are expressed numerically (for example disproportionality or polarization). Party system is a complex multilevel structure where factors are interrelated. Frequently, complex phenomena like party nichereness or ideology are predicted by the variety of complex causal relationships. Still, in this research, we are exploring how electoral volatility impacts party programmes. As we already know, electoral competition has two sides – demand and supply. Supply-side in the form of voters is rightly associated with electoral volatility, as election results directly express citizens’ will and attitude. On the other hand, aggregate party nichereness is strongly related to the supply side in the form of political parties.

2.1 Electoral volatility: causes and outcomes

Electoral volatility is a relatively simple concept that is frequently used to measure voters’ choices stability and party system institutionalization. Contemporary studies of electoral volatility suggest that different types of electoral volatility exist, and various underlying factors can cause vote switching. Bartolini & Mair (2007) studied the stabilization of European electorates in the 20th century and presented comprehensive general model with several essential determinants of vote-change. Mentioned scientists tested a variety of causal relationships between independent factors and electoral volatility. Later all these factors were grouped into four major indices that meant to shape electoral availability. The final model concluded that institutional incentives and socio-organizational bonds are two major groups of factors that shape electoral instability (Bartolini & Mair, 2007, p. 258). Institutional incentives are represented by party-system format and institutional change, while a group of socio-organizational bonds consists of cultural segmentation and organizational density. Short-term factors operationalized with the help of ideological distance does not enter the regression analysis, however, authors claim that factors associated with the political market itself also influence electoral stability. Socio-organizational bonds and institutional incentives appear to influence electoral volatility in opposite directions. High levels of socio-organizational bondedness decrease electoral availability, while high levels of institutional incentives release space for competition. To explain the relationship between policy distance as a market factor and electoral volatility, authors established matrix and showed that policy distance matters when institutional incentives prevail over socio-organizational bonds (ibid, p. 261 – 271).
Findings presented by Bartolini & Mair without any doubt showed that political parties’ offer impacts electoral volatility. Nevertheless, Mair (1997) notes that this relationship plays both ways. General bottom-up nature of political parties has changed, and parties prefer to compete on the market, rather than stabilizing it by reserving certain groups of voters. Sense of party affiliation has become less strong among voters resulting in destabilized parties’ electorates. Less integrated voters and more remote parties lead to a higher degree of volatility, as voters have more options on the table (ibid, p. 37-38).

Another point is that society itself is in the process of permanent change, due to demographic or socio-economic factors. As society changes, an electoral base of the party is also subjected to change. The party’s policy profile also updates over time in response to new needs and demands (ibid, p. 49 – 50). To modify their policy profiles, political parties need accurate indicators. The type of electoral volatility and its degree can contain an important message for party leaders. Hence, high electoral instability not only signals about available voters but also serves as a stimulus for parties to adapt their profiles to changing needs and demands of society.

On the other hand, a low level of electoral volatility doesn’t necessarily mean that nothing is changing along other dimensions. Political parties’ ability to maintain electoral support can be explained by their adaptability. Electoral shifts themselves can result from political party’s inability or unwillingness to modify its appeals and organizational structure (ibid 71-72).

When we work with electoral volatility and political parties’ programmatic offers, we deal with the chicken-and-egg thing, as the direction of the relationship remains uncertain. Tavits (2008) studied the nature of the link between electoral volatility and supply of parties and suggested that electoral volatility could be considered both as a cause and as an effect of party system change. This idea is drawn from the assumption that party systems could be unstable either by the electorate or by elites. She investigated this link in Central and Eastern Europe and concluded that elites stabilize electoral alignments by increasing the stability of available choices (ibid p, 549). Here the author suggests that elites’ decisions to enter or exit a party system have a direct impact on electoral instability of young democracies. On the other hand, the author states that electoral volatility doesn’t have a substantial effect on the decision to field candidates.

Nevertheless, we should understand that the party system enters and exits represent only one way of changing the supply side of party systems. As it was mentioned previously, political parties are capable of changing the contents of their programs in accordance with shifts in voters’ opinions. This kind of changes is less visible than simple changes in the composition of the party system. Tavits, suggests that high electoral volatility indicates that large portions of voters are not loyal to
any of existing parties, thus it is a powerful signal for elites to establish new party (ibid, 540). Here we develop this argument further and state that aggregate shifts in voters’ preferences should also change the content of political parties’ appeals.

Previously we have discussed that electoral volatility captures two distinctive phenomena that political parties address differently. Instability associated with party system exists or enters produces strong incentives for parties to revise their positions, whereas the vote switching between stable competitors is a common occurrence. Walgrave & Nuytemans (2009) note that vote loss could lead to a party reorganization or a manifesto reconsideration. High level of electoral instability associated with a party system regeneration creates a similar impetus for all parties to update their statements and positions. Following this logic, a new competitor or departure of a previously existing competitor from the system should lead to a major change in the aggregate programmatic supply of political parties.

A view that electoral change automatically implies party system change is prevalent among scholars, who study changes in the party system structure. Mair proposes that reasoning here could be both direct and indirect. Straightforward argument entails that aggregate or individual electoral instability causes party system change. However, this approach is problematic because even low level of aggregate volatility could produce a shift from one party system type to another. Here the location of the electoral fluctuations must be considered. Indirect reasoning views electoral volatility as an indicator of change in the cleavage system (Mair, 1997, p. 55). The indirect rationale makes more sense, especially in the context of regeneration volatility, as new competitors entering the system are frequently associated with ignored issues or distinctive policy stances. Additionally, we can say that electoral change only registers changes in the electorate’s preferences, whereas these changes could happen long before the polling day.

Political parties’ strong adaptability must be discussed in detail to reinforce the argument that specific type of electoral volatility produces aggregate changes in political parties’ manifestos. Political parties constantly compare themselves to others in the context of their positions or previous electoral success. For example, Fagerholm (2016) found evidence that parties labeled ‘mainstream’ influence each other’s policy positions, while Meyer (2013) presents another idea that parties tend to move simultaneously and maintain their positions with respect to other parties within the system. Bearing in mind mentioned tendencies, we can assume that new parties or disappearing established parties should stimulate ideological and programmatic changes of the party system. Another factor that merits attention is the electoral success of rival parties. Schumacher & Van Kersbergen (2016) studied how mainstream parties address the electoral
success of populist parties, and they demonstrate that mainstream parties start accommodating more radical policies in response to the populist parties’ elevated electoral support. They also indicate that the prospect of losing supporters to populist parties is the main factor that motivates mainstream party response. This important finding suggests that party doesn’t necessarily have to lose elections first to launch the process of change, rather party elites capture trends in public opinion and adjust their election promises during the electoral campaign.

2.2 Aggregate nicheness and polarization as two distinctive characteristics of a party system

In this section, we investigate possible associations between the political composition of the party system and other systematic properties. The primary purpose of this section is to identify whether party system polarization and aggregate nicheness are equally responsive to the same systematic factors. Here we separately discuss responses of two characteristics of party system political composition and then look for similarities in their responses.

Nicheness

Previously mentioned studies viewed niche party/nicheness as exclusively party’s individual characteristic. Only some of them compared party systems in the context of niche party/nicheness. For instance, Wagner (2012) discovered that party more fragmented party systems tend to have more niche parties. Nevertheless, he relied on a binary measure of niche party and simply calculated how many niche parties are in the system. Such aggregation method conflicts with more recent continuous niche party operationalizations presented by Meyer & Miller (2015) and Bischof (2017).

Even though we do not know much about party nicheness on a systematic level, we can rely on an extensive amount of scientific literature on individual political party behavior, because most party system properties in one way or another are drawn from characteristics of individual parties within the system. Nevertheless, we keep in mind that party systems are composed of both niche and mainstream parties with different ideological profiles. Individual party level investigations give us valuable information about factors that motivate parties to choose between niche and mainstream strategies. Characteristics of the party system and socio-economic factors could influence programmatic diversity of the party system.
Party system nicheness is another dimension that we can use to compare party systems. Aggregate party system nicheness reflects how diverse electoral competition is. This characteristic serves an essential descriptive purpose by showing us what kind of electoral strategy prevail in the system and how parties segment the offering. On the stage of formulating policy programs, each party must choose between two basic salience strategies: stressing specific market segment or having preferences on a variety of issues that concern voters (Wagner & Meyer 2014). The first strategy is based on the idea that society views a specific party as an expert in a particular policy issue, and thus, a party can campaign using this issue. To be successful, this risky strategy implies that voters recognize the party’s expertise and concern has a strong salience among a substantial fraction of the electorate. A higher degree of nicheness indicates that parties on average tend to formulate more specific electoral platforms and expect to benefit from their issue specialization. The second strategy is more conventional and concentrated on popular topics of political debate. Party’s adherence to the dominant direction of the political discussion is derived from the idea that voters are more attracted by parties which stress major problems of the day (Ansolabehere & Iyengar 1994). This happens because citizens assume that such parties are more sensitive and better informed. On the other hand, parties that stress their distinctive issues may fail to represent the electorate’s needs (Sides 2006).

