# Survival of the Fittest?

# Cabinet Duration in Postcommunist Europe

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Studies of government duration in transitional democracies are critically important in that they have profound implications for stability, democratic representation and accountability, and the prospects for continued democratic consolidation. For example, there is a long-standing debate on the different effects of presidential and parliamentary systems on the survivability of regimes.<sup>1</sup> Examining government duration in postcommunist Europe addresses some key questions about institutional choice in transitional democracies, principally, how specific institutional arrangements are effective in constraining or extending the tenures of postcommunist governments. Yet the majority of studies of cabinet duration focus on western Europe and ignore the interesting cases of transitional democracies.<sup>2</sup>This article tests whether theories used to explain cabinet duration in western Europe can be transported to the postcommunist context. Although postcommunist states may not exhibit the strongest institutions or the most predictable mass behavior, their governments are still constrained by institutional arrangements that give domestic actors an oppositional role and are lengthened by strong economic performance.

Analyses of the postcommunist states of the eastern Europe and Baltic states have been mainly comparative case studies.<sup>3</sup> Although there have been attempts to compare them with the western democracies, scholars have argued that different histories, developments, and characteristics represent obstacles to these attempts. Hypotheses developed for the western democracies can address the same characteristics and processes for cabinet duration in eastern European and Baltic states. They are tested using duration models on a sample of ten postcommunist countries from the date of their independence through 2003. Similar to western European governments, tenure in office is determined by a mixture of institutional constraints (effective number of parties, type of government) and policy success (inflation).

#### **Cabinet Durations: Deterministic or Stochastic?**

Lowell argues that a parliament should be composed of only two parties for good policy results, one of which constitutes the cabinet and the other, the opposition.<sup>4</sup> Taylor and

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Herman develop this argument by examining the effects of fragmentation in the parliament, government, and opposition on government stability.<sup>5</sup> They find that ideology does not play a role in duration, while the share of the antisystem parties negatively affects government stability. The weighted number of parties and one-party status are also found to affect duration significantly.

In two other studies examining the effects of the parliamentary and governmental characteristics, other factors are found to influence cabinet durations. Sanders and Herman find that antisystem parties can influence duration, as well the degree of legislative support and the number of parties in the government.<sup>6</sup> Dodd also concludes that cabinet coalitional status affects the length of time a government stays in office.<sup>7</sup> Another influential study concludes that cabinet majority status, minimal winning coalition status, ideological cleavage within the cabinet, and number of government parties can significantly affect the tenure of governments.<sup>8</sup>

In the 1980s scholars began to debate the meaning of cabinet stability and termination.9 Browne, Frendreis, and Gleiber developed the events approach to the problem of cabinet stability.<sup>10</sup> They state that the problem with the previous studies was the assumption that "the values associated with actor preferences and situational attributes are constant over the life of a cabinet."<sup>11</sup> Instead, they argue that "account must be taken of the events that threaten the stability of cabinets and the processes that produce them if we are to achieve a more successful theoretical understanding of the problem of cabinet stability."<sup>12</sup> They describe events as anything that produces uncertainty for the coalitions, ranging from scandals to the death of the prime minister to contentious political issues. The events analysis shows that there is a low and invariant probability for a critical event to occur. Events are therefore conditionally independent, meaning that "the chance of a cabinet surviving from the first day of its tenure to the second is equal to the probability of its surviving from day 1000 to 1001."13 King, Alt, Burns, and Laver produce the most encompassing theory of cabinet duration by including both the events approach and deterministic factors.<sup>14</sup> In this article, most of these variables are tested with the use of their unified approach.

#### **Postcommunist Governments**

Previous studies have given various explanations for the terminations of postcommunist governments. In their case-specific analysis of government duration in various postcommunist states, Henderson and Robinson point out that the Bulgarian government collapsed in 1991 because of the inability of the government to keep its promises on privatization and decommunization.<sup>15</sup> In their study of the 1991 Polish government, Henderson and Robinson find that, while institutions played a critical role, the actual policy outcomes also were important in producing cabinet instability.<sup>16</sup> They identify coalition partners, bad relations with the president, and economic problems as factors

shortening the tenure of governments. For example, the 1993 Polish government was short-lived because it could not reconcile the vast ideological differences between the president and government. In another study, Blondel and Müller-Rommel analyze the setting, structure, and life of cabinets in sixteen postcommunist countries but fail to provide a systematic and quantitative analysis of the termination of governments.<sup>17</sup>

Some of the same hypotheses used in advanced democracies can be tested on postcommunist governments. Scholars have discovered that many behavioral and institutional attributes present in western Europe are either absent or not fully developed in postcommunist Europe. These various findings point to the dissimilarity of postcommunist Europe to advanced democracies; it simply can not be expected to behave in the same manner, especially in the case of government duration. For example, scholars suggest that postcommunist states have a number of problems, including a lack of mass partisanship, substantial electoral volatility, weak party system institutionalization, and fractionalized parties without crystallized ideological programs or internal party discipline.<sup>18</sup>

