Contestation and inclusiveness in post-communist countries: evidence across time and space*

Quão democráticos são os países pós-comunistas? Este trabalho compara os países pós-comunistas a partir das dimensões da poliarquia: inclusão e contestação. Metodologicamente, estimamos como essas dimensões variam no tempo e espaço usando dados de Coppedge, Alvarez e Maldonado (2008). Nossos resultados sugerem que os países pós-comunistas se tornaram mais inclusivos, mas não para desenvolver um maior nível de debate público entre 1991 e 2000. Além disso, os dados sugerem que enquanto a inclusão se distribui aleatoriamente (−.012), a contestação mostra autocorrelação espacial positiva (0.522). Esses resultados sugerem que a democracia nos países pós-comunistas se caracteriza melhor pelo desenvolvimento da participação, sem contestação.

PALAVRAS-CHAVE Contestação; Inclusão; Democracia; Países pós-comunistas; Análise espacial.

How democratic are post-communist countries? This paper compares post-communist countries based on the polyarch dimension: inclusiveness and contestation. Methodologically, we estimate how these dimensions vary across time and space using data from Coppedge, Alvarez and Maldonado (2008). Our findings suggest that post-communist countries became more inclusive but failed to develop higher levels of public contestation between 1991 and 2000. In addition, data suggest that while inclusiveness is randomly distributed (−.012) contestation shows positive spatial autocorrelation (.522). These results suggest that democratic rule in post-communist countries is best characterized by developing participation without contestation.

KEYWORDS Contestation; Inclusiveness; Democracy; Post-communist countries; Spatial analysis.

*We would like to thanks Scott Gehlbach, Brian Robinson, Steven Timm and Natália Leitão for their helpful comments on our draft version and Giuseppe Lobo for his logistic support. In addition, we would like to thanks David Long for sharing his shape file. Aggregate data can be download at http://www.nd.edu/~mcoppedg/crd/
Introduction

Defining democracy is one of the oldest and most controversial issues in political science. Since Aristotle scholars have been concerned with how democracy is properly defined and measured (Geddes, 1999). On one hand, classical theorists settled its normative features using old Greece as a comparative parameter. On the other hand, positive analysts tend to estimate not only which factors influence democracy stability (Boix and Stokes, 2003; Geddes, 2003; Huntington, 1994; Jones, 1995; Mainwaring, 1993), but also the effects of democratic institutional design on other variables (Przeworski et al., 1996; Enterline and Greig, 2005; Maoz and Russet, 1992). Either way, to employ democracy as dependent or independent variable it is necessary to operationalize it into empirical categories (Munck and Verkuilen, 2002). However, this is not an easy task (Bollen, 1980; Bollen and Grandjean, 1981). According to Blalock (1971), “[...] measurement and conceptualization problems are the major obstacle to integrating theory and research.” (Blalock, 1967: 881).

Theoretically, Dahl (1971) polyarchy concept has been established as one of the most successful attempts to translate an abstract idea into an observed variable. Coppedge, Alvarez and Maldonado (2008) argue that

[…] about three-quarters of what Polity, Freedom House, and other indicators of democracy have been measuring consists of variation on the two dimensions of democracy that Robert Dahl proposed in Polyarchy – contestation and inclusiveness. (Coppedge, Alvarez and Maldonado, 2008: 01).

Thus contestation and inclusiveness are latent dimensions that are captured by different democratic indicators. Here, we analyze how these dimensions vary across time and space among post-communist countries1. To do so, we use data from Coppedge, Alvarez and Maldonado (2008). Our findings suggest that post-communist countries became more inclusive but failed to develop higher levels of public contestation between 1991 and 2000. In addition, data suggest that while inclusiveness is randomly distributed (−0.012) contestation shows positive spatial autocorrelation (.522).

The remainder of the paper consists in four sections. First, we briefly review Dahl (1971) two dimensions of polyarchy. We summarize which variables explain each dimension and we describe the different historical sequences that countries can follow. In the methodological section we outline our research design. Next we compare how contestation and inclusiveness vary across time and space in post-communist countries. In the final section we present our conclusions.

Contestation and Inclusiveness

Dahl (1971) argues that

[…] a key characteristic of a democracy is the continuing responsiveness of the government to the preferences of its citizens, considered as political equals. (Dahl, 1971: 01).

