Communist Legacies and Democratic Survival in a Comparative Perspective: 
Liability or Advantage?

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Abstract
The literature on the legacies of communism for democratization has focused almost exclusively on explaining variation in the democratic experiences within the postcommunist space. While this is useful in many ways, it says little about a communist legacy in comparison to other types of antecedent regimes. We take a different approach, looking at the question by comparing postcommunist legacies to those of other states through the prism of democratic survival. One key implication of this shift in perspective is that the literature on democratic survival highlights a range of social and economic factors that are likely to help postcommunist democracies survive, which stands in stark contrast to the postcommunist democratic performance literature that emphasizes potential disadvantages. We assess these competing and contradictory implications by analyzing the relative likelihood of democratic survival using a sample of all Third Wave democracies from 1970-2010. We find that postcommunist democracies are neither systematically more nor less likely to fail than other democracies. Further, we find no evidence that the prospects of failure are significantly affected by past membership in the Soviet Union or the Eastern Bloc, the type of communist regime, or the number of years under communist rule. These findings provide little evidence that the problems of postcommunist democratization pose a more difficult set of conditions for democratic survival.

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Introduction

The notion that historical legacies are important to the fate of new democracies is well established theoretically, and is supported by substantial evidence. In this article we address a question of this type: What effect does a communist past have on the viability of new democracies? Soon after the first transitions to democracy in Eastern Europe, there was a substantial debate over whether theories developed to understand democratization in other regions of the world could be used to understand post-communist developments. Bunce pointed out that a communist past was substantially different from that of the new democracies of Southern Europe and Latin America whose experience with democratization in the 1970s and 1980s shaped theories of transition and consolidation. She thus argued that existing theory should not be adopted in a wholesale fashion and utilized only with exceptional care.

Linz and Stepan took the more nuanced position that the road from post-communist transition to consolidated democracy implied a rather different set of challenges than those in Southern Europe or Latin America. Both accounts highlighted simultaneous radical changes in important macro-level factors (regime, institutional, and economic) as a unique aspect of post-communist democratization which presented these states with a unique set of challenges with regard to democratic consolidation. Schmitter

1 Bernhard, Reenock, Nordstrom 2004; Wittenberg 2006; Pop-Eleches and Tucker 2011; Darden and Grzymala-Busse 2006; Cheibub 2006. Also see the recent collection by Beissinger and Kotkin 2014.


3 Linz and Stepan 1996.
and Karl disagreed with these contentions, arguing that while the differences were substantial, there was no reason not to adapt tried and true theory to understanding the region. In contrast, Przeworski downplayed the uniqueness of the region, arguing that the economic stagnation that beset Latin America in the 1980s and the radical adjustment policies used to address it was no less an economic challenge than the simultaneous transformation confronted by Eastern European democratizers.

In considering post-communist democratization processes, we are persuaded by Nodia’s framing of the issue -- “What is unique about post-communist transitions is that they are transitions from communism. The only interesting question is how different this makes them and in what this specific difference consists.” Nodia’s claim is important in the context of the debate discussed above because addressing his question about communist legacies requires one to step back from the findings on post-communist democratic performance, which compares post-communist states to each other, and instead consider the record of the post-communist states in comparison to other regions. This demands that we explore the question of post-communist differences in the context of the broader literature on democratization.

In this paper we address this question through the lens of the cross-national literature on democratic survival, an issue yet to be explored in the context of post-

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5 Przeworski 1991, 122 & 139.

6 Nodia 1996, 16.

7 Kopstein and Reilly 2002; Fish 2005; Pop-Eleches 2007; Smyth 2006; Darden and Grzymala-Busse 2006.
communist regime change. This literature concerns itself with the question of whether countries that make the transition to democracy (defined in terms of a series of minimal conditions) remain democratic or break down. From the perspective of this literature and variables it has identified as central to democratic survival, it is unclear why one should accept blanket claims that a communist past either inherently helps or harms a democracy’s prospects. Important findings from this literature read in conjunction with the literature on post-communist democratic performance suggest a potentially mixed legacy. Specifically, it seems that there are aspects of the communist past that might promote survival (e.g., relatively high levels of economic development and socioeconomic equality) while others may promote democratic breakdown (e.g., a highly subject political culture). It is therefore a distinct possibility that different factors linked with democratic survival and failure in the cross-national literature may wash each other out when taken together as an aggregated communist legacy.

Our reading of the literature makes us highly skeptical of sweeping claims that post-communist democracies are systematically advantaged or disadvantaged in terms of democratic survival.8 Ultimately, though, and as anticipated by the discussion above, whether communist legacies are different than those of other Third Wave democracies and whether existing theories of democratic survival are useful in understanding the comparison of different legacies is an empirical question. Motivated by Nodia’s position,

8 For example, Kovrig (1995) described the communist period as 40 lost years. Janos argued that Eastern Europe and the former Soviet Union in the early 1990s were in some ways in an analogous situation to Eastern Europe in the period after WWI or even earlier, when democracy generally failed to take root in the region (2000).
we analyze whether a communist past has meaningful consequences for democratic survival by comparing the prospects of regime failure for post-communist democracies to those of third-wave democracies with other antecedent regimes. Consistent with our intuition, empirical analyses of all third-wave democracies between 1970 and 2010 turn up very little evidence consistent with the proposition that post-communist democracies are systematically more or less likely to fail than other third-wave democracies. Further, we find no evidence that the survival prospects of post-Soviet or post-Eastern Bloc democracies or former patrimonial communist regimes are significantly different than those of other third-wave democracies, or that the length of time under communist control prior to democratization influences the hazard of democratic breakdown.

The article proceeds in five steps. First, we discuss what the cross-national democratic-survival literature implies for the relative survival prospects for post-communist democracies. Here, we highlight three important areas: 1) level of development and economic performance, 2) cultural and behavioral legacies, and 3) egalitarianism. Second, we present our research design for assessing whether post-communist democracies, in general, are more or less likely to fail than other third-wave democracies. Third, we discuss the results of our statistical analyses. Fourth, we consider whether variation in the communist experience in terms of whether it emerged from the Soviet Union, the duration of communist rule, or type of communist rule (using

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One of the implications of our comparative focus is that some factors considered to be relevant for variation across post-communist countries are irrelevant for the larger sample (e.g., years of EU membership might influence the degree of democracy across Eastern Europe but is irrelevant to a Latin America or Africa).
Kitchelt’s typology) is associated with variation in democratic survival. Finally, we conclude with a discussion about how our findings add to the discussion of the impact of the communist legacies.