Mentioned strategies are well reflected in two models of party organization – catch-all and niche. Archetypical niche party is expected to be an activist, and policy-driven organization with the stable electorate. Catch-all party, on the contrary, is usually associated with broad, indistinctive electoral platforms, and loose connections with voters. Due to the vote-maximizing incentives, catch-all parties primarily consist of hired professionals that help parties to run more effective electoral campaigns. The mainstream strategy of a catch-all party does not necessarily mean that voters who prefer specific issues ignore this party and elections in general. Sometimes catch-all parties have a clear advantage on distinctive matters if there is no niche competitor that incorporate this issue. We should always remember that different combinations exist, but party systems that primarily consist of catch-all parties should be less segmented, as catch-all parties always try to secure their electoral fortunes by occupying space closer to the median voter and campaigning over a broad range of issues.

Existing niche party studies attributed a variety of characteristics to niche parties’ behavior. According to Adams et al. (2006), niche parties are less responsive to shifts in public opinion than their mainstream opponents. Ezrow et al. (2010) noted that niche parties are more receptive to their supporters, while mainstream parties are more sensitive to global shifts in public opinion. Later studies conducted by Dassonneville (2018) provides alternative findings and suggests that there is
no substantial difference in the way how niche and mainstream parties change their ideological positions. Meyer & Wagner (2013) studied incentives that make parties changing their profiles from niche to mainstream and suggested that an electoral defeat could motivate parties to adopt more mainstream profile, at the same time mainstream competitors are unlikely to narrow down their profile in case of losing votes. In this way, niche strategy requires electoral stability, as narrow programmatic offers have limited ability to attract voters concerned with other issue segments. Niche parties are expected to have a solid electoral base, which can hardly be created in a highly uncertain environment. Frequent vote-switching could be a good reason for parties to broaden their programmatic offer.

Ezrow (2010) studied how electoral laws and size of the party system impact the number of niche parties and their electoral success. In his research, Ezrow reported that electoral rules play an important role in niche party success. It is expected that more fragmented and more proportional systems increase the number of niche parties and their competitiveness. Here the number of niche parties in the system is associated indirectly with party system proportionality, as it is suggested that small parties benefit from proportionality, while niche parties tend to be smaller than mainstream ones.

**Polarization**

Polarization works with parties left-right placement and studies the diversity of ideological party positions among which voters can choose. (Rohlfing & Schafföner, 2019). Even if parties play on the same electoral field and emphasize similar policy issues, they cannot produce identical electoral platforms, and that is the reason why parties are always placed on the certain distance from each other in the ideological space.

According to Dalton (2008), several assumptions about different polarization dynamics in two-party and multiparty systems already existed in the spatial model presented by Downs (1957a). He concluded that in multiparty systems, ideology plays an active role in the electoral process and parties underline their distinctive profiles rather than resemble profiles of each other (ibid p.127). On the other hand, a movement towards the median voter position is always the best strategy for parties in the two-party system.

Cox (1990) proposed the idea that polarization is derived from electoral laws and parties’ strategic decisions. Office-seeking or vote-seeking parties divide space to maximize their chances of gaining seats in a parliament. Parties’ locations in the system are dictated by optimal positioning...
strategies, which in turn are different in party systems dominated by centripetal incentives and those dominated by centrifugal stimulus (ibid p. 927). In their review of Cox’s model, Andrews & Money (2009) assumed that it predicts convergence for all types of two-party systems and dispersion for all kinds of multiparty systems. They also add that mentioned Cox’s argument proves the initial idea of Downs that electoral laws influence party positioning indirectly through the number of parties in the system.

In his studies of a majoritarian and proportional system, Dow (2001) advances arguments presented by Cox. He assumed that majoritarian systems promote vote-seeking behavior because the probability of coalition government is low in such a system. As a result, parties expected to move closer to the position of the median voter. At the same time, proportional systems are intended to reduce vote-seeking behavior and have more parties, whose vote-maximizing positions are located closer to the extremes of the ideological spectrum. In proportional systems probability of coalition government is higher, therefore parties have an opportunity to achieve their policy goals with a relatively small number of seats in parliament (Dow, 2001, p. 111). In this fashion, degree of proportionality changes optimal ideological positions of parties, which rely ‘on the marginal trade-off between winning an additional seat and the likelihood of being included in the governing coalition’ (ibid, p. 112). Here the emphasis on the coalition bargaining explains why parties in multiparty system choose to occupy their unique position rather than maximize their support by moving towards the median voter’s location. Additionally, the author suggests that governments in a proportional system should reflect better interests of a diverse electorate (ibid). Dow’s empirical findings proved his expectations and showed that parties in majoritarian systems parties place themselves closer to the ideological center than in proportional systems (ibid, p. 122).

Here we talk a lot about the relationship between parties’ locations in the ideological space and number of political parties. As it was shown previously, studies of electoral polarization frequently distinguish two main categories of party systems – two-party and multiparty. However, in reality, different combinations exist, and it is always better to have an accurate quantitative measure of the party system size. Party system fractionalization concept is more capable of showing us the degree to which electoral competition is ‘dominated by a few parties or divided among many parties’ (Powell, 1982, p. 80). The best-known method of measuring party system fragmentation is developed by Laakso & Taagepera (1979). Their measurement method, in the simplest explanation, reflects the distribution of power in the party system. Party system fragmentation is an essential analytical tool because parties with fewer seats in parliament have less agenda setting opportunities. A variety of studies registered a strong association between a party system fragmentation and the degree of polarization. This argument is strongly intuitive, because less
fragmented party systems provide parties with more room for maneuver and voters with fewer options, whereas fragmented party systems are more competitive, and each party tries to find its own location, that in theory should increase the ideological distance between parties.

There is a temptation to assume that linear relationship between the number of parties in the system and the degree of polarization exists. Sartori (1976) believes that counting matters as it represents how political power is distributed or concentrated. In addition, an increase in the party system fragmentation creates a greater number of interaction streams, and thus makes the party system more complicated (ibid, p. 120). Even though the number of systematic parties impacts the way how parties interact, polarization does not derive directly from party system fragmentation, as a variety of outliers can be observed. Pelizzo & Babones (2007) submit that the degree of polarization potentially could be low in highly fragmented party systems, just as a high level of polarization can be observed in not fragmented systems. Nevertheless, the idea that larger party systems promote the greater spread of ideological positions can be theoretically reinforced by the phenomenon of electoral ‘squeezing’ introduced by Cox (1990). This phenomenon refers to the situation when party’s ideological placement (presumably in the center of voter distribution) is pressurized by other competitors from each side, and thus he cannot get any support from voters located next to its closest competitors. In the described situation, the party is behind the eightball and have strong incentive to occupy a position outside of the central cluster (Cox, 1990, p. 914).

The broad study later conducted by Ezrow (2008) included hypotheses of the positive influence of proportionality and party system size, but it concluded that spatial incentives might not be as good in explaining party system ideological extremism as it appeared from the first sight. Ezrow didn’t find any evidence that the degree of party system extremism increases with greater proportionality or greater fragmentation (2008, p. 495).

**Polarization vs Aggregate nicheress**

A brief overview of existing scientific literature related to polarization and aggregate nicheress shows that both concepts address the same question from different points of view. Both concepts are intended to capture how much parties differ from each other within a given context, and how broad the range of options that voters have. The main difference is that one concept (polarization) identifies diversity of a programmatic offer within a party system on the grounds of political parties’ estimated positions in a hypothetical unidimensional ideological space, while another
concept (aggregate n nicheness) does not construct any space and determine party system segmentation based on the relative programmatic offer uniqueness of each party within the system.

Following the logic of Sartori (1976) aggregate party nicheness captures so-called ‘segmentation’, whereas polarization is intended to measure political debates intensity. Sartori suggested that fragmentation of the party system does not automatically imply that political debates are hot there. He even contrasted polarized pluralism and moderate pluralism (ibid, p. 124 – 125). The former entails that dispersion of power is segmented among pragmatic parties, while later indicates that dispersion of power is polarized among ideological parties. In this sense, a combination of party system aggregate nicheness and polarization gives us valuable information on how parties divide unidimensional ideological space and policy segments among each other. Results of both measurements can be derived from the parties’ manifestos, but we should also consider that one method is purely based on spatial theories of competition, whereas another approach emphasizes the importance of issue salience theory.

The term ‘polarization’ in a socio-political context oftentimes has a negative connotation and exaggerates the existence of a conflict. Dalton (2008) submitted that high party system fragmentation combined with ideological disputes are mainly accountable for the collapse of democracy in Weimar and French Fourth Republic (p. 900). The popular perception of the extreme left or right party includes the idea of irreconcilable opposition to the existing political system. However, does extreme ideological position automatically implies that party avoids cooperation with more moderate competitors? It might depend on whether the location was chosen sincerely or strategically. Previously we mentioned Dow’s (2001) assumption that political parties in proportional systems could place themselves closer to the extremes because these positions are more beneficial for them than moving towards the ideological center. This leads us to the idea that great ideological distance between parties does not immediately make them less cooperative.

Greater aggregate nicheness indicates that parties’ programmatic offers overlap less, and this could lead to a more complex decision-making process in the government. On the other hand, parties with narrow distinctive policy profiles often appear to be good coalition partners, as long as their interests are not intertwined.

Overall, we can say that the same forces that decrease party system polarization are expected to decrease aggregate uniqueness of the party system. For example, a decrease in the party system fragmentation or party system proportionality should negatively affect polarization and aggregate nicheness simultaneously. By that logic, we expect that ideological polarization and aggregate nicheness should move in the same direction.
2.3 Research hypotheses

We already provided a conceptual background and literature overview regarding our research questions. Now, it is time to outline and illustrate our main research hypotheses.