This means that citizens must have unimpaired opportunities to: (a) formulate their preferences; (b) signify their preferences to their fellow citizens and the government by individual and collective action; (c) have their preferences weighed equally in the conduct of the government, that is, weighed with no discrimination because of the content or source of the preference (Dahl, 1971: 02). These are the basic conditions required to consider a regime as democratic. However, to guarantee that these conditions are successfully established, Dahl (1971) argues that is necessary to accomplish eight institutional requirements. Table 1 displays this information.

Dahl (1971) argues that these eight institutional requirements can be used to classify political regimes according to their level of democratization. In addition, these institutional features can be reduced to two theoretical dimensions of democracy: contestation and inclusiveness. Therefore, the more developed these dimensions are, the closer the regime is to polyarchy, and the higher its level of democratization. Figure 1 shows the interaction between contestation and inclusiveness.

Based on the interaction of these two dimensions, Dahl (1971) suggests the existence of four ideal types of political regimes. In the lower left corner are the closed hegemonies. This type of regime shows low levels of both contestation and inclusiveness. In the lower right side are the inclusive hegemonies. This type of regime shows low levels of contestation but offers a high degree of participation. In the upper left side are the regimes with high levels of political competition but low participation (competitive oligarchies). Finally, in the upper right are the regimes that show higher levels of both contestation and inclusiveness. Dahl (1971) defines polyarchies

---

1 Post-communist countries include: Albania, Armenia, Azerbaijan, Belarus, Bosnia and Herzegovina, Bulgaria, Croatia, Czech Republic, East Germany, Estonia, Georgia, Hungary, Kazakhstan, Kyrgyzstan, Latvia, Lithuania, Macedonia, Moldova, Poland, Romania, Russia, Slovakia, Slovenia, Tajikistan, Ukraine and Uzbekistan.
employed principal component analysis (PCA) to estimate both contestation and inclusiveness based on different measures of democracy. We use their data in order to test the following hypotheses regarding post-communist countries.


**H**₂: Both contestation and inclusiveness are spatially dependent.

To test **H**₁, we compare the levels of both contestation and inclusiveness in post-communist countries in two different historical periods: just

---

**Table 1.** Some requirements for a Democracy among a large number of people.

<table>
<thead>
<tr>
<th>I. Formulate preferences</th>
</tr>
</thead>
<tbody>
<tr>
<td>II. Signify preferences</td>
</tr>
<tr>
<td>III. Have preferences weighted equally in conduct of the government</td>
</tr>
</tbody>
</table>

The following institutional guarantees are required:

- Freedom to form and join organizations
- Freedom of expression
- Right to vote
- Eligibility for public office
- Right of political leaders to compete for support
- 5a. Right of political leaders to compete for votes
- Alternative sources of information
- Free and fair elections
- Institutions for making government policies depend on votes and other expressions of preference.

But how do different political regimes become polyarchies? Dahl (1971) argues that historical sequences are an important aspect to understand democratization. In particular, he highlights two different features: (1) the specific path or sequence of transformations of a regime; and (2) the way in which a new regime is inaugurated (Dahl 1971: 33). Path I, in which contestation precedes inclusiveness, is the most common sequence among the old and stable polyarchies (Dahl 1971: 36). The rules and culture of competitive politics first develops among a small elite and then starts to include more people. In path II inclusiveness comes first and then the rules of political competition are developed. Finally, by following path III, a closed hegemony becomes a polyarchy since it develops both contestation and inclusiveness at the same time. In what extent Dahl’s regime ideal types can be used to analyze post-communist countries? In particular, how democratic are post-communist countries? This paper aims to advance our current knowledge on democratization by exploring how contestation and inclusiveness vary across time and space in post-communist countries.

**Data and Methods**

This section outlines our research design. To estimate democratization levels, we used data from Coppedge, Alvarez and Maldonado (2008). They employed principal component analysis (PCA) to estimate both contestation and inclusiveness based on different measures of democracy. We use their data in order to test the following hypotheses regarding post-communist countries.


