Party System Effects on Country Governance:
A Cross-National Analysis*

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Country governance is defined as the extent to which a state delivers desired benefits of government at acceptable costs. Standard theory in comparative political parties says that the quality of country governance should be better in countries (1) with party systems than without them, (2) where party systems are competitive, (3) where party systems are aggregative, and (4) where party systems are stable. We test those propositions using the 2007 Worldwide Governance Indicators for 212 countries matched with our own comprehensive set of data for the same countries. Controlling for country size and wealth, regression analyses explain upwards of sixty percent of the variance in WGI scores. As demonstrated in this analysis, party system traits have significant effects on country governance.

Key words: Country Governance, Party System Competitiveness, Party System Aggregation, Party System Stability, WGI Scores

I. Introduction

For decades, scholars across the world have worked at measuring and classifying political party systems. Presumably, they believed that differences in party systems accounted for differences in political performance. Too often, however, scholars stopped at measuring and classifying party systems without showing whether their measures and classifications actually predicted to political performance – for example, in durability of the regime, popular approval of the government, or the quality of governance. We focus on the effects that differences among party systems have on the quality of governance – an admittedly complex concept. We offer a clear definition of country governance as a dependent variable; measure it using the Worldwide Governance Indicators for 212 countries; create

fresh measures of party systems for all 212 countries; theorize about the effects of party system competition, stability, and aggregation on country governance; and demonstrate that even after controlling for country size and wealth, party system traits have significant effects on country governance.

It is true that studies in the 1970s and 1980s reported the effects of parties (less often party systems) on political performance. For instance, Hibbs' s study showed that the macroeconomic policies concerning inflation and unemployment in capitalist countries varied according to whether government was controlled by leftist or rightist parties (Hibbs 1977). A later study by Hibbs also said that "Parties behave to a significant degree 'ideologically' , meaning that they promote policies broadly consistent with the objective interests and revealed preferences of their core constituencies (Hibbs 1992). Keefer found that older parties are more programmatic, and that programmatic political parties are related to lower corruption and higher bureaucratic quality, but have no effect on the rule of law (Keefer 2007).

However, most of these studies were interested in one of the very many properties of parties, the ideological orientation, and focused on individual parties, mostly governmental parties, rather than the party system. The cited studies involved only about 100 countries and favored developed over developing countries (Robbins 2008). To study party system effects on country governance, we need to focus on the party system instead of just looking at the organizational shapes and functions of individual parties.

Although our dependent variables came from the Worldwide Governance Indicators created at the World Bank, we collected our own data on the parliamentary representation of political parties in each of the 212 countries. Our own comprehensive and unique data on party systems allow us to address the question, "Do different properties of party systems have different effects on country governance?"

II. Research Framework

Since the International Political Science Association listed "World Capitalism, Governance, and Community" as a Conference Theme of the World Congress held in Quebec, in 2000, "governance" has become a buzzword in various subfields of political science – often used synonymously with "government." For example, the Wall Street Journal reported that the 2010 referendum in Kyrgyzstan "will usher in a parliamentary system of governance" (Toktogulov and Boudreaux 2010, A11). Actually, the term "governance" has been applied to business firms, labor unions, social clubs, government corporations, and governments at all levels – especially to international organizations (de Alcántara 1998). Some writers look beyond the process of operating social organizations to their outcomes (Peters

2000; Pierre 2000; Rhodes 1997). And there are writers who use governance as a fancy term for government itself (Taylor 2002; Weiss 2000; Bradley 2005). We return to a more restrictive political usage, regarding governance as a quality of governmental performance by nation-states. We define country governance as *the extent to which a state delivers to its citizens the desired benefits of government at acceptable costs.*[1]

Proposing a definition of country governance is one thing, measuring it adequately across countries is something else. Scholars at the World Bank developed a set of Worldwide Governance Indicators and applied them to 212 countries.[2] Identifying six abstract "meta-values" and using numerous reports from 35 different international sources, they scored the countries annually from 1996 to 2008 on six indicators – Rule of Law, Government Effectiveness, Control of Corruption, Regulatory Quality, Voice and Accountability, and Political Stability and the Absence of Violence. Table 1 shows the brief descriptions of the six indicators of country governance developed by the World Bank. The first four indicators (RL, GE, CC, and RQ) for 2007 intercorrelated more highly (mean $r = .92$) than VA and PS ($r = .68$). We regard the first four indicators as "administrative" and the last two as "political." Although the Worldwide Governance Indicators (hereinafter, WGI) have their critics (Radelet 2003; Botero and Schlosse 2010), the data are widely recognized as the best data set available on country governance. We use the 2007 scores for all six indicators for 212 countries to operationalize the concept of country governance.

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1) Our definition is similar to Besaçon's conceptualization, "Governance is the delivery of political goods – beginning with security – to citizens of nation-states. Good governance results when nation-states provide a high order of certain political goods – when the nation-states perform effectively and well on behalf of their inhabitants. However, it differs from hers by including the phrase "extent to which," which makes it a quantitative concept, but still a complex one. See Marie Besançon, *Good Governance Rankings: The Art of Measurement* (Cambridge: World Peace Foundation, 2003), p. 1.