**The Macro-level Legacies of Communism and Democratic Survival**

The literature on democratic survival has tested a range of different variables and consistently yields results that point to the influence of three sets of macro-level factors: economic development and performance, political culture and behavior, and socio-economic equality. We integrate findings from research on post-communist democratic performance into a discussion of these factors because in conjunction the two literatures facilitate theoretical insights on the potential for the breakdown of post-communist in comparison to other Third Wave democracies. This contrast yields multiple, clear expectations concerning aspects of the communist past and the prospects of democratic survival. Importantly, in the aggregate, these factors have different, and contradictory, implications for the likelihood of democratic survival.

*Economic Development and Performance*

The work of Przeworski, Alvarez, Limongi, and Cheibub explained Lipset’s original finding on the correlation between economic development and democracy as an exogenous relationship because it enhances democratic survival. That is, more developed democracies have substantially higher rates of survival than less developed democracies. For a certain group of countries that began the twentieth century hovering between incipient modernity and feudal stagnation, communist rule represented an

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effective and rapid path to industrialization. If one looks at where countries like Russia and China were at the start of the twentieth century, and where they are now, communist countries outperformed many other forms of dictatorship and some post-colonial democracies (e.g. India). One can speculate on how the countries that came under the sway of the Soviet Union at the end of World War II would have fared had they remained on the periphery of the West. Clearly, for the developed areas of what became Central and Eastern Europe, the experience of a divided Germany suggests that it was not the best development strategy. However, would Poland and Hungary, the Baltics, and Balkans have eventually developed more rapidly like other peripheral European states, e.g. Spain, Ireland, Finland, and Greece, or would they have continued to lag due to the persistence of traditional barriers to development? Such counterfactuals cannot be definitively answered, but what is most important from the perspective of democratic survival is where formerly communist countries stood in terms of development at the point of transition to democracy, not whether the path to get there was the most efficacious.

This potential advantage has not received substantial attention in the literature and few authors have discussed it even in passing. Both Janos and Pop-Eleches potentially see Communist development efforts as a disadvantage for democracy. Their judgments though are based on a more Western-Europe focused comparison while we take other Third Wave democracies as ours. A substantial subset of post-communist states made a

12 Kopstein 2003; Ekiert 2003.
successful transition to democracy at levels of GDP per capita at which democratic failure is understood to be highly unlikely (e.g. Slovenia and the Czech Republic). Our data indicate that, on average, post-communist democracies enjoy a significantly higher GDP per capita at the onset of their democratic episodes than do other third-wave democracies, $8,219 vs. $4,312 in constant 2005 international dollars. 14

which are cross-sectional and use Freedom House, show the Eastern European experience as having mixed effects depending on the indicator of modernity that he applies. Our differences with him have to do with our focus on the survival of countries that made transitions to democracy in the Third Wave as our sample. His regressions look at all countries regardless of regime type and include longstanding OECD democracies. For a comparison of development in our sample across regions see Sections V and VI in the appendix. Section V compares all countries in our sample in terms of their level of development, rates of growth, socioeconomic inequality, and basic needs provision by region. In section VI we show that future post-communist democracies are also above the mean for development and growth rate for the historical era preceding democratization in the region (1950-1990).

14 It is important to stress that what matters for our analysis is that post-communist democracies have higher levels of GDP per capita than other third wave democracies, not whether communist states grew faster than other new democracies prior to democratization.
Economic performance also has been shown to be a robust predictor of democratic survival.\textsuperscript{15} Specifically, democracies that experience economic contraction have a higher probability of breakdown. Despite fears that the initial recession that accompanied the transformation of planned to market economies would threaten economic reform,\textsuperscript{16} the timing of such recessions was fortuitous given that new democracies experience democratic honeymoons where they are less susceptible to breakdowns in the period directly following transition.\textsuperscript{17} In the aggregate, the annual economic growth of post-communist democracies is lower than that of other third-wave democracies (3.3\% vs. 4.2\% respectively) in the period we analyze. Compared to democracies that transitioned from other antecedent regimes, then, post-communist democracies should be less likely to fail due to their higher levels of economic development but slightly more likely to fail on the basis of their economic growth.

\textit{Political Culture and Behavior}

The literature on democratic survival has looked at a number of social and behavioral factors such as colonial experience, ethno-linguistic fractionalization, and predominant religious traditions. Even richer in this regard is the well-established

\textsuperscript{15} Gasiorowski 1995; Bernhard, Nordstrom, and Reenock 2001; Kapstein and Converse 2008.

\textsuperscript{16} Przeworski 1991.

\textsuperscript{17} Bernhard, Reenock, and Nordstrom 2003
literature that links political culture and behavior with democratic performance. We draw on that literature on the post-communist experience in this section. The prevalent position on post-communist political culture is that it has a negative legacy. The most influential position has been that of Kenneth Jowitt, who coined the term “Leninist Legacy.” He argued that in its wake communism left societies in which many citizens had attitudes that were antithetic to democratic development. Vladimir Tismaneanu has made similar arguments. Certainly, the kind of fatalism that they note -- apathy toward politics, lack of interpersonal trust, learned helplessness, and expectations that the state rather than the individual will take responsibility for the fate of citizens -- are all incongruent with the attitudinal correlates of democracy. A few studies, though they do not go so far as to suggest that the experience of communism created positive legacies for political culture, present findings that might seem to hold such implications (see Dalton 1994 and Pop-Eleches and Tucker 2011).

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18 Classics include Almond and Verba 1965; Putnam 1993; Welzel and Inglehart 2006.


21 There is also an extensive more descriptive literature on the political culture of post-communist countries that utilizes surveys of values and attitudes. Curiously, many of these studies find that support for democracy is stronger in countries with lower levels of democratic institutionalization than countries where democracy is better established. And many of them do not explore what is distinctive above about the post-communist situation, but instead apply models well-established from the study of other regions to
A number of studies have shown that civic engagement and hence the strength of civil society is less well developed in post-communist society. The work of Mark Howard documents the low propensity of post-communist citizens to participate in civic organizations.\textsuperscript{22} This has in turn been verified by Bernhard and Karakoc and Pop-Eleches and Tucker, who also uncover an unwillingness to engage in protest activity.\textsuperscript{23} Both studies not only find this to be true in comparison to the long established democracies of North America and Western Europe, but also in relation to other recently democratizing regions (like Latin America). These findings are consistent with Jowitt’s idea that the Leninist legacy should have a negative behavioral legacy for democracy.