**H**₂: Both contestation and inclusiveness are spatially dependent.

---

2 Table 01 in Coppedge, Alvarez and Maldonado (2008) shows PCA results for 19 variables. They reached a KMO measure of sample adequacy of .917, used oblique rotation and the two extracted components accounted for 75% of all variance.

Contestation and inclusiveness in post-communist countries: evidence across time and space

Anselin (1989) argues that "[...] in order to interpret what 'near' and 'distant' mean in a particular context, observations on the phenomenon of interest need to be referenced in space, e.g., in terms of points, lines or areal units. (Anselin 1989: 02).

Thus, autocorrelation can be understood as a situation where observations spatially closer show similar values and the aim of spatial analysis is to measure this relationship. Here, we test if both contestation and inclusiveness are spatially dependent in post-communist countries. To do so, we use Moran’s I statistic defined as

$$I = \frac{N}{\sum \omega_{ij}} \sum \sum \omega_{ij} (X_i - \bar{X})(X_j - \bar{X}) \sum (X_i - \bar{X})^2$$

where N is the number of spatial units related to i and j, X and \( \bar{X} \) represent the observed variable and its respective mean and \( \omega_{ij} \) represents the spatial weight matrix.

Results

Both tables 2 and 3 summarize descriptive statistics for contestation and inclusiveness in 1991 and 2000. In 1991, the average of contestation in post-communist countries was .545 with a standard deviation of .522. In 2000 the average was .623 with a standard deviation of .883. However, the difference between T₂ (2000) and T₁ (1991) is not statistically significant (t = –0.395; df = 42; p = .695). On substantive grounds,
After compare how democratic dimensions vary across time, an important step to better understand democratization in post-communist countries is through the historical sequence they followed. What path best characterize post-communist countries? Here, we replicate a promising approach suggested by Coppedge, Alvarez and Maldonado (2008) which consists in following a specific country to analyze how both contestation and inclusiveness changed over time. Figure 3 illustrates Poland historical path.

In the 1950s and 1960s, Poland was closer to an inclusive hegemony (higher levels of inclusiveness but lower degree of contestation) seemingly followed by institutional breakdown in which the regime became a closed hegemony. The collapse of communism in 1989 represents a critical juncture in that Poland increased its level of public contestation and inclusiveness at the same time. However, it is not possible to fully classify Poland according to Dahl’s historical sequence since Poland first moved toward a less democratic regime and just after that it moved toward a polyarchy. According to Bunce (2003), “Communism in Poland had created over time a popular consensus supporting liberal politics.” (Bunce, 2003: 184). In addition, Bunce (2003) suggest four factors to explain why this is the case: (1) the long history nationalism; (2) the higher national homogeneity after World War II; (3) Poland’s democratic tradition and (4) the vulnerability of the communist regime.

Grzymala-Busse and Innes (2003) argue that in Bulgaria

[... the political and economic preconditions for radical reforms were terrible from the outset and have remained so, as in the most obvious strategy

---

The data suggest that we should not take for granted that post-communist countries are developing their public contestation levels, at least in the 1991-2000.

Regarding inclusiveness, the average in 1991 was .582 with a standard deviation of .244. In 2000 the average reached .793 with a spread of .214. In addition, the data suggest that the difference between $T_1$ and $T_2$ is statistically significant ($t = -3.348; df = 49; p < .002$). We calculate eta squared in order to estimate the effect size statistic:\n
$$\eta^2 = \frac{t^2}{t^2 + N - 1}$$

For public contestation, eta squared statistic is .006. For inclusiveness, this value is .309. $\eta^2$ ranges between 0 and 1. Cohen (1988) suggests the following guideline to interpret eta statistic: $\eta^2 = .01$ as small effect; $\eta^2 = .06$ as moderate effect and $\eta^2 = .14$ as large effect. Therefore, data suggest that while public contestation seems to vary little, inclusiveness appears to have developed over time. To be sure, we run a paired sample t-test to compare the difference between both contestation and inclusiveness means of post-communist countries in $T_1$ (1991) and $T_2$ (2000) ($\Delta C$ and $\Delta I$, respectively). The results are the same. For contestation, $t = .836; df = 25; p < .411$. For inclusiveness, $t = 3.285; df = 25; p < .003$. Table 4 summarizes this information.