After collectively evaluating the conclusions of these studies, one would be hardpressed to suggest that the same institutional and economic determinants of government duration in the advanced democracies could also be found in the transitional democracies of postcommunist Europe. This assertion is in fact reasonable. The ways in which cabinets are terminated depend on the behavior of key actors, all of which have similar principal interests to those of western Europe. Thus, the behavior of veto actors in postcommunist Europe is likely to have the same sort of effect as in western Europe, because they are all acting within their own self-interest. Further, veto actors will be able to react to poor economic outcomes in ways that will reduce the survivability of governments. If this hypothesis is true, then it has profound implications for the study of institutions and government stability in postcommunist Europe. It is a testament to the strength of these institutions and the processes of institutionalization and consolidation, because transitions in vastly different circumstances have installed institutions that constrain or encourage behavior in predictable and consistent manners.

After all, some postcommunist states have adopted parliamentary governments and have also governed by coalition governments similar to western European systems. Blondel and Müller-Rommel dedicate most of their first chapter to the defense of comparing western and eastern European cabinets.<sup>19</sup> They state that the eastern European countries have benefited from the experiences of western Europe, which is evident in the region's institutional choices. In fact, when the average government duration scores of the two regions are examined, there do not appear to be any substantively meaningful differences between the two regions. Table 1 provides the mean duration for governments in eastern Europe and western Europe. The mean cabinet duration in eastern Europe for the period 1991–2003 is 582.5 days. In western Europe, the mean duration of eleven continuously democratic states from 1945 to 1989 is 636.7 days, with Italy having the lowest mean duration (251 days) and Ireland the highest mean duration, it is necessary to take a

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closer look in order to find the effects of specific institutional and economic arrangements on the tenures of postcommunist governments. The expectation is that the conclusions will be similar to studies focusing on advanced democracies.

Western Europe		Eastern and Central Europe		
State	Duration (Days)	State	<b>Duration (Days)</b>	
Italy	251.0	Latvia	330.7	
Finland	319.1	Romania	369.9	
Belgium	450.4	Lithuania	446.9	
Denmark	578.5	Poland	449.1	
Netherlands	649.7	Estonia	476.9	
Germany	671.0	Bulgaria	590.0	
Sweden	744.6	Slovakia	593.0	
Norway	753.7	Slovenia	603.7	
Austria	800.6	Czech	869.5	
UK	850.2	Hungary	1095.7	
Ireland	935.0			
Avg. Duration	636.7	Avg. Duration	582.5	

 Table 1 Mean Government Duration for Western and Eastern and Central European

 States

NOTE: Sources: Warwick (1994) and Müller-Rommel, Fettelschoss, and Harfst (2005)

#### **Dangerous Conditions**

Studies of cabinet duration provide a number of governmental characteristics that lead to short government tenures. Taylor and Herman argue that the number of parliamentary parties shortens cabinet duration by blocking the passage of successful policies.<sup>20</sup> They also test the effect of party fractionalization in the parliament, measured with Rae's index of fractionalization. The effective number of parties should affect government duration because, as the parliament becomes more fractionalized, it becomes more difficult and complex to form coalitions.<sup>21</sup> Warwick states that the effective number of parties is "an indicator of the complexity of the bargaining system in the parliament" and finds that it has a significant effect on the survivability of western European cabinets.<sup>22</sup> This finding leads to the first hypothesis.

*Hypothes is 1*: As the effective number of parties in parliament increases, the hazard rates of governments will increase.

Lowell notes that the most effective government is composed of only one party because, "the larger the number of discordant groups that form the majority, the harder the task of pleasing them all, and the more feeble and unstable the position of the cabinet."<sup>23</sup> Further, as the number of parties in the cabinet increases, the task of reaching agreement among government parties grows more difficult and improves the chances of a government breakdown.<sup>24</sup> Likewise, Tsebelis argues that, as the number of potential veto players increases (as in coalition governments), the ability to generate policy quickly decreases.<sup>25</sup> In a system with a wealth of veto players, policy deadlock becomes more likely because of the presence of actors with divergent interests, reducing the probable survival rates of governments.

*Hypothesis 2*: As the effective number of parties in cabinet increases, the haz ard rates of governments will increase.