Our first hypothesis is related to the relationship between aggregate nicheness and polarization. Adams et al. (2006) claimed that niche parties occupy extreme ideological positions or at least non-center positions on the left-right spectrum. Nonetheless, in their study, they utilized a party family approach, which is quite distant from more recent party nicheness operationalization methods. My argument is that different combinations could exist and greater aggregate uniqueness does not automatically mean greater polarization. Not all policy issues have pronounced ideological incline. As an example, we could use the anti-corruption policy segment. Obviously, both sides of the ideological spectrum should be against bribery or any other kind of fraudulent behavior, so anti-corruption is not attributed to any side. Still, anti-corruption could have strong salience among voters, especially in the Eastern European countries. We can hypothetically imagine a party that heavily emphasizes the anti-corruption issue category. This party would have a distinctive party offer, but it would be placed closer to the center of the ideological distribution.

On the other hand, if the party narrowly campaigns over distinctive policy issue on the left or the right side, it would lead to greater polarization. In other words, niche party systems, are not always polarized, while polarized party systems in most of the cases are niche. This assumption reflects well Sartori’s (1976) argument that segmentation does not mean polarization, while polarization is always segmented.

Considering mentioned fact, we can safely assume a positive correlation between party system polarization and party system aggregate nicheness, and form the first research hypothesis:

**H1. Polarization and Aggregate nicheness move in the same direction.**

Next two hypotheses are directly related to the problem of party system stability. We assume that two types of party system volatility influence the diversity of a party system in terms of both spatial positions and issue ownership. Theoretically, both types of electoral volatility constitute good indicators of cleavage change or public opinion change. Regeneration volatility shows that the composition of the party system changes. Genuinely new parties and disappearing old ones, in theory, should influence the programmatic diversity within the party system. Alternation volatility primarily shows the stability of established parties’ electorates. Greater number of voters without stable party affiliation could motivate parties to occupy positions closer to the median voter and emphasize issues that popular among the general population, rather than a specific group of voters.
Regeneration volatility indicates that either new party entered the system or previously stable party exited the system. New parties are frequently associated with new or previously neglected issues. Also, new competitors tend to be smaller and have fewer resources than established competitors. Wagner & Meyer (2014) suggested that parties with fewer activists and resources are more likely to concentrate on a limited set of issues and engage less in debates over popular topics. From this, we draw our second hypothesis:

H2. As Regeneration Volatility increases, aggregate party system nicheness and party system polarization should also increase.

High level of alternation volatility indicates that citizens tend to switch their votes between stable parties. Alternation volatility shows that voters do not have a stable connection with parties, but still prefer to support parties that are already in the system. To adopt a more distinctive profile, parties have to be sure that they would receive stable support, otherwise concentrating on issues that do not concern anyone makes no sense. If parties unsure about the loyalty of their electorate or about their electoral fortunes, strategically it makes more sense to engage in a mainstream political debate and occupy ideological position closer to the median voter. Therefore, our third hypothesis looks as follows:

H3. Increase in Alternation Volatility leads to a decrease in party system polarization and party system aggregate nicheness.
3. Operationalizations

This chapter is intended to present and discuss existing nicheness, polarization, and electoral volatility operationalization techniques. Here I show the strengths and weaknesses of each concept measurement techniques and then choose methods the most suitable for this research measurement methods.

3.1 Nicheness operationalization

Based on used methods existing niche party concept’s operationalizations can be roughly divided into three groups: 1) early investigations inspired by Downsian ideas and based on party family approach (Meguid, 2005; Adams et al., 2006); 2) studies that use party manifestos and calculations to identify niche parties, but still advocate dichotomous measurements (Wagner, 2012); 3) studies that assign nichness scores to every party in the system (Meyer & Miller, 2015; Bischof, 2017).

An in-depth examination of a niche party phenomenon has been started with simple niche/mainstream binary opposition. It might appear at first sight that such distinction is an obstacle to the elaboration of the single well-recognized operationalization method, as boundaries are arbitrary, and scholars could use different categorization criteria. Still, such approach is a good starting point that made it possible for scholars to distinguish niche parties from mainstream and understand better the essence of niche party phenomenon and test several hypotheses about niche party behavior (Meguid, 2005; Adams et al., 2006; Ezrow, 2010).

Meguid (2005, 2008) uses a binary measure of niche parties and applies a defined set of criteria to differentiate mainstream and niche parties. These criteria suggest that niche parties (1) prioritize non-economic novel issues outside of existing dimensions of electoral competition; (2) raised topics are not only novel but can also cross-cut traditional electoral competition alignments; and (3) niche parties very specific programmatic statements (Meguid, 2005, p. 347 – 348). These criteria are drawn from her Position, Salience, and Ownership theory as existing spatial theory toolkit cannot fully encompass interactions between parties in issue-based competition. (Meguid, 2008, p.27). Standard spatial theories imply that ideological position is the only thing that matters, and rational voter should use proximity to make decisions, while parties move within a single dimension to attract more voters. According to Meguid, we should consider saliency and ownership factors and recognize that parties can compete by using all three elements (ibid).
Operationalizations created by Meguid (2005, 2008) and Adams et al. (2006) share some similarities, as both are based on Downsian spatial ideas, and both suggest a dichotomous measure of niche parties. Nevertheless, they are quite different in several respects. For example, the framework presented by Adams et al. implies that parties are rendered as a niche based on their overall left-right noncentrism, which means that parties can compete on non-economic and economic issues and still be defined as a niche party (Wagner, 2012, p. 850). Meguid, in contrast, stresses that niche parties are not just extreme versions of mainstream parties.

We can easily argue that operationalization presented by Adams et al. is arbitrary as it differentiates niche and mainstream parties based on a simple assumption that parties representing an extreme ideology or non-centrist niche ideology should be called niche. As any approach that does not include precise measurements, this operationalization leaves us a lot of questions. How far a party’s position should be from the ideological center to code it as a niche party? Why simply labeling parties instead of elaborating criterions or measurements? Scholars explicitly state that they used the famous Left-Right index (RILE) in their model, still, they decided not to apply it in their measure of niche party and used family membership criterion.

Wagner (2012) took a step forward and departed from operationalizations that use a family approach. Previous definitions can roughly be called precise, as they use the party’s ideology as a primary source of information. Instead of concentrating exclusively on voters’ perceptions and expert assessments, he decided that niche (mainstream) party status should also be derived from party manifestos.

Following his conceptualization, Wagner argues that niche party status should rely on two basic criteria: (1) how much parties de-emphasize economic issues; (2) whether parties have a high emphasis on non-economic issues (Wagner, 2012, p. 852 – 853). Wagner’s method uses both Manifesto Research on Political Representation (MARPOR) dataset and expert surveys (Laver & Hunt, 1992; Benoit & Laver, 2006) to acquire data about parties’ issue salience. Wagner does not use all 56 categories that could be found in MARPOR dataset, instead, he chooses 1 economic and 9 non-economic issue dimensions. Besides, he uses an average of two manifestos written for elections at time t and time t – 1 to address grievances regarding random fluctuations in MARPOR data. When issues on economic category and 9 non-economic categories are calculated, he compares it with mean issue emphasis of all other parties in a given system. The niche party status is assigned to parties whose issue emphasis is one standard deviation lower than mean issue emphasis of rest parties on economic category and one standard deviation higher than mean issue emphasis of rest parties in the system on non-economic categories. To make his measurement
more reliable and ensure that niche party’s focus is high within the party system, in general, he adds additional conditions for manifesto data and expert surveys (Wagner, 2012, p. 853 – 854). For parties’ programmatic statements, he suggests that the party should devote at least 10 percent of its manifesto to issue to get niche status. Additional condition for the expert survey is that issue emphasis has to be ‘one weighted standard deviation above the weighted mean salience of all issues’ (ibid p. 854).

Abovementioned operationalization is a first attempt to develop a precise measure of niche party concept that does not rely on qualitative characteristics. Wagner used calculations to identify a party’s status, but still, he adheres to dichotomous measure because he didn’t find out how to present nicheness as a combined value. For him, it was necessary to consider the extent to which party fulfilled both criteria (ibid). Presented measurement helps him to test the hypotheses previously developed by other scholars and to bring new research dimensions. Meguid’s (2005, 2008) assumption about niche parties’ size and age is proved in Wagner’s research. He noted that niche parties tend to be smaller and newer than mainstream rivals. He also added that there is no great ideological difference between niche and mainstream parties. Another finding is that the number of niche parties tends to be higher in more fragmented systems (Wagner 2012, p. 2012).

