

Red, Brown, and Regional Economic Voting: Russia, Poland, Hungary, Slovakia, and the Czech Republic from 1990-99

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ABSTRACT

The vast majority of all work on economic voting has focused on the question of who benefits when economic conditions are better. For multiparty democracies, though, the question of who is likely to benefit when economic conditions are worse is equally, if not more, important. Using an original data set of regional level economic, demographic, and electoral variables, I explore this question using cross-regional variation in election results in 19 national presidential and parliamentary elections from Russia, Poland, Hungary, Slovakia and the Czech Republic that took place between 1990-99. While there is very strong empirical support for the hypothesis that communist successor parties performed better in areas of the country where economic conditions were worse, there is surprisingly little support for the hypothesis that nationalist parties perform better under similar circumstances.

INTRODUCTION

To date, the vast majority of the literature on economic voting in established democracies has focused on the question of who is likely to benefit from stronger economic conditions. In the context of the United States, answering that the incumbent candidate should benefit from better economic conditions tells us practically all we need to know about how the economy is likely to affect election results: in a two party system, if the incumbent benefits from better economic conditions, then the challenger will benefit from worse economic conditions.¹ Not surprisingly, as the literature on economic voting spread from American politics to include studies of other advanced industrialized democracies, this focus on assessing the degree to which better economic conditions improved the electoral fortunes of incumbents remained.² However, as we move farther away from the confines of a stable two-party systems, the need to address the question of who is likely to benefit from poor economic conditions grows, both because of the increasing number of options faced by voters and because of the potentially more serious consequences of those choices. Recognizing this, many early studies of the effect of economic conditions on election results in post-communist countries were careful to explore the effect of economic conditions on either all of the important parties in a particular election or else on multiple categories of parties across a series of elections.³ What is still lacking in the literature, though, is a systematic comparison of competing hypotheses across multiple elections and countries that focuses precisely on this question of what types of parties are likely to enjoy electoral benefits in response to bad economic conditions in multiparty elections.

¹ For example of studies of the effect of economic conditions on the vote for incumbent candidates in the United States, see for example Ogburn and Coombs 1940; Kramer 1971; Tufte 1975; Erikson 1989; Erikson 1990.

² For example of comparative studies of the effect of economic conditions on the vote for incumbent candidates outside of the United States, see for example Paldam 1991; Remmer 1991; Powell and Whitten 1993; Wilkin, Haller, and Norpoth 1997; Palmer and Whitten 1999; Tucker 2001.

³ For examples of the former, see Gibson and Cielecka 1995; Colton 1996; Bell 1997; for examples of the latter, see Pacek 1994; Tucker 1999; Fidrmuc 2000a; Fidrmuc 2000b; Tucker 2000.

What is particularly surprising about this lack of a systematic comparison is that there is an underlying “received wisdom” about the types of parties that benefit from poor economic conditions in new or unstable democracies, which one could superficially label the Weimar Model. Loosely put, the Weimar Model predicts that poor economic conditions should benefit the far left (red) or the far right (brown).⁴ In the post-communist world in particular, repeated references were made in the literature to the dangers of a Weimaresque scenario unfolding as the transition progressed.⁵ In the ensuing years, though, there have been few attempts to systematically test this piece of received wisdom across multiple elections and countries.⁶

In this paper I address these gaps in the literature by systematically assessing the degree to which communist successor parties and nationalist parties performed better in parts of the country where economic conditions were worse in five post-communist countries during the first decade of post-communist elections.⁷ More specifically, I analyze the effect of economic conditions on the fates of 27 communist successor parties/candidates and 23 nationalist parties/candidates that competed in 19 parliamentary and presidential elections in Russia, Poland, Hungary, Slovakia, and Russia from 1990-99. The analysis takes place at the regional level: within each election, I examine whether the party in question received a higher proportion of the vote in areas of the country where economic conditions were poor than they did in areas of the country where economic conditions were stronger while controlling for the socio-

⁴ The actual literature on the causes of voting behavior in the Weimar republic, and especially in the 1933 election is extremely varied; for a review see Heilbroner and Muhlberger 1997; King, Rosen et al. 2003. But the popular interpretation of the Weimar experience is clearly that the Nazis and the Communists competed for the vote of Germans increasingly dissatisfied with the economic catastrophe wrought by the Great Depression.

⁵ See especially Hanson and Kopstein 1997; Hanson and Kopstein 1998; Shenfield 1998, as well as the many citations they reference in these articles.

⁶ One interesting paper that gets at the question as part of a larger analysis of the vote for what the author labels “unorthodox parties” is Pop-Eleches 2004.

⁷ The post-communist world seems particularly appropriate for testing a Weimar Model of this sort because of the years of Communist rule. But there is no reason that this type of study could not be replicated in another part of the world. In particular, it would be interesting to see if different results emerged following a post-nationalist transition.

demographic features of the different regions. I label this type of analysis a study of “regional economic voting”, as it looks for a relationship between variation in economic condition and election results at the regional level.

The results of this analysis are extremely clear: while there is strong support for the contention that communist successor parties performed better in areas of the country where economic conditions were poor, there is very little evidence to support the contention that nationalist parties benefited from bad economic conditions in a similar manner. Moreover, these findings hold up even when we control for the incumbency status of parties. The rest of this paper proceeds as follows. In the next section, I discuss the theoretical reasons for expecting communist successor parties and nationalist parties to enjoy more electoral success in parts of the country where economic conditions are worse. I then describe the data used in the analysis, highlighting the advantages and disadvantages of working with regional-level data, the case selection, and the coding rules employed. After a short section outlining the methodological approach, the results of empirical tests of both hypotheses are presented.

THEORETIC UNDERPINNINGS : THE COMMUNIST SUCCESSOR AND NATIONALIST HYPOTHESES

In this section, I introduce two hypotheses that make predictions about the type of party likely to benefit from poor economic conditions in elections in post-communist countries. The reader will note that both of these hypotheses refer to aggregate-level relationships between cross-regional variation in economic conditions and election results, as opposed to micro-level models of individual vote decisions. The hypotheses are designed, however, to be consistent with micro-level propositions about the individual behavior of voters, as will be explained in detail below. Still, it is important for the reader to note that the resulting hypotheses do not test

actual predictions about individual level behavior, but rather aggregate level hypotheses based on assumptions about how individuals are likely to behave.