The type of government is also hypothesized to have substantial impacts on government survivability. The type of government takes into account both the number of parties needed to form a coalition and the coalition's majority or minority status.<sup>26</sup> While it has been argued that the majority status produces more stable governments than minority cabinets, Strom shows that minority governments are "rational solutions under specified conditions."<sup>27</sup> Warwick, on the other hand, argues that majority governments survive longer than minority governments regardless of the other conditions.<sup>28</sup> They survive longer because minority governments are often crisis governments that have to govern in the face of a parliament with an opposition majority.<sup>29</sup>

Dodd differentiates coalition governments into three types: minimum winning coalitions, surplus governments in which there are more than enough parties to form a majority, and minority/undersized governments which do not have the majority of the seats of the parliament.<sup>30</sup> He states that the minimum winning coalitions are superior to surplus and minority governments. Surplus governments contain unnecessary parties that increase the deprivation the parties suffer, so parties are expected to move rapidly to reduce the coalition to the minimum size, thus threatening stability. Minority coalitions survive only until a minimum winning coalition can be established. As Dodd states, "this cabinet is faced constantly with the possibility that while it attempts to govern, other parties are negotiating their differences so that they can overthrow the cabinet and attain ministerial status, or at least force the dissolution of parliament and new elections."<sup>31</sup> Minority governments in postcommunist Europe are threatened in the same manner by the opposition as governments in advanced democracies. For example, in Slovakia in 1993 the cabinet lost majority status and afterwards faced a majority opposition in the legislature that forced a successful vote of no confidence in 1994.<sup>32</sup>

*Hypothesis 3a*: Governments with majority support in the assembly will have a lower hazard rate than minority governments.

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*Hypotheses 3b*: Minimum winning coalition governments will have a lower hazard rate than surplus governments, and surplus governments will have a lower hazard rate than minority governments.

The type of political system may also affect cabinet duration, because of the possibility of conflict between the head of state (president) and the head of government (prime minister). One of the reasons for the cabinet to be considered as terminated is listed as the intervention of the head of state. As the powers of the president widen, it is expected for him or her to intervene more if he or she does not approve of the government's actions. Although none of the countries in the postcommunist states can be considered as presidential, five among the ten are semipresidential regimes (Bulgaria, Lithuania, Poland, Romania, and Slovenia), in that they provide some nonlegislative powers to the head of state.<sup>33</sup> Blondel and Müller-Rommel also state that the relative role of the president and prime minister in these states generates instability.<sup>34</sup> A strong example is Poland, where the government was resolved in 1993 because of the intervention by the head of state who could not reconcile his differences with the government.<sup>35</sup> Whatever the underlying reason, semipresidential systems may cause poor relations between the president and the prime minister that may lead to political instability.

*Hypothesis 4*: Semipresidential regimes will have higher hazard rates, relative to parliamentary systems.

Economic indicators are vastly important for the longevity of governments. As Hibbs states, "macroeconomic policy toward unemployment and inflation generates intense controversy and conflict among key political actors and interest groups."<sup>36</sup> Robertson argues that economic conditions matter because of the public's response as well as the consideration of potential coalition partners.<sup>37</sup> He argues that, as important as the pressure on the governments is during poor economic conditions, the governments by themselves reassess the advantages of being part of the government in times of economic downturn. It may drive parties out of the coalition because government policies are hurting their constituents.<sup>38</sup> It can be argued that inflation and unemployment rates erode the public's confidence in the government and affect the public's perception of the leader's competence.<sup>39</sup> Further, elections provide the electorate with the ability to reward or punish incumbent governments based on their perceptions of aggregate economic conditions.<sup>40</sup>

It is easy to find several examples from postcommunist Europe dealing with the importance of economic conditions. In Lithuania the single party majority government of Slezevicius was forced to resign as a result of economic troubles.<sup>41</sup> In Czechoslovakia the fiscal crisis in 1997 led to protests and the resignation of the government. In 1998 the Romanian prime minister Ciorbea resigned because the economic problems prevented the economic development that he had proposed. The next two hypotheses test whether these anecdotes are consistent on a broad scale with the resign.

*Hypothesis 5a*: As the unemployment rate increases, the hazard rates of governments will increase.

*Hypothesis 5b*: As the inflation rate increases, the hazard rates of governments will increase.

## **Research Design**

Several data sets were used in order to analyze these hypotheses. Müller-Rommel, Fettelschoss, and Harfst provide data on the government duration (measured in months) and the number of government parties of postcommunist democracies.<sup>42</sup> Rose and Munro provide information on the number of parties in parliament.<sup>43</sup> The effective numbers of parties in parliament and government are calculated with data on the seat shares of the parties in the parliament.<sup>44</sup> To test the third hypothesis, six types of government are used, where single party majority, minimal winning coalition, and surplus coalitions are recoded together as a dichotomous variable to test majority status and the minority governments are recoded together for the minority variable.<sup>45</sup>

Finally, annual unemployment data are taken from the World Bank's *World Development Indicators*, while the monthly Consumer Price Index (and some monthly unemployment data for a few states) is available from the International Labour Office's (ILO) *Yearbook of Labour Statistics.*<sup>46</sup> Quarterly or monthly data are not available for unemployment for a long series for the sample of postcommunist states.<sup>47</sup> To complete the monthly duration analysis, interpolated monthly scores are used.<sup>48</sup> Table 2 provides the summary statistics of these variables.