Another study that looks for evidence of a unique Leninist legacy is Letki and Evans, who approach the issue from the perspective of trust.\textsuperscript{24} They argue that prior to the fall of communism, interpersonal trust (based on personal networks) was much stronger than institutional trust. They hypothesize that the harsh post-communist economic transformation tended to undermine these interpersonal trust networks without building compensating institutional trust networks, thus complicating the task of building a democratic political culture in post-communist countries. The implication here is that chart whether the political culture developing in a purely post-communist sample of countries is supportive of democracy. Thus they provide little guidance in framing hypotheses about post-communist legacies in a comparative context (e.g Rose and Mishler 1994, Mishler and Rose 2001, Evans and Whitefield 1995, Reisinger et al. 1994).

\textsuperscript{22} Howard 2003.

\textsuperscript{23} Bernhard and Karakoc 2007; Pop-Eleches and Tucker 2013.

\textsuperscript{24} Letki and Evans 2005.
the nature of trust under communism combined with post-communist economic transformation is a complex of conditions that makes democratic survival more difficult.

Socioeconomic Equality

Since Moore it has been apparent that the patterns of land tenure and labor regulation that lead to gross social inequality complicate efforts to democratize and sustain democracy.\(^{25}\) In this spirit, a number of contemporary observers have analyzed the effects of unequal socioeconomic distribution and have confirmed that inequality continues to complicate the problem of sustaining democracy.\(^ {26}\)

Through the prism of that more recent literature, post-communist democracies would again seem to have certain advantages in terms of democratic survival. Income distribution was egalitarian in relative terms under communism and basic needs provision was also high. And in comparison to other democratizing regions, it has remained so.\(^ {27}\) Post-communist democracies, on average, have significantly lower Gini scores than do other third-wave democracies (31 vs. 43).\(^ {28}\) Additionally, basic needs satisfaction, as measured by the average food supply in kilocalories, is significantly higher in post-communist democracies than it is in other democracies (2981 vs. 2610 per diem).\(^ {29}\)

\(^{25}\) Moore 1966; Rueschemeyer, Stevens, and Stevens 1993; Collier 1999.

\(^{26}\) Boix 2003; Acemoglu and Robinson 2001; Reenock, Bernhard, and Sobek 2007, Ansell and Samuels 2014.

\(^{27}\) See Haggard and Kaufman 2008 for an explicit comparison of Eastern Europe, Latin America, and East Asia.

\(^{28}\) Solt 2009.

\(^{29}\) FAOSTAT 2010.
Generally speaking, the moderate levels of income inequality as well as adequate food supplies for most populations in post-communist democracies were quite favorable to democratic survival, giving them two additional advantages to democracies that emerged out of other forms of dictatorship.

A Communist Legacy or Legacies?

The preceding discussion yields a number of insights concerning the relationship between communist legacies and democratic survival. First, a communist past would appear, on average, to be a mixed bag for democratic survival. The literature on the survival of democratic regimes has pinpointed the economy and its performance as predictors of democratic survival. Post-communist democracies would appear less likely to fail compared to other Third Wave democracies given their levels of economic development and, perhaps, more likely to fail given their respective rates of economic growth. The relative socioeconomic equality of communist states may have functioned as a positive legacy following transition to democracy. However, the negative cultural and behavioral legacies of communism suggest that post-communist democracies face a relatively higher probability of breakdown than other third-wave democracies. Taken together, the correlates of cross-national democratic survival suggest a communist past is neither inherently good nor bad for democratic survival. The next section describes how we empirically assess the relationship between a communist past and democratic survival.

Research Design
Most quantitative studies of the post-communist democratic experience have focused on the variation of outcomes within that sub-set of states and thus use data for all states that emerged from communism. The goal of our paper is different in that we examine the relative advantages or disadvantages of emerging from a communist experience for the survival of new democracies. This means that a number of post-communist countries are irrelevant to our analysis, specifically those that did not make a transition to democracy. We use the Bernhard, Nordstrom, and Reenock (BNR) survival dataset to identify the population of third wave democracies (defined as any new democracy that begins after 1970) until 2010.\footnote{See Bernhard, Nordstrom and Reenock 2001. We downloaded the dataset at http://www.clas.ufl.edu/users/bernhard/content/data/data.htm and updated it from 2005 to 2010. See Table SA.1 in the Supplementary Appendix for the country episodes analyzed in our regressions.} Our data set includes all third wave democratic episodes in order to analyze how post-communist states fared as democracies relative to those with other authoritarian legacies.\footnote{The non-communist third wave democracies in our sample consists of eighteen states from the Caribbean and Latin America, four states from Europe (Spain, Portugal, Greece, and Switzerland), eighteen states from Africa, two states in North Africa and the Middle East (Sudan and Turkey), eight states from Asia, and one state from Oceania (Papua New Guinea). We provide additional descriptive information about these states in the Supplementary Appendix, Section V.} It is important to emphasize that the data set only includes democratic episodes, so excludes all observations, including post-communist cases, where a country does not meet the minimum requirements for
democracy in the BNR dataset. Thus our data does not include all post-communist countries, only those which made a successful transition to democracy.\textsuperscript{32}

Additionally, our data set does not include any established democracies whose episodes were ongoing as of the 1970 cutoff (prior to the Third Wave), nor does it include micro-states. This yields a time-series cross-sectional data set of 69 countries with a total of 78 democratic episodes (some countries experience multiple democratic periods) comprising 1258 democratic country years and 22 breakdowns. All episodes that do not end in a democratic breakdown are right-censored in 2010.\textsuperscript{33} The dependent variable in our analyses is coded 1 if a country experienced a democratic breakdown in year $t$ and 0 otherwise.

