



Institutions and the stabilization of party systems in the new democracies of Central and Eastern Europe



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ABSTRACT

Most explanations of party system stability focus on the strength of mass-elite linkages. We highlight the role of institutions, focusing on how electoral rules and elected institutions, especially the presidency, impact elites' incentives to coordinate on a stable set of parties or to form new parties, thus affecting electoral volatility. Using Central and Eastern European elections data, we find that directly elected presidents increase volatility and that presidential power magnifies this effect. Absent a directly elected president, high district magnitude is associated with increased volatility, but district magnitude dampens the impact of an elected president on volatility; hence, our findings underscore the interactive impact of institutions on party systems. We also find evidence that bicameralism and concurrence of presidential and parliamentary elections decrease electoral volatility. Our model not only explains persistently high electoral volatility in Eastern Europe, but the extreme stability of Western European party systems.

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1. Introduction

Scholars have long argued that successful democratization demands development of a stable party system (Sartori, 1976; Mainwaring and Scully, 1995; Mainwaring, 1999; Kitschelt et al., 1999; Tavits, 2005; Mozaffar and Scarritt, 2005). However, lack of party system stabilization has not impeded successful democratization in the new democracies of Central and Eastern Europe.¹ Since

democratization began in this region, measures such as Polity have risen steadily, yet voters have continued to change party allegiance and the composition of parties competing has been in constant flux (Evans and Whitefield, 1993; Colton, 2000; Rose and Munro, 2003).

Scholars use an index of electoral volatility (Pedersen, 1983), a measure that captures change in vote share from one election to the next, to operationalize stability of party systems. High volatility is associated with weak or unstable party systems (Bartolini and Mair, 1990; Mainwaring, 1999). Despite the overall success of democratic transition, levels of volatility across the post-communist democracies of Central and Eastern Europe have been consistently higher than those observed in other transitions (Toka, 1995; Mair, 1997; Lewis, 2007; Powell and Tucker, 2009; see especially Bielasiak, 2002, Table 2). Further, levels of volatility remain higher than in Western Europe, despite the fact that many Central and Eastern European democracies are now economically and politically integrated with their Western neighbors.

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¹ As of the most recent competitive election in each country, the Polity score was 7 or above for all but Russia. Further, eleven Central and East European countries have joined the EU, implying that they have met EU criteria for successful democratization. Croatia is set to join in 2013, and Albania is an official candidate country. Only Russia, Ukraine, and Moldova have no official relationship with the EU.

Since Lipset and Rokkan wrote on the origins and stability of West European party systems (1967), lack of party system stabilization is best explained as the result of inconsequential party organizations with weak ties to the electorate (Mainwaring, 1999; Roberts and Wibbels, 1999; Kitschelt et al., 1999). Recent work has shown that exogenous factors such as economic performance and time since democracy's founding also impact electoral volatility, but the focus on the quality and characteristics of mass-elite linkages remains (Mainwaring, 1998; Kitschelt et al., 1999; Reich, 2004; Tavits, 2005).

Our approach differs. Our institutions-based theory of party system stabilization explains high volatility in post-communist democracies primarily as the result of institutions chosen at the time of transition. Characteristics of these countries' initial choice environments—in particular the extremely condensed time-frame in which new institutions were chosen, the high degree of instability in number and strength of parties, and “politicians' miscalculations of costs and benefits of alternative institutions”—yielded institutional outcomes “not predicted by legacies of communist rule” or by pre-communist political history (Kitschelt and Smyth, 2002, 1231). In several countries, including former Soviet republics and former satellite states, elites adopted the West European model of parliamentarism with proportional electoral rules; however, in other cases, elites added popularly elected presidents with varying levels of executive power, single-member district electoral tiers, and upper legislative chambers.

As we demonstrate, such institutional additions, especially the addition of a directly elected president with more than ceremonial power, help explain both variation in electoral volatility within Central and Eastern Europe and the decidedly higher levels versus Western Europe. We argue that the most important factors explaining party system stabilization are the institutional prizes that political elites compete for and the rules governing that competition. Institutions that provide incentives to coordinate on a stable set of parties—low district magnitudes and upper chambers—reduce electoral volatility; institutions that provide incentives to forge new parties in order to compete more successfully for national office—high district magnitudes and directly elected presidents with more than ceremonial power—increase volatility. Furthermore, the combined effect of any or all of these institutional features is not additive: we find that district magnitude impacts volatility differently in a system with a directly elected president than in a system without, and the impact of directly elected presidents varies depending on the strength of that institution.

Although studies of volatility often include institutional controls, such as district magnitude (Tavits, 2005; Birch, 2001) or elected president (Birch, 2001), none offers theoretical reasons for doing so, and none considers potential ways in which combinations of institutions may impact volatility. Hence, results are inconsistent (Tavits finds that DM decreases volatility, Birch that it increases it) and explanations are ad hoc. We provide a consistent theoretical framework to explain how institutions comprising the competitive electoral environment impact

elite coordination incentives and thus party system stabilization.

Using original data on electoral volatility, we test our hypotheses on 16 post-communist Central and Eastern European countries from first competitive, free and fair elections through 2011.² We find that volatility is higher in countries with directly elected presidents, and that presidential strength amplifies this effect. Electoral rules impact volatility as expected, with higher district magnitudes promoting higher volatility; however, this effect depends on other institutions. Absent a directly elected president, high district magnitude is associated with increased volatility but in systems with a directly elected president it has little independent effect. Bicameralism and concurrent election of president and legislature are associated with decreased volatility. Thus, we find that complex institutional choices affect volatility interactively. According to our theoretical framework, volatility is, on average, high in the new Central and Eastern European democracies because directly elected presidents are common, upper chambers rare, and district magnitudes high.

We begin by developing theory on how elected institutions affect incentives for elites to coordinate on a stable set of political parties, underscoring unique features of the initial choice environment that allow us to isolate the impact of institutions on volatility. From this theory, we develop a series of hypotheses that we test using original data on electoral volatility from 70 democratic lower-house elections in 16 post-communist countries in Central and Eastern Europe. We conclude by discussing the implications of our findings for the study of comparative institutions.

2. Theory

Typically, scholars operationalize electoral volatility using the Pedersen Index (Pedersen, 1983); however, this standard measure does not differentiate volatility due to shifts in voter allegiance versus volatility due to disappearance of old and appearance of new parties (Sikk, 2005; Tavits, 2008; Powell and Tucker, 2009). A voter who switches support to another party is making a different kind of choice than a voter who must switch because the party voted for in the last election no longer exists. Most studies of volatility, motivated

² We include all free and fair elections, as assessed by international monitoring organizations, starting with each country's first election after attaining independence. This criteria corresponds well with a Polity score of 6, insuring that we include only cases in which the Polity score is 6 or better. We exclude elections to constituent assemblies, elections held during periods of civil collapse (e.g. 1996 Albania), the Czechoslovakian election, and all Russian elections after 2003. For the case of Russia, we make an exception to strict adherence to Polity because there is stark disparity between Polity coding scores and first-hand accounts of competitiveness and quality of elections as well as overall freedom of the press during the 1990s. According to Fish (2005), Shevtsova (2003), and many others, it is clear that Russia was more democratic in the 1990s than in the 2000s. Freedom House coding for Russia reflects these first-hand accounts, worsening considerably during the 2000s. Therefore, we include all elections in the 1990s, but include only the 2003 election from the 2000s, after which Russia's Polity score dropped from 6 to 4.