Meyer and Miller (2015) believe that dichotomous approach is limited, and they state that it is more important to understand how much attention party pays to an issue and as a result understand to which degree one party is more considered as a niche party than others. They suggest that niche party concept is not attributed to any specific type of party and should be treated as a characteristic that to a certain extent, could be found in any political party profile. Following these ideas, Meyer & Miller developed a measure that captures the nicheness quality of all parties in a party system. Their measure calculates weighted mean parties’ emphasis for each policy issue excluding given party and then compares it with issue emphasize of a chosen party. Then their nicheness measure ‘adds up the deviations on all relevant policy dimensions and divides by the total number of policy dimensions’ (ibid p. 262). The equation of this method is as follows:

\[
Nicheness = \sqrt{\frac{1}{N} \sum_{i=1}^{N} (x_{ip} - \bar{X}_{i,-p})^2}
\]

where \(x_{ip}\) – ‘emphasize of party \(p\) on policies in policy dimension \(i\)’

\(\bar{X}_{i,-p}\) – ‘average emphasis of all other parties (excluding \(p\)) on policy dimension \(i\), weighted by party size’.
Then to compare political parties and make meaningful assumptions about the system they suggest standardizing results of the first equation. The standardizing formula is as follows:

\[
\text{Standardized nicheress} = \sigma_p - \mu_{-p}
\]

where \( \mu_{-p} \) – ‘weighted by party size mean nicheress of the \( p-1 \) rival parties’

\( \sigma_p \) – unstandardized nicheress score

Bischof (2017) developed party nicheress measurement method that strongly resembles the technique developed by Meyer & Miller. Nevertheless, two crucial differences should be discussed here. Firstly, he redefined original formula created by Meyer & Miller and proposed to exclude party size weights from it and reduce the number of relevant issue segments to 5 (Ecology, Agrarian, Regional, Extreme Right, Eurosceptic). Secondly, he introduced specialization index to understand how diverse manifestos are within the system. First changes echo with Bischof’s interpretation of a niche party, as a party that narrowly emphasizes historically defined market segments. Second adding gives us information about the degree of party’s specialization. Bischof claims that party specialization is an important criterion that set by parties, while their market shares are primarily defined by competitors (Bischof 2017, p. 228). Inclusion of the party offer specialization is an important step forward, as all previous nicheress measurements based their nicheress estimates based on political parties’ interplay, while ignoring the party’s own self-assessment. In this sense, measuring party’s issue specialization illustrates a party’s intention to narrow down its programmatic offer to become a niche competitor.

Although Bischof’s conceptualization and operationalization include well-based additions that help us study nicheress concept from another point of view, still in our research we will concentrate on nicheress measurement method suggested by Meyer & Miller (2015). In its current form, Bischof’s approach effectively captures nicheress tendencies in European nations that have well-defined party families and a long history of electoral competition. At the same time, our
research requires measurement that avoids a priori assumptions about the nature and structure of policy dimensions.

For our cross-nation comparison of party system aggregate nicheness we calculate unstandardized estimates of party nicheness, as it was recommended by Meyer & Miller (2015, p. 262). Then to get aggregate uniqueness of the party system, we calculate the weighted average mean of parties’ individual unstandardized nicheness scores. Party system size is used as a factor that determines each party’s contribution to the final score. Nicheness scores are calculated with the help of ‘manifestoR’ package of an open-source statistical software ‘R’. All relevant data is obtained from a dataset created by Volkens et al. (2018).

3.2 Polarization operationalization

Party positions

Before we dive deep in the party system polarization concept operationalization we should briefly discuss how political parties’ ideological positions defined. The first thing we must address here is that ideological space and political parties’ individual positions are not shaped by the forces of nature, and hence constructed by people through communication and interpretation processes. Another important thing is that political discussions are rich in topics, thus politics cannot be reduced to social welfare, economics, or any other matter. Various discussions raise the problem of multidimensionality and suggest that most of us need ‘more than one dimension to describe important political interactions’ (Benoit & Laver, 2006, p. 14). These are two main reasons why anyone who decides to combine a party’s positions on different topics faces validity and reliability issues of his or her aggregation method.

Ezrow identified primary sources of information about parties’ policy positions and concluded that there is no consensus regarding this issue, as a result, variety of studies prefer different ways of data collection (2008, p. 495). Expert opinions, national election surveys, and content analyses of parties’ manifestos describe parties’ placements from various points of view. In this research, we estimate parties’ positions based on their election manifestos, and there are a lot of good reasons to do so. The first reason and probably the most important one is that party manifesto is a unique document that represents political parties’ collective vision. Ideally, party manifesto should be composed and approved through the multi-stage discussion (Budge, 2001, p. 211). Party manifesto plays a central role in the campaigning because party members write them with strategical goals in mind. As a central document, a manifesto is expected to predict messages designed for other
communication channels like public statements or advertisements. Also, manifestos are very straightforward, because they use simple massages and repetition to make their points understandable for everyone. In addition, party manifestos are written for specific elections within a particular period, which could help us avoid expert and popular misjudgments about parties’ behavior (ibid). On the other hand, the reliability of content-analysis is frequently subjected to criticism because of a human factor. Coders often assign politically meaningless parts of the text to political categories or assign statements to the wrong side of the left-right spectrum, thus systematic misclassification becomes a disturbing problem (Mikhaylov et al., 2012, p. 90).

To estimate individual party positions and polarization, we use data collected by the Manifesto Project. In the MARPOR dataset, we can access hand-coded data on programmatic profiles of political parties in more than 50 countries. The dataset is mostly consisting of information about parties in the European party system, still, it also covers several states located outside of the European continent. To date, MARPOR dataset has remained the most comprehensive collection of information about the content of parties’ manifestos. Previously we mentioned that their content-analysis coding scheme includes 56 categories reflecting different policy issues plus one category for text units containing no politically meaningful information. The numerical value of each category is proportional to the amount of space in the dataset devoted to issues represented by this category. The dataset includes only so-called ‘relevant’ parties that won at least one seat in the legislature or two seats in parliaments of Central and Eastern Europe. Analytical usefulness and popularity of the dataset can be explained by the fact that it includes information about electoral platforms in countries that significantly differ from each other in terms of culture, economic performance, and history. The broader coverage creates opportunities for developing new hypotheses about party systems and testing old ones in new environments. In addition, dataset categories constitute a very flexible basis for time-series and cross-sectional comparisons.

There is a wide range of opinions on how we should define the left-right spectrum, and whether we have to do it at all. The general meaning of the left-right spectrum in a given context can be either assumed as a self-evident thing or constructed from ideas that stand behind individual policies (Benoit & Laver, 2006, p. 129 – 130). We can argue that assumed, self-evident meaning is no better than labeling in the context of ideological space analysis, thus we are a lot happier with a definition of the left-right dimension derived from individual policy positions. Benoit & Laver has distinguished deductive or a priori, and inductive methods of constructing left-right spectrum (ibid, p. 130-131). The deductive method implies that an observer must choose a topic or a combination of topics that would provide us with a useful representation of a left-right scale in a
particular party system (ibid). Inductive method, on the contrary, implies using relative positions of actors as a signpost and draw an image of the ideological space from scratch.

Variety of studies express concerns regarding the results of both approaches. The RILE index developed by Laver & Budge (1992) is the most widely used embodiment of the deductive method of identifying parties’ positions. The RILE index was criticized by Pelizzo (2003) for misrepresenting party positions and being more capable of presenting the direction of ideological change rather than the party’s ideological self-placement. Meanwhile, inductive methods construct complex ideological spaces that are uneasy to interpret (Mölder, 2016, p. 45). Also, Benoit & Laver believe that inductive approach fits better researches intended to reveal substantive meanings of left and right where it is not clear in advance (2006, p. 130).

Budge (2013) argues that a priori nature of the RILE index is a good reason for scholars to use it in different party systems in all periods, as it doesn’t require any knowledge about the content of ideological discussion in a given context and its values always have the same meaning. To combine all relevant policy positions into a single ideological dimension, it must be assumed that positions on relevant dimensions are highly correlated. Budge submits that internal logic of the RILE index does not imply that its left or right integral parts co-vary with each other across empirical data, rather political theorists of the early twentieth century assumed the relationship between these components (2013, p. 3). An additional argument in favor of using RILE index to estimate parties’ self-placement is its relative simplicity and straightforward reasoning. It uses 26 purely leftist or rightist categories that could be found in the MARPOR dataset, and all quasi-sentences in electoral manifestos are sorted according to these left and right policy categories. Afterward, the volume of leftist and rightist policies calculated separately and then combined value of left categories is deducted from the combined value of right categories (Pelizzo, 2003). The consistency of the results over time can be viewed as an additional justification for using the index. Different studies used different methods to study the robustness of the RILE index results and concluded that estimates of parties’ locations appear to be stable over time (Meyer & Jenny, 2013, p. 181 – 182; McDonald & Budge, 2014, p. 76).

Regardless of its strengths, the index is widely associated with validity issues. It is probably the most questionable part of the framework presented by Laver & Budge (1992). As long as scholars treat parties’ locations in space as an essential individual and systematic property, they want to be sure that the index does what it has to do. The easiest and the most obvious way to check the validity of RILE index results is to cross-check it with results of expert surveys. The estimates based on expert survey data and those based on manifesto data frequently appear to be different.
Benoit & Laver (2006) demonstrated that their expert survey data measures the same phenomenon as manifesto data does. In addition, they were unable to identify a pattern that would explain registered noise (ibid). Study conducted by Keman (2007) shows that scales produced by expert survey method and manifesto method have low internal variance, but the high variance between two scales. Mentioned findings leave the method selection to the discretion of researchers. We can say that the validity of a particular method strongly depends on what type of inference we are expecting.

The validity of the RILE index can also be tested by comparing its methodology and rationale with empirical findings. Mölder (2016) assumed that RILE index has meaning only if left and right categories represent opposite sides of the unidimensional ideological space. Following this logic, the negative correlation should exist between leftist and rightist policy categories (ibid, p. 40). His analysis revealed that the assumed relationship only partially can be proved by the empirical findings. The connection is either weak in the case of Western European nations or absent in the case of countries that experienced communist rule (ibid, p. 45).