Our theoretical interest lies in the relative survival prospects of post-communist democracies compared to democracies with other antecedent regimes. The variable $\textit{Post-Communist}$ is coded 1 if a state emerged from a communist past and 0 otherwise. We recognize that this dichotomous variable represents only a rough approximation of some of the factors specified in the literature on post-communist democratic performance. However, indicators necessary to directly test some of these mechanisms, such as attitudinal congruence with democracy and the strength of civil society, are simply not

\textsuperscript{32}Our data set, for example, does not include the Central Asian countries that never became democratic in the years after the Soviet Empire fell. See Section 1 of the supplemental appendix for a listing of the democratic episodes in the dataset.

\textsuperscript{33}Even though these episodes are ongoing after 2010, the data are right-censored at that point. All information from the data is included in the likelihood estimates for these continuing democratic episodes even though they artificially end in 2010.
available for a broad cross-section of cases over time. Our tests are designed to examine the implications of the legacies discussed in the literature review. If the more micro-level cultural and behavioral factors highlighted in the literature on post-communist democratic performance are important, they should lead to a differentiated communist legacy in a set of observations that includes democracies that emerged from other forms of authoritarianism. Further, depending on the sign and significance on these variables, we will be able to tell whether the net effect of such legacies is positive or negative and which issues are important to understanding any post-communist difference.

In addition to our variable that explicitly captures a communist past, we highlight four factors that have played a role in the literature on democratic survival that are critical to assessing the differential legacies of communism. Their relative levels of economic development, inequality, and basic needs satisfaction constitute potential positive legacies for post-communist democracies, while their post-transition rates of economic growth might hurt their chances for survival. Controlling for these variables allows us to isolate how other factors associated with a post-communist past, most notably the behavioral and/or cultural legacies discussed above, influence democratic survival. To capture economic development and performance, we include real GDP per capita (constant) and rate of growth for each year. GDP per Capita and Economic Growth data come from the Penn World Table 8.1. We examine two forms of socioeconomic equality. First we look at income inequality measured via GINI scores from the Standardized World Income Inequality Dataset (SWIID). We also consider a state’s

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34 Feenstra, Inklaar, and Timmer 2015.

35 Solt 2009.
ability to ensure the basic needs of its citizens. We operationalize this concept as the per capita Food Supply in kilocalories per day.\textsuperscript{36}

Our analyses also control for a number of factors that feature prominently in the literature on democratic survival. The first two model potential differences in survival due to variation in democratic institutions. Legislative Fractionalization is measured using the Laakso-Taagepara index of the effective number of parties while Presidential Systems is a dichotomous variable coded 1 for presidential and semi-presidential systems and 0 otherwise.\textsuperscript{37} We also include a variable identifying the number of Previous Democratic Episodes a country has experienced. These three controls are taken from Bernhard, Nordstrom, and Reenock. We model the potential effect of the resources curse on democratic survival with a state’s (net) Oil Exports.\textsuperscript{38} The dichotomous variable Majority Muslim controls for the possible influence of Islam on the likelihood a democracy fails.\textsuperscript{39} Finally, our fully specified models control for the effect of ethnic fractionalization on democratic survival.\textsuperscript{40}

\textsuperscript{36} FAOSTAT 2010. For the unique properties of this measure for gauging socioeconomic distribution see Reenock, Bernhard, and Sobek 2007.

\textsuperscript{37} Laakso and Taagepera 1979.

\textsuperscript{38} Ross 2013.

\textsuperscript{39} Pew Forum 2009.

\textsuperscript{40} The ethnicity data were drawn from the CREG data compiled by Nardulli, et al. 2012. We transformed their data on ethnic group population shares into the standard measure of fractionalization, i.e. the probability that two randomly selected individuals in a given country are from different ethnic groups (Fearon 2003: 15).
Our primary analyses were conducted with Cox proportional hazard models. The Cox estimator is preferable to parametric event history models (e.g., Weibull or exponential) when the question of theoretical interest concerns the relationship between a covariate and the likelihood of a subject failing and not the underlying distribution of subject failures (Box-Steinnesmeier and Jones 2004). Given that we are concerned with the effect of a communist past on the prospects of democratic survival, the Cox model is the appropriate event history estimator for our analyses. All of our models account for non-proportional hazards between covariates and democratic survival. An analysis of Shoenfeld residuals indicated that Legislative Fractionalization was the only explanatory variable whose influence on the hazard of a democracy failing varied over time. Following Box-Steinnesmeier and Zorn (2001), we interacted it with the natural log of the number a year’s a democracy has survived up to time $t$. It is worth briefly noting that the proportional hazard associated with Post-Communist Democracy implies that the effect of having a post-communist past on the likelihood of democratic failure does not vary as a function of the time since a country transitioned to democracy.

Finally, some of our explanatory variables are missing a number of observations. Analyzing incomplete data sets results in listwise deletion, which causes inefficiency and, unless the observations are missing completely at random, selection bias (King et al. 2001, Honaker, King, and Blackwell 2011). Missing observations among our explanatory variables reduces the estimation sample for a fully specified model to 671 observations (out of 1258 possible observations). As this degree of missingness precludes valid inferences, we used Amelia II to impute five complete data sets (Honaker,
King, and Blackwell 2011). Further details about the multiple imputation procedure are available in the Supplementary Appendix.

Results

Overall, we find little evidence that a communist past systematically helps or hinders the survival of third-wave democracies. This inference follows from multiple sets of analyses. We begin with Figure 1, which reports Kaplan-Meier survival estimates (and 95% confidence intervals) for post-communist democracies (solid line) and democracies that had other antecedent regimes (dashed line).

Figure 1 indicates that after twenty-one years (the maximum duration of a post-communist democracy in our sample), approximately 83% of post-communist democracies had not failed. In contrast, only 66% of third-wave democracies without a communist past survived for that long. While a seventeen-percentage point difference is notable, there is substantial overlap in the 95% confidence intervals about these predicted survival rates. Thus, a basic analysis of expected survival rates suggests that there is

Replication materials for all analyses associated with this paper will be made available upon publication.