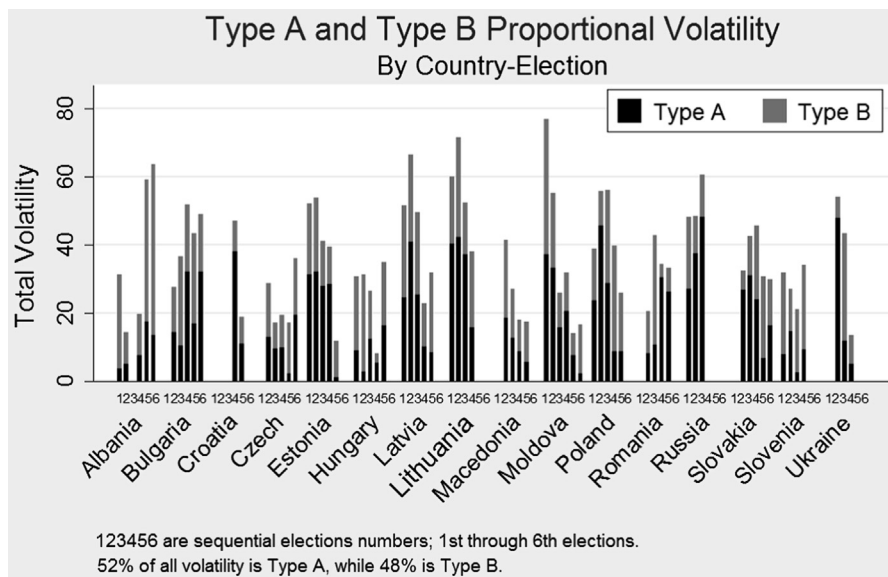


Fig. 1. CEE electoral volatility.

by a framework that emphasizes social cleavages and their ideological connection to parties—mass-elite linkages—have sought to explain the first kind of choice and have done so in terms of ideological and socioeconomic characteristics of the voting population (Roberts and Wibbels, 1999; Tavits, 2005). However, Powell and Tucker demonstrate that most volatility in Central and Eastern Europe (hereafter CEE) is due not to changes in voter preferences but to almost constant changes in number and array of parties competing (2009). Thus, elite decisions to form new parties (or coalitions) contribute more to CEE volatility than does weak partisanship (Kreuzer and Pettai, 2003).

Powell and Tucker (2009) distinguish two types of volatility captured by the standard index. One, which they designate Type B, is caused by voters switching allegiance among existing parties. The other, designated Type A, “is caused by the entry and exit of parties from the political system” (2). Type A volatility is the direct result of elite decisions to create new electoral vehicles with which to compete, or to disband old ones. As shown in Fig. 1, Type A volatility accounts for a greater proportion of CEE total volatility than does Type B.³ Thus, a primary reason for high electoral volatility is failure of political elites to coordinate on a consistent set of parties. Because we model change in vote share due to party exit and entry, we concentrate on explaining variation in Type A volatility, and our institutions-based model explains over 50% of the variation in this measure. In the new CEE democracies, institutional choices made in the aftermath of communism continue to play a significant role in determining the degree to which party systems stabilize.

In contrast to those emphasizing mass-elite linkages, our theory explains volatility primarily in terms of the institutions comprising the competitive environment. The new CEE democracies provide an ideal setting to isolate the impact of institutions on party system development. Most importantly, the timing of constitutional bargaining reduced the impact of pre-democratic mass-elite linkages on the institutional choices of party leaders. The groundswell of support for democratic transition ensured that no single party or type of party dominated initial bargaining.⁴ Participating elites represented mass movements, communist-era party organizations, historical parties, programmatic parties centered on liberal market reform, and nationalist parties. Further, with the exception of communists (Ishiyama, 1999), parties involved in constitutional bargaining had no prior democratic experience, had only recently formed, and had almost no

³ Using our own data, we adapt Powell and Tucker's presentation of Type A and Type B volatility (2009, Fig. 1).

⁴ The Russian constitution alone was drafted by one political group outside parliament, was never submitted to parliament for debate or approval, and was adopted by popular referendum (Smith and Sharlet, 2008). Other CEE constitutions resulted from debate among party elites, and parties that later amended constitutions were almost never the same in name, ideology or organization. For details on drafting and passage of constitutions in Poland, Estonia, Latvia, Lithuania, Czech Republic, Slovakia, Romania, Bulgaria and Albania see Ludwikowski (1996). For Hungary details see Sajó (1996) and Elster et al. (1998). For details on Macedonia, Croatia and Slovenia see Aceuska (1996) and Roberts (2009). Although conditions for initial constitutional debate in Moldova and Ukraine were not ideal, in both cases bargaining occurred in parliaments. Ultimately, the Moldovan parliament reduced the powers of the president and changed the mode of election from direct to indirect in 2000 (Brežianu and Spănu, 2007). In Ukraine, the parliament heavily amended the constitution to reduce the powers of the president in 2004, but these amendments were overturned by Ukraine's Constitutional Court in 2010 (Christensen et al., 2005).

members or organization, many of which disintegrated or disappeared after the first election (Reich, 2004).⁵

In addition, the initial choice environment was characterized by high uncertainty regarding the number and strength of parties participating (Jones Luong, 2000; Andrews and Jackman, 2005), making it difficult for elites to predict the impact of any institutional choice on their own or their parties' future electoral performance (Kaminski, 2002; Shvetsova, 2003). During round table negotiations or within parliamentary or constitutional assemblies, elites focused on short-term costs and benefits of particular institutional features rather than considering the implications of the constitutional design as a whole (Lijphart, 1992; Elster et al., 1998; Geddes, 1996; Benoit and Schiemann, 2001; Moser, 2001; Remington and Smith, 1996). As information regarding potential competitors and voters' preferences changed, so did elites' perceptions about which institutions were in their best interest. In Poland, former communists initially supported a strong, indirectly elected president. However, following their spectacular 1989 loss to Solidarity, the former communists threw their weight behind securing a highly proportional electoral system, whereas Solidarity pushed for direct election of the presidency (Geddes, 1996). Likewise, the Hungarian Socialist Party's support for a directly elected president waned with their standing in the polls. Often institutions were added purely to appease other parties and reach consensus. For example, adding an upper chamber to the Polish parliament was proposed by the former communist bloc to appease a party important to the negotiations (Osiatynski, 1996). Thus, constitutional design epitomized compromise among elites representing parties with different prospective interests, making it impossible ex-ante to predict the final complex institutional outcome.

That said, each country's unique history, especially the particular legacy of communism (Jowitt, 1992), affected the experiences of elites who participated in constitutional negotiations (Kitschelt and Smyth, 2002). Among countries in our study, prior constitutionalism, democratic experience, relationship to the Soviet Union, and extent to which Stalinist command systems were implemented varied greatly. Kitschelt et al. (1999) find that specific characteristics of communist regimes made it more or less likely for programmatic, as opposed to clientelist or personalist, parties to arise following collapse, implying that makeup of parties in the immediate postcommunist environment could impact choice of institutions. However, for the reasons we have elaborated—that institutions resulted from compromise among elites representing a variety of party types and that bargaining occurred in an environment of extreme uncertainty—we find it impossible to predict support for adoption of directly elected presidents, proportional representation, or other institutions based on parties' prior histories, role within the

communist regime, or ideological orientation.⁶ Elites from countries with shared communist or interwar experience (such as former Soviet republics) were not more likely to adopt particular institutions,⁷ and there is little variation in support for particular electoral systems, since almost all parties supported predominantly proportional electoral rules (Shvetsova, 2003). In addition, we find no empirical support for the proposition that CEE countries' experiences with communism or interwar constitutionalism are associated with either stability or instability of party systems.

Whatever the constitutional starting point—interwar constitution or European model—institutional features were added or adjusted piecemeal, with different parties supporting different features at different points in time. In short, the collapse of communism created a situation as close to a *tabula rasa* as is historically possible (Elster et al., 1998), and so presents a unique opportunity to study institutional effects on the development of party systems.

Hence, we emphasize the primacy of institutions, theorizing that the combination of directly elected institutions—electoral opportunities—impacts entry and exit of parties from the political system because these opportunities may encourage elites to form new party vehicles to better compete or may discourage such behavior. To the extent that the competitive environment encourages coordination on a stable set of parties, we expect electoral volatility to be reduced; likewise, lack of institutional incentives to coordinate creates conditions for higher volatility. Although we know of no theory concerning the combined effect of electoral institutions on party system stability, many scholars have written on particular institutional incentives for elite coordination. We review relevant work here and identify those institutions that ought to increase volatility, beginning with literature on how electoral rules impact elite coordination.