Even if we consider all shortcomings of the RILE index, still it mostly fit our research. Party ideological self-placement and nicheness are two different characteristics derived from data provided by MARPOR dataset. So, to keep results consistent, it makes a lot more sense to take data from one source of information.

**Polarization**

As it was mentioned previously, the concept of party system polarization should reflect aggregate ideological distances. Scholars frequently measure polarization in a unidimensional political space, but there is no specific reason to work only with one dimension or even dimensions in general. As it was suggested by Mölder (2017), it is also possible to calculate political distances between parties based on their issue salience weights. The main benefits of such approach are that we do not need to combine all party positions in one single dimension and that studying overlaps of policy categories could tell us more about the closeness of two parties than more conventional ideological measures (ibid, p. 34). We calculate polarization using traditional left-right estimates of parties’ positions because our research hypotheses are primarily drawn from existing scientific advancements that use them. In addition, our research also includes calculations of party distinctiveness based on the salience of parties’ policy positions that partially resemble the mentioned method.
The complexity of the unidimensional space is not limited to the process of its construction. In reality, an ideological scale can be divided between parties in numerous ways, and the most laborious task here is to develop a polarization measurement method that would cover all possible options. Schmitt (2016) identifies five possible methods of measuring polarization (variance, standard deviation, mean absolute difference, range and counting extreme parties) and claims that none of them can describe properly each theoretical pattern of party system polarization (p. 14). Nevertheless, he suggests several points that could help researchers to receive more reliable findings related to party system polarization. Firstly, a combination of standard deviation, range, and counting number of extreme parties should better capture polarization than each measure taken separately (ibid, p. 27). Secondly, it is suggested that we should use only relevant parties, as it reduces the need to weight their results (ibid). Thirdly, the notion of ideology and specific method of estimating parties’ location in space should be carefully chosen by the researcher (ibid, p. 28).

Here we prefer to concentrate on standard deviation and range measurements of party system polarization, as they do not require arbitrary decisions, and in principal capture most polarization patterns. The method of counting extreme parties requires defined threshold and in general more useful when we want to study electoral successes of extreme parties, rather than an overall distribution of opinions.

The most widely used method of measuring party system polarization based on the standard deviation is developed by Dalton (2008). His operationalization of party system polarization is built on two basic ideas: ‘(a) the relatively position of each party along the Left-Right scale and (b) the party’s position weighted by party size (because a large party at the extreme would signify greater polarization than a splinter party in the same position)’ (ibid, p. 906). He calls his method Polarization index, and its formula suitable for RILE estimates looks as follows:

\[
\text{Polarization} = \sqrt{\frac{\sum_{i=1}^{n} V_i \times \left( \frac{(p_i - w\text{mean})}{100} \right)^2}{n}}
\]

where \( p \) – party’s left – right position

\( V \) – vote share of party

\( w\text{mean} \) – weighted left-right position weighted by vote share of parties

Source: Dalton (2008)
Dalton’s polarization index could theoretically range from 0 to 10, where 0 indicates that all parties are located at the same point of the left-right spectrum and 10 means that all parties in the system are located on the extremes of the ideological dimension (Dalton, 2008, p. 906).

The range-based method is even less complicated than the one proposed by Dalton (2008). This operationalization technique measures polarization as a simple distance between two extreme parties. Usually, it does not include any party size factors that, in other measurements, indicate the relative importance of parties within the system. Theoretically, the unweighted range should effectively capture the party system’s centrifugal and centripetal tendencies (Schmitt, 2006, p. 13).

Here logic dictates that we should not only discuss theoretical strengths and pitfalls of both techniques but also compare them in terms of empirical findings. Here we present polarization estimates calculated using both methods. In the table, the names of both methods refer to their aggregation techniques. It means that ‘range polarization’ reflects the distance between two extreme parties and standard deviation polarization signifies Dalton’s original polarization index.

<table>
<thead>
<tr>
<th>Country</th>
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<th>Standard deviation polarization</th>
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<td>Method 2</td>
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Table 1. Polarization results by country and by method

Figures from Table 1 illustrate that a high degree of polarization is a lot less common than a low degree of polarization. Both range-based and standard deviation measurements of polarization simultaneously captured the highest level of polarization in Israel (6.3 and 4.41). At the same time, according to both operationalization techniques, the least dispersed party positions were identified in Armenia (0.58 and 0.2 respectively). Interestingly in the original paper written by Dalton (2008) both post-communist countries and those that did not experience communist rule frequently demonstrated polarization scores higher than 3, whereas in our empirical findings obtained using the same measurement only Israel’s score exceeds this number. We can explain this meaningful
difference by the fact that Dalton based his empirical findings on public perceptions of parties, and we in turn based ours on parties’ self-placements derived from their manifestos.

Furthermore, in our findings, post-communist countries have, on average, very tight ideological spaces. Serbia, with the ideological distance of 3.95 and a polarization index of 2.51 can be considered as an outlier. Nevertheless, in absolute terms distribution of ideological positions in Serbia is still rather tight. There are two possible explanations of relatively low dispersion of ideological positions in post-communist party systems. The first option is that centripetal tendencies truly dominate these party systems, and parties prefer to occupy positions closer to the median voter. We can imagine a situation that in a highly uncertain environment or the case of highly disloyal electorate, parties could choose to secure their electoral results and adopt more moderate ideological profile. Another explanation has less to do with parties’ strategical decisions than with more mechanical peculiarities of observed tendency. It was discussed previously that the deductive method of estimating party positions entails that general universally applicable notion of left and right exist. Our findings can be interpreted in the way that this notion does not necessarily exist in the case of post-communist countries. The electoral platforms’ content in these countries created without taking into account that left, and right policies should contradict each other and without meaningful influence of early modern political theorists. Thus, the unrestricted process of combining opposing policy positions in manifestos can produce so-called ‘center bias’. This argument echoes with findings presented by Mölder (2016) that questioned the validity of RILE index in post-communist party systems (p.45).
Now, when we identified that in the case of minimum and maximum polarization, both measurements produce comparable results, we can proceed and check whether such consistency exists in other cases. To compare two polarization measurements methods, we plot the empirical results of both methods. Figure 1 shows that put together the results of two polarization measurement techniques constitute a good linear fit. Moreover, there are not many data points that show considerable variation away from the line of best fit. The Pearson correlation coefficient is equal to 0.86 in this case, which means that the empirical results of one polarization measurement method explain approximately 74 percent of the variance in the results of another approach.

The association between two variables is not ideal, but still quite strong, which means that they mostly capture the same polarization tendencies and could be used interchangeably. For that reason, there is no need for us to conduct in this research separate tests with each method’s empirical results. Later in this research, we will use Dalton’s (2008) method as a more nuanced one. To calculate polarization index scores, we obtained all necessary data from MARPOR dataset (Volkens et al., 2018).
3.3 Electoral volatility operationalization

Pedersen (1979) have created understandable and universally applicable systematic measure of electoral volatility. In simple terms, it aggregates each party’s individual changes in electoral performance between two elections within a party system. An electoral volatility index equation is as follows:

$$Electoral\ volatility = \frac{\sum_{i=1}^{n}|P_{it} - P_{i(t+1)}|}{2}$$

where $n$ – number of parties in the system

$P_{i}$ – percentage received in time periods $t$ and $t + 1$

Source: Powell & Tucker (2014, p. 124)

Powell & Tucker stick to the idea that the index of electoral volatility refers to two different phenomena, so they decided to disaggregate this index into measure that captures instability caused by party entry/exit (Type A Volatility) and measure that captures volatility among stable parties (Type B Volatility) (ibid, p. 126). Authors remark that it is possible to obtain volatility caused by new political parties or old disappearing parties only if we employ an arbitrary threshold that indicates whether a party is inside or outside of the political system. In their research, Powell & Tucker applied 2 percent threshold. Later, Chiaramonte & Emanuele (2017) utilized operationalization method and framework developed by Powell & Tucker and suggested to use 1 percent threshold. They also suggested that Type A volatility should be called ‘regeneration volatility’ and Type B volatility is better to call ‘alternation volatility’. Here we present the regeneration volatility equation:

$$Regeneration\ volatility = \frac{|\sum_{o=1}^{n}P_{ot} + \sum_{w=1}^{n}P_{w(t+1)}|}{2}$$

where $o$ – old parties that participated only in elections at the time $t$

$w$ – new parties that took part in election only at time $t + 1$

$n$ – number of parties in the system

$P$ – denotates percentage received at time $t$ and $t + 1$


Alternation volatility formula looks as follows:
\[\text{Alternation volatility} = \frac{\sum_{i=1}^{n} |P_{it} - P_{i(t+1)}|}{2}\]

where \(n\) – number of parties in the system

\(P\) – denotes vote share of parties that contested elections at time \(t\) and \(t + 1\)


From first sight, both measurement techniques are relatively easy to use, but the hardest part starts when we begin investigating what kind of parties can be labeled as ‘truly new’. Powell & Tucker (2014) present quite a complex scheme of how votes should move in the case of party split or merge. This scheme, in theory, provides more precise volatility estimates, but its high complexity creates problems for anyone who would decide to replicate their method. Chiaramonte & Emanuele (2017) suggested to include in the regeneration volatility calculations only the cases when the new party was launched by individual who exited old party or was expelled from it, while all other cases (splits and mergers) should be included in the calculation of alternation volatility.