The differences in the ranges in Figure 1 reflect the fact that the oldest post-communist democracies enter our data set in 1990 while the oldest democracies with a non-communist past enter our data set in 1970.
likely no significant difference in the effect of a communist past on the survival of third-wave democracies.\textsuperscript{43}

Figure 1: Democratic Survival and a Communist Past

Turning to more systematic analyses, Table 1 presents a set of models that assess the effect of a general post-communist past on democratic survival. The parameters

\textsuperscript{43} We also calculated Kaplan-Meier estimates for post-communist democracies and other third wave democracies conditional on whether they had above or below average levels of \textit{GDP per capita}, \textit{Economic Growth}, \textit{Economic Inequality}, and \textit{Food Supply}. These analyses also suggest a post-communist past is generally not associated with systematically higher or lower rates of democratic failure. These results are reported in the Supplementary Appendix (Section 7).
reported in Table 1 represent the mean values of the coefficients and corrected standard errors and significance levels as computed by Rubin’s (1987) method, yielded by the estimation of identically specified Cox models on each of five Amelia II-generated data sets. A positive coefficient implies that increasing the value of an explanatory variable is associated with a higher risk of democratic failure while a negative coefficient is associated with a lower risk of democratic failure.

Table 1: Democratic Survival and a Communist Past

<table>
<thead>
<tr>
<th>Model</th>
<th>Parameter</th>
<th>Model 1</th>
<th>Model 2</th>
<th>Model 3</th>
</tr>
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<tbody>
<tr>
<td></td>
<td></td>
<td>(\beta)</td>
<td>s.e.</td>
<td>(\beta)</td>
</tr>
<tr>
<td></td>
<td>Post-communist Democracy</td>
<td>-0.8</td>
<td>0.62</td>
<td>-0.51</td>
</tr>
<tr>
<td></td>
<td>GDP per capita</td>
<td>-0.69</td>
<td>0.35*</td>
<td>-0.54</td>
</tr>
<tr>
<td></td>
<td>Economic Growth</td>
<td>-0.15</td>
<td>0.04**</td>
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<td></td>
<td>Food Supply</td>
<td>-0.001</td>
<td>0.001</td>
<td>-0.002</td>
</tr>
<tr>
<td></td>
<td>Previous Democratic Spells</td>
<td>-</td>
<td></td>
<td>0.42</td>
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<td></td>
<td>Legislative Fractionalization</td>
<td>1.16</td>
<td>1.03</td>
<td></td>
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<tr>
<td></td>
<td>Legislative Fractionalization*\ln(t)</td>
<td>-0.16</td>
<td>0.137</td>
<td></td>
</tr>
</tbody>
</table>

Using Schafer and Olsen’s (1998) notation, the standard errors are computed by taking the square root of \(T = \bar{U} + \left(1 + \frac{1}{m}\right)B\), where \(T\) is the total variance associated with the mean coefficient estimate, \(\bar{U}\) is the within-imputation variance of the estimated coefficient \([\bar{U} = \frac{1}{m} \sum_{i=1}^{m} U_i]\), B is the between-imputation variance \([B = \frac{1}{m-1} \sum_{i=1}^{m} (Q - \bar{Q})^2]\), and \(1 + \frac{1}{m}\) is a correction factor to account for simulation error in \(\bar{Q}\). Standard errors and test statistics were calculated by adapting the code associated with Goemans (2008).
<table>
<thead>
<tr>
<th>Variable</th>
<th>Estimate 1</th>
<th>Estimate 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Presidential System</td>
<td>-0.81</td>
<td>0.73</td>
</tr>
<tr>
<td>Oil Exports</td>
<td>0.003</td>
<td>0.001*</td>
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<tr>
<td>Muslim Majority</td>
<td>1.2</td>
<td>0.62†</td>
</tr>
<tr>
<td>Ethnic Fractionalization</td>
<td>-0.978</td>
<td>1.13</td>
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<tr>
<td>Observations</td>
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<td>1258</td>
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<td>Democratic Episodes</td>
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<td>Failures</td>
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<td>22</td>
</tr>
<tr>
<td>Log-Likelihood</td>
<td>-88.21</td>
<td>-71.25</td>
</tr>
</tbody>
</table>

Two-tailed significance tests: †=p<0.1; *=p<0.05; **=p<0.01

Model 1 estimates democratic survival exclusively as a function of whether a third-wave democracy has a communist past. This bivariate specification allows Post-communist Democracy to capture the net effect of a communist past on the likelihood of democratic survival. Put differently, this model identifies whether, on average, post-communist democracies are systematically more or less likely to fail than democracies that transitioned from some other type of authoritarian rule. Consistent with the Kaplan-Meier results in Figure 1, the coefficient on Post-communist Democracy in Model 1 is negative but highly insignificant. Using a set of post-estimation simulations, the hazard ratio associated with Post-communist Democracy is 0.44, with a 95% confidence interval of 0.13 and 1.51.\(^{45}\) Substantively, this implies that, compared to third-wave democracies

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\(^{45}\) The simulation results are based on 1,000 draws from multivariate normal distributions based from the coefficient and variance-covariance matrices of the models estimated on each of imputed data sets. This yields a vector of 5,000 simulated coefficients. The mean hazard ratio reported above represents the mean value yielded by exponentiating
with another type of antecedent regime, post-communist democracies are 56% less likely to fail given that they have lasted until time $t$, on average. However, there is a large degree of uncertainty around this estimate: the lower and upper bounds of the confidence interval imply post-communist democracies are between 87% less likely to fail and 51% more likely to fail than democracies with non-communist legacies.

Model 2 in Table 1 adds variables that account for a democracy’s economic development, growth, income inequality and food supply. Consistent with expectations, we find that democratic survival is more likely given higher levels of economic development and higher levels of economic growth. Economic inequality and our indicator for basic needs satisfaction are signed in the expected direction but are statistically insignificant. As discussed above, including these variables in a statistical model means that Post-communist Democracy no longer represents the net effect of a communist legacy for democratic survival. Instead, Post-communist Democracy represents communism’s legacy with respect to cultural and behavioral factors independent of its legacies for economic development and growth, egalitarianism, and basic needs satisfaction. Model 2 suggests that post-communist democracies face a substantively but statistically insignificantly lower risk of failure due to their negative cultural and behavioral legacies. More specifically, a set of simulations based on Model 2 indicate that post-communist democracies face a mean hazard of failure 39% lower than other third-wave democracies. However, there is considerable uncertainty surrounding this estimate: the upper bound of the 95% confidence interval suggests that this vector, while the lower and upper bounds of the confidence interval represent the 2.5\textsuperscript{th} and 97.5\textsuperscript{th} percentile values.
post-communist democracies are roughly 218% more likely to fail than other democracies while the lower bound implies they are 89% less likely to fail.