2) The Worldwide Governance Indicators project originated in the Research Department of the World Bank in the late 1990s. Following the first letters of the creators, the measures are sometimes called KKM indicators (Kaufmann, Kraay and Mastruzzi). They (KKM) wrote about their project's methodology in documents freely available via the internet. See the following URL for reference: http://info.worldbank.org/governance/wgi/index.asp.
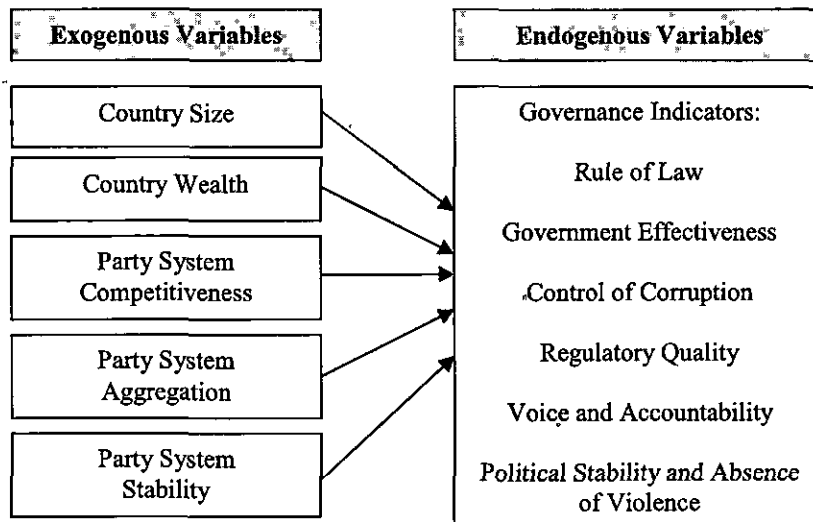
<Table 1> The Worldwide Governance Indicators

Indicators	Descriptions
Rule of Law (RL)	Measuring perceptions of the extent to which agents have confidence in and abide by the rules of society, and in particular the quality of contract enforcement, property rights, the police, and the courts, as well as the likelihood of crime and violence.
Government Effectiveness (GE)	Measuring perceptions of the quality of public services, the quality of the civil service and the degree of its independence from political pressures, the quality of policy formulation and implementation, and the credibility of the government's commitment to such policies.
Control of Corruption (CC)	Measuring perceptions of the extent to which public power is exercised for private gain, including both petty and grand forms of corruption, as well as "capture" of the state by elites and private interests.
Regulatory Quality (RQ)	Measuring perceptions of the ability of the government to formulate and implement sound policies and regulations that permit and promote private sector development.
Voice and Accountability (VA)	Measuring perceptions of the extent to which a country's citizens are able to participate in selecting their government, as well as freedom of expression, freedom of association, and a free media.
Political Stability and Absence of Violence (PS)	Measuring perceptions of the likelihood that the government will be destabilized or overthrown by unconstitutional or violent means, including politically-motivated violence and terrorism.

Sources: Daniel Kaufmann, Aart Kraay, and Masssimo Mastruzzi, *Governance Matters VII: Aggregate and Individual Governance Indicators, 1996-2007* (Washington, D.C.: World Bank, June 2008), pp. 7-8. The order of the indicators was changed from the original.

Figure 1 shows our research design of causality between social-political conditions and country governance. We argue that features of a country's party system and two other factors, i.e., country size and country wealth, help explain variations in the qualities of country governance.

<Figure 1> A Basic Model for Explaining Country Governance

Exogenous Variables	Endogenous Variables
Country Size	Governance Indicators:
Country Wealth	Rule of Law
Party System Competitiveness	Government Effectiveness
Party System Aggregation	Control of Corruption
Party System Stability	Regulatory Quality
	Voice and Accountability
	Political Stability and Absence of Violence

Strong theory implies that poor countries are harder to govern than rich countries (Wright 2008; Kurtz and Schrank 2007) and that large countries are harder to govern than small ones (Kurtz and Schrank 2007; Xin and Rudel 2004; Powell 1981; Skaaning et al. 2008). Any attempt to assess the effects of party systems on country governance must control for country wealth and size. For measuring country size, we considered that "A territorial entity has several dimensions of size: population, area, density, and others" (Dahl and Tufte 1973, 17). We looked more closely at the relationship between the two major options – number of people vs. area in square miles or kilometers – for measuring country size. The correlation between the logarithms for country population and country size becomes a robust .87, and the plot of the cases is fairly even around the regression line. Both the high correlation in and the tighter clustering of cases suggests that country population and area have much in common. We added country population to country area, creating one measure of country size. For measuring country wealth, we used a logarithm of the distribution of GDP per capita in dollars.

III. Theoretical Framework

The party system has been conceived to do the major role of intermediating between society and government. It reflects social cleavages and offers basic conditions for state governance. Indeed, countries have been regarded stable or unstable depending on the party system (Lipset and Rokkan

1967; Lane and Ersson 2007).

Sartori's study provided a powerful explanation that the party system itself performs an important role to shape political·stability. He focused on the polarization of the party system and said that polarized multi-partism is negative for political stability (Sartori 1976). Although Sartori is quite correct in saying that multi-partism is not good for state governance, his focus on polarization doesn't seem to be valid for understanding party system effects on country governance these days, as polarization is no longer a main property of the party system worldwide.

Instead, the established party system theory that the high degree of fractionalization hinders the party system delivering social interests to the government is still debated. Lijphart argued that in Europe, social heterogeneity has called for the adoption of a proportional representation system in elections, and this has kept the state stable regardless of the multi-partism (Lijphart 1969). Similarly, Strøm suggested that multi-partism has not always been resulted in political instability (Strøm 1990). His study showed that several countries with a multi-party system maintained system stability by forming minority governments.

Pedersen is more concerned with the volatility of the party system rather than the number of the parties. He said that it is the electoral change that shapes the party system, and when volatility is high, the party system adjusts to the new changes of political environments (Pedersen1979). Kirchheimer's catch-all strategies and Mair's cartelized party system theory focused on the size and competitiveness of the party system and they also implied a negative view of increasing volatility (Kirchheimer 1966; Mair 1997).

Following these previous studies, mostly based on European party systems, the party system effects on country governance in new democracies have also been studied. Kuenzi and Lambright raised the question of whether the party system institutionalization is a requisite·for the consolidation of democracy. Their study showed that party system stability and competitiveness have positive associations with democracy in African countries (Kuenzi and Lambright 2005). Lee's study of the party system in Thailand also showed that the high level of competitiveness and the low level of stability of the party system prohibited the Thailand government from democratizing in the 1970s (Lee 2003).