Thus, on average, post-communist countries included more people in the political process over time but did not develop public contestation by our measures. This is not to say that democratization in post-communist countries did not develop after communist collapse but rather that perhaps a better way to understand democratization process in post-communist countries is through developing inclusiveness without increasing public contestation. Table 5 compares which ideal types best characterizes post communist countries in $T_1$ (19991) and $T_2$ (2000).

In 1991, most post-communist countries were closer to closed hegemonies or polyarchies (33.3%). In 2000 the proportion of closed hegemonies was reduced (18.5%) and the percentage of inclusive hegemonies increased (14.8% to 25.9%). Comparatively, there were no changes in 37% of the cases. 18.5% of post-communist countries changed their levels of public contestation to transform their regime type. Table 6 shows how regime types changed from 1991 to 2000 in the countries of interest.

---

6 Cohen (1988) defines the effect size as “[...] the degree to which the phenomenon is present in the population or ‘the degree to which the null hypothesis is false’.” (Cohen 1988: 08).

---

Cohen (1988) defines the effect size as “[...] the degree to which the phenomenon is present in the population or ‘the degree to which the null hypothesis is false’.” (Cohen 1988: 08).
Contestation and inclusiveness in post-communist countries: evidence across time and space

Figure 4 illustrates Bulgaria’s historical path. Bulgaria shows a very clearly pattern of increasing inclusion and then developing public contestation. Although Bulgaria’s path is closer to Dahl’s Path II, it also cannot be fully representative since some degree of participation was compromised after 1989. Bunce (2003) argues that […] if we restrict our focus to those countries that show significant improvement in their democratic performance over time, or Bulgaria and Romania, we see the same pattern: mass mobilization at the beginning of the transition. (Bunce, 2003: 172).

According to Howard (2002), Bulgaria shows the lowest average of number of organizational membership per person in post-communist countries (.35 for Bulgaria as compared to the average of .91). He concludes that

For the countries with the very lowest levels of participation which generally have weak and unsupportive states and unstable economies, it is unlikely that participation in voluntary organizations will increase significantly. (Howard, 2002: 165).

Data by Coppedge, Alvarez and Maldonado (2008) suggest that the Bulgarian political regime should be classified was polyarchy not only in 1991 but also in 2000. Thus, although civil society appear to be weak, institutional data points out that participation in Bulgaria is more developed compared with other post-communist countries. Figure 5 shows Czech Republic’s historical path.

Data suggest that Czech Republic took path III (increasing contestation and inclusiveness at the same time). Dahl (1971) argues that paths II and III are dangerous for the same reason:

[…] to arrive at a viable system of mutual security is a difficult matter at best; the greater the number of people and the variety and disparity of interests involved, the more difficult task and the greater the time required. (Dahl, 1971: 36).

<table>
<thead>
<tr>
<th>Table 4. Paired sample t-test.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pair</td>
</tr>
<tr>
<td>C</td>
</tr>
<tr>
<td>I</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Table 5. Type of Regime in time in 1991 and 2000*.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Type of regime</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>Closed hegemonies</td>
</tr>
<tr>
<td>Inclusive hegemonies</td>
</tr>
<tr>
<td>Competitive oligarchies</td>
</tr>
<tr>
<td>Polyarchies</td>
</tr>
<tr>
<td>Total</td>
</tr>
</tbody>
</table>

* To classify each country we employed the following criteria: if the country was below the average in both dimensions it equals to closed hegemonies. If it was above the average in both dimensions it equals to polyarchies. If it was above the average in contestation but below the mean in inclusiveness it was coded as competitive oligarchy. Finally, if it was below the mean in contestation and above the average of inclusiveness it was coded as inclusive hegemony. By 1991 Serbia and Montenegro was not included in the sample.

<table>
<thead>
<tr>
<th>Table 6. Regime types change from 1991 to 2000.</th>
</tr>
</thead>
<tbody>
<tr>
<td>T1-T2</td>
</tr>
<tr>
<td>No change</td>
</tr>
<tr>
<td>Contestation</td>
</tr>
<tr>
<td>Inclusiveness</td>
</tr>
<tr>
<td>Both</td>
</tr>
<tr>
<td>Total</td>
</tr>
<tr>
<td>missing</td>
</tr>
<tr>
<td>Total</td>
</tr>
</tbody>
</table>

Darden and Grzymala-Busse, (2006) include Czech Republic among the countries that had […] highly schooled populations and substantial national content in the schooling curriculum at the onset of the communist period. (Darden and Grzymala-Busse, 2006: 94).