The dependent variable in this analysis is the time (in months) each cabinet spends at risk before experiencing either removal from office or the end of the sample (December 2003). Duration modeling, then, provides a much better statistical test of the hypotheses than ordinary least squares (OLS).<sup>49</sup> Parametric duration models start with the assumption that there is some distribution that accurately portrays the underlying hazard rate of an event occurring at any given interval of time (in this case, government failure). Choosing a model specification can be difficult, especially because the Cox semiparametric model does not demand that the underlying hazard rate be specified.<sup>50</sup> There is some theoretical reason for an *a priori* specification of the shape of the underlying baseline hazard rate for different governments. For example, the hazard rate is not believed to be flat, so the exponential model is rejected because of its assumption of a flat baseline hazard. The underlying hazard monotonically increases the longer a government is in office, which would suggest that a Weibull model is appropriate. Therefore, there is both a theoretical and a methodological justification for using the Weibull model to determine the effects of institutional and economic factors on government failure.<sup>51</sup>

# Institutional Constraints, Policy Successes, and Government Duration

In order to test the hypotheses, a model with all of the hypothesized variables is first estimated. The expectation is that the variables empowering the institutional opposition (coalition governments, effective number of parliamentary parties) and poor economic

#### Table 2 Summary Statistics of the Variables

Variable	Minimum	Maximum	Mean	Std. Dev.
Cabinet Duration (in Days)	8	1524	526.9	426.1
Type of Government*	1	6	2.9	1.2
Effective Number of Parliamentary Parties	2.4	10.8	4.3	1.5
Effective Number of Government Parties	1.0	5.3	2.0	0.9
Semipresidentialism 0=Parliamentary, 1=Semipresidential	0	1	0.5	0.5
Unemployment Rate	1.7	21.4	11.1	4.4
Inflation Rate (Logged)	-4.9	5.5	-0.1	1.2

\*Type of government: (1) single party government (one party holds the majority in parliament and all government seats), (2) minimal winning coalition (all parties in government are necessary to form a majority government), (3) surplus coalition (coalition governments that exceed the minimal winning criteria), (4) single party minority government (the party in government does not possess the majority of seats in parliament), (5) multiparty minority government (the parties in government do not possess the majority of seats in parliament), and (6) caretaker government (temporary cabinet) (Müller-Rommel. Fettelschoss, and Harfst, 2005)

performance (unemployment and inflation rates) will decrease the survival rates of governments.

The first model provides tests of the first three hypotheses. Table 3 presents the first model with all of the explanatory variables; a hazard ratio greater than 1 represents a covariate increasing the hazard rate of government failure while a hazard ratio less than 1 indicates a factor positively affecting survival. The first two hypotheses deal with the number of political parties in various institutions. The first hypothesis is not supported (hr 0.96 p-value 0.78), as the hazard rate is not statistically significant. After controlling for the institutional arrangement and economic performance, it does not seem to matter how fractionalized the parliament is.

The second hypothesis argues that, as the number of parties that are required to keep the coalition intact increases, it becomes more difficult to satisfy their competing interests. This hypothesis appears to be supported, as the hazard ratio for the number of government parties variable is 2.06 (p-value <0.05). This indicates that, for every one unit increase in the number of parties in government, the probability of government failure (given that the government has lasted until then) increases by 106 percent. The Weibull analysis showed that the number of government parties increases the risk of failure by providing greater division over policy matters and more difficulty in ensuring the cohesiveness of the coalition. Figure 1 provides comparisons of four hypothetical governments (with identical values of the other key covariates) with one, two, four, and five

		(1)			(2)	
	hr	S.E.	p-value	hr	S.E.	p-value
Eff. No. Parl. Parties	0.96	0.14	0.779	0.83	0.13	0.235
Eff. No. Gov't Parties	2.06	0.63	< 0.05	2.67	0.96	< 0.01
Semipresidential	1.28	0.42	0.441	1.21	0.39	0.556
Type of Government						
Single Party				0.36	0.26	0.164
Surplus Coalition				0.35	0.16	< 0.05
Minority				4.04	1.68	< 0.001
Majority	0.19	0.08	< 0.001			
Caretaker	22.56	12.70	< 0.001	107.30	70.52	< 0.001
Policy Outcome						
Unemployment	1.03	0.04	0.413	1.06	0.04	0.162
Inflation (Logged)	1.47	0.19	< 0.01	1.59	0.22	< 0.001
Ho: ln n=1	0.71	0.10	< 0.001	0.75	0.10	<0.001
Number of Subjects	1138			1130		
Number of Failures	60			59		
Log-likelihood	-200.4			-197.1		

Table 3 Weibull Model Results of Postcommunist Government Duration

NOTE: Unemployment is available in annual form and is then interpolated monthly. The inflation data represent the monthly change in the Consumer Price Index (CPI). The Wald test for the null hypothesis that the shape parameter (p) is flat (=0) can be rejected in each model. For Model 1, *Majority* includes single party governments, minimum winning coalitions and surplus coalitions. The reference category in Model 1 is *Minority*, which includes single party and multiple party minority governments. For Model 2, *Single Party Government* includes only single party majority governments. The variable *Surplus* includes only surplus coalitions. The reference category for these models is minimum winning coalitions.

parties in the coalition. As expected, governments that rely on multiple parties to ensure a majority coalition are much more unstable than single party governments. Although the hazard rate is quite small and similar for all the governments in the first two years of office, about two years into the tenure the probability of government failure becomes much higher for four and five party governments. The Weibull model points to the importance of the effective number of government parties, as the risk of government termination increases substantially as the number of parties in government increases.