As in all these previous studies, the party system has been conceived as a key link between society and state for effective country governance. Among the various properties of the party system, fractionalization, competitiveness, and volatility have remained major features for deciding state governability, and their impacts on country governance are still the subject of major academic questions for scholars. Contrary to other studies mainly focused on one or several cases, our study attempts to test the party system effects on country governance using a worldwide dataset.

As with all empirical theories with testable propositions, our theory of party system effects on country

governance rests on a number of assumptions, originated from the normative statement: It is good to have political parties competing to control government in open elections.[3] We unpack that assumption in a testable, empirical theory explaining why and how competitive party systems "perform better." The four major propositions that guide the empirical research are:

> P1   *Countries with popularly elected nonpartisan parliaments score higher on governance than those with unelected nonparty parliaments, which score low on governance.*[4]
>
> P2   *The more competitive the party system, the better the country governance.*[5]
>
> P3   *The more aggregative the party system, the better the country governance.*[6]
>
> P4   *The more stable the party system, the better the country governance.*[7]

The process for collecting data on party systems to match the governance indicators for 212 countries is thoroughly described in an earlier paper.[8] Using Internet sources, we found parliamentary seat data for 189 countries: the 185 with publicly identified parties and four with shadowy parties. We recorded the percentage of parliamentary seats held by the three largest parties in each country after two elections: a "stimulus" election prior to 2007 and an adjacent "referent" election usually held before the stimulus

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3) In the logic of inquiry, assumptions are untested empirical assertions. They are untested primarily because they are too general or vague to be tested. We make similar assertions about political parties, which are formalized as follows: (A1) a popularly elected government is more responsive to public opinion than one not popularly elected; (A2) a party government is more responsive to public opinion than a non-party government; (A3) political parties that control parliament seek to retain control; (A4) to the extent that elections decide control of parliament, governing parties respond to public opinion; (A5) public opinion favors government policies that serve general interests more than policies serving special interests; (A6) general interests are served when governments deliver benefits that serve shared meta-values; (A7) the likelihood that governing parties retain control of parliament depends on various factors-such as, the competitiveness of the party system, the aggregation of the party system, and the stability of the party system. We could find numerous references for these assumptions, for instance, see Francis G. Castles and Rudolf Wildenmann (eds.) Visions and Realities of Party Government (New York: Walter de Gruyter, 1986); Joseph Wright, "Do Authoritarian Institutions Constrain? How Legislatures Affect Economic Growth and Investment," *American Journal of Political Science* 52 (April, 2008), pp. 322-43; Mary Gallagher and Jonathan K. Hanson, "Coalitions, Carrots, and Sticks: Economic Inequality and Authoritarian States," *PS: Political Science and Politics* 42 (October, 2009), pp. 668-72; Adam Przeworski, Susan C. Stokes and Bernard Manin (eds.), *Democracy, Accountability and Representation* (New York: Cambridge University Press, 1999); Giovanni Sartori, *Parties and Party Systems: A Framework for Analysis* (Colchester: ECPR Press, 2005); Peter Mair, *Party System Change* (Oxford: Oxford University Press, 1997); and Jan-Erik Lane and Svante Ersson, *Politics and Society in Western Europe*, 4th edition (London: Sage, 1999).

4) Derived from A1 and A2 stated in footnote 5.

5) Derived from A3, A4, A5, A6, and A7 stated in footnote 5.

6) Derived from A3, A4, A5, A6, and A7 stated in footnote 5.

7) Derived from A3, A4, A5, A6, and A7 stated in footnote 5.

8) Jin-Young Kwak and Kenneth Janda, "Measuring Party System: Revisiting Competitiveness and Volatility in Parliamentary Party Systems," *The Korean Journal of Area Studies* 28, No. 2 (2010), pp. 21-49.

election. We identified 15 additional countries that did not hold elections for parliamentary parties and eight countries that held elections but nonpartisan ones, seating no deputies by party. These 212 countries account for virtually all party systems across the world.

A review of previous efforts at measuring party systems isolates ten measures in Table 2.

<Table 2> Ten Measures of Party Systems

Measure	Terms and formulae
1. Strength of largest party	p_1, the proportion of seats held by the largest party
2. Number of parties seated, NPP	NPP = number of parties with at least one seat
3. Fractionalization index, F[9]	$1 - \sum_i^N p_i^2$, where p = proportion of seats held by party i
4. Effective number of parliamentary parties, ENPP[10]	$\dfrac{1}{\sum_i^N p_i^2}$, where p = proportion of seats held by party i
5. Aggregation index[11]	$\dfrac{p_1}{NPP}$, where p_1 = percentage of seats held by the largest party; NPP = all seated parties
6. Seat volatility[12]	$\dfrac{\sum_{i=1}^N \lvert p_{i,t} - p_{i,t-1} \rvert}{2}$ where $p_{i,t}$ = percentage of seats held by party i at election t
7. Repeat party representation	Number of three top parties in stimulus election that won seats after the referent election
8. Strength of second largest party	p_2, proportion of seats held by the second largest party
9. Margin of the largest party over next largest	Proportion of seats held by party #1 minus proportion held by party #2
10. Strength of third largest party	p_3, proportion of seats held by the third largest party

Measures #1 and #2, the strength of the largest party (p_1) and the number of parties in parliament (NPP), affect measures #3, #4, and #5. In essence, items #1 to #5 measure what might be called party system "fragmentation" or its opposite condition, "aggregation." For example, the larger the actual

9) Douglas Rae, "A Note on the Fractionalization of Some European Party Systems," *Comparative Political Studies* 1 (October, 1968), pp. 413-18.
10) Markku Laakso and Rein Taagepera, "Effective Number of Parties: A Measure with Applications to West Europe," *Comparative Political Studies* 12 (1979), pp. 3-27.
11) Lawrence C. Mayer, "A Note on the Aggregation of Party Systems," in Peter Merkl (ed.), *Western European Party Systems* (New York: Free Press, 1980), pp. 515-20.
12) Mogens N. Pedersen, "The Dynamics of European Party Systems: Changing Patterns of Electoral Volatility," *European Journal of Political Research* 7 (1979), pp. 1-26.

number of parliamentary parties, the greater Rae's fractionalization index, and the greater the effective number of parties – the more fragmented the system. Conversely, the greater the strength of the largest party and the greater Mayer's aggregation index, the more aggregative the system.