For my research, I took data on Western European party systems from a dataset created by Emanuele (2015). The author calculated both types of electoral volatility in countries outside of Western Europe with the help of suggestions presented by Chiaramonte & Emanuele (2017). In this research, information on election results was collected from Kollman et al. (2018) or countries’ national electoral comities.
4. Analysis and results

To study how two types of electoral volatility influence party system polarization and aggregate nicheness, we use data of 48 elections in different countries. In our dataset, each country is observed only once. Due to available data limitations, our observations relatively dispersed in time, but in absolute terms, the dispersion is not critical. Election years range from 2007 to 2017. Still, even if we were able to obtain the most recent data for each country in our dataset, elections are not held at the same time in different countries, so this type of observations are never collected in one point in time.

Our multivariate analysis includes 2 multiple regression models. Models were created to test our hypotheses and to test how well a combination of alternation volatility, regeneration volatility, and control variables explain variances in party system aggregate nicheness and party system polarization. We expect that our regression analysis will show a statistically significant positive association between regeneration volatility and two indicators of party system political configuration (polarization and aggregate nicheness). Alternation volatility, on the contrary, is expected to produce opposite tendency and show a negative association with mentioned dependent variables. Here we also present a set of variables that control for other possible relationships. Given variables should not be treated as purely control variables, as each factor could determine changes in programmatic offers of political parties. It also worth to specify the expected effects of each control variable.

**Fragmentation**

We have included this control variable because both theoretic models and empirical studies suggest that fragmentation positively influence the degree of polarization and number of niche parties in the system (Wagner, 2012; Ezrow, 2010; Cox, 1990). Party system size is operationalized as an effective number of parliamentary parties using the method suggested by Laakso & Taagepera (1979). Data on the effective number of parliamentary parties is taken from a dataset created by Gallagher (2019) or calculated by the author using mentioned measurement technique.

**Ideological center of gravity distance**

In many cases, the relative ideological center of gravity is different from the absolute one. In the case when the distribution of party positions is inclined towards left or right, we still can expect that one party would move closer to the opposite side to get voters, whose views are neglected by other parties. In party systems with relative ideological center closer to the absolute one, we can
expect to register lower polarization and lower aggregate nicheness scores. Ideological center of gravity distance indicates how far the party system’s ideological center of gravity is located from the absolute center of the left-right dimension. To identify the ideological center of gravity, we calculate weighted by party size average mean of each party’s positions. Here the party’s vote share indicates its size. Data on left-right positions of political parties and their vote shares are taken from MARPOR dataset (Volkens et al., 2018).

**Years of democracy**

Following the argument presented by Cox (1990), we assume that in countries with more considerable experience of democracy, party systems have old and established centrist parties with catch-all nature and extensive resources. In such an environment, minor competitors are forced to move away from the ideological center towards the extremes and look for a beneficial issue other than the mainstream one. Thus, we expect older party systems to have higher polarization and aggregate nicheness scores. Years of democracy is operationalized as consecutive years of the existing regime. Data is obtained from Boix et al. (2018).

**Rural population**

A substantial proportion of people leaving in a rural area could indicate possible strength of the rural-urban conflict, which in turn can motivate parties to emphasize free trade or protectionist policies. Also, parties that campaign over policies related to the agricultural sector are more likely to appear in countries with greater rural population or greater importance of the agricultural sector of the economy. Term rural population refers to the country’s inhabitants leaving in the rural areas. Rural population is measured as a percentage of the total population. Data is obtained from the World Bank (2019). Term rural area has a vague meaning, so here each country’s statistical authorities define rural area and rural population separately.

**Inflation**

We can say for sure that politics is not only about an economic issue, still its quite hard to promote the non-economic problems solely when the economy is dysfunctional, and citizens cannot be sure about their future well-being. Unhealthy annual inflation clearly indicates that something is wrong with the national economy. Increase in inflation rate is expected to reduce party system polarization and aggregate nicheness because high inflation effects citizen directly and economic dimension gets even stronger salience. Inflation reflects a percentage change in the average price of a specified basket of goods and services. Here we use annual percentage change to measure the general fit of the economy. Data is obtained from the World Bank (2019).
Table 2. Descriptive statistic of collected data

<table>
<thead>
<tr>
<th>Dependent variables</th>
<th>Mean</th>
<th>SD</th>
<th>Min.</th>
<th>Max.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aggregate Nicheness</td>
<td>4.9</td>
<td>1.57</td>
<td>2.32</td>
<td>7.63</td>
</tr>
<tr>
<td>Polarization</td>
<td>1.44</td>
<td>0.76</td>
<td>0.2</td>
<td>4.41</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Independent variables</th>
<th>Mean</th>
<th>SD</th>
<th>Min.</th>
<th>Max.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regeneration Volatility</td>
<td>5.54</td>
<td>5.66</td>
<td>0</td>
<td>23.71</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Control variables</th>
<th>Mean</th>
<th>SD</th>
<th>Min.</th>
<th>Max.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fragmentation</td>
<td>4.24</td>
<td>1.54</td>
<td>1.61</td>
<td>8.42</td>
</tr>
<tr>
<td>Ideological center distance</td>
<td>9.6</td>
<td>8</td>
<td>0.06</td>
<td>31.97</td>
</tr>
<tr>
<td>Years of democracy</td>
<td>56.77</td>
<td>45.5</td>
<td>10</td>
<td>159</td>
</tr>
<tr>
<td>Rural population</td>
<td>27.74</td>
<td>13.36</td>
<td>2.35</td>
<td>57.5</td>
</tr>
<tr>
<td>Inflation</td>
<td>1.92</td>
<td>2.89</td>
<td>-1.74</td>
<td>12.84</td>
</tr>
</tbody>
</table>

4.1 Polarization and nicheness tendencies

Before conducting multiple regression analysis, we first examine our first hypothesis and illustrate the association between party system polarization and aggregate nicheness. Previously we discussed that ideological polarization and aggregate party nicheness capture combined differences of political parties on different levels of generalization. We figured that mentioned variables are simultaneously affected independent systematic factors as party system proportionality, size, and stability. To support our assumption that aggregate nicheness and polarization moves in the same direction, we present polarization and aggregate nicheness scores of chosen party systems in Table 3.