They argue that […] nationalist schooling produced shared expectations and standards for a legitimate government. It sustained both anticommunist sentiment throughout the postwar era and the
opposition that arose (and organized where the communist regime made it possible). (Darden and Grzymala-Busse, 2006: 111).

Although Czech Republic had followed a “dangerous path,” it seems that its current level of both contestation and inclusiveness allows us to define Czech Republic as a polyarchy. Figure 6 depicts Hungary’s historical path.

Hungary shows a historical sequence similar to Poland: An inclusive hegemony suffered an intuitiona

Figure 3. Historical path - Poland (1950-2000).

Figure 4. Historical path - Bulgaria (1950-2000).
Contestation and inclusiveness in post-communist countries: evidence across time and space

breakdown and become a closed hegemony. After communism’s collapse (1989) the regime radically developed its level of inclusion and then increased its degree of public contestation. For Moser (1999), “Poland and Hungary, have followed the standard pattern of party consolidation over time.” (Moser, 1999: 360). In addition, regarding national content schooling, Darden and Grzymala-Busse (2006) included Hungary in the same group of Czech Republic: strong nationalism content and higher levels of literacy (see Figure 1 in Darden and Grzymala-Busse 2006: 91). Finally, Howard (2002) argues that [...] in those postcommunist countries with higher levels of participation in voluntary organizations [...] it is possible, and in some cases even likely, that the state and economy will become stronger over the next decade. (Howard 2002: 165).

Scholars can examine how participation, measured by average member of organizational membership per person, relates to inclusiveness measured by available institutional indicators. In any case, it seems that properly identifying which variables explain variation in democratization will continue to challenge political science literature into the future. We believe that the comparative analysis of post-communist countries provides a promising case to better understand the mechanisms that link explanans and explanandum.

After providing some evidence of how contestation and inclusiveness vary across time in post-communist countries, the next step is to estimate how these dimensions differ across space. Technically, we used a box map (hinge = 1.5) to analyze the distribution of these dimensions and check for outliers\(^7\). Figures 7 and 8 illustrate the distribution on both contestation and inclusiveness in post-communist countries.

According to Anselin (2005), outliers maps are useful to detect observations that are to distant from the mean. The data suggest that there is no outlier regarding both contestation and inclusiveness in post-communist countries. Although informative, it is not possible to infer patterns of spatial autocorrelation just by looking the map. We ran univariate Moran’s I statistic to analyze the distribution of both contestation and inclusiveness in time \(T_2\) and \(T_1\), As weight, we used a rook matrix. According to Geodacenter, “A rook weights matrix defines a location’s neighbors as those areas with shared borders (in contrast to a queen

\(^7\) Anselin (2005) argues that “An observation is classified as an outlier when it lays more than a given multiple of the interquartile range (the difference in value between the 75th and 25th observation) above or below respectively the value for the 75\textsuperscript{th} percentile and 25th percentile. The standard multiples used are 1.5 and 3 times the interquartile range” (Anselin 2005:49).

Figure 5. Historical path - Czech Republic (1990-2000).
Regarding contestation, the yellow observation is an outlier (Belarus)\(^9\). If we exclude it from the analysis the Moran’s I coefficient would change from .5219 to .6576. Regarding inclusiveness, the Morans’ I coefficient is –.0124, suggesting that the distribution of participation is spatially random in post-communist countries. To be sure, we run bivariate Morans’ I scatter plot using contestation and inclusiveness in 1991 and 2000. Anselin (2005) argues that, this is particularly useful for the analysis of space-time correlation, where the two variables are the same, but measured at two points in time. (Anselin, 2005: 14).