Formula #6 for volatility, however, is entirely different. As Pedersen wrote after evaluating the family of fragmentation indicators: "Fragmentation is a locational concept. The indicators of that concept, accordingly, are locational indicators that measure states of systems, not change in systems" (Pedersen 1980, 398). In addition, Pedersen's volatility measure accords no special weight to the strength of the largest party. Table 3 summarizes a factor analysis of the 10×10 intercorrelation matrix of these ten measures. It extracted three factors that explained 80 percent of their total variance.[13] Table 3 gives the correlations of each variable with the unobserved, underlying factors detected by the analysis. Standard practice drops factor loadings below a certain level to prevent distracting statistical "noise" from obscuring the factor structure. We dropped all loadings below .70. Five measures loaded on Factor 1, two on Factor 2, and two on Factor 3. The percentage of seats held by the third largest party had nothing much in common with the other nine measures. These rotated factors were orthogonally rotated and uncorrelated with one another. By inference, the ten measures tap three distinct dimensions of party systems.

<Table 3> Factor Analysis of Ten Party System Measures

	Factor 1: System Aggregation	Factor 2: System Competition	Factor 3: System Stability
Party #1 % stimulus year	.87		
Mayer (log) (aggregation)	.97		
Rae (fractionalization)	-.90		
Laakso/Taagepera (log) (ENPP)	-.88		
# of all parties (log)	-.84		
Party #3 % stimulus year			
Party #2 % stimulus year		.94	
Margin Party #1 - #2		-.75	
Pedersen (log) (volatility)			.78
Repeat party representation			-.85

Extraction method: principal component analysis.

Rotation method: Varimax with Kaiser normalization.

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13) The first edition of Lane and Ersson, Politics and Society in Western Europe (London: Sage, 1987), reported a factor analysis of 14 party system measures, many – but not all – identical to the 15 in their 3rd edition. They uncovered five factors (p. 161) that correspond closely to the patterns discussed here. Four fragmentation measures loaded on Factor 1; three socioeconomic measures on Factor 2; three ideological measures on Factor 3; two other ideological measures on Factor 4; and two measures of change on Factor 5. The analysis did not include strength of the parties.

The five variables that loaded highly on Factor 1 are often described in the literature as measuring party system fragmentation (Lane and Ersson 1987; Mayer 1980). Unfortunately, the literature often employs measures of fragmentation in confusing and contradictory ways (Nyblade and O'Mahony 2010). Hoping to write on a cleaner slate, we label the factor "party system aggregation," which describes the party system factor positively rather than negatively. We labeled Factor 2 "party system competitiveness" because it attracted a common measure of party competition (percentage margin between the largest and next largest parties in parliament) and our preferred measure of system competition (percentage of seats held by the second largest party). Factor 3 was called "party system stability" because of its high positive correlation with Pedersen's well-known measure of volatility and its high loading of a variable that indicated whether the three largest parties in the stimulus election won seats in the referent election.

III. Party System Effects on Country Governance

A. Governance Without Party Systems

Before we review governance without party systems, we tested causal relationships between two exogenous variables other than party system properties, i.e., country size and country wealth. Our regression analysis showed that country size had statistically significant effects on every indicator of country governance, explaining from 5 to 27 percent of the variance. When added to country size, country wealth effects were greater for all six Worldwide Governance Indicators, but size effects remained statistically significant. Together, the two variables explained from 41 to 67 percent of the variance for each of the country indicators. When non-political factors explain so much variance in cross-national analysis, relatively little room remains for political variables to exert any influence. That was not the case with the party system factors.

Then what about governance without party systems? The overwhelming majority (about 90 percent) of the 212 countries covered by the WGI have political parties. Of these, 189 countries had parliamentary deputies seated by political parties around 2005, while only 23 did not. Of those without parliamentary parties, eight chose deputies via popular elections[14] while 15 had no elections for parliament.[15] Lacking political parties, do they rate higher or lower than expected, allowing for country size and wealth? We suggested the following proposition, *ceteris paribus*:[16]

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14) Those countries are American Samoa, Marshall Islands, Micronesia, Nauru, Niue, Oman, Palau, and Tuvalu.

15) Those countries are Afghanistan, Bahrain, Bhutan, Brunei Darussalam, Lebanon, Libya, Maldives, Myanmar, Nepal, Qatar, Saudi Arabia, Somalia, Swaziland, Tonga, and UAE.