Although the vast majority of studies of the effect of economic conditions on election results – especially in established democracies – tend to focus on how economic conditions affect the vote for incumbent parties, a much smaller second strand of the literature makes predictions about the effect of economic conditions on the vote for parties based on their partisan alignment. The basic thrust of the argument is that certain economic conditions – generally higher unemployment – are likely to increase the vote for left wing parties, while other economic conditions – generally higher inflation – are likely to increase the vote for right wing parties. The logic underlying the argument is that voters are concerned with specific economic problems and have a belief about which parties would be better suited to solving those particular problems (or ought to be held particularly responsible for failing to solve these problems).⁸ In the context of the advanced industrialized democracies, it is generally assumed that right wing parties are more likely to favor control of inflation at the expense of rising unemployment while left wing parties are the opposite. Thus, an electorate concerned about inflation could be more attracted to right wing parties, while an electorate scarred by unemployment would be more likely to vote for a left-wing government.

Transporting a simple partisan based approach to the post-communist world is problematic because of the pervasive levels of uncertainty in any new democracy (Bunce and Csanadi 1993; Pop-Eleches 2004). It is difficult to apply a simple left-right classification scheme to parties in transition countries, both because it is hard to know where parties stand and

⁸ For examples of work claiming greater likelihood of punishment, see Powell and Whitten 1993; Palmer and Whitten 2000. For examples of work testing whether higher levels of a particular economic ill lead to greater support for the appropriate type of party, see Rosa and Amson 1976; Lewis-Beck and Bellucci 1982; Bellucci 1984; Host and Paldam 1990. For micro-level research in the American context, see Kiewiet 1983.

because they can often change their positions (Kitschelt 1992; Colton 1998). Moreover, even if analysts could come up with a compelling schema, it would be a stretch to assume that that voters would be able to associate parties of a certain partisan persuasion with specific policies as closely as voters can in established democracies. This is a function of the proliferation of new parties, the presence of new economic realities, and voters' lack of experience in seeing different parties in power. Moreover, due to the enormity of the economic transition from a centrally planned economy to a market economy, it is unlikely that voters would be motivated by concerns over specific economic conditions as opposed to the state of the overall economy.

With these concerns in mind, I make the following two assumptions to craft a model that is based on the partisan approach to economic voting but is appropriate for the post-communist context. First, I assume that voters have low levels of information about political parties. They are not likely to possess strong information about the types of policies that parties have promised to implement in office, their likelihood of actually following through on those promises, or their competence in doing so once elected, all of which are mainstays of the partisan approach in established democracies. Nevertheless, it does not seem unreasonable to assume that voters would be able to differentiate broad categories of parties. One group of parties about which voters are likely to have some information are the communist successor parties.⁹ I define communist successor parties as the political party or parties that are closely linked to the party the old ruling communist party during the communist regime. Two sets of parties fall under this general rubric. The first are the legal successors to the previous ruling parties. The second

⁹ Another group of parties that voters are likely to know something about are the parties most closely associated with the changes that have taken place in the country since the start of the transition. As these parties would be more likely to enjoy greater electoral success where economic conditions are better, they are beyond the scope of this article. I have, however, elsewhere examined the effect of economic conditions on the electoral fortunes of all of these parties in the same set of elections included in this study, and I found strong empirical support for the claim that these parties benefit from better economic conditions. Interested readers should see Tucker forthcoming.

group includes all splinter parties that have split from the legal successor party in order to remain closer to the ideology of the old ruling party. In the case of post-communist countries, this is an easy distinction to make, as the splinter party would declare that it wants to remain truer to communist principals than the legal successor. The important point is that communist successor parties are visibly linked to the previous regime, either through the people that make up the party, the ideology it continues to publicly embrace, or its legal obligations.¹⁰

The second assumption of the hypotheses is that, instead of assuming that voters are guided by concerns with specific economic problems, we assume that they have general concerns about the economy; they react to it either being “bad” or “good”. This assumption is a function of the dramatic change to the nature of the economy discussed above.

The Communist Successor Hypothesis therefore predicts that communist successor parties will benefit where economic conditions are worse, and will do worse where economic conditions are better. The logic behind this prediction is as follows. If a voter is dissatisfied with the state of the economy, she will have many option for which party to cast her vote. While she may not have much information about most of those parties, she does know something about communist successor parties. When their predecessors were in power, the economic landscape looked very different from the present one. Thus if the voter is particularly concerned about the current economy, then she knows at least one type of party that in the past – at least on the surface – ruled in a period of time without the current economic difficulties. Even if a return to the past is not desired, the voter may still be more likely to have more confidence in the communist successor parties to address these issues than any of the other options. And the worse

¹⁰ One should also note that “communist successor” is not synonymous for “leftist”. There are examples of dominant leftist parties that are not communist successor parties, such as the Czech Social Democratic Party, as well as communist successor parties that have moved closer to the center, such as the Democratic Left Alliance in Poland.

the economic conditions are, the more likely she is to act on these concerns when she casts her ballot.¹¹ By no means should we expect everyone to vote for communist successor parties if they are unhappy with the current path of reforms, but the more unhappy one is with the state of the economy, the more likely we might expect her to be to cast a ballot for a communist successor party. If we assume that we will find more people dissatisfied in the state of the economy in areas of the country where economic conditions are worse, then at the aggregate level we should expect to see more support for communist successor parties in areas of the country where economic conditions are worse, and less support for communist successor parties in areas of the country where economic conditions are stronger.

Similarly, the lessons of history – and especially the rise of fascist parties in interwar-Europe in the 1930s – suggests that voters dissatisfied with the state of the economy may turn to nationalist parties for a wide variety of reasons. These range from arguments about relative deprivation to the appeals of scapegoating to the lure of easy solutions to complicated problems. Within the post-communist context in particular, we can hypothesize that voters who are especially despondent in the aftermath of a chaotic economic transition would be attracted to parties offering both a return to greatness for the country and, in many cases, an enemy to blame for the current state of affairs.¹² As we would expect to find larger numbers of despondent people where economic conditions are worse, this yields the aggregate level hypothesis that we

¹¹ The path from macro-economic conditions to micro-level individual decision-making and back to macro-level aggregate vote totals works both directly and indirectly. Consider unemployment as an example. If I have lost my job and can not find work, then I am likely to think that the pain from reform outweighs the benefits. The higher the unemployment rate, the more people there are who are likely to be unemployed and share these beliefs. Thus the higher the unemployment rate, the more likely it is that we will see stronger support for communist successor parties.. However, the effect also works indirectly. Even if I am not unemployed, higher unemployment rates may mean that more people I know are unemployed. I may also see more unemployed people loitering on the streets, and I may be more afraid that I will become unemployed. Indeed, Paldam and Nannestad 2000 argue that for every person who is unemployed, an estimated 100-300 people will know that person and “will notice and be concerned”. And their estimate does not even include the people who do not know the unemployed directly but notice their presence.