The institutional variable with the largest impact on postcommunist government duration is anticipated to be the type of government. Hypothesis 3a compares the hazard rates of majority governments to minority governments. Not having a majority of parliamentary support should substantially reduce the chance of termination, relative to minority governments. This hypothesis is tested by creating a dichotomous variable for both majority governments (single party governments, minimum winning coalitions, and surplus coali-





Weibull regression

tions) and for caretaker governments and by estimating the model with minority governments (single and multiple party minority governments) as the reference category. Majority governments experience 19 percent of the risk of government termination that minority governments face after controlling for the other covariates. Figure 2 shows that majority governments have much lower hazard rates than minority governments. While the risk of failure for a majority government increases slowly over time, as soon as a minority governments. Moreover, the hazard rate increases steadily over time for minority governments. As expected, caretaker governments have much higher hazard rates than minority governments (hr 22.56 p-value <0.001). It is therefore difficult for postcommunist governments to have a lengthy tenure in office if they are faced with majority opposition in the assembly.

The second model provides a test of Hypothesis 3b, that minimum winning coalitions would have a lower hazard rate than surplus governments, which would have smaller hazards than minority governments. To test this hypothesis, the dichotomous variables representing type of government had to be reconfigured. For this model, dichotomous variables for single party governments, surplus coalitions, minority governments, and caretaker governments are included.<sup>52</sup> The reference category is minimum winning coali-



Figure 2 Underlying Hazard Rates for Majority and Minority Governments (Model 1)

tions. It is therefore expected that the hazard rate for surplus governments will have a hazard rate larger than 1 (greater than minimum winning coalitions) and the hazard rate for minority governments should be greater than the hazard rate for surplus governments (relative to minimum winning coalitions). This hypothesis is not supported, as there is no statistical difference between the hazard rates of single party governments relative to minimum winning coalitions. Surplus governments have a much smaller risk of removal from office than minimum winning coalitions (hr 0.35, p-value <0.05). Minority and caretaker governments, on the other hand, have much higher hazard rates than minimum winning coalitions (4.04 and 107.30, respectively). In addition, this model provides a slightly better overall fit than Model 1, as shown by its larger log-likelihood (-197.1).

In the final institutional hypothesis semipresidential systems are expected to have shorter tenures than parliamentary systems, because of the nonlegislative powers of the president.<sup>53</sup> The data do not support this hypothesis; the semipresidential variable fails to approach conventional levels of statistical significance in either model. This finding is particularly interesting given the high levels of tension between presidents and prime ministers in many of the semipresidential systems in the sample. Based upon these findings, it appears as though the tenure of postcommunist governments is partly determined prior to their taking office, though not because of semipresidentialism. Having a majority opposition with a high number of government parties substantially limits the tenure of transitional governments.





The final two hypotheses evaluate the effects of economic performance in office. Are governments bound by institutions, or can successful economic policy outcomes allow governments to lengthen their tenures beyond what one would anticipate given the institutional environment? There is some support for these findings because, while a rising unemployment rate has no effect on the hazard rate for postcommunist governments (hr 1.06, p-value 0.162), the logged inflation rate increases the probability of removal (hr 1.59, p-value <0.001).<sup>54</sup> Figure 3 provides the hazard rates for three hypothetical governments facing rising prices have much higher risks of removal than governments facing price stability. These findings provide some optimism concerning the ability of governments to extend their tenure based on successful policy outcomes. To illustrate the robustness of the results, Table 4 provides the same models estimated with a Cox semiparametric model.

These findings show the importance of institutional arrangements in the study of government duration. The results indicate that institutional arrangements largely determine the range of possible durations for a government. This conclusion is not entirely pessimistic, however. Within that in-stitutionally determined range of tenures, governments can extend their tenure to the limits based on successful economic policy performance.