P1　　　*Countries with popularly elected nonpartisan parliaments score higher on governance than those with unelected nonparty parliaments, which score low on governance.*

Including the NoParties and NonPartisan variables permits testing of hypotheses H1.1.1-6 and H1.2.1-6 concerning the effects on country governance relative to countries with political parties. One set of hypotheses tests for the negative effects of NoParties:
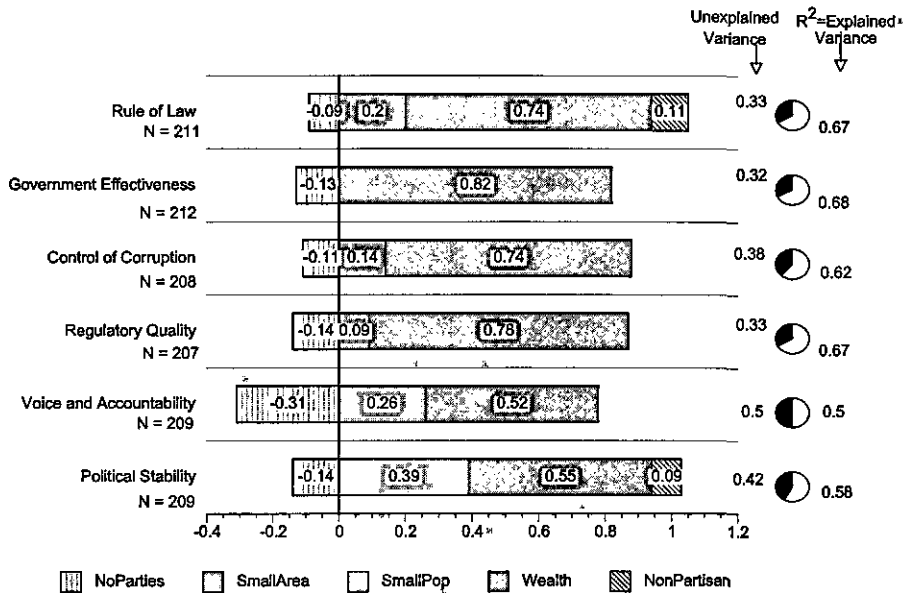
H1.1.1: **NoParties** has a negative effect on Rule of Law (RL)

H1.1.2: **NoParties** has a negative effect on Government Effectiveness (GE)

H1.1.3: **NoParties** has a negative effect on Control of Corruption (CC)

H1.1.4: **NoParties** has a negative effect on Regulatory Quality (RQ)

H1.1.5: **NoParties** has a negative effect on Voice and Accountability (VA)

H1.1.6: **NoParties** has a negative effect on Political Stability (PS)

The other set of hypotheses tests for the effects of NonPartisan. P1 makes no specific prediction other than NonPartisan countries will have higher (more positive) governance scores than NoParties countries, but we will require that their scores are also statistically significant:

H1.2.1: **NonPartisan** has a more positive effect than **NoParties** on RL

H1.2.2: **NonPartisan** has a more positive effect than **NoParties** on GE

H1.2.3: **NonPartisan** has a more positive effect than **NoParties** on CC

H1.2.4: **NonPartisan** has a more positive effect than **NoParties** on RQ

H1.2.5: **NonPartisan** has a more positive effect than **NoParties** on VA

H1.2.6: **NonPartisan** has a more positive effect than **NoParties** on PS

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16) In our model, ceteris paribus is pursued by controlling for country size and wealth in regression analyses that include the variables, NoParties and NonPartisan. NoParties is scored 1 for the 15 countries that did not hold elections to select parliamentary deputies and whose parliaments have no political parties. All other countries are scored 0. NonPartisan is scored 1 for the eight countries that held nonpartisan elections for parliament. All other countries are scored 0. Therefore, the countries that score 0 on both variables are countries with parliamentary parties. In effect, the NoParties and NonPartisan countries are compared against those 189 countries. P1 is vague concerning the effects of NonPartisan countries. It merely says that they should score "higher" on governance than NoParties countries. NonPartisan are expected to score higher because they hold elections. Nevertheless, they still lack political parties, so the theory is unclear. P1 only says that they should have higher governance scores than NoParties countries.

<Figure 2> Effects of NoParties, Country Size[a], Wealth, and NonPartisan
on All Six Governance Indicators[b]

* SmallArea measures Country Size except for Political Stability, which uses SmallPopulation.

[b] Entries in the bar graph are β coefficients from the regression equations.

All are significant at the .05 level or beyond. R^2 are adjusted.

The regression results for all six indicators of country governance are given in Figure 2. The values in the graph are standardized regression coefficients (βs), which indicate the amount of change in the standardized governance variables for each standard deviation increase in the independent variables. The NoParties countries have significant negative coefficients roughly the same size for all of the indicators except Voice and Accountability, for which its effect was almost triple. Among the WGI sources in scoring VA was Freedom House's rating of countries for "political rights," which includes having free and fair elections, representative legislature, free elections, and political parties.[17] Countries that had no elections and no parliamentary parties were downgraded for Voice and Accountability. So the relationship is partly definitional; hence the strong relationship.

Apparently, the few countries that had free nonpartisan elections for parliament were not equally downgraded, so they did not generate negative coefficients in the regression analysis.[18] In fact, the NonPartisan coefficients were not significant for four of the six indicators. The regression analysis

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17) Freedom House in Washington, D.C., calls itself "an independent watchdog organization that supports the expansion of freedom around the world." See http://freedomhouse.org.

18) Oman, which was included among the eight NonPartisan countries, was not classified as an Electoral Democracy by Freedom House for not having free elections. However, it is still included in this analysis.

results clearly support all six hypotheses H1.1.1-6, but only H1.2.1 and H1.2.6.