¹² Although see McFaul 2003 for a different take on this proposition in contemporary Russia.

should expect to see more support for Nationalist parties in parts of the country where economic conditions are worse.

The coding of nationalist parties is not as objective as the coding of the communist successor parties, although I suspect there should be little debate about the parties included in the study as nationalist parties (see Table 1 below). I essentially included all parties that were commonly referred to as nationalist parties in the literature; I also used the classification of parties in Bugajski 2002) as a guide to which parties ought to be included in the list. While some readers may quibble with the inclusion or exclusion of a particular party or two from the list, the starkness of the results insure that adding or deleting a party or two would have no effect on the overall results.¹³ It is important to note that as the purpose of this paper is to distinguish between the appeal of red and brown, I have made the categories of communist successor parties and nationalist parties mutually exclusive. Despite the fact that some communist successor parties may have adopted more overtly nationalistic appeals than others, for the purpose of this paper the nationalist label is *a priori* defined as an option only for non-communist successor parties.

Thus the first goal of the paper – to produce competing hypotheses that predict parties that are likely to enjoy greater electoral success where economic conditions are worse – is satisfied. It is important to note that I have done so without any recourse to a kind of catch-all non-incumbent hypothesis (e.g., “all opposition parties should benefit from poor economic conditions”), which would get us no farther than all of the studies that have just focused on the vote for incumbents. Indeed, I have gone to the opposite extreme by producing hypotheses of regional economic voting patterns that make no mention at all of incumbency status. Some readers may object that we should expect to find different patterns for communist successor

¹³ And while this paper is still in draft format, I would encourage who thinks a particular party should either be added or deleted from the list to contact me with the suggestion at jtucker@princeton.edu.

parties that are also incumbents as opposed to communist successor parties that are not currently part of the government, and likewise for nationalist parties. As it turns out, controlling for incumbency has absolutely no effect on the overall conclusion that there is much more empirical support for the Communist Successor Hypothesis than the Nationalist Hypothesis, as will be demonstrated in the empirical results section.

DATA AND METHODS: ANALYZING 19 POST-COMMUNIST ELECTIONS

Having produced two hypotheses about the parties likely to benefit from poor economic conditions, the next step is to test these hypotheses empirically. Here, I test the hypotheses on data from 19 national elections that took place between 1990-99 in Russia, Poland, Hungary, Slovakia, and the Czech Republic. These five countries were chosen for a number of reasons. First, all five of the countries have enjoyed relatively free and fair elections.¹⁴ Second, all embarked on some type of economic reform program. Although the reforms have differed in term of pace, scope, and results, it is clear that all five countries now have substantially different economies as compared to the communist era. Third, the sample also includes elections from both the former Soviet Union and East Central Europe, as well as both presidential and parliamentary elections, in order to make as strong a case as possible for generalizability of the findings. In particular, including parliamentary and presidential elections allows us to include both the vote for individuals (in presidential elections) and parties (in parliamentary elections) in the analysis.¹⁵ A final, non-trivial, consideration is that all five countries report disaggregated

¹⁴ Russia is the one exception, with questions persisting about the 1993 parliamentary elections. Nevertheless, despite the likely presence of some fraud, it is doubtful that the overall outcomes were affected greatly. See McFaul 1996; Myagkov, Ordeshook, and Sobyenin 1997; White, Rose, and McAllister 1997. Moreover, eliminating this election from the analysis has no effect on the overall conclusions.

¹⁵ Had the data permitted, it would also have been interesting to examine the vote for individuals in parliamentary elections by examining the vote in the single member district component of the Hungarian and Russian parliamentary elections. Unfortunately, economic data disaggregated to the single member district boundaries were not available in either case.

election results and economic conditions using the same sub-national units, thus facilitating the construction of the data base.

Moreover, the ability to produce generalizable results is enhanced by the useful variation of both macro-economic and political development during 1990s found in these five countries. As Table 1 demonstrates, all three countries followed the familiar pattern of countries undergoing economic reform: initial declines in gross domestic product as the transition got under way (what Przeworski has labeled the J-Curve), a rise in inflation as prices adapt to market conditions, and the emergence of unemployment.¹⁶ However, the manner in which this overall pattern played out differs significantly across the countries. While all five suffered serious declines in GDP in the early 1990s, Poland was already enjoying economic growth by 1992 while Russia suffered declines in GDP every year through 1996, and then again in 1998. Similarly, all five countries did in fact see an increase in unemployment, but the magnitude of this rise varies across countries. Unemployment in the Czech Republic managed to stay below 5% for most of the decade, while Poland and Slovakia both were mired in double-digit unemployment rates by the early part of the decade that proved difficult to reverse. The countries also had different experience with inflation. Russia and Poland pursued the now well known “shock therapy” approach to prices, and consequently had very high inflation rates early in the decade that decreased – albeit more quickly in Poland – as time passed. By contrast, Slovakia and the Czech Republic both had only one year (1991) in which inflation was over 50%, and both managed to keep inflation in the single digits for most of the second half of the decade. Hungary lies somewhere in between these two experiences, with inflation never exploding as it did in Russia and Poland but at the same time averaging close to 25% a year through 1997.

¹⁶ See Przeworski 1991.

Likewise, including these particular five countries provides important variation in patterns of political development in regard to the movement of communist successor and nationalist parties in and out of government. In the Czech Republic and Russia, for example, once voted out of office in the initial post-communist elections, communist successor parties never return to power. In Poland and Hungary, though, communist successor parties are elected to office in 1993 and 1994, and consequently are running for re-election as incumbent parties in 1997 and 1998, respectively. Poland, Hungary, and Russia all feature communist successor parties that are the primary opposition party when they are not power, whereas the communist successor parties in Slovakia and the Czech Republic play less important roles. In Slovakia, a nationalist party controls the government for much of the decade – and even does so in coalition with another nationalist party for part of that time – whereas in the other four countries nationalist parties are rarely part of the government.