Model 3 adds a set of control variables standard in the survival literature. Focusing first on the results of theoretical interest, Model 3 also suggests that the cultural and behavioral legacies of communism (insignificantly) decreases the hazard of democratic failure compared to other third-wave democracies. Post-estimation simulations suggest the mean hazard is roughly 6% lower among post-communist states while the upper and lower bounds of the 95% confidence interval, respectively, imply hazards of failure approximately 650% higher and 88% lower than those of democracies without a communist past. Turning to the other macro-legacies of communism, Model 3 implies democracies that experience positive economic growth and greater basic needs satisfaction are significantly less likely to fail. With respect to our control variables, we find that the hazard of democratic failure is increasing with a state’s net oil exports and higher when a majority of the population is Muslim. We find no relationship between legislative fractionalization (including the interaction term to account for nonproportional hazards), the number of previous democratic spells, presidentialism, or ethnic fractionalization and the risk of failure among third-wave democracies.

The analyses presented in Figure 1 and Table 1 offer no evidence that post-communist democracies possess a unique legacy that makes them systematically more or less likely to fail than other third wave democracies. However, it should be noted that higher levels of economic development and caloric intake are associated with a lower risk of democratic failure (Models 2 and 3, respectively). Given that they generally score higher on these measures than other third wave democracies, post-communist
democracies are advantaged by their legacies on these measures. However, these relationships hold across all third wave democracies and therefore do not constitute a unique legacy of communism with respect to democratic survival.

**Variation in Communist Legacies**

The analyses thus far consider whether post-communist democracies are systematically more or less likely to fail than third-wave democracies with different antecedent regimes. Of course, countries’ experiences with communism varied in a number of ways. Indeed, taking into account the literature on post-communist democratic performance raises the notion that we should not just look at one legacy that affects all post-communist democracies, but also examine differentiated sets of communist experiences that may also have different ramifications for democracy. Resolving this tension can only be done by comparing the survival prospects of different sets of post-communist democracies to other democracies.

The literature on post-communist democratic performance and our own observations from the literature on democratic survival suggest that there are important differences between different sets of post-communist countries. For example, the advantage in economic development highlighted above is not uniform across post-communist democracies. The average GDP per capita of democracies who were previously members of the Soviet Union is more than $2,500 lower than is the GDP per capita of other post-communist democracies ($8,881 vs. $11,664). The idea that there is a universal negative cultural legacy is also contradicted by several important observers of post-communist democracy. Ekiert and Kubik, who have studied protest and the strength
of civil society regionally, point to cases like Poland where there was a more active civil society prior to transition, and in which societies have engaged in more extensive protest activity following democratization.\textsuperscript{46} Their work holds out the possibility that states in which the transition involved a greater degree of social pressure from below and citizen activism are less saddled by negative attitudinal or behavioral legacies.

Another line of research that justifies a differentiated legacy approach is Kopstein and Riley’s work on how more “Western” countries exhibit higher levels of democracy in the post-communist world.\textsuperscript{47} Whereas they operationalize this in geographic terms, distance works as a proxy for a more “Western” cultural orientation. Additionally, Darden and Grzymala-Busse find that countries that had been independent states prior to the onset of communism were more democratic than those that had not.\textsuperscript{48} And finally, Kitschelt argues that there fundamentally three types of communism – patrimonial, bureaucratic-authoritarian and national accommodative. He argues that the first will be handicapped in generating the kind of programmatic and structured party system necessary for stable democracy.\textsuperscript{49}

If this set of scholars is correct, the negative political legacies of communism should be stronger among certain subsets of post-communist countries for several reasons. First, the lack of interpersonal trust, apathy towards politics, and the lack of involvement in civic organizations and protest activity may well be stronger in the states that spent

\textsuperscript{46} Ekiert and Kubik 1999.

\textsuperscript{47} Kopstein and Riley 2000.

\textsuperscript{48} Darden and Grzymala-Busse 2006.

\textsuperscript{49} Kitschelt 1995.
greater time under communism than those who had relative shorter periods under it. Second, along the same line, late communist civil society was generally more robust in certain countries in East-Central Europe than in those that emerged out of the USSR. Third, these states also had greater historical ties with the West and a history of independent interwar statehood. Fourth, communist states that were more patrimonial will be handicapped in generating the kind of elite political culture that sustains programmatic party-systems. Thus, when thinking about the potential negative cultural and behavioral legacies of communism, we need to entertain the possibility that not all post-communist democracies were created equally, and that perhaps certain subsets of emergent post-communist democracies are more vulnerable to breakdown than others based on their differential experience with communism.

We therefore also test whether differences between post-communist states highlighted in the literature on post-communist democratic performance matter in the global context. The potential implications of this literature are two-fold. If there is a general Leninist legacy we should observe no difference between communist states when controlling for other factors relevant to democratic survival. If those arguing for a differentiated approach to communist legacies are correct, we should be able to detect the effects of this in a broader global framework. To analyze the possibility that patterns of democratic survival vary among post-communist democracies, we differentiate post-communist democracies as a function of whether they emerged from the former Soviet Union or the Eastern Bloc, the number of years a country was communist, and whether communism was patrimonial in nature.
**Soviet vs. Eastern Bloc**

One fundamental and obvious difference that emerges from the literature on post-communist democratic performance is between post-communist democracies that emerged from the former Soviet Union (FSU) and the semisovereign states of the former Eastern Bloc (FEB). Such differences are found by Smyth to be consequential and many of the legacies discussed above do seem to break approximately along these lines.\(^{50}\) The difference between the two also proxies well for Kopstein and O’Reilly in terms of the inner and outer empires. In terms of Ekiert and Kubik’s arguments on civil society, it also aligns roughly between the level of contentiousness under communism. Resistance was much stronger in the Eastern Bloc states historically.

In terms of the variables of interest we highlighted from the survival literature, post-Soviet democracies have significantly lower levels of economic development than members of the former Eastern Bloc. We observe similar differences in the area of socioeconomic inequality as well: democracies emerging from the former Soviet Union have significantly higher Gini scores on average than do other post-communist democracies (36.6 vs. 28.5). Thus, it is plausible that the consequences of a post-communist past for democratic survival are different for former Soviet and former Eastern Bloc states.