Data suggest that regardless of the variable used the results are the same. Thus, we have more confidence arguing that contestation and inclusiveness

\[ \text{Table 7. Morans’ I for contestation and inclusiveness in 1991 and 2000.} \]

<table>
<thead>
<tr>
<th></th>
<th>Contestation</th>
<th></th>
<th>Inclusiveness</th>
</tr>
</thead>
<tbody>
<tr>
<td>Morans’ I</td>
<td>.329 (p = .02)</td>
<td>.522 (p = .01)</td>
<td>-.059 (p = .46)</td>
</tr>
</tbody>
</table>

Figure 6. Historical path - Hungary (1950-2000).

The data suggest that in both periods contestation seems to be spatially autocorrelated in post-communist countries. We used 99 permutations and found p values of .02 in 1991 and .01 in 2000. In contrast, the data suggest that the distribution inclusiveness is spatially random. We used 99 permutations and found p values of .46 in 1991 and .55 in 2000. Figure 9 illustrates contestation and inclusiveness in 2000.

According to Anselin (2005),

 […] the four quadrants in the scatter plot correspond to different types of spatial correlation. Spatial clusters in the upper right (high-high) and lower left (low-low) quadrants, and spatial outliers in the lower right (high-low) and upper left (low-high). (Anselin, 2005: 132/133).

Regarding contestation, the yellow observation is an outlier (Belarus)\(^9\). If we exclude it from the analysis the Moran’s I coefficient would change from .5219 to .6576. Regarding inclusiveness, the Morans’ I coefficient is –.0124, suggesting that the distribution of participation is spatially random in post-communist countries. To be sure, we run bivariate Morans’ I scatter plot using contestation and inclusiveness in 1991 and 2000. Anselin (2005) argues that,

This is particularly useful for the analysis of space-time correlation, where the two variables are the same, but measured at two points in time. (Anselin, 2005: 14).

Data suggest that regardless of the variable used the results are the same. Thus, we have more confidence arguing that contestation and inclusiveness

\[ 8 \text{ The spatial matrix was calculated using the statistical software GeoDa™.} \]

\[ 9 \text{ Ward and Gleditsch (2008) using data from 2002 polity IV found that “countries such as Belarus persisting as an autocracy surrounded by (mostly) more democratic neighbors (Ward and Gleditsch 2008: 18).} \]
Contestation and inclusiveness in post-communist countries: evidence across time and space

Democratization represents a canonical issue in political science. This paper aims to advance our current knowledge about it by assessing how democratic levels vary across time and space in post-communist countries. First, we found that inclusiveness developed more strongly between 1991-2000. In 1991, 14.8% of all post-communist countries were inclusive hegemonies. In 2000, this proportion was 25.9%. Surprisingly, there is no statistically significant difference between contestation levels in post-communist countries in 2000 and their degree of inclusiveness.

Brinks and Coppedge (2006) argue that regimes linked in some networks exert a measurable force on each other. Any model exploring the determinants of democratization that does not account for these spatial relationships is underspecified. (Brinks and Coppedge, 2006: 482/483).

These findings suggest that the spatial component of democratization is an important variable to consider.

**Conclusion**

Democratization represents a canonical issue in political science. This paper aims to advance our current knowledge about it by assessing how democratic levels vary across time and space in post-communist countries. First, we found that inclusiveness developed more strongly between 1991-2000. In 1991, 14.8% of all post-communist countries were inclusive hegemonies. In 2000, this proportion was 25.9%. Surprisingly, there is no statistically significant difference between contestation levels in post-communist countries in 2000 and their degree of inclusiveness.
of public contestation in 1991 (just after communist collapse). Thus, we should not take for granted that post-communist countries are developing their public contestation levels, at least in the 1991-2000 period. For example, 18.5% (5) of all countries showed changes in their contestation levels up to modify their regime type. Unfortunately, in three of the five observations (60%), the direction of change was negative - the countries decreased their level of public contestation.

Second, although inclusiveness developed more strongly than contestation, data suggest that this phenomena was spatially randomly distributed. In contrast, in both periods data suggest that there is positive spatial autocorrelation regarding public contestation levels in post-communist countries. That is, spatially closer political regimes showed similar levels of contestation not only in 1991 but also in 2000.

If our conclusions are true, democratic rule in post-communist countries is best characterized by developing participation without contestation. Unfortunately, democracy cannot grow in an environment that lacks public contestation. Further research can explore how democratic levels are currently dispersed across time and space not only in post-communist countries but also among other nations.

References