B. The Effects of Party System Competitiveness

The factor analysis identified two indicators that loaded on the factor labeled "party system competitiveness." One was the point difference between the percentages of seats held by the largest and second largest parties, which is often used as a measure of party system competitiveness (Adsera 2003; O' Dwyer 2006). The other was the percentage of seats held by the second largest party, which has rarely been used that way (Eerd 2010; Grzymala-Busse 2007a). After considering the concept of competitiveness and looking at the data, we conclude that the second indicator is the better measure (Kwak and Janda 2010). We also reject three other indicators used to measure competitiveness that loaded highly on the fragmentation factor. Two are the percentage of seats held by the largest party (Vanhanen 1997) and the "effective number of parties" (Kuenzi and Lambright 2005). They simply do not measure competitiveness. Neither does the third – fractionalization – despite its frequent use to measure competitiveness.
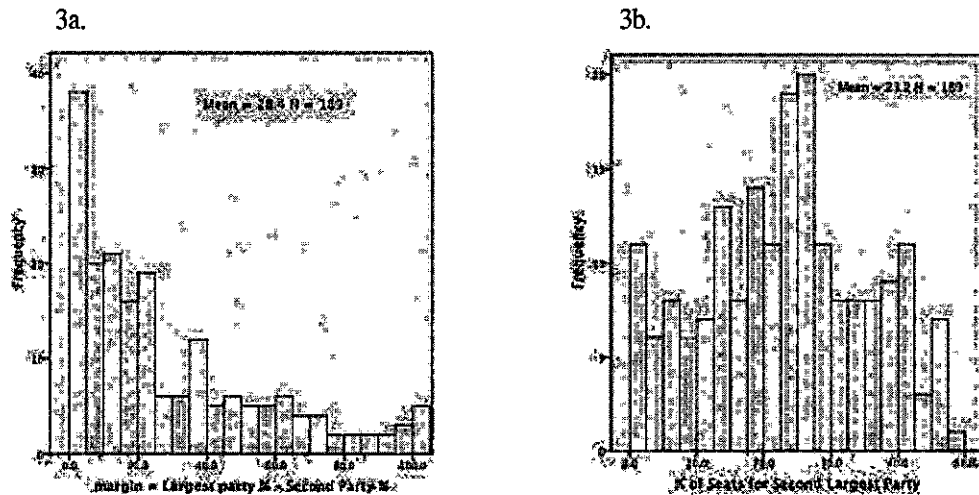
The formula for fractionalization was devised by Rae and he based the measure on the proportions of seats held by parliamentary parties. Rae proposed his measure in response to this question: "Is competitive strength concentrated in one party, or is it divided among many parties? (Rae 1967)". In so doing he suggested that fractionalization is a measure of party system competition, and scholars have used it that way (Kuenzi and Lambright 2005; Kesselman 1966).

The terms "competition" and "competitive" have been applied to very different aspects of party politics. According to Sartori' s formulation, competition establishes the "rules of the game" being played, while competitiveness is "a particular state of the game" (Sartori 1976, 218). Sartori continues, "competition is 'competitive' when two or more parties obtain close returns and win on thin margins" (Sartori 1976).

Using the "most different systems" research design (Przeworski and Teune 1970, 32), we do not control for standard political factors such as type of electoral system or presidential/parliamentary government. If party system competitiveness has any significant impact on governance, it must surface through all types of political systems. We focus exclusively on contests for control of the lower chamber of the legislative body. Parties that win a majority of seats typically control that institution. Defined as "majority bent" parties, they are "those which command an absolute majority in parliament or are likely to be able to command at some date in the normal play of institutions" (Duverger 1951, 283). If no party has a majority, parties form a government coalition, receiving "payoffs" (e.g., cabinet positions) according to their proportion of seats (Browne and Franklin 1973; Warwick and Druckman 2001). This

"proportionality rule" makes party control of government a function of the seats they won (De Winter and Dumont 2006). The relationship between seats held and cabinet posts acquired is strong in parliamentary systems, less-strong in presidential systems (Amorin Neto 2002; Amorin Neto and Strøm 2006). Competition for governing parties comes from opposition parties that threaten to replace them after the next election. Not all opposition parties are credible threats. Threats are more serious from other majority bent parties or from parties that can form a government coalition. Accordingly, governing parties look not only to their seat margin, as suggested by Sartori, when pondering losing office in the next election, but also to the strength of their main party challengers (Grzymala-Busse 2007a). The sheer size of the parties competing for control is important. Rival governing parties must be sufficiently large to have credible "office capacity," enabling them to staff government ministries adequately (Skjœverland 2009).

<Figures 3a and 3b> Two Measures of Party System Competitiveness
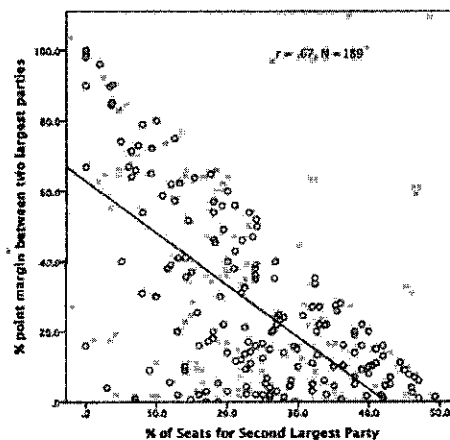
3a.

3b.

We collected data on two measures of party system competitiveness for 189 parliaments. Figure 3a graphs the point margin between the percentages of seats held by the two largest parties. Figure 3b graphs the percentage of seats held by the second largest party after the stimulus election.

Figure 3a depicts a highly skewed distribution. A few parliaments tail off to the right, toward the maximum of a 100 point margin difference (meaning that in a few parliaments the largest party holds all the seats), while almost 40 parliaments stand toward the left, at the 0 point difference in seats between the two largest parties. In contrast, Figure 3b displays a more statistically desirable distribution that is

symmetrical and unimodal (one category containing a plurality of the countries).

Although point margin and percentage of seats for the second party are highly correlated (r = .67), they express competitiveness very differently, as shown in Figure 4. As the second largest party's percentage of seats tends toward 50, the point margin between the two largest parties tends toward 0, whereas the point margin ranges from almost 0 to almost 70 when the percentage of seats held by the second largest party is around 20. Measuring competitiveness by the point margin between the two largest parties is better suited to a two-party system, like that in the United States (which is comparatively rare) than a multi-party system, like those in Europe (which are far more common).