Included in the study are all elections for national office – parliamentary and presidential – that took place in each of these countries between 1990 and 1999.¹⁷ This excludes initial parliamentary elections that were contested largely between two forces, the communists and a broad anti-communist umbrella coalition; these elections also often included restrictions on participation and competition for certain seats. Thus the study begins with the first true multi-party parliamentary elections that occur in each of the countries, in addition to all directly contested presidential elections. For two-round presidential elections, results from the first round are analyzed; for mixed legislative electoral systems (Hungary and Russia) results from the party list proportional representation vote are analyzed. Table 1 lists the elections included in the study

¹⁷ The 1991 Russian presidential election is not included in the study because it predates the collapse of the Soviet Union and because I was unable to find regional data on one of the three economic variables for that year.

and the coding of the candidates/parties (which, for the sake of simplicity, I refer to simply as parties for the remainder of the article) for each election.¹⁸

– INSERT TABLE 1 ABOUT HERE –

To test the three hypotheses, I estimate the effect of economic conditions on the electoral fortunes of each of the 50 parties included in the study. To generate these estimates, an original data base of regional-level electoral, economic, and demographic data is utilized.¹⁹ More specifically, for each party listed in Table 1, the effect of economic conditions on that party's election results is estimated using the share of the vote received by the party as the dependent variable, measures of macro-economic conditions as independent variables, and demographic indicators as control variables, thus resulting in 50 separate analyses (one for each of the parties). It is important to note that although regional-level data is used in the analysis – e.g., the amount of the vote received by Party A in Region 1 – these are all results from *national* elections disaggregated to the regional level.

It is also important to note that this method generates estimates of the effect of economic conditions on the cross-regional variation in the support for a given within a given election. Thus this is not an over-time analysis that attempts to ascertain if nationalist or communist successor parties perform better at the national level when national level economic conditions are better or worse, but rather a cross-sectional analysis that measures the degree to which nationalist or communist successor parties perform better in areas of the country where economic conditions

¹⁸ In article of this length, it is clearly not possible to detail every coding decision. Please note, though, that no parties with fewer than 2% of the national vote were included in the analysis with the exception of the AZR in the 1998 Slovak parliamentary election, which was included in the sample despite receiving just 1.3% of the vote because it had been part of the previous Slovak government, having received 7.3% of the vote in the 1994 Slovak parliamentary elections.

¹⁹ The number of regions per country is Hungary (20), Slovakia (38), Poland (49), Czech Republic (76), and Russia (79). While it would be desirable to have as many observations as possible, the extent of disaggregation of the voting data is limited by the availability of commensurate economic data.

are worse than they do in areas where economic conditions are better, which is exactly the type of variation that the hypotheses presented in the previous section predict.

Given the cross-regional nature of the analysis, it is important to try to measure the effect of the economy independent of the other dominant explanation for cross-regional variation in electoral support, which is societal cleavages. Thus in order to control for any socio-demographic patterns of party support, a constant set of control variables are included in each regression: the percentage of workers that work in industry; the percentage of workers that work in agriculture; the percentage of the population living in urban areas; the percentage of older citizens in a region, and the log of the population of the region.²⁰ While these variables may not capture every socio-demographic basis for party support, they do touch on most of the larger themes in the literature, including rural-urban splits, agricultural and industrial labor patterns, and center-periphery distinctions. They also capture features that have been highlighted as being important for nascent post-communist cleavages, including the propensity of older voters to support communist successor parties and urban voters to prefer more liberal parties. The key point to note is that by including these control variables, all economic effects identified by the statistical analysis should be interpreted as being independent of any of these underlying socio-demographic explanations for party support.

Traditional analyses of the effects of economic conditions on election results in established democracies have usually relied on measures of changes in income or economic growth. In the post-communist context, however, unemployment and inflation have been

²⁰ Following convention, population is logged to account for the extreme outliers of major cities. Please note as well that the proportion of non-ethnic Slovaks is also included as a controlling variable in the Slovak election due to the presence of a Hungarian minority party that captured close to 10% of the vote in these elections. Earlier robustness tests had suggested that not including this control variable made the results less stable, although more recent tests have not seen this pattern repeated. Nevertheless, including the control variable seemed prudent just in case. Including similar control variables in other countries had no effect on any of the results.

arguably the most drastic economic developments and the ones to which we might think voters would be most likely to respond. In an ideal world, therefore, we would include all four of these variables in any economic voting analysis.

Inflation, however, does not lend itself to a cross-regional study, as the most substantial variation in inflation is usually over time as opposed to across regions within a single country in a single time period.²¹ Moreover, it is very difficult to find inflation figures disaggregated to the regional level; indeed, I could only locate such data for 4 of the 19 elections included in the study. For these reasons, I use change in wages, growth, and unemployment as the economic variables in every regression analysis.²²

The actual regression analyses are conducted using a model appropriate for multi-party data (Tomz, Tucker, and Wittenberg 2002). Details of the model can be found in the Appendix, but the basic idea is that it is designed to take account of the fact that aggregate electoral data is compositional: all vote proportions are bounded between 0 and 1, and the sum of all vote proportions must equal 1. It is primarily distinguished from OLS in that the dependent variable is modeled as the log of the ratio of the vote for the party in question relative to a base category (the vote for one or more of the other parties) and that all of the equations for any given election are estimated simultaneously using a *seemingly unrelated regression* (SUR) model.²³

²¹ This claim is especially apparent if we consider inflation to largely be a product of central bank policy. As central banks are national institutions, we would expect to find substantial variation in inflation only across time within a single country or across countries at a single time.

²² Both change in wages and growth are calculated as changes from the previous year. It is impossible to find GDP growth disaggregated at the regional level early in the decade. For this reason, GDP growth is used when available; when it is not available, industrial growth is used instead. In no case is industrial growth used when GDP growth is available.

²³ The base category for the results used in this study was a composite “other” category of multiple political parties. This composite other category did not include all non-communist successor parties or non-Nationalist parties, as the regressions were run as part of a larger analysis investigating the effect of economic conditions on other parties as well; for a complete list of parties included in the regressions, see Tucker forthcoming. Thus anyone seeking to replicate these results should contact the author (jtucker@princeton.edu) to receive a list of the exact parties included in the composite base category for each election.