Cox demonstrates how different electoral rules influence elite coordination (1997). Rules that increase incentives to coordinate reduce the number of contestants, and the characteristic that most influences coordination is district magnitude. Smaller district magnitudes provide stronger

⁶ Primary supporters of directly elected presidents included opposition parties in Croatia, Slovakia and Slovenia, popular democratic movements in Poland and Russia, and former communist parties in Bulgaria, Lithuania, Moldova, Romania and Ukraine. Geddes argues that former communist parties were inclined to support directly elected presidencies (1996), and while this was true initially, these parties' support for the elected presidency disappeared rapidly as information on their lack of popularity surfaced, e.g. Hungary and Bulgaria.

⁷ While it is plausible (and supported by evidence from several cases) that charismatic party leaders with a strong personal following were more likely to push for adoption of a directly elected president with significant powers, such leaders were not unique to any set of cases sharing a particular pre-democratic experience. For example, leaders with populist followings existed in Poland, Lithuania, Russia and Croatia. Further, although Russia's president is the strongest elected president in CEE, directly elected presidencies with more than ceremonial power were just as likely to be adopted in former satellites and future members of the EU (Poland, Bulgaria and Romania) as in former Soviet Republics (Lithuania, Russia and Ukraine). Note: We define a president with more than ceremonial power as scoring 6 or better on Metcalf's presidential powers index.

⁵ In the months prior to the first elections, populist leaders were as likely to be associated with democratic movements (e.g. Poland's Walesa and Russia's Yeltsin) as with the reform wing of former communist parties (e.g. Romania's Iliescu and Lithuania's Brazauskas).

coordination incentives and predict fewer political parties. To the extent that coordination on a stable number of parties reduces volatility, we expect greater coordination and lower volatility in countries with low district magnitudes, and less coordination and higher volatility in countries with high district magnitudes.

Cox also investigates the effect of additional electoral contests, such as the contest for president, on strategic decisions of political actors (1997). He finds that incentives to coordinate across electoral contests increase when contests occur concurrently, so concurrent legislative and presidential elections have a reductive effect on the number of parties. Extending Cox's logic, we expect to find that concurrent presidential and parliamentary elections increase incentives to coordinate and so decrease volatility. We further expect that concurrent legislative elections, as generally occur with bicameral legislatures, also reduce volatility.

Other scholars have studied the effect of popularly elected presidents on party system stabilization, notwithstanding the relative timing of presidential elections. There is broad consensus that presence of a directly elected president hinders parties' organizational development and slows consolidation of the party system (Colton, 1995; Fish, 2000, 2005; Mainwaring, 1993; Shugart and Carey, 1992).

Samuels and Shugart consider the impact of elected presidents on the organization and focus of parties (2010). They state that "to the extent that capture of a separately elected presidency is important for control over the distribution of the spoils of office and/or the policy process... pursuit of the presidency ... tends to become parties' overriding organizational and behavioral imperative" (2010, 15–16). Further, Samuels and Shugart argue that the stronger the presidential prize, the greater the incentive for party elites to prioritize the national campaign and the greater the "electoral separation of purpose" between elites running for parliament and elites interested in the presidency. So presence of a directly elected president increases opportunities for political entrepreneurs and decreases the need to coordinate on a stable set of political parties, leading to increased volatility.

Clark and Wittrock, in their study of the effect of presidential strength on CEE party systems, hypothesize that in the presence of a strong presidential executive, "there is decidedly less incentive for the formation of cohesive political parties" (2005, 176). They find a positive and significant relationship between presidential strength and number of parties in the party system. Hicken and Stoll (2008) and Golder (2006) also find significant relationships between presidential strength and the structure of the party system. Based on this body of work, we theorize that the stronger the elected president the greater the elite incentives to create new party vehicles to compete for the presidency, thus increasing volatility. Note that our theory is interactive—increasing presidential strength increases the effect of a directly elected president. Given that our theoretical framework rests on the incentives provided by elected institutions, we offer no theory as to any independent effect of presidential strength.

Scholars have also considered bicameralism's incentives for elite coordination. Tsebelis and Money state the fundamental institutional implication: "Compared with unicameralism, bicameralism makes a change to the status quo more difficult" (1997, 75). Hence, as summarized by Heller, to assure the passage of their parliamentary agenda, or its opposition, parties in lower chambers must forge lasting alliances with like-minded groups in upper chambers (2007). Druckman and Theis find that cabinets enjoying majority support in upper chambers endure longer, even when upper chambers do not participate in votes of confidence (2002). Legislative alliances promote electoral alliances, and vice versa (Cox, 1997). Consistent with these studies, we expect presence of upper chambers to decrease volatility.

Based on these theoretical arguments, we propose the following hypotheses concerning the effect of institutions on Type A volatility, and thus total volatility.

H1. Lower district magnitudes provide stronger incentives for elites to coordinate and so decrease volatility; higher district magnitudes increase volatility.

H2. Presence of a directly elected president increases volatility.

H3. In the case of a directly elected president, the greater the strength of the presidency, the greater the increase in volatility.

H4. Presence of a second legislative chamber reduces volatility.

H5. Concurrent election of president and legislature reduces volatility.

Collectively, our hypotheses suggest that volatility is lowest in pure parliamentary systems with low district magnitudes and upper chambers, and highest in systems with high district magnitudes or directly elected presidents, especially when elected on different cycles than the legislature. In the latter type of system, volatility increases with presidential strength.

We estimate the relationships of our key explanatory variables with both total and Type A electoral volatility, and include control variables that others have found to be significant predictors of Pederson's standard measure. Not surprisingly, since most of the volatility in the CEE cases is due to party entry and exit, our model performs well on both total volatility and the more refined measure of Type A volatility.

3. Data and measures

Our data comprise 70 democratic lower-house elections in 16 post-communist CEE countries from 1990 to 2011.⁸ Table 1 presents a summary of institutional characteristics for each country in our sample.

3.1. Electoral volatility

Total volatility. We adopt the standard Pedersen Index for total electoral volatility:

⁸ Included elections are shown in Table 1 and Fig. 1.

Table 1
Institutional characteristics.

Country	Constitution effective	Election number	Electoral rules	Directly elected president	Presidential power	Avg. DM	Party threshold	Upper seats %
Albania	Apr 1991	1–2	PR	No	5	5.3	4	0
	Oct 1998	4–6	Multi-tier		6	11.1	2.5	
Bulgaria	Jul 1991	2–6	PR	Yes	4	7.7	4	0
Croatia	Dec 1990	4	PR	Yes	4	13.1	5	0
		5				12.7		
Czech Republic	Jan 1993	2–4	PR	No	5	25.0	5	.29
		5–6				14.3		
Estonia	Jun 1992	1–5	PR	No	8	9.2	5	0
Hungary	Oct 1989	1–4	Multi-tier	No	12	2.0	5	0
	Jan 2012	5				13.8		
Latvia	Jul 1993	1–5	PR	No	4	20.0	5	0
Lithuania	Nov 1992	1	Multi-tier	Yes	7	35.3	5	0
		2–4				2.0		
Macedonia	Nov 2001	2–5	PR	Yes	2	10.9	0	0
Moldova	Aug 1994	1–2	PR	Yes	12	101.0	4	0
		3–6		No				
Poland		1	PR	Yes	11	19.3	0	.18
	Oct 1992	2			11	16.7	5	
	Oct 1997	3			10	16.7	5	
		4–5			10	11.2	5	
Romania	Dec 1991	2–3	PR	Yes	10	7.8	4	.29
		4–5					5	
Russia	Dec 1993	1–3	Multi-tier	Yes	26	113.0	5	.28
Slovakia	Oct 1992	2–3	PR	No	5	150.0	5	0
		4–6		Yes				
Slovenia	Dec 1991	1–4	PR	Yes	3	11.0	4	.31
Ukraine	Jun 1996	2–3	Multi-tier	Yes	11	113.0	4	0
		4	PR		6	450.0	3	

$$Volatility = \frac{\sum_{i=1}^n |p_{it} - p_{i(t+1)}|}{2}$$

where n is number of parties and p_i represents percentage of votes received by a particular party at time t and $t + 1$. For each election, we include all parties receiving at least 1% of the vote in the party system. If a party received at least 1% of the vote in election t but less than 1% in election $t + 1$, we consider it to have exited the system.⁹