Accordingly, we estimated models in which *Post-Soviet* is coded 1 for FSU states and 0 otherwise and *Post-Bloc* is coded 1 for FEB states and 0 otherwise. These models leave democracies that emerged from other types of non-democratic rule as the reference category and are reported in Table 2.

\(^{50}\) Smyth 2006, 13.
Table 2: Democratic Survival and Soviet and Eastern Bloc Legacies

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</table>

Two-tailed significance tests: †=p≤0.1; *=p≤0.05; **=p≤0.01

Model 4 in Table 2 contains only the dichotomous variables that differentiate between democracies that emerged from the former Soviet Union and those that were
previously members of the Eastern Bloc. The coefficients on both variables are negative and highly insignificant. Transforming the coefficients into hazard ratios with post-estimation simulations, Model 4 estimates that, compared to democracies without a communist past, post-Soviet democracies are roughly 17.4% less likely to fail [95% CI = -81%, 250%] and post-Eastern bloc democracies are approximately 77% less likely to collapse [-97%, 72%].

Model 5 in Table 2 estimates the effects of a post-Soviet and post-Eastern Bloc past on democratic survival while controlling for economic development (negative and significant) and growth (negative and significant), economic inequality (positive but insignificant), and basic needs satisfaction (negative but insignificant). The coefficients on Post-Soviet and Post-Eastern remain insignificant after controlling for these factors. This model implies that, relative to other third-wave democracies, post-Soviet democracies are 8% less likely to fail [-85%, 468%] and post-Eastern bloc democracies are 51% less likely to fail [-95%, 393%].

Model 6 adds controls for a state’s previous democratic experience (positive and insignificant), legislative fractionalization (positive and insignificant) and the interaction term (negative and insignificant but decreasing over time), presidential systems (negative but insignificant), net oil exports (positive and significant), whether a majority of a state’s population is Muslim (positive and significant), and ethnic fractionalization (negative but insignificant). Transforming the coefficients into hazard ratios, Model 6 implies that, on average, post-Soviet democracies are 58% more likely to fail [-85%, 1,518%] and post-Eastern bloc democracies are 6% less likely to fail [-92%, 1,091%] than other democracies. Thus, our results suggest there is no systematic evidence of significant
differences in the risk of regime failure across post-Soviet, post-Eastern Bloc, and other third-wave democracies.

*Years under Communism*

A second dimension upon which post-communist democracies vary is the number of years they had a communist government. While overlooked in the existing literature, the duration of communist rule may affect the extent to which the various communist legacies, be they positive or negative, took root in a country. In practice, the duration of communist rule varies from 70 years for the constituent republics of the Soviet Union, 51 years for the western republics of the USSR, and approximately 40 years for former members of the Eastern Bloc. Thus, this measure not only differentiates between FSU and FEB countries, but also the original Soviet Republics and those added as a result of World War II (the Baltic States and Moldova from other former Soviet successor states). The shorter durations also correspond to a history of interwar independence which has been highlighted in the literature on post-communist democratic performance as an important factor by Darden and Grzymala-Busse.51 As noted above, our expectation is that those countries that spent the longest time under communism will exhibit the strongest communist legacies. Table 3 reports the results of models that estimate the effect of the duration of communist rule on democratic survival.

In the bivariate Model 7, we find a negative but insignificant relationship between the likelihood of democratic failure and the duration of communist rule. With respect to

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51 Darden and Grzymala-Busse 2006.
the relative hazard, Model 7 implies that each additional year of communism decreases
the risk of a third wave democracy failing by 1 percent [-3%, 1%].

Table 3: Democratic Survival and the Duration of Communist Rule

<table>
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<tr>
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</tbody>
</table>

Two-tailed significance tests: †=p≤0.1; *=p≤0.05; **=p≤0.01

Introducing controls for GDP per capita (negative and significant), GDP growth
(negative and significant), economic inequality (negative but insignificant), and food
supply (negative and insignificant), Model 8 indicates that there is no relationship between the number of years of communist rule and the likelihood of democratic failure. Post-estimation simulations indicate that, on average, each year of communist rule increases the hazard of democratic failure by 0.27%, with the lower and upper bounds of the 95% confidence interval, respectively, implying a 2.7% decrease and a 3.4% increase in the hazard for each additional year of pre-democratic, communist rule. This substantive finding continues to hold when we account for previous democratic spells (positive and insignificant), legislative fractionalization (positive and insignificant), presidential systems (negative and insignificant), net oil exports (positive and significant), the presence of a Muslim majority (positive and significant), and ethnic fractionalization (negative and insignificant) in Model 9. We find that each additional year of communist rule increases the hazard of democratic failure by 2.3%, with the lower bound of a 1.68% decrease and an upper bound of a 6.4% increase in the hazard. Given that these results account for the positive communist legacies of relatively strong economic development and performance and egalitarianism, Models 8 and 9 imply that the duration of communist rule has no effect on democratic survival due to its effect on behavioral and cultural patterns.

**Patrimonial Communism**

Finally, another way to think about variation in communist legacies for democratic survival is in terms of different varieties of communism. Kitschelt’s distinction between bureaucratic-authoritarian, national accommodative and patrimonial regimes makes meaningful distinctions between subtypes of communist authoritarianism,
not only in terms of Kitschelt’s theories concerning party system formation but in other ways as well.\textsuperscript{52} Bureaucratic-authoritarian, while socially repressive, offers the potential positive legacy of a more efficient, rule governed bureaucracy, whereas national accommodative has a history of more liberal cultural policy, greater consultation with society and a more accommodative set of policies in line with predominant social attitudes, and a moderate level of bureaucratic efficiency. Patrimonial forms of communism were both relatively inefficient and repressive. We would expect this form to embody the potentially negative legacies of communism more explicitly than the preceding two.