Finally, although I expand on this topic in great detail elsewhere (see Tucker forthcoming, Chapter 3), it is worth pausing for a brief moment to address the question of why I have chosen to explore regional economic voting, as opposed to either cross-national or individual-level patterns of economic voting. The decision was guided by three primary motivations. First, analyzing regional level data allows us to dramatically increase the amount of data that we can bring to bear on the question. Instead of each election producing but one observation – as is the case in cross-national studies – each election in this study produces between 20 and 78 observations. This in turn allows us to estimate the effect of the economy on the vote for each individual party in which we have an interest, as opposed to needing to lump parties together into *a priori* “categories” for the purpose of conducting the statistical analysis. Second, this party by party analysis facilitates both an in-depth study of the effect of the economy on each particular as well as a means of conducting comparative analysis across all of the cases. Without pooling data inappropriately – which is a serious concern in the post-communist context – the method allows me to still compare results across the entire sample in a transparent and consistent manner. Moreover, I am able to avoid all of the complexities that would go along with trying to compare survey data from different survey in different countries and languages. Finally, and most importantly, I employ regional-level data because the hypotheses I hope to test in this paper are hypotheses concerning regional economic voting. And while my interest in hypotheses pitched at this level of analysis is in part a function of the advantages of analyzing regional level data in the post-communist context, it is also driven by the fact that regional level has long been underrepresented in studies of economic voting. Although cross-national and individual level studies are of course important ways of measuring the effect of economic conditions on voting and election results, examining the manner in which

regional variation in economic conditions affects regional variation in election results as equally appropriate manner in which to do so, as well as an equally important topic for academic study.

EMPIRICAL RESULTS

Although space prohibits reporting the regression results for all nineteen elections, consider as an example the 1996 Czech Parliamentary elections.²⁴ In this election, one communist successor party, the Communist Party of Bohemia and Moravia (KSČM), and one nationalist party, the Republican Party (SPR-RSC), took part in the election. Table 2 presents the results of regressing the vote for each of these parties on our base economic variables (unemployment, change in income, and growth) and our five demographic control variables (the percentage of the population employed in agriculture, the percentage employed in industry, the percentage of elderly citizens, the percentage of the population living in urban areas, and the population of the region).

-- INSERT TABLE 2 ABOUT HERE --

These regression results as presented in Table 2 can tell us something interesting about the effect of the economy on these four parties. But it is unclear how useful they are for the larger task of assessing whether or not each case provides support for the hypotheses we are testing, or how we would compare these results with those found from another election. This would be a difficult enough task if we employed a model such as OLS, whereby we would have one intuitively logical set of coefficients and standard errors for each of the 50 parties being analyzed. But as the multi-party election model described above is dependent on a one party (or group of parties) functioning as a base category, regression analysis will produce a different set

²⁴ The full set of regression results are available upon request and will be included as a web-based appendix with future versions of the paper.

of coefficients and standard errors depending on which of the parties are included as the base party in exactly the same way as a multi-nomial logit analysis. Thus the correct way to interpret the coefficient for unemployment on the KSČM in Table 2 is not as the effect of unemployment on the vote for the KSČM, but rather as the effect of unemployment on the vote for the KSČM relative to the composite “other” category that functions as the base party.

Therefore, if we choose to rely on the coefficients and standard errors of economic variables for assessing the empirical support for our hypotheses, we would actually need to rotate through every party except one as the base party in turn in order to get a complete set of coefficients and standard errors.²⁵ And with three economic variables per analysis and two a half parties per election over nineteen elections, we would end up comparing hundreds of coefficients and standard errors in an effort to make our overall assessments of the empirical support of the different hypotheses. Moreover, with a log-transformed dependent variable, none of these coefficients would have any real intuitive meaning. Thus in order to analyze the our hypotheses comparatively, we need a much more compact estimate of the effect of economic conditions on the election results for each party that can easily be compared across cases.

An appropriate measure to use in this case is a first difference that calculates the change in the predicted share of the vote for each party when demographic variables are held constant and economic conditions are varied to simulate a standardized shift from a region with “bad” economic conditions to a region with “good” economic conditions. To do this in practice, I calculate two estimates for the expected vote of the party in question: one with economic variables at their 10th percentile level and another with economic variables at their 90th percentile level. In both cases demographic variables are set at their means. Unemployment is shifted from

²⁵ We would not need to rotate every party through because we can calculate the final party from the other regressions, as a pairs of parties (one in the regression, one in the base) will also produce the exact opposite coefficients with the same standard errors by mathematical definition.

the higher value to the lower value, while change in income and growth are shifted from the lower value to the higher value.²⁶ When the expected vote in the “bad” region (high unemployment, low economic growth, low wage growth) is subtracted from the expected vote in the “good” region (low unemployment, high economic growth, high wage growth), the result is a single measure of the overall impact of better economic conditions on the vote for that particular party, which is exactly what is needed to analyze the communist successor and nationalist Hypotheses. Moreover, not only do first differences have the advantage of producing a single, intuitive measure of the effect of economic conditions on the electoral fortunes of the party in question, they are also robust by mathematic definition to which party is included as the base party for the purpose of the regression analysis.

There is, however, one important shortcoming in comparing first differences for different parties. In moving from a set of betas with standard errors to a single point estimate of a first difference, however, we run the risk of losing information regarding our *uncertainty* in the quantity of interest being reported. Fortunately, this can be avoided by using stochastic simulation to simulate an entire distribution of first differences.²⁷ Such an approach has the added benefit of allowing us to quantify not only our best estimate of the first difference (the mean value of the simulations) but also our level of uncertainty surrounding that estimate (the standard deviation of the simulations). Moreover, we can easily generate confidence intervals

²⁶ For example, if there were 100 regions, we would use the unemployment level from the region with the 10th highest rate in one case and from the 10th lowest rate in the second case.