Type A volatility.¹⁰ In the new CEE democracies it is non-trivial to determine which parties are truly new. What appears to be a new party may be an old party that changed its name, or a coalition formed predominately from one

large old party and several small ones. In general, our rule is: if a coalition is formed by parties that contested the prior election (t), but only one of the parties obtained seats in the prior parliament and that party received more than twice as many votes as the other member parties combined in the current election ($t + 1$), we code the coalition as a continuation of the largest party; any change in vote share between the new coalition and its largest member in the prior election contributes to Type B volatility—changing voter preferences. On the other hand, if a coalition forms and two or more member parties obtained seats in the prior parliament and no single party obtained more than twice as many votes as the other parties combined, we code the new coalition as a new party, and changes in vote share for the new party and the old member parties contribute to Type A volatility.¹¹

⁹ In coding volatility, we rely primarily on data from the European Election Database, which was originally collected by the Norwegian Social Science Data Services (NSD), and is currently accessible online at http://www.nsd.uib.no/european_election_database/. For countries not in this dataset, such as Moldova and Ukraine, we rely on information from “Parties and Elections in Europe”, accessible at www.parties-and-elections.de/. For certain country elections, we cross-checked information using several available online resources including the University of Essex online archive “Political Transformation and the Electoral Process in Post-Communist Europe”, at <http://www.essex.ac.uk/elections/>, and Wikipedia.

¹⁰ We adopt Powell and Tucker’s formula: Type A Volatility = $|\sum_{o=1}^n p_{ot} + \sum_{w=1}^n p_{wt(t+1)}|/2$, where o = old disappearing parties that contested only the election at time t and w = new parties that contest only the election at time $t + 1$ (2009, Equation (2), p. 5).

¹¹ Our coding rules differ from Powell and Tucker, who apply the following: if a coalition is made up of several parties, any two of which obtained more than 5% of the vote, they consider the coalition to be a new party; thus, the change in vote share contributes to Type A volatility. Although their rules are defensible on a number of grounds including strict consistency, we believe they provide too low a bar for designating a new coalition to be a new party, with the result being inflated values of Type A volatility. Estimation based on Powell and Tucker’s coding confirms our findings, yielding results substantively indistinguishable from those we report.

It is also common to observe the breakup of a party into a series of new parties, or for a small party to break off from a larger party. If a small breakaway party received assembly seats, we code it as a new party (unless it is clearly identified as an old party that temporarily joined an electoral coalition). If the largest of the parties resulting from party breakup (whether it retains the prior name or not) is the only member of the prior coalition to obtain seats in parliament, and if it receives more than twice as many votes as all of the small breakaway parties combined, we code the largest party as a continuation of the prior party; otherwise, we code it as one of the new parties formed from breakup of the old party. In general and whenever there were questions about proper coding of coalitions or new parties, we did additional research to determine the proper identification of new parties versus continuation of old parties.

3.2. Explanatory variables

Our key explanatory variables are those hypothesized to influence coordination within and among party elites competing for national political office.

3.2.1. Electoral system

Average district magnitude.¹² Following Cox, we consider district magnitude to be the single best summary measure of an electoral system's institutional characteristics (1997). Using average district magnitude (DM) for each country electoral period, we follow others, including Hallerberg and Marier (2004, 576), in taking the log of this variable (log DM), since we expect DM increases at the low end of the scale to have greater impact on party incentives to coordinate, and thus on party consolidation or fragmentation, than increases at the high end of the scale.¹³

3.2.2. Elected institutions

Directly elected presidency. All countries in our data have a presidency, although some are indirectly elected by parliament. We are interested in the effect of direct election and include a binary variable coded 1 for lower-house elections held under institutional arrangements

that include a *directly elected president*. Of 70 assembly elections, 38 were held under such institutional rules. Due to changes in their respective constitutions, Moldova, and Slovakia have held parliamentary elections both with and without directly elected presidents. We capture these changes.

Concurrence of presidential and lower house elections. *Concurrence* is a five-category variable in which direct presidential elections having greater than one year separation from lower-house elections are coded 0, six to twelve months separation are coded 1, three to six months as 2, one to three months as 3, and less than one month separation between elections are coded 4. We believe the effect of concurrent elections on party coordination incentives diminishes rapidly with increasing separation of elections, so these categories are coded accordingly.

Upper legislative chamber. Five of our 16 cases have upper chambers. While there is considerable variation in veto powers, even the weakest—the Slovenian National Council—has power to review parliamentary decisions, propose laws, and call national referenda (Fink-Hafner, 1998; Lukšič, 2003). Adopting the World Bank Database of Political Institutions measure, we operationalize levels of coordination required with upper chambers using the proportion of upper house legislative seats in relation to all seats. For example, if a country has a lower house with 80 seats and an upper house with 20 seats, *upper seats* = .20.

3.2.3. Presidential power

Presidential power, a conditioning variable for *directly elected president*, is based on Shugart and Carey's appraisal of legislative and non-legislative dimensions of presidential power (1992, 150),¹⁴ as modified by Metcalf (2000). Metcalf adjudicates between "checklist" indices of presidential power, in which possible powers are listed but not weighted, and the Shugart and Carey method, and makes a good case for Shugart and Carey. We similarly review and reject two checklist methods.¹⁵ A disadvantage of Shugart and Carey coding—that it does not effectively distinguish low levels of presidential power—is resolved by Metcalf's improvements, some based on Shugart's own revisions (Shugart, 1996). Metcalf scores

¹² Data on mean district magnitude is from the World Bank's Database of Political Institutions, 2009 version, at <http://go.worldbank.org/2EAGGLRZ40>. Mean district magnitude is based on the magnitude of all country electoral districts. In our data, the highest mean magnitude is Ukraine, starting in 2006, which temporarily adopted a single, national district for its 450 person parliament (Ukraine returns to multi-tier electoral rules for the 2012 parliamentary elections). No CEE country adopted a pure single-member district system, although several adopted multi-tier systems in which one tier was based on single-member districts.

¹³ For instance a change in average district magnitude from 1 to 2 should influence coordination incentives far more than a change from 401 to 402. Since there are no pure single-member district (SMD) electoral systems among our cases, the lowest average district magnitude is 1.96, found in both Hungary's and Lithuania's mixed-member systems. The highest average district magnitudes are 113 (log DM = 4.7) in Russia, and 150 (log DM = 5.0) in Slovakia, except for the 4th Ukrainian election under single national district PR at 450 (log DM = 6.1).

¹⁴ The legislative dimension includes veto or decree powers, as well as levels of ability to introduce legislation, propose referenda, or control the budget process. The non-legislative dimension considers presidential control over cabinet formation and dismissal, and ability to dismiss assemblies under broad or specific circumstances.

¹⁵ The Frye method of measuring presidential authority is extensive, with 27 listed powers, but ignores the relative importance of those powers—power to appoint "senior officers" is weighted the same as the power to dissolve parliament (1997). Siaroff limits his list to nine "key" presidential powers, which includes popular (direct) election alongside a handful of important constitutional powers, and also weights each identically (2003). For our analysis, however, direct election is the key factor by which presidentialism impacts Type A volatility, and is conditioned by constitutional powers. Thus Siaroff's scheme is also unsuitable for this project on substantive grounds. We ran our models using Metcalf's, Shugart and Carey's, and Frye's coding schemes. Results using Shugart and Carey or Frye coding schemes are substantively similar to results using Metcalf coding.