		(1)			(2)	
	hr	S.E.	p-value	hr	S.E.	p-value
Eff. No. of Parl. Parties	0.97	0.14	0.136	0.82	0.13	0.207
Eff. No. of Gov't Parties	2.00	0.60	< 0.05	2.75	1.00	< 0.01
Semipresidential	1.27	0.41	0.467	1.24	0.41	0.511
Type of Government						
Single Party				0.33	0.25	0.137
Surplus Coalition				0.31	0.14	< 0.05
Minority				3.84	1.60	< 0.001
Majority	0.20	0.08	< 0.001			
Caretaker	27.68	10.31	< 0.001	76.38	51.02	< 0.001
Policy Outcome						
Unemployment	1.02	0.04	0.475	1.05	0.04	0.234
Inflation (Logged)	1.50	0.19	< 0.01	1.62	0.22	< 0.001
Number of Subjects	1130			1130		
Number of Failures	59			59		
Log-likelihood	-306.0			-302.1		

#### Table 4 Cox Model Robustness Checks for Postcommunist Government Duration

NOTE: Unemployment is available in annual form and is then interpolated monthly. The inflation data represent the monthly change in the Consumer Price Index (CPI). For Model 1, *Majority* includes single party governments, minimum winning coalitions and surplus coalitions. The reference category in Model 1 is *Minority*, which includes single party and multiple party minority governments. For Model 2, *Single Party Government* includes only single party majority governments. The variable *Surplus* includes both single party and multiple party minority governments. The variable *Minority* includes both single party and multiple party minority governments. The reference category for these models is minimum winning coalition.

#### Stochastic and Deterministic Factors in Postcommunist Government Duration

Are governments in postcommunist Europe slaves to their institutional arrangement? Is their length in office largely predetermined by their type of government? Or can governments extend their time in office through effective policy performance? While government duration is strongly influenced by the degree of parliamentary support and effective number of government parties, improving economic output in the form of low inflation allows governments to lengthen their tenure.

These results are somewhat counterintuitive in light of previous studies on the weaknesses of institutions and the underdevelopment of mass behavior in postcommunist Europe. These studies would seem to suggest that it is unreasonable for scholars to anticipate that institutions and economic performance will result in the same outcomes in the region as they do in advanced democracies. For example, scholars suggest that postcommunist states have a number of problems, including a lack of mass partisanship, substantial electoral volatility, and fractionalized parties, without crystallized ideological programs or strong internal party discipline in party systems that are not institutionalized.<sup>55</sup>

Even in the absence (or presence) of these institutional attributes, both institutions that give power to domestic opposition and economic performance affect governments in similar ways. This conclusion has profound implications for the study of institutions and government stability in postcommunist Europe. It is a testament to the strength of these institutions and the interdependent processes of institutionalization and consolidation, because transitions in vastly different circumstances still created institutions that constrain or encourage government behavior in predictable and consistent manners. Behavior common in most of western Europe is also present in a region full of political uncertainty and transition such as postcommunist Europe.

# NOTES

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1. See Juan Linz, "Presidential or Parliamentary Democracy: Does It Make a Difference?," in Juan Linz and Arturo Valenzuela, eds., *Failure of Presidential Democracy* (Baltimore: The Johns Hopkins University Press, 1994); Adam Przeworski, Michael Alvarez, Jose Antonio Cheibub, and Fernando Limongi, "What Makes Democracies Endure?," *Journal of Democracy*, 7 (1996), 39–55.

2. Eric C. Browne, John P. Frendreis, and Dennis W. Gleiber, "An Events Approach to the Problem of Cabinet Stability," <u>Comparative Political Studies</u>, 17 (1984), 167–97; Eric C. Browne, John P. Frendreis, and Dennis W. Gleiber, "The Process of Cabinet Dissolution: An Exponential Model of Duration and Stability in Western Democracies," <u>American Journal of Political Science</u>, 30 (1986), 628–50; Gary King, James E. Alt, Nancy Elizabeth Burns, and Michael Laver, "A Unified Model of Cabinet Dissolution in Parliamentary Democracies," <u>American Journal of Political Science</u>, 34 (1990), 846–71; Paul V. Warwick, <u>Government Survival in Parliamentary Democracies</u> (Cambridge: Cambridge University Press, 1990).

3. Jean Blondel and Ferdinand Müller-Rommel, *Cabinets in Eastern Europe* (New York: Palgrave, 2001); Karen Henderson and Neil Robinson, *Post-Communist Politics: An Introduction* (Hertfordshire: Prentice Hall, 1997).

4. Lawrence A. Lowell, *Government and Parties in Continental Europe*, vols. 1 and 2 (Cambridge, Mass: Harvard University Press, 1896).

5. Michael Taylor and V. M. Herman, "Party Systems and Government Stability," American Political Science Re-view, 65 (1971), 28-37.

6. D. Sanders and V. Herman, "The Stability and Survival of Governments in Western Democracies," *Acta Politica*, 26 (1977), 346–77.

7. Lawrence Dodd, *Coalitions in Parliamentary Government* (New Jersey: Princeton University Press, 1976).

8. Paul Warwick, "The Durability of Coalition Governments in Parliamentary Democracies," *Comparative Political Studies*, 11 (1979), 465–98.

9. Following the events approach, a coalition is considered terminated if (1) there were elections, (2) the

prime minister voluntarily resigned, (3) the prime minister died, (4) dissention within government occurred, (5) parliamentary support dropped, or (6) the head of state intervened. Ferdinand Müller-Rommel, Katia Fettelschoss, and Philipp Harfst, "Party Government in Central European Democracies: A Data Collection (1990–2003)," *European Journal of Political Research*, 43 (2005), 869–94.