²⁷ More technically, we draw 1,000 betas from the sampling distribution of the parameter estimates. From each set of betas, a separate first difference was calculated. The simulations were performed using *Clarify 2.1* (Tomz, Wittenberg, and King 2003). For a full treatment of the approach, see King, Tomz, and Wittenberg 2000). Moreover, stochastic simulation of first differences also produces unbiased estimates of the first differences regardless of base parties in the same manner as the calculation of first differences without stochastic simulation. While the estimated distribution may vary across repeated runs, all variance will be due to the unbiased variance in the simulation procedure and not to the choice of base party. Put another way, repeatedly running simulations with the same base party will generate no less variation across sets of simulations than running repeatedly running simulations rotating the base party.

surrounding substantively meaningful quantities of interest. For example, in the empirical analysis to follow, the crucial concern is whether we can be confident that the party in question is hurt by better economic conditions. To assess this claim, we will want to know how confident we are that the first difference is less than zero (in other words, that better economic conditions decrease the expected vote for the party, or, put another way, that the party benefits from worse economic conditions). If 90% of the simulated first differences are less than zero, then we can claim with 90% confidence that the party in question is hurt by stronger economic conditions and therefore performs better where economic conditions are worse. In this manner, calculating estimated probability distributions of first differences allows us to measure *exactly* what we need to test our hypotheses: how confident we should be that worse economic conditions translated into better election results for the party in question.

For ease of interpretation, these simulations can be plotted graphically, resulting in an estimated probability distribution of the first difference. Figure 2 plots these estimated distributions for the previous example, the 1996 Czech parliamentary elections.

-- INSERT FIGURE 1 ABOUT HERE --

From Figure 2, we find that this particular election provides clear empirical support for both the nationalist and communist successor Hypotheses. We are very confident that both the communist successor party, the Communist Party of Bohemia and Moravia (KSČM), and the nationalist Party, the Republican Party (SPR-RSC), performed better where economic conditions were worse, as at least 99% of the simulations in both cases predicted a *decrease* in the vote for each party when we improved economic conditions. So if we were to rely on just this election, we would conclude that there was strong support for both of the hypotheses. The advantage of a

comparative research design is that we can eschew reliance on just a single case, but in order to do this we need to consider the results across all of the elections comparatively

Comparative Analysis

Rather than display the 48 additional estimated distributions from the other 18 elections and continue to discuss each individually, Table 3 concisely summarizes our level of confidence in all of the empirical evidence for all of the hypotheses.

-- INSERT TABLE 3 ABOUT HERE --

Table 3 displays a count of the number of parties for which we are 90% certain that moving from a bad economy to a good economy produces the type of effect – positive or negative – that the hypotheses predict should be present. As explained above, the percentage of positive first differences is used to measure the level of certainty that the effect is as predicted by the model. Thus for both communist successor and nationalist parties, we are 90% confident that the data supports the hypothesis if no more than 10% of the predicted first differences are positive. The table also lists the number of cases for which 90% of the simulations are in the opposite direction from what is predicted; these are the cases for which the hypotheses appear to be clearly wrong. We identify these cases in the same manner as the cases where there is 90% confidence of the effect, only with the signs reversed.

In contrast to the example of the 1996 Czech parliamentary election, Table 3 presents very stark evidence suggesting greater empirical support for the Communist Successor Hypothesis than for the Nationalist Hypothesis. Observe first the Communist Successor Hypothesis, where we have strong confidence that the empirical data supports the hypothesis in 78% of the cases (21 out of 27). Moreover, there is only one example of a case where we have

strong confidence that the empirical data actually supports the opposite from what was predicted by the hypothesis.²⁸ By comparison, we only find strong empirical support for the Nationalist Hypothesis in less than 20% (4 out of 23, or 17%) of the cases. In fact, we actually find twice as many cases where we have strong confidence that the opposite from what was predicted occurred, namely that the nationalist party performed better in parts of the country where the economy was stronger. The distinction between the degree of empirical support for the two hypotheses is really quite stunning, especially when one considers that these effects were estimated from the same pool of elections using the same economic data. Taken together these findings cast significant doubt on usefulness of the Nationalist Hypothesis in predicting the types of parties to benefit from poor economic conditions, at least in these five post-communist countries, while at the same time suggesting strongly that the Communist Successor Hypothesis ought to be our default expectation for which parties are likely to benefit from poor economic conditions.²⁹

Given the degree of attention paid to incumbency in the economic voting literature, a critique of the analysis presented in Table 3 would be that we could be finding results that are in reality driven by incumbency status but which we incorrectly attribute to communist successor or nationalist status because we do not take incumbency status into effect in our analysis. One could imagine a world of this type producing Table 3 if (1) all incumbents performed better where economic conditions were better (2) the vast majority of nationalist parties in the study were also incumbents and (3) almost none of the communist successor parties in the study were

²⁸ This is a small Russian far-left communist movement, the “Communist Workers of Russia – For the Soviet Union” (KTR-SS) bloc in the 1995 Russian parliamentary elections.

²⁹ Moreover, these results hold even if the size of the economic shift is decreased or the number of explanatory economic variables is increased; the next version of this paper will contain additional similar to Table 3 to document this claim.

incumbents.³⁰ As it turns out, neither condition (2) nor (3) hold, as the proportion of nationalist parties that are also incumbents (6 out of 23, or 26%) is practically the same as the proportion of communist successor parties that are also incumbents (7 out of 27, or 26%).³¹

-- INSERT TABLE 4 ABOUT HERE --

But even more definitively, the results presented in Table 4 makes it abundantly clear that the distinction between the level of empirical support for the communist successor and Nationalist Hypotheses is in no way due to the incumbency status of the different parties. If we think that incumbency status somehow contaminates the pure effect of being a communist successor or nationalist party, the second and fourth columns of Table 4 demonstrate that even if we were to drop all incumbent parties from the sample, we would come to the exact same conclusion: there is much stronger empirical support for the Communist Successor Hypothesis (here, 70% of the cases provide support for the hypothesis) than the Nationalist Hypothesis (24% of the cases provide support). And even stripping out the nationalist parties that are also incumbents leaves us with the same number of parties (4) for which we have strong confidence

³⁰ Although beyond the scope of this paper, I have elsewhere considered the degree to which condition (1) holds by testing such an Incumbency Hypothesis independent of party type across the same set of elections. As it turns out, I find strong support for an Incumbency Hypothesis of this nature in only approximately 40% of the cases. See Tucker forthcoming.