<table>
<thead>
<tr>
<th>Country</th>
<th>Abbreviation</th>
<th>Year</th>
<th>Aggregate nicheness</th>
<th>Polarization</th>
</tr>
</thead>
<tbody>
<tr>
<td>Armenia</td>
<td>ARM</td>
<td>2012</td>
<td>3.47</td>
<td>0.2</td>
</tr>
<tr>
<td>Australia</td>
<td>AUS</td>
<td>2016</td>
<td>5.84</td>
<td>2.03</td>
</tr>
<tr>
<td>Austria</td>
<td>AUT</td>
<td>2017</td>
<td>3.84</td>
<td>1.42</td>
</tr>
<tr>
<td>Belgium</td>
<td>BEL</td>
<td>2010</td>
<td>4.41</td>
<td>1.99</td>
</tr>
<tr>
<td>Bosnia-Herzegovina</td>
<td>BIH</td>
<td>2014</td>
<td>7.35</td>
<td>1.37</td>
</tr>
<tr>
<td>Bulgaria</td>
<td>BGR</td>
<td>2017</td>
<td>3.63</td>
<td>0.54</td>
</tr>
<tr>
<td>Canada</td>
<td>CAN</td>
<td>2015</td>
<td>4.5</td>
<td>2.16</td>
</tr>
<tr>
<td>Country</td>
<td>Code</td>
<td>Year</td>
<td>P</td>
<td>N</td>
</tr>
<tr>
<td>----------------------</td>
<td>------</td>
<td>-------</td>
<td>---------</td>
<td>---------</td>
</tr>
<tr>
<td>Croatia</td>
<td>HRV</td>
<td>2015</td>
<td>4.94</td>
<td>1.42</td>
</tr>
<tr>
<td>Cyprus</td>
<td>CYP</td>
<td>2016</td>
<td>7.63</td>
<td>1.81</td>
</tr>
<tr>
<td>Czech Republic</td>
<td>CZE</td>
<td>2017</td>
<td>3.56</td>
<td>1.13</td>
</tr>
<tr>
<td>Denmark</td>
<td>DNK</td>
<td>2011</td>
<td>7.13</td>
<td>2.7</td>
</tr>
<tr>
<td>Estonia</td>
<td>EST</td>
<td>2015</td>
<td>3.74</td>
<td>1.18</td>
</tr>
<tr>
<td>Finland</td>
<td>FIN</td>
<td>2011</td>
<td>5.56</td>
<td>1.65</td>
</tr>
<tr>
<td>France</td>
<td>FRA</td>
<td>2017</td>
<td>4.04</td>
<td>1.45</td>
</tr>
<tr>
<td>Georgia</td>
<td>GEO</td>
<td>2016</td>
<td>2.32</td>
<td>0.65</td>
</tr>
<tr>
<td>Germany</td>
<td>GER</td>
<td>2017</td>
<td>3.37</td>
<td>1.69</td>
</tr>
<tr>
<td>Greece</td>
<td>GRE</td>
<td>2015</td>
<td>6.81</td>
<td>2.42</td>
</tr>
<tr>
<td>Hungary</td>
<td>HUN</td>
<td>2014</td>
<td>5.98</td>
<td>2.2</td>
</tr>
<tr>
<td>Iceland</td>
<td>ICE</td>
<td>2013</td>
<td>5.61</td>
<td>1.62</td>
</tr>
<tr>
<td>Ireland</td>
<td>IRE</td>
<td>2016</td>
<td>4.17</td>
<td>1.01</td>
</tr>
<tr>
<td>Israel</td>
<td>ISR</td>
<td>2015</td>
<td>7.33</td>
<td>4.41</td>
</tr>
<tr>
<td>Italy</td>
<td>ITA</td>
<td>2013</td>
<td>7.39</td>
<td>2.26</td>
</tr>
<tr>
<td>Japan</td>
<td>JAP</td>
<td>2012</td>
<td>3.83</td>
<td>1.74</td>
</tr>
<tr>
<td>Latvia</td>
<td>LAT</td>
<td>2014</td>
<td>6.9</td>
<td>0.7</td>
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<tr>
<td>Lithuania</td>
<td>LIT</td>
<td>2012</td>
<td>4.32</td>
<td>1.28</td>
</tr>
<tr>
<td>Luxembourg</td>
<td>LUX</td>
<td>2013</td>
<td>2.88</td>
<td>1.04</td>
</tr>
<tr>
<td>North Macedonia</td>
<td>MAC</td>
<td>2008</td>
<td>4.08</td>
<td>1.15</td>
</tr>
<tr>
<td>Mexico</td>
<td>MEX</td>
<td>2015</td>
<td>4.49</td>
<td>0.99</td>
</tr>
<tr>
<td>Moldova</td>
<td>MOL</td>
<td>2014</td>
<td>4.77</td>
<td>0.65</td>
</tr>
<tr>
<td>Montenegro</td>
<td>MNT</td>
<td>2016</td>
<td>7.05</td>
<td>0.36</td>
</tr>
<tr>
<td>Netherlands</td>
<td>NLD</td>
<td>2017</td>
<td>4.3</td>
<td>1.5</td>
</tr>
<tr>
<td>New Zealand</td>
<td>NZL</td>
<td>2014</td>
<td>4.91</td>
<td>1.41</td>
</tr>
<tr>
<td>Norway</td>
<td>NOR</td>
<td>2013</td>
<td>2.38</td>
<td>0.66</td>
</tr>
<tr>
<td>Poland</td>
<td>POL</td>
<td>2011</td>
<td>5.7</td>
<td>1</td>
</tr>
<tr>
<td>Portugal</td>
<td>POR</td>
<td>2015</td>
<td>3.21</td>
<td>0.91</td>
</tr>
<tr>
<td>Republic of Korea</td>
<td>ROK</td>
<td>2016</td>
<td>7.19</td>
<td>0.9</td>
</tr>
<tr>
<td>Romania</td>
<td>ROM</td>
<td>2016</td>
<td>7.32</td>
<td>1.25</td>
</tr>
<tr>
<td>Russia</td>
<td>RUS</td>
<td>2011</td>
<td>3.25</td>
<td>1.27</td>
</tr>
<tr>
<td>Serbia</td>
<td>SRB</td>
<td>2016</td>
<td>7.04</td>
<td>2.51</td>
</tr>
<tr>
<td>Slovak Republic</td>
<td>SLK</td>
<td>2016</td>
<td>4.38</td>
<td>1.42</td>
</tr>
<tr>
<td>Slovenia</td>
<td>SLO</td>
<td>2011</td>
<td>3.9</td>
<td>0.69</td>
</tr>
<tr>
<td>South Africa</td>
<td>SAF</td>
<td>2014</td>
<td>4.68</td>
<td>1</td>
</tr>
<tr>
<td>Spain</td>
<td>ESP</td>
<td>2016</td>
<td>3</td>
<td>1.31</td>
</tr>
<tr>
<td>Sweden</td>
<td>SWE</td>
<td>2014</td>
<td>4.98</td>
<td>2.09</td>
</tr>
<tr>
<td>Switzerland</td>
<td>SWZ</td>
<td>2015</td>
<td>7.25</td>
<td>2.93</td>
</tr>
<tr>
<td>Turkey</td>
<td>TUR</td>
<td>2015 (June)</td>
<td>3.6</td>
<td>0.95</td>
</tr>
<tr>
<td>United Kingdom</td>
<td>GBR</td>
<td>2017</td>
<td>2.7</td>
<td>1.27</td>
</tr>
<tr>
<td>Ukraine</td>
<td>UKR</td>
<td>2007</td>
<td>4.7</td>
<td>0.67</td>
</tr>
</tbody>
</table>

Table 3. Polarization and Aggregate nicheress by nation
The first easily noticeable thing is that aggregate nicheness scores are low in absolute terms. Hypothetically nicheness scores can range from 0 to 100, where 0 indicates that all parties in the system devote the same proportions of their manifestos to the same issues, and 100 indicates that each party in the system emphasizes a separate set of problems and political parties do not intervene each other’s issue space. In reality, in some countries, electoral competition appears to be more segmented than in the other, but a general tendency shows that parties tend to incorporate each other’s policy dimensions. The highest aggregate nicheness score (7.63) was registered in Cyprus, but at the same time party system in Cyprus appears to be moderately (1.81) polarized. The lowest nicheness aggregate nicheness can be found in Georgia (2.32) and Norway (2.38). At the same time, these party systems located close to each other on both dimensions are not the least polarized. In most cases, more polarized systems simultaneously appear to have higher aggregate nicheness scores. Nevertheless, the great variance between these two measurements points out that polarization and aggregate nicheness captures two different phenomena.

Here we construct scatterplot to compare polarization and aggregate nicheness and further investigate the relationship between them. The first thing one may notice in Figure 2 is that results of polarization and aggregate nicheness produce good linear fit, but still, we can see random noise and irregularities in the graph. The Pearson correlation coefficient, in this case, is equal to 0.49, and it indicates that the relationship between aggregate nicheness and polarization has medium strength. Only 24 percent variance in one variable can be explained by the variance in another variable. A second important thing that can be found in the scatterplot is that there are no cases that combine high polarization with low aggregate nicheness. This could indicate that more polarized party systems are at the same time more segmented. By contrast, higher specialization of political parties does not automatically imply greater ideological distance between actors. It indicates that greater specialization does not always motivate parties to move away from the ideological center of the party system. Another explanation is that in the case of countries that strongly deviate from the best fit line, electoral manifestos are compiled without assuming that left and right policies should be mutually exclusive. As a result, programmatic offers differ from each other in terms of issue saliency, but at the same time, they constitute a random combination of left and right policies that moves parties closer to the absolute ideological center.
4.2 Electoral volatility and aggregate nicheress

Here we present results of regression analysis where Aggregate nicheress is a dependent variable. The results of our model that could be found in Table 4 point out that there is no statistically significant relationship between two types of electoral volatility and aggregate nicheress. Which means that it shows no evidence that regeneration volatility and alternation volatility influence party system aggregate nicheress. Moreover, the p-value of F-statistic in model 1 is lower than 0.1, which indicates that the results of these models are statistically significant. Nevertheless, we find out that in this model party system fragmentation is statistically significant due to the correlation with inflation variable. When we omit all other variables, the party system fragmentation predictor becomes insignificant. Here we can claim that party system fragmentation is not associated with party system aggregate nicheress. Results of our model (1.1) contradict finding previously presented by Wagner (2012). On the other hand, the relationship between inflation and aggregate nicheress appears to be statistically significant on the 0.05 level. Increase in inflation indicates that the purchasing power of national currency decreases and consumer prices growing. Inflation is one of the economic performance indicators that influence citizens directly, and our findings illustrate that inflation affects party system aggregate nicheress in the expected direction. In the model 1.2 increase in inflation by 1 percentage point leads to a -0.182 decrease in aggregate nicheress. The negative influence of inflation could be explained by the fact that greater
inflation influences the well-being of the large segments of the population, and thus increases the salience of economic and welfare issues in the party system. Elevated salience of mentioned issues makes them particularly attractive for political parties and motivates them to compete over this dimension. It is essential to point out that aggregate nicheriness decreases not because of the special nature of economic issues, but rather because poor economic performance motivates people to care less about other matters, thus parties are forced to discuss economic policies, or otherwise they risk being labeled irresponsible. Considering empirical range of aggregate nicheriness scores, we can say that 10 percentage points increase in the inflation rate, could lead to a considerable change of the programmable offer distinctiveness within the party system.

Another important thing that has to be mentioned is an overall fit of the model. Here we can observe that the predictive power of our model (1) is low. Here \( R^2 \) is equal to 0.229, which means that the model predicts only 23 percent of the variation in aggregate nicheriness. It also implies that empirical data points widely deviate away from the best fit line.