<Figure 4> Seat Point Margin by Size of Second Party

The issue can be illustrated by considering these scenarios: (1) A two-party system in which the parties split 52 to 48 in percentage of seats held, and (2) a multi-party system in which the two largest parties split 30 to 26. In both cases the margin in percentage of seats held by the two largest parties is 4 points. Does a 4-point margin adequately reflect the competitiveness of both scenarios? The 4 points in seats needed to reverse the parties' positions is only an 8 percent gain for a party holding 48 percent of the seats but a 15 percent gain for one holding 26 percent. Despite facing the same point margin in seats in the two scenarios, in the second one the smaller party has to gain relatively more to replace the larger party. Does the percentage of seats (48) held by the largest party challenger then provide a better measure of competitiveness between the two scenarios? Simply musing about which is better will not answer the question, but an answer can come from trying both measures in testing our theory about party system effects on country governance.

We report our statistical tests of hypotheses in the next section, but for now we can answer that the

percentage of seats held by the second largest party produces consistently stronger effects on all but one of the governance indicators, for which the effects are equal. Because the more fruitful measure, which we hereafter call Party#2%, has not been used much in the literature, it deserves more discussion. Perhaps Party#2% is more fruitful because it conveys more information about the distribution of parliamentary seats. The point margin says nothing about the size of either parliamentary party, but Party#2% implies information about Party#1% and about Party#3%. For example, knowing that the second largest party holds 35 percent of the seats, one also knows (because the totals cannot exceed 100) that the largest party has at least 36 percent and that the third largest has at most 29. By implying more information about the distribution of seats among the three largest parties, Party#2% may exert stronger effects in the empirical tests. Therefore, we used the size of the second party after the stimulus election (Party#2%) to operationalize "competitiveness."

In the past, researchers have sometimes found significant party effects on political outcomes only to see them washed away with the introduction of social variables, such as population size and wealth. In his study of party systems and political system performance, Powell says, "Adding (log) population size greatly increases the power to explain rioting and diminishes the size of the party variable effects," and "Once we control for level of economic development the party system types have little effect on deaths by violence" (Powell 1981, 861-79). Therefore in testing hypotheses we routinely include both country size and country wealth as control variables, allowing in advance for their effects on country governance.

We also routinely include variables NoParties and NonPartisan. NoParties is scored 1 for the 15 countries that do not hold elections to select parliamentary deputies, and whose parliaments have no political parties. NonPartisan is scored 1 for the eight countries that hold nonpartisan elections for parliament. The other 189 countries with party systems are scored 0 on those two variables. Party systems are represented by converting Party#2% into z-scores. Competitive parties had high z-scores; non-competitive parties had low scores. The mean z-score of 0 was assigned to each of the missing 23 countries, which fits the fact that they had no party system competitiveness.[19]

We focus on testing H2.1-6 concerning the effects of party system competition for the 189 countries with party systems. Our regression analyses include five independent variables: SmallArea (or SmallPop),[20] Wealth, NoParties, NonPartisan, and Party#2%. We do not include any other factors – cultural or political – that may affect country governance. Concerning any omitted factors, we invoke the Latin phrase ceteris paribus (other things being equal) that economists use to ignore other factors (known and unknown) that affect the relationships they are studying. Because we ignore other variables with potential influence on country governance, we do not expect to reach high levels of explanation. Instead,

19) Using all the cases preserved the original variance in RL scores, but it introduced error associated with using means to estimate missing data for Party#2%.
20) Land area and population were converted to logs and multiplied by -1, measuring "smallness" not "bigness."

we will be satisfied to demonstrate, after controlling for country size and wealth, whether any party system characteristics are significantly related to country governance, which is operationalized by the WGI for 2007. Here are our hypotheses concerning P2:

P2   *The more **competitive** the party system, the better the country governance.*
     H2.1: The larger Party#2%, the greater RL
     H2.2: The larger Party#2%, the greater GE
     H2.3: The larger Party#2%, the greater CC
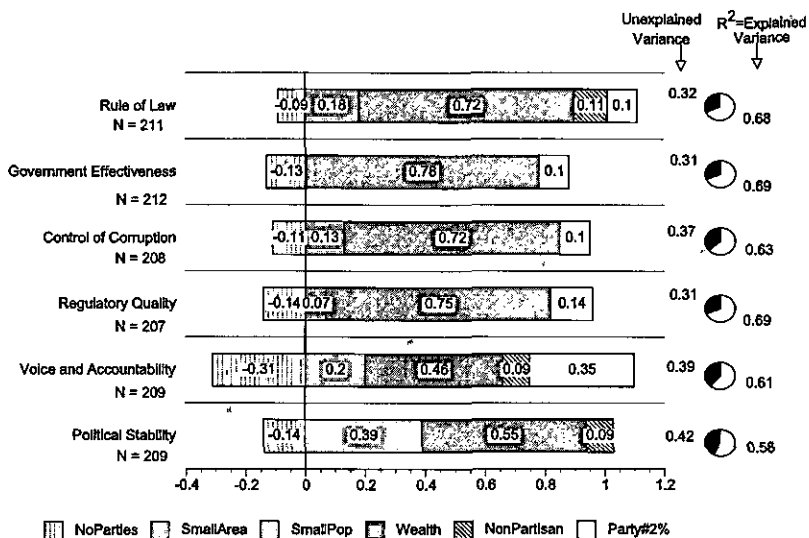   H2.4: The larger Party#2%, the greater RQ
     H2.5: The larger Party#2%, the greater VA
     H2.6: The larger Party#2%, the greater PS