³¹ Coding incumbency in elections in transition countries is a much trickier business than in established democracies. For the purpose of this study, I attempt to define incumbency as widely as possible in order to pick up any parties that might be subject to an economic voting incumbency effect. More specifically, for parliamentary elections in a parliamentary system, all parties that are currently in the ruling coalition at the time of the election are classified as incumbents. In the case of multiple coalitions prior to an election, the most recent coalition is used for determining incumbents, except in the case when a coalition that has ruled for the bulk of the time between elections is replaced, in which case both coalitions are coded as incumbents. For parliamentary elections in a presidential system, incumbents are the parties in the parliament that are most closely tied to the president and come closest to representing the “party of power.” For presidential elections, the incumbent is classified as the current president or, if the current president is not running, the candidate from the current president’s party. If the president is technically an independent, then we can use instead the president’s “chosen” successor. In the case of the initial competitive elections for either the parliament or president, the incumbent is defined as the party or candidate(s) that represent the party in power before the election (here, the Communist Party). In this study, Hungary, Slovakia, and the Czech Republic are considered parliamentary systems, Russia is considered a presidential system, and Poland is considered a mixed system. For the actual coding of parties, see Table 1. For more details on the coding of incumbent parties, see Tucker forthcoming, ch. 5.

that the opposite of what the hypothesis predicted has occurred (e.g., the party performed better where economic conditions were better) as the number of parties which provide strong empirical support for the hypothesis (4); in the case of the Communist Successor Hypothesis this ratio is only 1:14. Examining the parties that are also incumbents provides an even starker contrast. All 7 of the communist successor parties that were also incumbents performed better in areas of the country where the economy was worse despite their incumbency status, while none of the incumbent nationalist parties performed better where the economy was worse.³² In fact, of the 6 nationalist incumbents, we have strong confidence that 4 of them actually performed better where economic conditions were better. Another way of putting this is that for the incumbent nationalist parties, we find their incumbency status “trumping” their nationalist status in two-thirds of the cases. So the one useful piece of information that we get from considering incumbency is that we have a potential explanation for half of the cases where the effect of the economy is in the opposite direction from what was predicted.

Based on the theoretical framework underlying the Communist Successor Hypothesis, I have consciously considered the group of communist successor parties as a single category. In popular parlance, however, scholars often break communist successor parties down into reformed and unreformed camps. And while there is nothing inherent in the information based approach that I used to generate the Communist Successor Hypothesis that suggests the economy should have different effects on reformed and unreformed communist successor parties, it is an interesting empirical question. One could also imagine arguments that were more focused on the policy positions of communist successor parties suggesting we should find more support for the hypothesis amongst unreformed communist successor parties than their reformed counterparts.

³² Although beyond the scope of this paper, this is also a very interesting result in so far as it allows us to contrast the Communist Successor Hypothesis with a more traditional incumbency based approach. I consider this in great detail elsewhere; interested readers should see Tucker forthcoming.

-- INSERT TABLE 5 ABOUT HERE --

Table 5 presents the results of splitting the communist successor parties into their reformed and unreformed categories. The coding scheme for doing so was fairly simple. The three official successor parties that attempted to reinvent themselves as social democratic parties and their presidential candidates are coded as reformed communist successor parties; this includes the SLD in Poland, the MSzP in Hungary, and the SDL in Slovakia.³³ The two legal successor parties that chose not to recast themselves as social-democratic parties, the KSČM in the Czech Republic and the KPRF in Russia, are coded as unrepentant communist successor parties.³⁴ All of the remaining parties that are coded as communist successor parties because they broke from the legal successor in an effort to as a more orthodox communist alternative are coded as unreformed almost by definition.

As is clearly demonstrated by Table 5, there is almost no difference in the pattern of support for the Communist Successor Hypothesis amongst reformed and unreformed communist successor parties, and there is no evidence at all to support the claim that we should find more support for the hypothesis in the unreformed category.

³³ At the most basic level, these parties can be identified by the fact that they re-named their parties, dropping the Communist label and instead including “socialist” “social democratic” or “democratic left” in their name. But there is almost complete consensus in the literature that these three parties should be considered reformed successor parties; see for example Mahr and Nagle 1995; Orenstein 1998; Markus 1999; Bauer 2002; Bunce 2002. Ziblatt and Bizouras 2002 actually go so far as to create a “reform index”, with the MSzP, SLD, and SDL occupying the top three spots; the Czech KSČM has the lowest score (293-4).

³⁴ Much has been made of the efforts of the KPRF to present different faces to the world depending on the audience. In particular, Genadii Zyuganov’s trip to the World Economic Forum in Davos, Switzerland in the run up to the 1996 Presidential election is often mentioned as evidence of a moderate streak in the KPRF (McFaul 1997, 41). That being said, it would be a much larger claim to lump the KPRF in the general reformed camp as the SLD, MSzP, or SDL. While the KPRF is clearly not the same thing as the Communist Party of the Soviet Union – as is evidenced in part by the presence of parties to its left such as the aforementioned KTR–SS – it seems clear that for the purpose of this distinction between reformed and unreformed communist successor parties it belongs in the latter category. For more on the complex evolution of the KPRF, see Lentini 1992; Urban 1996; Davidheiser 1998; Sakwa 1998; Sakwa 2002 and especially Urban and Solovei 1997. For more on the KSČM, see Ishiyama 1997; Grzymala-Busse 1998; Grzymala-Busse 2002; Hanley 2002.

Overall, the investigation of the data leaves us with three clear conclusions. First, there is much stronger empirical support for the Communist Successor Hypothesis than the Nationalist Hypothesis; indeed, one could almost go so far as to say these data come close to falsifying the Nationalist Hypothesis. Second, these effects are not in any way dependent upon parties' incumbency status. Finally, whether or not a communist successor party is reformed or unreformed has no effect upon the likelihood of finding support for the Communist Successor Hypothesis in the case of that party. Additionally, the study presents clear evidence that not only is possible to examine the effect of economic conditions on the vote for parties other than incumbent parties, but this can be done within a framework of comparing rival hypotheses. While the evidence presented above is peculiar to the post-communist political experience, there is no reason that studies of economic voting in other parts of the world could not similarly benefit from shifting the spotlight away from exclusive domain of incumbent party electoral results.