10. Browne, Frendreis, and Gleiber, "An Events Approach to the Problem of Cabinet Stability"; Browne, Frendreis, and Gleiber, "The Process of Cabinet Dissolution."

11. Browne, Frendreis, and Gleiber, "An Events Approach to the Problem of Cabinet Stability," p. 179.

12. Ibid., p. 179.

13. Browne, Frendreis, and Gleiber, "The Process of Cabinet Dissolution," p. 635.

14. King, Alt, Barnes, and Laver.

15. Henderson and Robinson.

16. Ibid.

17. Blondel and Müller-Rommel.

18. On the lack of mass partisanship, see Timothy J. Colton, *Transitional Citizens: Voters and What Influences Them in the New Russia* (Cambridge, Mass.: Harvard University Press, 2000); on the substantial electoral volatility, see Margit Tavits, "The Development of Stable Support: Electoral Dynamics in Post-Communist Europe," *American Political Science Review*, 65 (2005), 283–98; on weak party system institutionalization, see Scott Mainwaring and Mariano Torcal, "Party System Institutionalization and Party System Theory after the Third Wave of Democracy," Working Paper #319 (2005); for fractionalized parties, see Robert Moser, "Electoral Systems and the Number of Parties in Postcommunist States," *World Politics* (1999), 359–84; for parties without crystallized ideological programs, see Herbert Kitschelt, Zdenka Mansfeldova, Radoslaw Markowski, and Gabor Toka, *Post-Communist Party Systems: Competition, Representation and Inter-Party Cooperation* (Cambridge: Cambridge University Press, 1999).

19. Blondel and Müller-Rommel.

20. Taylor and Herman.

21. Dodd, "Party Coalitions in Multiparty Parliaments."

22. Warwick, Government Survival in Parliamentary Democracies, p. 41.

23. Lowell, pp. 73-74.

24. Warwick, Government Survival in Parliamentary Democracies, p. 35.

25. George Tsebelis, "Decision Making in Political Systems: Veto Players in Presidentialism, Parliamentarism, Multicameralism, and Multipartism," *British Journal of Political Science*, 25 (1995), 289–325.

26. See Dodd, *Coalitions in Parliamentary Government*; Sanders and Herman; Kaare Strom, "Minority Governments in Parliamentary Democracies: The Rationality of Nonwinning Cabinet Solutions," <u>Comparative Political Studies</u>, 17 (1984), 199–227; Warwick, Government Survival in Parliamentary Democracies.

27. Strom, p. 199.

28. Warwick, Government Survival in Parliamentary Democracies.

29. Taylor and Herman.

30. Dodd, "Party Coalitions in Multiparty Parliaments."

31. Ibid., p. 1101.

32. Blondel and Müller-Rommel.

33. Klaus Armingeon and Romana Careja, *Comparative Data Set for 28 Post-Communist Countries*, 1989–2004 (Institute of Political Science, University of Berne, 2004).

34. Blondel and Müller-Rommel.

35. Henderson and Robinson, p. 256.

36. Douglas A. Hibbs, "The Mass Public and Macroeconomic Performance: The Dynamics of Public Opinion toward Unemployment and Inflation," *American Journal of Political Science*, 23 (1979), 705–31.

37. John D. Robertson, "The Political Economy and the Durability of European Coalition Cabinets: New Variations on a Game-Theoretic Perspective," *Journal of Politics*, 45 (1983), 932–57; John D. Robertson, "Toward a Political-Economic Accounting of the Endurance of Cabinet Administrations: An Empirical

Assessment of Eight European Democracies," American Journal of Political Science, 28 (1984), 693-709.

38. Robertson, "The Political Economy and the Durability of European Coalition Cabinets"; Robertson, "Toward a Political-Economic Accounting of the Endurance of Cabinet Administrations."

39. Harvey D. Palmer and Guy D. Whitten, "Government Competence, Economic Performance and Endogenous Election Dates," *Electoral Studies*, 19 (2000), 413–26.

40. Michael S. Lewis-Beck, *Economics and Elections: The Major Western Democracies* (Ann Arbor: University of Michigan Press, 1988); G. Bingham Powell and Guy D. Whitten, "A Cross-National Analysis of Economic Voting: Taking Account of the Political Context," <u>American Journal of Political Science</u>, 37 (1993), 391–414.

41. Blondel and Müller-Rommel.

42. Müller-Rommel, Fettelschoss, and Harfst.

43. Richard Rose and Neil Munro, *Elections and Parties in New European Democracies* (Washington, D.C.: Congressional Quarterly Press, 2003).

44. The formula provided by M. Laakso and R. Taagepera, "Effective' Number of Parties: A Measure with Application to Western Europe," *Comparative Political Studies*, 12 (1979), 3–27, is used to calculate the effective number of parties:

$$\frac{1}{\sum {s_i}^2}$$

where s<sub>i</sub> is the seat share of the i<sup>th</sup> party.