Indeed, the only cases of regime failure among third-wave democracies with a communist past experienced the patrimonial form of communism. While consistent with the idea that patrimonial communism would be relatively worse for democratic survival, the complete absence of democratic failure among former bureaucratic-authoritarian and national-accommodative communist regimes complicates our ability to identify their likelihood of democratic survival/collapse. Put simply, we cannot estimate the respective effects of bureaucratic-authoritarian and national-accommodative communist pasts on democratic failure because there are no cases of democratic failure among them. We therefore estimated two sets of models to assess whether former patrimonial communist democracies are significantly more or less likely to fail than other third wave democracies. The first dropped observations of former bureaucratic-authoritarian and nationalist communist regimes while the second treated of former bureaucratic-authoritarian and nationalist communist regimes like other third wave democracies. The

\footnote{52 Kitschelt 1995.}
downside of the latter approach is that the baseline category consists of both post-communist democracies and democracies with other antecedent regimes, which hampers our ability to make inferences about the relative survival prospects of patrimonial communist regimes and democracies without a communist past. Table 4 therefore presents results based on the analysis of data sets that exclude democracies with a bureaucratic-authoritarian or national-accomodative communist past.

Table 4: Democratic Survival and Patrimonial Communist Rule

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<td>Failures</td>
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<tr>
<td>Log-Likelihood</td>
<td>-85.91</td>
<td>-71.09</td>
<td>-65.81</td>
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Two-tailed significance tests: †=p≤0.1; *=p≤0.05; **=p≤0.01
Model 10 estimates a bivariate specification of the relationship between a patrimonial communist past and democratic survival. The effect of *Patrimonial Communism* is negative but highly insignificant. The mean hazard ratio yielded by post-estimation simulations is -3.95, with a 95% confidence interval of -71.4 and 225.91. Thus, compared to third-wave democracies with another type of antecedent regime, democracies with a patrimonial communist past are 4% less likely to fail at a given point in time, on average. There is, however, considerable uncertainty around this estimate: the lower and upper bounds of the confidence interval, respectively, imply a patrimonial communist past makes a democracy between 71% less likely and 326% more likely to fail.

We control for a democracy’s economic development (negative and marginally significant), economic growth (negative and significant), economic inequality (positive but insignificant) and basic needs satisfaction (negative and insignificant) in Model 11. Once we account for these factors, the coefficient on *Patrimonial Communism* remains negative and insignificant. Calculating the relative hazard, we find a democracy with a patrimonial communist past is 38.3% less likely to fail than other third-wave democracies, on average. Again, though, the confidence intervals around this mean estimate are large, with a lower bound of 88% less likely to fail and an upper bound of 216% more likely to fail.

From Model 12, we find a positive but insignificant relationship between a patrimonial communist past and democratic failure once we control for additional factors. With respect to the relative hazard of failure, a democracy with a patrimonial communist
past is, on average, 20\% more likely to fail than third-wave democracies without a communist legacy. However, this substantive result is undermined by the uncertainty surrounding the estimate (lower and upper bounds of an 87\% reduction in the hazard and a 1,001\% increase in the hazard). Our control variables suggest that the probability of democratic failure is significantly higher in the presence of a Muslim majority, but no other control variables are significantly related to democratic survival.

Additional Analyses

We conducted two sets of additional analyses to assess the robustness of our findings. For space and presentation purposes, we briefly describe these analyses here and fully report them in the Supplementary Appendix. First, we re-estimated all of the models reported above using logit models that account for duration dependence with a cubic polynomial of time (see Beck, Katz, and Tucker 1998 for the relationship between the logit and Cox estimators and Carter and Signorino 2010 on the advantages of cubic polynomials over splines). Second, we estimated models that analyzed the effect of a patrimonial communist past on democratic survival that included observations of democracies with bureaucratic-authoritarian and national communist pasts.\(^{53}\) These sets of robustness checks are consistent with the results reported here: we find no consistent

\(^{53}\) As noted above, though, democracies with bureaucratic-authoritarian communist or national accommodative communist pasts are treated like democracies without a communist past in these models because their lack of democratic failures precludes the possibility of including them as separate communist regime types.
evidence that a communist past, in general, makes third-wave democracies systematically more or less likely to fail than democracies with other antecedent regimes.

Conclusion

We began this paper by highlighting Nodia’s question about whether new democracies with a communist past were different from other new democracies because they transitioned from that particular antecedent regime. Based on our analyses, the preliminary answer to Nodia’s question is that transitions to democracy from communism were no different than transitions from other antecedent regimes in terms of a legacy effect on democratic survival. Our results consistently show that a communist past was neither an advantage nor a disadvantage for new democracies in the post-communist space. Thinking about how a communist legacy fits with a set of macro-level factors commonly linked to democratic survival revealed that the theoretical relationship between post-communism and democratic survival is complex: different aspects of the communist experience lead us to expect higher chances of survival for post-communist states, while other factors seem to push toward a shorter experience with democracy. Indeed, our results support this notion of crosscutting factors, as post-communist states appear no more or less likely to breakdown than other third wave democracies.

It appears that in terms of democratic survival there is very little reason to treat post-communist democracies as a special case. Our study finds no evidence of a systematic overall legacy effect when it comes to democratic survival in the third wave. This in itself is important because putting the post-communist space in comparative perspective requires one to think broadly about the theoretical nature of a country’s
historical legacy and to move beyond discussions of the peculiarities of the post-communist space in isolation. Blanket claims about a positive or negative effect of communism on democratic survival likely result from, explicitly or implicitly, emphasizing one particular aspect of a communist legacy rather than thinking about the different facets of a communist past in their entirety.

On a purely descriptive level, post-communist democracies break down less frequently than other democracies. However from a statistical point of view this nominal difference is not significant. The estimated effects are far too uncertain. In as much as communist states began their episodes with better socioeconomic conditions, they fared better, but this is a general legacy not unique to post-communist democracies.

Future work can refine our understanding of how to put the post-communist set of states in the broader comparative framework in at least three ways. We have chosen to evaluate the question at hand using a survival framework. Analysis of other conceptualizations of post-transition democratic performance, such as democratic deepening, would help put additional context around our findings. Second, additional work emphasizing the empirical evaluation of historical legacies may be warranted. Outside of the specific effects of colonial legacy, little work has been done with the goal of exploring specific legacies in the survival framework. More work of this type would allow for different kinds of antecedent regime legacies to be compared to communism and each other as a means to discover new generalizations. Finally, additional work on the micro-level factors inherent to the transition process would address one part of the broader story about communist transitions to democracy that our work does not address.
Works Cited


Heston, Alan, Robert Summers, and Bettina Aten. 2012. Penn World Table Version 7.1 Center for International Comparisons of Production, Income, and Prices at the University of Pennsylvania.