Table 2

Political institutions and their relationship with volatility.

	(1)	(2)	(3)
	Type A Volatility	Type A Volatility	Total Volatility
Type B volatility	-.08 (.17)	-.15(.15)	
Population, lagged	2.66e ⁻⁹ (9.54e ⁻⁸)	-2.15e ^{-7**} (8.03e ⁻⁸)	-4.07e ^{-7**} (1.12e ⁻⁷)
Δ GDP per capita	-.002* (.001)	-.002 (.001)	-.003** (.001)
Time	-2.30 (1.56)	-1.84 (1.28)	-2.04 (1.78)
Multi-tier electoral system	1.11 (5.25)	3.29 (3.81)	9.16 (6.43)
Party threshold	2.69** (.75)	2.00** (.45)	1.39 (.87)
Upper seats, proportion	-23.63 (14.47)	-32.34** (10.38)	-33.63** (13.27)
Concurrence of elections	-.09 (1.99)	-2.35** (1.03)	-1.07 (1.29)
Log district magnitude	1.09 (1.47)	3.43** (1.52)	2.54 (1.91)
Directly elected president	8.86** (3.79)	3.98 (7.76)	-9.70 (5.59)
Presidential power	.48 (.54)	-.84* (.42)	-1.57** (.32)
DE Pres*Pres Power		3.34** (.66)	4.75** (.62)
DE Pres*Log DM		-5.12** (1.55)	-2.90 (1.77)
(Intercept)	7.65 (10.41)	14.95 (12.39)	41.15** (8.78)
R ²	.357	.521	.485
AIC	547.4	530.8	562.8
N = Country-elections	70	70	70

* $p \leq .10$; ** $p \leq .05$; 2-tailed tests.

Robust standard errors in parenthesis, clustered by country.

are nearly always higher, which most noticeably affects the low end of the scoring range, enabling finer distinctions among weak presidents (Metcalf, 2000, 668–676).¹⁶ The resultant range is 0–44, with 44 representing a president with completely dominant powers along both legislative and non-legislative dimensions. Based on a thorough review of constitutions for our country cases, we code *presidential power* from 2 (Macedonia) through 26 (Russia).

3.3. Institutional controls

Electoral system. Although Cox (1997) shows that most of the explanatory effect of electoral rules is captured by average district magnitude, we also control for mixed-member versus pure proportional systems (Kostadinova, 2002; Moser and Scheiner, 2004). *Multi-tier* is coded 0 for elections under pure proportional representation (PR) rules and coded 1 for elections under mixed single-member district and PR.

Electoral threshold. Cox describes electoral thresholds as an “important wrinkle” affecting the mechanical translation of votes to seats and so impacting how the electoral system affects the party system (1997, 62). However, it is not clear that thresholds exert an effect independent of district magnitude: they can be applied in primary districts, at the national level, or both, and may affect volatility differently depending on the size and level of district. Unfortunately we do not have sufficient variation in our data

to test these interactive effects. Most of the countries in our sample imposed an electoral *threshold* of 4 or 5% (61 of the 70 elections), and only nine elections were held with thresholds of 3% or less. That said, since thresholds should impact elite coordination, we include it as an important control.

3.4. Additional controls

Type B volatility, which we also control for, is caused by shifts in voter support from one party to another, both of which participated in elections t and $t + 1$. It is also the mathematical difference between total volatility and Type A volatility. We do not expect Type B to impact Type A volatility, which is what we find.

We also include *population*, change in gross domestic product per capita ($\Delta GDPpc$), and *time*.¹⁷ We use lagged population to control for variation in district size and total seat share which, unrelated to institutions, may create coordination challenges for political elites and increase Type A volatility. Correlation between total lower house legislative seats and population is .67 in our data. Other studies of electoral volatility, which do not distinguish between Type A and Type B volatility, suggest that economic downturns increase volatility (Tavits, 2005), and that volatility should decrease as elites gain coordination experience and voter preferences stabilize (Reich, 2004). Thus, we control for economic conditions— $\Delta GDPpc$ —and *time*—the sequential lower-house election number—which ranges from first to sixth elections.¹⁸

¹⁶ Metcalf adds Judicial Review as an important legislative power. She also argues that Shugart and Carey's scheme fails to account for some limited presidential powers, so proposes a few additional scoring categories within the 0 to 4 range. For instance, where Shugart and Carey code a president's referenda proposal powers as *none* = 0, *restricted* = 2, or *unrestricted* = 4, Metcalf adds *countersignature of minister required* = 1.

¹⁷ We also test effects of change in unemployment and inflation; however, neither variable is a significant predictor of Type A or total volatility.

¹⁸ Data for change in GDP are from the World Bank World Development Indicators, www.worldbank.org.

4. Estimation and results

Results from pooled OLS models with robust standard errors clustered by country,¹⁹ presented in Table 2, provide considerable support for our theory that institutions impact volatility and that these effects are interactive. In Model 1 we estimate a basic (non-interactive) Type A volatility model with all explanatory and control variables and find that our key explanatory institutional variable—*directly elected president*—is positively and significantly associated with Type A volatility, confirming H2. Although the impact of log DM on Type A volatility is positive, as predicted in H1, this effect is not significant in the basic model, suggesting that proper specification of impact of electoral rules on volatility must include its interaction with other key institutional features, e.g. elected president as well as power of that president. Party threshold is an institutional control that is positive and significant. Our theory is interactive rather than additive, and, as expected, institutional effects are much stronger in the interactive model.

Model 2 incorporates our theorized interactions of *directly elected president* with levels of *presidential power* and with levels of average district magnitude. By properly specifying the interactive relationship of direct election of presidents with presidential strength and electoral rules, the data fit is far better (note increased R^2 with lower AIC²⁰) and all of the institutional variables in our hypotheses find support. As specified in H3, the effect of a directly elected president depends on the strength of the presidential prize,

and both *presidential power* and its interaction with *directly elected president* are statistically significant. Log DM and its interaction with *directly elected president* are similarly significant, while electoral concurrence and upper seats (H4 and H5) increase in magnitude and become significant at conventional levels. As for non-institutional control variables, *time* falls short of conventional significance levels in both basic and interactive models. Contrary to findings reported by Tavits (2005, 2008), yet in accord with other empirical work (Bielasiak, 2002; Reich, 2004), we find no evidence that passage of time alone leads to party system stabilization.²¹ Lagged *population* changes signs and becomes significant in the interactive model.²² The relationships of Type B volatility and $\Delta GDPpc$ to Type A volatility are not significant at conventional levels.²³

Except where otherwise noted, the following discussion is based on Model 2, the interactive Type A volatility model.