<table>
<thead>
<tr>
<th>Dependent variable: Aggregate nicheness</th>
<th>1</th>
<th>1.1</th>
<th>1.2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regeneration Volatility</td>
<td>0.039</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Alternation Volatility</td>
<td>-0.061</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fragmentation</td>
<td>0.315*</td>
<td>0.213</td>
<td></td>
</tr>
<tr>
<td>Ideological center distance</td>
<td>0.039</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rural population</td>
<td>0.016</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Inflation</td>
<td>-0.126</td>
<td></td>
<td>-0.182**</td>
</tr>
<tr>
<td>Constant</td>
<td>3.584***</td>
<td>4.001***</td>
<td>5.254***</td>
</tr>
<tr>
<td>N</td>
<td>48</td>
<td>48</td>
<td>48</td>
</tr>
<tr>
<td>( R^2 )</td>
<td>0.229</td>
<td>0.044</td>
<td>0.111</td>
</tr>
<tr>
<td>Adjusted ( R^2 )</td>
<td>0.116</td>
<td>0.023</td>
<td>0.092</td>
</tr>
<tr>
<td>Residual Std. Error</td>
<td>1.480 (df = 41)</td>
<td>1.556 (df = 46)</td>
<td>1.500 (df = 46)</td>
</tr>
<tr>
<td>F-statistic</td>
<td>2.025*</td>
<td>2.099</td>
<td>5.771**</td>
</tr>
<tr>
<td></td>
<td>(df = 6; 41)</td>
<td>(df = 1; 46)</td>
<td>(df = 1; 46)</td>
</tr>
</tbody>
</table>

Note: *p<0.1; **p<0.05; ***p<0.01

Table 4. Results of the multiple regression models with two types of Electoral Volatility as independent variables and Aggregate nicheness as a dependent variable
4.3 Electoral volatility and Polarization

From the figures in Table 5, we can see that our regression analysis did not show a statistically significant association between two types of electoral volatility and polarization. This means that we can decline our initial hypothesis that regeneration volatility is positively associated with aggregate nicheness and polarization. Moreover, our hypothesis that alternation volatility is negatively associated with aggregate nicheness and polarization can also be declined. Surprisingly, our model did not register a positive association between party system fragmentation and polarization. Previously this relationship was suggested by different studies (Ezrow, 2010; Cox, 1990).

Our initial model (1) was statistically significant (F-statistic p-value < 0.05) but showed no statistically significant predictors of the party system polarization. I assumed that it was due to the correlation between years of democracy variable and other independent variables. When I omit years of democracy variable, several other explanatory variables turn out to be statistically significant. In model 1.1, rural population size and inflation have a statistically significant impact on party system polarization. The Rural population size variable is significant at 0.1 level, and results of our multiple regression analysis indicate that a 1 percent increase in the rural population produces -0.016 decrease in the ideological distance. I can say that the relationship between the percentage of rural population and party system polarization is weak because a rural population percentage can range only from 0 to 100. Still, the direction of a relationship is unexpected for me. If we define rural area population as people who live in a low population density area and face physical and social infrastructure issues, rural area population becomes a proxy for the general development of the state, rather than phenomenon that indicates the importance of the rural-urban cleavage suggested by Lipset & Rokkan (1967). The electorate in countries where a substantial amount of population live in underdeveloped rural areas could be less interested in politics in general, so political parties in such states are not motivated to develop well-elaborated distinctive ideological profiles.

In the model with omitted age of democracy variable (1.1) inflation also has a statistically significant influence on party system polarization on the 0.1 level. The relationship appears to be weak between these two variables as 1 percentage point increase in inflation causes -0.070 decrease in polarization. Nevertheless, we should remember that inflation is not limited. In our sample, we do not have countries with an annual inflation rate higher than 13 percent. However, rampant inflation greater than 20 percent could lead to a significant change in party polarization. Explanation here is similar to those we can find in the relationship between inflation and aggregate nicheness. Inflation is healthy only to a certain extent, so higher inflation rate motivates parties to
balance different leftist and rightist economic policies. This balance leads to a more moderate ideological position.

Simple linear regression with years of democracy as an independent variable and polarization as a dependent variable showed a statistically significant relationship between two variables on the 0.01 level. Empirical findings suggest that countries with greater experience of democracy and electoral process have political parties with greater dispersion of ideological positions. It could lead us to a thought that older democracies have well-institutionalized political parties that occupy positions closer to the center of voter distribution, and as a result, we can observe the phenomenon of ‘squeezing’ proposed by Cox (1990). New competitors are restricted from occupying positions between two center competitors and motivated to move closer to extremes to attract voters. Nevertheless, even if the mentioned tendency is present, the effect of current regime age is minimal. 1 additional year of democratic regime increases party system polarization by 0.007. Even 100 hundred years of democracy will not change the ideological distance in the party system meaningfully. It is also worth to mention the overall fit of the models. Our initial model (1) has the highest value of $R^2$ that is equal to 0.321. It means that the model explains approximately 32 percent of the variance in party system polarization. This result suggests that the predictive strength of our models is weak.

<table>
<thead>
<tr>
<th>Dependent variable: Polarization</th>
<th>1</th>
<th>1.1</th>
<th>1.2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regeneration Volatility</td>
<td>0.001</td>
<td>-0.002</td>
<td></td>
</tr>
<tr>
<td>Alternation Volatility</td>
<td>-0.002</td>
<td>-0.003</td>
<td></td>
</tr>
<tr>
<td>Fragmentation</td>
<td>0.104</td>
<td>0.105</td>
<td></td>
</tr>
<tr>
<td>Ideological center distance</td>
<td>0.015</td>
<td>0.013</td>
<td></td>
</tr>
<tr>
<td>Years of democracy</td>
<td>0.003</td>
<td></td>
<td>0.007***</td>
</tr>
<tr>
<td>Rural population</td>
<td>-0.009</td>
<td>-0.016*</td>
<td></td>
</tr>
<tr>
<td>Inflation</td>
<td>-0.061</td>
<td>-0.070*</td>
<td></td>
</tr>
<tr>
<td>Constant</td>
<td>1.042</td>
<td>1.517***</td>
<td>1.054***</td>
</tr>
</tbody>
</table>

<p>| | | | |</p>
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<tr>
<th></th>
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</thead>
<tbody>
<tr>
<td>N</td>
<td>48</td>
<td>48</td>
<td>48</td>
</tr>
<tr>
<td>$R^2$</td>
<td>0.321</td>
<td>0.300</td>
<td>0.163</td>
</tr>
<tr>
<td>Adjusted $R^2$</td>
<td>0.202</td>
<td>0.197</td>
<td>0.145</td>
</tr>
<tr>
<td>Residual Std. Error</td>
<td>0.679 (df = 40)</td>
<td>0.681 (df = 41)</td>
<td>0.703 (df = 46)</td>
</tr>
<tr>
<td>F-statistic</td>
<td>2.699**</td>
<td>2.922**</td>
<td>8.969***</td>
</tr>
<tr>
<td></td>
<td>(df = 7; 40)</td>
<td>(df = 6; 41)</td>
<td>(df = 1; 46)</td>
</tr>
</tbody>
</table>

Note: *p<0.1; **p<0.05; ***p<0.01

Table 5. Results of the multiple regression models with two types of Electoral Volatility as independent variables and Polarization as a dependent variable
Conclusion

The main goal of this research project was to explore how shifts in voters’ preferences influence the political characteristics of the electoral competition. In this study, we tested three hypotheses. First hypotheses assumed that party systems with greater ideological polarization tend to have higher aggregate nicheness. Second and Third hypotheses were developed to study how electoral volatility affects programmatic characteristics of a party system.

Hypotheses of this research were tested using cross-national data on 48 countries, but our empirical findings supported only one out of three initial hypotheses. Investigation of the relationship between aggregate nicheness and polarization proved our assumption and showed that these two characteristics of the party system, indeed, move simultaneously in one direction.

Regarding our hypotheses that two types of electoral volatility impact aggregate nicheness and polarization in the opposite direction, our empirical findings showed no statistically significant relationship between mentioned variables. In our research, we argued that higher regeneration volatility should make party systems more segmented (niche) and more polarized, whereas alternation volatility was expected to influence party system aggregate nicheness and polarization in the opposite direction. Results of our analysis suggest that these hypotheses should be declined.

Moreover, among our socio-economic and system-properties control variables, only inflation appeared to be a relatively good predictor for both party system aggregate nicheness and party system polarization. It is also worth to mention that our findings do not support the previously advanced argument that positive relationship between party system fragmentation and party system polarization exists.

Data on electoral volatility were only partially available for chosen 48, so we utilized measurement methods suggested by Powell & Tucker (2014) and the author himself calculated regeneration and alternation volatility for countries that are not in the electoral volatility dataset (Emanuele, 2015). Besides elections in Western European countries, our set of collected data included primarily Eastern European countries, which have highly unstable and uncertain patterns of party politics. Even if we apply electoral volatility coding rules suggested by Chiaramonte & Emanuele (2017), still it is quite hard to distinguish genuinely new parties in Eastern European party systems, due to the lack of data. The mentioned problem probably caused some noise in our data.

Another important fact that must be mentioned is that we used quite a simple method of aggregation (weighted average mean) for party system distinctiveness. We followed all formal
recommendations suggested by Meyer & Miller (2015), still more nuanced aggregation method might capture the causation between electoral volatility and aggregate nicheness.

In this research, I concentrated on static characteristics of the party system, but dynamic tendencies in parties’ placements and issue segmentation also deserve to be studied. We can easily imagine an argument that changes in party system polarization and aggregate nicheness could be influenced by electoral volatility. To explore this relationship, one should use data on how total nicheness or polarization increased or decreased between subsequent elections.

My final point is that used methods of estimating parties’ ideological position and each party’s individual nicheness score are not recognized by everyone as the best way to deal with the problem of ideological placement or problem of party nicheness. RILE index remains the most popular deductive method of constructing ideological space, but these days it faces criticism. On the other hand, the measurement method suggested by Meyer & Miller (2015) competes with the technique recommended by Bischof (2017). The later one even captures more characteristics of a party’s profile, but also include questionable a priori assumptions about party systems in its core. These leads us to conclude that future studies should not necessarily concentrate on operationalization methods used in this work.


**Data sources**


Software