45. Single party government (one party holds the majority in parliament and all government seats); minimal winning coalition (all parties in government are necessary to form a majority government); surplus coalition (coalition governments that exceed the minimal winning criteria); single party minority government (the party in government does not possess the majority of seats in parliament); multiparty minority government (the parties in government do not possess the majority of seats in parliament); and caretaker government (temporary cabinet). Müller-Rommel, Fettelschoss, and Harfst.

46. World Bank, *World Development Indicators* (2003); International Labour Office, *Yearbook of Labour Statistics* (various years).

47. The International Labour Office provides the monthly consumer price index for all ten states in the sample since the transition. The monthly inflation rate is created as the percentage change in CPI from one month to the next. Other states have available data from the following dates: Poland, monthly 1/1999–12/2003; Hungary, quarterly 2/1992–11/2003; Czech Republic, monthly 1/1993–12/2003; Slovakia, monthly 1/1993–12/2003; Slovenia, quarterly 5/1997–11/2003; Bulgaria, monthly 3/1992–12/1994 and quarterly 3/2000–12/2003; Romania, monthly 2/1992–12/2003; Estonia, quarterly 2/1997–11/1998 and monthly 1/1999–12/2003; Latvia, monthly 7/1993–12/2003; Lithuania, monthly 1/1994–12/2003.

48. The change in unemployment rate from one year to the next is divided by twelve months and then added to each subsequent month's value, creating a linear interpolation.

49. Duration modeling provides two principal benefits of handling these probabilities of failure within a duration analysis framework rather than using OLS. First, the OLS estimation technique does not effectively deal with those observations that have yet to experience the event. OLS either excludes the cases that are not completed or treats those observations as having occurred. Both of these approaches are incorrect. Duration analysis produces a better alternative to OLS by treating the observations at the end of the sample as still containing valuable information about the underlying hazard rate. The other principal advantage to using duration analysis is that OLS is unable to deal with the naturally occurring time dependence of a process like government removal. See Christopher Zorn, "Modeling Duration Dependence," *Political Analysis*, 8 (2000), 367–80. It is assumed that the assumption that the probability of removal from office at time t is a function of a list of covariates and of whether that government was in office at time t-1. This assumption leads to the natural conclusion that any omitted variables will lead to autocorrelation, which OLS can not deal with satisfactorily. Alternatively, logit analyses fail because "an indicator variable cannot capture the variability in duration time a state spends prior to adoption—precisely the effect we are trying to understand." Janet M. Box-Steffensmeier and Bradford M. Jones, "Time Is of the Essence: Event History Models in Political Science," *American Journal of Political Science*, 41 (October 1997), 336–83. This approach causes inefficient estimates with large variances.

50. Specifying the incorrect distribution will cause the inferences "regarding the relationship between the covariates and the duration time [to] be misleading since covariate estimates can be sensitive to the distribution function specified." Janet M. Box-Steffensmeier and Bradford S. Jones, *Event History Modeling: A Guide for Social Scientists* (Cambridge: Cambridge University Press, 2004) p. 21.

51. The first model is estimated with a number of different specifications of the underlying hazard rate, including the Gompertz, exponential, Weibull, log logistic, and generalized Gamma. The Weibull estimation has both the largest log likelihood and the smallest Akaike Information Criterion (AIC). Further, the parameters from the Gamma model make it possible to test various distributions. The K parameter is significant at the .000 level, which implies that the null hypothesis that  $\kappa=0$  (which is the test of the lognormal distribution) can be rejected. Additional Wald tests show that the null hypothesis that  $\kappa=1$  (Weibull distribution) can not be rejected, but the null hypothesis  $\sigma=1$  can be rejected. A chi square test of the sigma parameter shows that the null hypothesis  $\sigma=1$  (with a chi square of 110.92, with one degree of freedom and a p-value of .000) can be rejected. This rules out the exponential model since the null hypothesis  $\kappa=1$  can not be rejected but the null hypothesis  $\sigma=1$  can be rejected. The Wald test that the  $\kappa$  and  $\sigma$  parameters are equal is also rejected, implying that the Gamma distribution is not effective.

52. The single party variable includes single party majority goverments; the surplus coalition variable only includes surplus coalitions; the minority variable includes both single party minorities and multiple party minorities; and the caretaker goverment includes only caretaker goverments.

53. Matthew Soberg Shugart and John M. Carey, *Presidents and Assemblies: Constitutional Design and Electoral Dynamics* (New York: Cambridge University Press, 1992).

54. Logging the inflation rate removes the unit root and makes the series stationary.

55. On the lack of mass partisanship, see Colton; on electoral volatility, see Tavits; on weak party system institutionalization, see Mainwaring and Torcal; on fractionalized parties, see Moser; on parties without crystallized ideological programs, see Kitschelt, Mansfeldova, Markowski, and Toka.