4.1. Institutional choice and implications

Based on Cox's (1997) predictions, we expect to find that increases in average district magnitude (DM) exacerbate elite coordination problems and are associated with increased volatility. Accordingly the model predicts a substantively interesting increase in Type A volatility for a unit increase in log DM. For instance, increasing log DM from 2 to 3—equivalent to increasing average DM from 7.4 to 20.1—predicts an increase in Type A volatility of 3.43%. This finding supports H1—higher DMs increase Type A volatility—although it is somewhat sensitive to case selection since log DM, and its interaction with *directly elected president*, are not significant if Hungary is dropped from the analysis. Because it is interacted, the log DM coefficient is only the predicted marginal effect when there is no directly elected president. When *directly elected president* = 1 the marginal effect of log DM is –1.69, and is significant at the .10 level, although significance is highly dependent on case selection.²⁴ So while H1 is only partially supported, log DM appears to remain an important conditioning variable for understanding the relationship of directly elected presidents

¹⁹ While our data are longitudinal, they contain only 70 observations with interrupted and unbalanced panels, and we find pooled ordinary least squares (OLS) with robust standard errors clustered by country to be the best available modeling strategy. Longitudinal data can violate OLS assumptions in four ways: errors might be serially correlated rather than independent across time; errors might have panel heteroscedasticity—different variances across countries—rather than constant variance; errors might be correlated at points in time due to exogenous shocks; and, errors might be simultaneously autocorrelated and heteroscedastic (Plümper et al., 2005, 329). Checking by-country summary statistics for Type A volatility and by-country mean residuals from the predicted value of Type A volatility does indicate non-constant variance. However, a Wald test does not allow us to reject the null hypothesis that country intercepts are homogenous, and with only 70 observations it is not possible to test the null hypothesis that both slopes and intercepts are homogenous. Another modeling challenge is that two key explanatory variables—*upper seats* and *presidential power*—vary only slightly, or not at all, over time. Estimation of variables having little within-unit variance using fixed effects is inefficient (Plümper and Troeger, 2007, 135), and an important assumption that underlies use of random effects models—that unit effects are uncorrelated with the covariates—is not justifiable in this context. While we believe the most efficient approach remaining is OLS with unit-clustered standard errors, modeling these data using a multi-level approach with random intercepts by country does not alter our substantive conclusions. Summary statistics for the dependent variable over time also indicate non-constant variance. Since Type A volatility is specifically defined as *change* due to parties entering and exiting the system, the value of Type A volatility for one election is not likely to be caused by the preceding election(s), and we verify that lagged Type A volatility is not significant. We do expect volatility to decrease with democratic electoral experience, which is the pattern we observe through fifth elections; however, such effects are not the same as serial correlation. Because of its theoretical value and to offset violations of OLS assumptions, we include *time* (election number) in our model.

²⁰ Akaike, H. 1974. "A New Look at the Statistical Model Identification." *IEEE Transactions on Automatic Control* 19:716–723.

²¹ Inconsistency in impact of time on volatility may be due to differences in model specification as well as measures of time. In our study, we use number of elections held; in other studies, authors use age of democracy.

²² Estimated relationships of Type B volatility, *population*, and $\Delta GDPpc$ and *time* to Type A volatility are sensitive to case selection, and vary greatly in magnitude and significance as individual countries, founding elections, or fifth and sixth elections are dropped from the analysis.

²³ To test robustness of our results to influence of prior history or communist legacy, we also introduced controls for membership in EU, history as republic of both the USSR and Yugoslavia, and length of time under communism. None of these controls were significant (standard errors were typically larger than estimated coefficients) and none had any impact on our models. We also tested for effects of prior history or communist legacy on volatility absent institutional controls, and found that communist legacy as captured by depth of communist bureaucratization or length of time under communism had no impact on volatility (standard errors are as large or larger than coefficients).

²⁴ Statistical significance of the marginal effect of *Log DM* when *directly elected president* = 1 is quite sensitive to case selection, and is not robust to dropping fifth and sixth elections or to individually dropping many of the countries in our dataset from the analysis.

and Type A volatility, which we discuss in greater detail below. Thus, the impact of district magnitude on elite coordination is not independent of the presence of multiple institutional prizes. We note that presence of a multi-tier system has no independent relationship with Type A volatility.

Our results strongly support the body of work suggesting that a directly elected president makes it more difficult for political elites to coordinate and slows consolidation of party systems.²⁵ However, our interactive model reminds us that there is much more to the story. Hypotheses 2 and 3 assert that presence of a directly elected president increases volatility and that this positive relationship increases with the strength of the presidential prize. Derivation of the marginal effect and standard error of *presidential power* from Model 2 indicates that when there is a directly elected president the marginal effect of presidential power on volatility is always positive and significant (2.50 with standard error .50).

In Fig. 2, we see that Type A volatility is, in fact, predicted to increase as the constitutional power of a directly elected president increases. Since *directly elected president* is interacted with both *presidential power* and *log DM*, both conditioning variables are part of calculating the marginal effect. When *log DM* = 3 (mean *log DM* for these data is 2.9) in Panel B, denoting an average district magnitude of 20, the predicted marginal effect of *directly elected president* becomes significant by *presidential power* = 5 and rises appreciably with increasing presidential power (3.34 per unit increase). So in a country with *Log DM* = 3 and *presidential power* = 10, a directly elected president is predicted to increase Type A volatility by 22%. This strong, positive relationship is robust to dropping any individual country, to dropping founding elections, or to dropping fifth and sixth elections from the analysis. Thus hypotheses 2 and 3 are strongly supported.

Log DM is an important conditioning variable for the impact of a directly elected president. The effect of greater *log DM* is to shift the Type A volatility curves in Fig. 2 downward, increasing levels of presidential power required for *directly elected president* to become significant, and decreasing the overall impact on Type A volatility. At extreme values of district magnitude, *log DM* = 5 (Panel C), *directly elected president* is not significant until approximately *presidential power* = 9, and the expected increase in Type A volatility for any level of *presidential power* is approximately 10 percentage points less than with *log DM* = 3 (Panel B). Thus, higher *log DM* offsets some of the positive relationship of *directly elected president* with Type A volatility when there is such a president. Clearly,

the impact of institutions on elite coordination is not additive; volatility can only increase so much.

We note that absent a directly elected president, *presidential power* has a negative and significant relationship with Type A volatility. Since *presidential power* is interacted with *directly elected president* in Model 2, its negative and significant coefficient is only meaningful when *directly elected president* = 0, which suggests that increasing presidential power when a president is *not* directly elected is associated with a decrease in Type A volatility. Although we did not anticipate this finding, it is likely that since indirectly elected

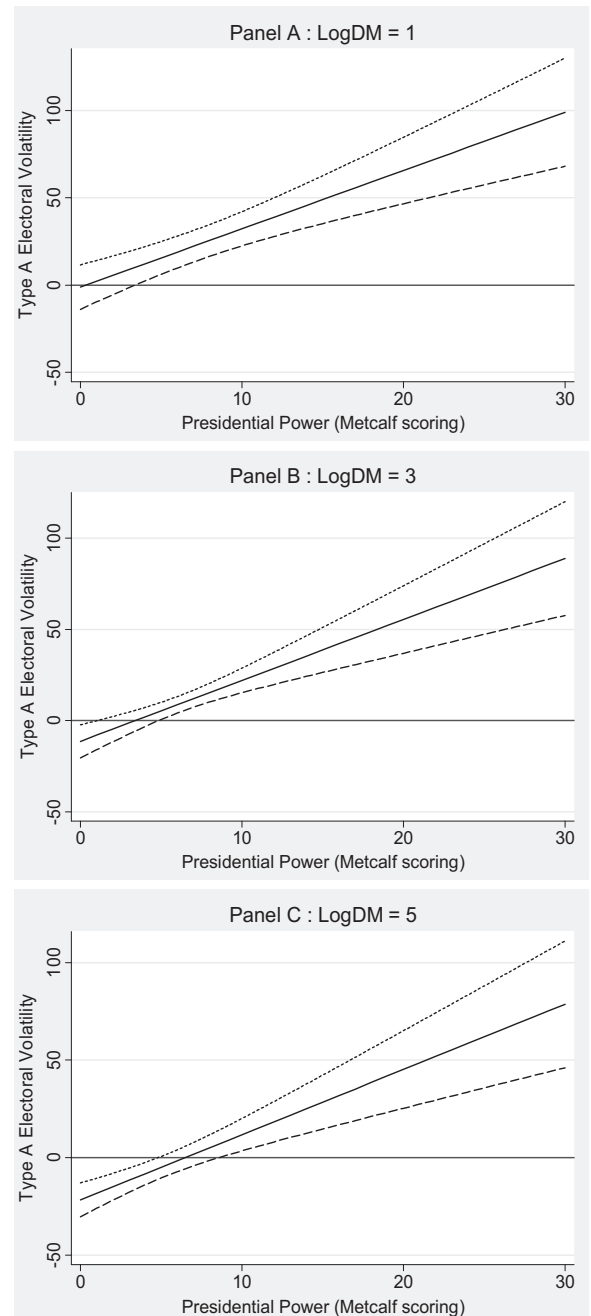


Fig. 2. Marginal effect of directly elected president.