APPENDIX: THE STATISTICAL MODEL

- $V_i = (V_{i1}, \dots, V_{i(J-1)})$ is a vector of vote proportions of party $j = (1, \dots, J-1)$ for each district i ($i = 1, \dots, n$)
- Y_i is a vector of $J-1$ log ratios where $Y_{ij} = \ln(V_{ij}/V_{iJ})$ for party j ($j = 1, \dots, J-1$) relative to party J
- Y_i is multivariate normal with a mean μ and a variance of Σ .
- Means can be estimated as a linear function of explanatory variables, whereby :

$$\mu_{ij} = X_{ij} \beta_j$$

- Equations are estimated simultaneously for all parties $j = (1, \dots, J-1)$ using a *seemingly unrelated regression* (STATA command `surreg`)
- For more, see Tomz, Tucker, Wittenberg (2002); code to implement the model can be downloaded from <http://gking.harvard.edu> as part of the Clarify software package

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Table 1. Coding of Parties**Panel 1. Communist Successor Parties**

Country	Year	Party/Candidate
Czech Republic	1992	Left Bloc
Czech Republic	1996	Communist Party of Bohemia and Moravia (KSČM)
Czech Republic	1998	Communist Party of Bohemia and Moravia (KSČM)
Hungary	1990	Hungarian Socialist Party (MSzP)*^
Hungary	1990	Hungarian Socialist Workers Party (MSZMP)^
Hungary	1994	Hungarian Socialist Party (MSzP)*
Hungary	1994	Hungarian Socialist Workers Party (MSZMP)
Hungary	1998	Hungarian Socialist Party (MSzP)*^
Hungary	1998	Hungarian Workers' Party (MP)
Poland	1990	Włodzimierz Cimoszewicz^
Poland	1991	Democratic Left Alliance (SLD)*
Poland	1993	Democratic Left Alliance (SLD)*
Poland	1995	Aleksander Kwaśniewski (SLD)*^
Poland	1997	Democratic Left Alliance (SLD)*
Russia	1993	Communist Party of the Russian Federation (KPRF)
Russia	1995	Communist Party of the Russian Federation (KPRF)
Russia	1995	Communist Workers of Russia (KTR)
Russia	1996	Gennadii Zyuganov
Russia	1999	Communist Party of the Russian Federation (KPRF)
Russia	1999	Communist Workers of Russia (KTR)
Slovakia	1992	Party of the Democratic Left (SDL)*
Slovakia	1994	Common Choice Coalition*^
Slovakia	1994	Communist Party of Slovakia (KSS)
Slovakia	1994	Union of Slovak Workers (ZRS)^
Slovakia	1998	Party of the Democratic Left (SDL)*
Slovakia	1998	Union of Slovak Workers (ZRS)
Slovakia	1998	Communist Party of Slovakia (KSS)

^Classified as incumbent party for Table 4

*Classified as reformed communist successor party for Table 5

Panel 2. Nationalist Parties

Country	Year	Party/Candidate
Czech Republic	1992	Republican Party (SPR-RSC)
Czech Republic	1996	Republican Party (SPR-RSC)
Czech Republic	1998	Republican Party (SPR-RSC)
Hungary	1998	Hungarian Justice and Life Party (MIEP)
Poland	1990	Stanislaw Tyminski
Poland	1991	Confederation for an Independent Poland (KPN)
Poland	1993	Confederation for an Independent Poland (KPN)
Poland	1995	Jan Olszewski
Poland	1997	Movement for the Defense of Poland (ROP)
Russia	1993	Liberal Democratic Party of Russia (LDPR)
Russia	1995	Liberal Democratic Party of Russia (LDPR)
Russia	1995	Congress of Russian Communities
Russia	1996	Vladimir Zhirinovskii
Russia	1996	Aleksandr Lebed
Russia	1999	Zhirinovskii Bloc
Slovakia	1992	Slovak National Party (SNS)
Slovakia	1992	Movement for a Democratic Slovakia (HZDS)^
Slovakia	1994	Slovak National Party (SNS)^
Slovakia	1994	Movement for a Democratic Slovakia (HZDS)^
Slovakia	1998	Slovak National Party (SNS)^
Slovakia	1998	Movement for a Democratic Slovakia (HZDS)^
Slovakia	1999	Ján Slota
Slovakia	1999	Vladimír Mečiar^

^Classified as incumbent party for Table 4

Table 2: Estimated Coefficients (Standard Errors) of Effect on Party Vote for the 1996 Czech Parliamentary Elections*

	SPR-RSC	KSČM
Unemployment Rate	.095 (.018)	.090 (.015)
Change in Income	-.020 (.009)	-.004 (.008)
Industrial Growth	.001 (.001)	.000 (.001)
Percent Agriculture	.009 (.008)	.012 (.006)
Percent Industry	.000 (.003)	-.004 (.003)
Percentage Elderly	-.018 (.016)	-.016 (.014)
Percent Urban	.009 (.002)	-.000 (.001)
Log Population	-.159 (.062)	.009 (.053)
Constant	3.20 (1.39)	.446 (1.18)
R-Squared	0.57	0.43
N	76	76

**Models estimated using seemingly unrelated regression (SUR) with logistic transformation of dependent variable. Source: Okresy Ceske Republiky v roce 1996 & 1995, Vekove Slozeni Obyvatelstva Ceske Republiky v roce 1996, Volby do Poslanecke Snemovny Parlamentu Ceske Republiky v roce 1996 and Aktuality CSU: 1996 Duben, Kveten - 1 .cast (Latest News of the Czech Statistical Office: April, May 1996 - Part I). Praha, Czech Republic, Cesky Statisticky Urad.*

Table 3. Number of Cases with 90% Certainty of Predicted Effect by Model

	Nationalists	communist successors
90% Confident in Predicted Direction	4	21
90% Confident in Wrong Direction	8	1
Total Cases	23	27
Percentage with 90% Confidence in Predicted (Wrong) Direction	17% (35%)	78% (4%)

Table 4. Breakdown of Certainty by Incumbency

	Nationalist		communist successors	
	<u>Incumbent</u>	<u>Opposition</u>	<u>Incumbent</u>	<u>Opposition</u>
90% Confident in Predicted Direction	0	4	7	14
90% Confident in Wrong Direction	4	4	0	1
Total Cases	6	17	7	20
Percentage with 90% Confidence in Predicted (Wrong) Direction	0% (67%)	24% (24%)	100% (0%)	70% (5%)

Table 5: Communist successor Parties: Reformed vs. Unreformed*

	All	Reformed	Unrepentant
90% Confident in Predicted Direction	21	8	13
90% Confident in Wrong Direction	1	0	1
Total Cases	27	10	17
Percentage with 90% Confidence in Predicted (Wrong) Direction	78% (4%)	80% (0%)	76% (6%)

*See Table 1, Panel 1 for classification.

Figure 1: Estimated Probability Distribution of Effect of Economic Conditions on Post-Communist and Nationalist Parties in 1996 Czech Republic Parliamentary Elections