²⁵ Although the Russian president has worked to weaken parties, we do not believe this mechanism is driving volatility in other CEE cases. The Russian president is institutionally particularly powerful and has used those powers to strengthen the presidency at the expense of parliament, thereby weakening the role of parties considerably (McFaul, 2001; Colton and McFaul, 2003; Hale, 2005; Fish, 2005; Colton and Hale, 2009; Reuter and Remington, 2009). In other CEE cases where the balance of power between president versus parliament has changed (e.g. Albania, Croatia, Moldova, Poland, Romania, and post-Orange Revolution Ukraine), power has shifted to parliament—the result of powerful parliamentary parties and coalitions—supporting our contention that in the new democracies of CEE, the office of president increases volatility by increasing electoral opportunities for elites rather than through the efforts of presidential officeholders to weaken parties.

presidents are chosen by parliamentary majority, rather than creating incentives to form new parties they increase incentives for elites to join established parties from which presidential candidates are chosen and which are crucial to election of the president, thus reducing volatility. Greater presidential powers serve to augment the power of the majority coalition, magnifying the effect. We note that in the two countries with the strongest indirectly elected presidents, Hungary and Moldova (*presidential power* = 12 in both), the president is usually affiliated with a governing party.²⁶

While the institution of an upper house should also impact coordination efforts, we hypothesize that a second legislative chamber *decreases* Type A volatility since ensuring passage of a party's parliamentary agenda promotes cross-chamber coordination.²⁷ The coefficient of *upper seats* is large, significant, and in the expected negative direction. Up to 31% of the legislative seats among our cases are in upper houses (Slovenia), in which case the model predicts a 10% reduction in Type A volatility ($-32.34 \times .31 = -10$). This result is robust to dropping founding elections, fifth and sixth elections, and each country individually from the dataset, so H4 is strongly supported.

Finally, we hypothesize that concurrence of presidential and legislative elections decreases Type A volatility because elections in two important arenas strengthen coordination incentives. While *concurrence* is insignificant in the additive model, it becomes significant in Model 2. Thus we find that closer proximity of presidential and parliamentary elections is related to decreased volatility. The model predicts up to a 9.4% decrease in Type A volatility when presidential elections are held within one month of assembly elections (*concurrence* = 4). However, the CEE norm is non-concurrent elections and there is little variation in our data. Only four of 70 elections occurred within three months of a direct presidential election (*concurrence* = 3 or 4), while 54 had at least 12 months separation (*concurrence* = 0). Thus results are sensitive to case selection and we consider hypothesis 5 only partially supported.²⁸

As with the additive model (Model 1), we find that party threshold positively and significantly affects Type A volatility. Our model predicts a 2% increase in Type A volatility for each unit (1%) increase in *threshold*. The fact that *threshold* has a significant relationship with Type A volatility is not surprising, although the positive sign may run counter to expectations. It may be that while electoral thresholds discourage small fractions from breaking off to run on their own, they may simultaneously encourage small parties to form coalitions, a phenomenon that would increase Type A volatility and which

has been quite common in CEE. Given limited variation in *threshold* within our data—61 of 70 elections occurred with 4 or 5% thresholds—any conclusions are necessarily tentative. As discussed earlier, the effect of thresholds is highly dependent on district size, presence of upper tiers, and tier at which thresholds are imposed, and perhaps even more dependent on societal cleavages. To properly capture the impact of threshold on volatility, we would need to estimate its effects across different sizes and types of districts, which, due to data constraints, is outside the scope of this project.

4.2. Institutional accommodation

We find confirmation for all of our hypotheses regarding effects of specific institutions. However, some institutions (high district magnitudes and directly elected presidents with real power) increase volatility whereas others (upper chambers and concurrent legislative and executive elections) decrease volatility. Clearly different combinations of institutions create more or less complex electoral arenas with different effects on volatility.

It is illustrative to consider expected values of Type A volatility given specific values of the covariates— $E(Y|X)$ —as departures from the European “standard” of pure parliamentary government with proportional representation and relatively low district magnitudes.²⁹ Insofar as such a standard forms a baseline for expected Type A volatility, this approach allows us to analyze how other institutional choices impact volatility and helps us understand why party systems in CEE democracies have been slow to consolidate.

We first calculate the expected value of Type A volatility for the European baseline using the covariate values in Table 3.³⁰ Since Type A volatility cannot be less than zero, our interactive model predicts no Type A volatility in cases with the institutional profile of most West European democracies. In fact, West European party systems have been extremely stable over the post-War period with low electoral volatility (Bartolini and Mair, 1990; Bielasiak, 2002, Table 3). However, adding a directly elected president to that baseline increases expected Type A volatility by over 18 points to 16.4%, with moderate *presidential power* = 7.6. Our analysis suggests that low volatility in Western Europe is due, at least in part, to the paucity of elected presidents and dominance of proportional representation with relatively low district magnitudes.

²⁶ In Hungary, the president was a member of or affiliated with a governmental party in all years except during Antall's government (1990–1994) and Orbán's first government (1998–2002). In Moldova, after direct election was abolished, the president has always been a member of the governing party. Not surprisingly, because our cases include only three countries having indirectly elected presidents with *presidential power* ≥ 6 , this finding is sensitive to case selection. Specifically it is not robust to dropping either Hungary or Moldova from the analysis.

²⁷ Since upper and lower house elections normally occur concurrently, increased coordination across electoral arenas should also help decrease Type A volatility.

²⁸ *Concurrence* is statistically insignificant if either Poland or Romania is dropped from the analysis.

²⁹ We use Clarify (Tomz et al., 2001) to simulate 10,000 random draws from the distributions of each parameter estimate and then to calculate $E(Y|X)$ for various covariate profiles. The means and standard deviations of the parameter draws are effectively identical to the OLS parameter estimates and standard errors.

³⁰ *Log DM* and *threshold* are the averages for 18 Western European countries from the Database of Political Institutions (1975–2010). *Upper seats* is the average from the same dataset with the United Kingdom dropped, since members of the House of Lords are not directly or indirectly elected. Since we do not have Metcalf coding for Western European *presidential power*, we use the CEE mean of presidential power with no directly elected president (*presidential power* = 7.6). We also assume electoral *concurrence* = 0, since only the French president is directly elected, and that *multi-tier* = 0, since only Germany has a multi-tier electoral system. We use *time* = 5 because almost all CEE countries have had five or more elections, and a higher election number more closely approximates the stabilized condition of established Western European democracies.

Table 3
Expected Values of Type A Volatility.

	Log DM	DE pres	Pres Power	Upper seats	Concurrence	Threshold	Multi-tier	Time	Other controls	E(Y X)
European baseline	2.15	0	7.6	.14	0	1.3	0	5	Means	–2.1% (–7.1; 3.1)
Add DE Pres	2.15	1	7.6	.14	0	1.3	0	5	Means	16.4% (10.7; 22.1)
CEE means, No DE Pres	2.9	0	7.6	.27	0	4.0	0	5	Means	1.7% (–3.3; 6.7)
CEE means, DE Pres	2.9	1	7.8	.27	.76	4.0	0	5	Means	15.0% (8.9; 21.1)
CEE, Not concurrent	2.9	1	7.8	.27	0	4.0	0	5	Means	16.8% (10.2; 23.3)
CEE, No upper seats	2.9	1	7.8	0	0	4.0	0	5	Means	25.5% (20.4; 30.6)
↓ Log DM ↑ Power	1	1	15	0	0	4.0	0	5	Means	46.7% (35.3; 58.0)

Means of other control variables: Type B Volatility = 17.7; $\Delta GDPpc$ = 347.8; population = 16,100,000. 95% confidence bounds in parentheses.

We present the expected value of Type A volatility for CEE democracies absent an elected president in the third row of Table 3. This value, 1.7%, is four points higher than that for the Western European baseline due to higher average district magnitudes and higher party thresholds. Even absent the elevating impact of an elected president, institutional choices in the post-communist democracies presaged higher levels of party system instability. When a directly elected president is added, using average CEE *presidential power* when *directly elected president* = 1, predicted Type A volatility increases to 15%, and increasing presidential power above the CEE mean for directly elected presidents raises this value further as shown in Fig. 3. In a typical CEE case, with a directly elected president not concurrently elected, no upper chamber and mean values of district magnitude, expected Type A volatility is quite high at 25.4%. Thus, institutional choices made in the initial environment of extreme uncertainty have contributed to high volatility and impeded consolidation of party systems.

4.3. Total volatility

When our interactive, institutions-based model is applied to total volatility (Table 2, Model 3) 49% of the variation in total volatility is explained ($R^2 = .485$) and our

hypotheses are largely confirmed.³¹ Some differences are worth exploring.

The relationships of *log DM* and its interaction with *directly elected president* are smaller and fall short of conventional significance levels. We are aware of no theoretical reason why district magnitude should impact change in voter preferences, so this finding suggests it mainly affects Type A volatility via the elite coordination mechanism we describe.

Perhaps the most important difference is that the predicted marginal effect of a directly elected president with real power is higher in the total volatility model than in the interactive Type A volatility model.³² Given *log DM* = 3, the marginal effect of *directly elected president* on total volatility is still positive and significant by *presidential power* = 5. At *presidential power* = 10, the predicted marginal effect of *directly elected president* on total volatility is 29%, or 7% higher than for Type A volatility, and continues upward at a steeper rate.³³ This finding suggests that having a popularly elected president with at least moderate power almost certainly increases not only Type A volatility, but impacts changes in voter preferences reflected in Type B volatility as well. H2 and H3 continue to be strongly supported.

The relationship of *upper seats* to total volatility is significant and similar in magnitude to its relationship with Type A volatility alone, so H4 is supported and having a second legislative chamber may impact Type B as well as Type A volatility. Conversely, it is not clear that H5—that electoral concurrence reduces volatility—is supported in the total volatility model since the coefficient of *concurrence* is small and insignificant. As we have already noted,

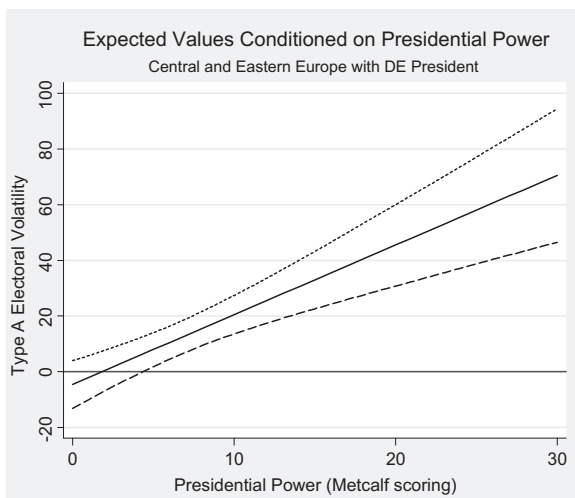


Fig. 3. E(Y|X)—type A volatility.

³¹ We do not include Type B as a control variable since total volatility is the additive result of Type A and Type B.

³² Although the sign of *directly elected president* in Model 3 is now negative and almost statistically significant (p -value = .103), we cannot interpret this as evidence that a directly elected president depresses total volatility. First, the coefficient of an interacted variable is directly meaningful only when values of all variables with which it is interacted—*presidential power* and *log DM* in this case—equal zero. This situation is empirically unlikely and does not incur in our data since *log DM* is never zero (average district magnitude = 1), and *presidential power* is never less than two. Additionally, the interaction of *directly elected president* and *presidential power* is larger, relative to the interactive Type A volatility model, in the total volatility model.

³³ Regardless of the value of *log DM*, the predicted marginal effect of *directly elected president* on total volatility increases approximately 4.8% per unit increase in *presidential power*, versus about 3.3% per unit increase in *presidential power* when Type A volatility is the dependent variable.

limited variation of *concurrency* in our data makes drawing conclusions tenuous.

Our theoretical framework explains how the institutional environment impacts party system stabilization via elite coordination, thus it is beyond the scope of this project to theorize about how institutions impact voter preferences (Type B volatility) or to attempt to model changes in those preferences. However, differences in results between Models 2 and 3 point to a study of the relationships between political and electoral institutions and changes in voter preferences as a promising area of future research.

5. Discussion

We present strong empirical evidence that complex institutional designs resulting from compromises forged by elites during communism's collapse in Central and Eastern Europe have had a lasting impact on party system stabilization. Drawing on the comparative institutions literature, we develop theory regarding unique effects of specific institutions, specifically district magnitude, directly elected presidents conditioned by presidential strength and district magnitude, presence of upper chambers, and electoral concurrency, on electoral volatility. We test each of these relationships on both the traditional measure of total volatility as well as the more refined Type A volatility and find confirmation for each. High district magnitudes provide disincentives for elites to coordinate on a small set of stable parties and so increase volatility. Presence of a directly elected president creates incentives for political elites to form new party vehicles to compete for the presidency, and high presidential power further amplifies these incentives and thus increases volatility. Our results suggest that upper chambers decrease volatility, consistent with the theory that presence of an upper house induces greater coordination among elites. Concurrency of legislative and executive elections is associated with a decrease in volatility, although we confirm this relationship only for Type A volatility.

Most importantly, we show that institutional effects are interactive. District magnitude has no independent effect in systems with a directly elected president, and in systems with a directly elected president increasing district magnitude actually dampens the impact of presidential power on volatility. Certain institutional features reduce volatility while others increase it. The institutional arrangements that we find predict high levels of volatility, popularly elected presidents and relatively high district magnitudes, are common among the CEE democracies. The institutional arrangement that we find predicts the lowest levels of volatility, pure parliamentarism with low district magnitude, is the modal institutional design in Western Europe, which has the lowest recorded levels of electoral volatility and notably stable party systems. Thus, not only does our institutions-based theory of party system stabilization explain lack of stability in the new democracies of Central and Eastern Europe, it also helps explain the continuation of low electoral volatility in Western Europe even though the social cleavages that defined those systems have little relevance to today's voters, and ties

between parties and voters have weakened (Inglehart, 1985; Kitschelt, 1994).³⁴

Party systems in most of the CEE democracies remain volatile—important new parties continue to enter and old parties to exit, even in cases where democracy is consolidated.³⁵ If we are correct that most of this volatility is due to elites' strategic responses to incentives created by the electoral arena, high volatility is the predicted result of institutional choices made at the time of transition and is not necessarily associated with characteristics that hamper democratic consolidation. In this regard, our institutional explanation is agnostic with regard to the relationship between institutions, high volatility, and democratization.

Our study has implications for the study of comparative institutions more broadly. Most institutional theory focuses on the effect of one institution (e.g. electoral rules) in isolation; yet, theorizing about one institution at a time can lead to inaccurate conclusions regarding the impact of institutions on political outcomes. We conclude, therefore, that to estimate accurately the impact of institutions on political outcomes, scholars should strive to model the broader institutional environment.

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³⁴ Volatility in Western Europe remains at about the levels recorded at the start of post-WWII democratization (compare Bielasiak, 2002, Table 2 with Mainwaring, 1999, Table 2.1).

³⁵ For example, in Bulgaria's most recent parliamentary election, a new party, Citizens for European Development of Bulgaria, won 40% of the vote and the election. In Latvia's most recent elections the new Unity party won the most seats. In other cases—Czech Republic (TOP 09), Lithuania (National Resurrection Party), Poland (Palikot's Movement), Romania (Democratic Liberal Party), and Slovakia (Freedom and Solidarity)—at least one of today's prominent parties was formed in the last five years.

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