Although scholars often measured party system competition differently in the literature, most recognized the concept's theoretical importance. For instance, Grzymala-Busse argues for *robust competition* having "opposition parties that offer a clear, plausible, and critical governing alternative that threatens the governing coalition with replacement" (Grzymala-Busse 2007b, 92-3). In addition, she says that "the availability of multiple and competing political options increases representation, both by encompassing wider constituencies and by providing all voters with alternatives to the government program," and "competition provides multiple policy and governance alternatives, and therefore it can potentially contribute to better institutional design through more extensive debates over the options, the inclusion of more viewpoints, and policy compromise" (Grzymala-Busse 2007b, 92-3). Coming close to our definition of governance producing benefits to citizens, Leary suggests "that more competitive elections lead to more provision of goods and services to voters and to longer lasting Regimes" (Leary 2010, 3). One could cite other sources making essentially the theoretical argument in P2: *The more competitive the party system, the better the country governance.*

Having considered in some detail the regression analysis concerning the Rule of Law, we can summarize the analysis for all six indicators of country governance. Figure 5 gives the results for all the countries scored on five independent variables: country size; country wealth, NoParties, NonPartisan, and party system competitiveness. Consider first the effects of our control variables, country wealth and country size.

<Figure 5> Effects of NoParties, Country Size[a], Wealth, NonPartisan, and Party#2%
on All Six Governance Indicators[b]

a SmallArea measures Country Size except for Political Stability, which uses SmallPopulation.

b Entries in the bar graph are β coefficients from the regression equations.

All are significant at the .05 level or beyond. R2 are adjusted.

Country Wealth retained its significant and strong effect on all governance indicators. We should comment, however, on its much weaker effect for Voice and Accountability (VA) and Political Stability and the Absence of Violence (PS). We found that VA and PS averaged lower correlations (.78 and .72 respectively) with the first four variables (RL, GE, CC, and RQ) than the four averaged among themselves (.92). Obviously, these four variables – Rule of Law, Government Effectiveness, Control of Corruption, and Regulatory Quality – reflect different aspects of country governance than the other two. Country wealth, it appears, affects administrative indicators of country governance (RL, GE, CC, and RQ) more strongly than political indicators (VA and PS). We usually found different effects of party system traits on administrative and political aspects of country governance.

Adding party system competitiveness to the equation has notable consequences for the importance of country size. Country size retains its significant effects on five of the six indicators, but loses significance for GE. Apparently, the slight correlation between small country size and party system competitiveness ($r = -.19$) allowed party system competitiveness to "pick up" the variation that country size had explained. Why that occurred for GE but not for the other variables is not clear. The WGI scored Government Effectiveness using information on turnover of government personnel, quality of the

bureaucracy, satisfaction with transportation, debt management, public debt management, and use of resources. Apparently, this aspect of country governance is not especially affected by country size. Large countries as well as small can enjoy similar levels of Government Effectiveness.[21]

The consistent negative effects of NoParties and the two positive effects of NonPartisan are unchanged by adding Party#2%.

The percentage of seats held by the second largest party also had significantly similar effects (β =.10) on all four administrative indicators of country governance. Its effects on the two political indicators were dramatically different, however. Its effect on Voice and Accountability reflected the same definitional problem as with the NoParties variable. That is, countries with parties, and especially competitive parties, earn high VA ratings. Nevertheless, party system competitiveness still affects Voice and Accountability, for Party#2% was scored quite independently of the WGI scoring for VA. Of more interest is the finding that party system competitiveness has no significant effect on Political Stability and the Absence of Violence – measured with information on political terrorism and assassination, armed conflict, ethnic tensions, civil unrest, and so on. All these negative acts occur regardless of party system competitiveness.

C. The Effects of Party System Aggregation

The concepts of interest "aggregation" and "articulation," are usually associated with individual parties, not party systems. At the party system level then, we can consider the parties' number and strength as indicative of party system aggregation, or its converse, party system fragmentation. In 1980, Mayer devised a method for measuring party system aggregation, which has been largely neglected (Mayer 1980). Today, democracy assistance groups still value the aggregative function of party systems, particularly in conflict-prone societies (Reilly et al. 2008). Most scholars, however, have shifted attention from party system aggregation to party system fragmentation.

The definition of fragmentation varies across writers, but all would agree that it deals with the extent to which numerous parties in a system have relatively equal political power. Writers claim or imply various consequences of high party system fragmentation. Lane and Ersson summarize the standard theory: "A high degree of fractionalization – too many parties – hinders a multi-party system from delivering durable and effective government, or so established party system theory suggests" (Lane and Ersson 2007, 94). Nevertheless, Lane and Ersson believe that some degree of fragmentation increases "the chances for voters to send signals to politicians/political parties and show they are monitoring their

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21) Interestingly, scholars have used Government Effectiveness, as an independent variable to explain "happiness." See Marcus Samanni and Sören Holmberg, "Quality of Government Makes People Happy," QoG Working Paper Series 2010:1 (Sweden: University of Gothenburg, Quality of Government Institute, March 2010).

behavior" (Lane and Ersson 2007, 95).

Other scholars reflect Lane's and Ersson's theoretical ambivalence. Anderson says that high fragmentation, with different parties targeting different parts of the electorate, is positively related to satisfaction with democracy (Anderson 1998). Mainwaring, in contrast, believes that high fragmentation reduces a president's capacity to introduce political reforms (Mainwaring 1999, 285). Doherty holds that high fragmentation prevents the emergence of adequate political opposition (Doherty 2001). Toka and Henjak worry about the destabilizing effects of both very high and very low party fragmentation (Toka and Henjak 2009). We drop the "fragmentation" terminology and frame our study using the concept of party system aggregation. Several benefits flow from returning to the earlier emphasis in the literature. One is that doing so skirts terminological confusion attending fragmentation. Another is that aggregation refers to a desirable trait of party systems from the standpoint of country governance while fragmentation is a negative trait. Finally, and most importantly, using aggregation recaptures the older theoretical argument. We define party system aggregation as *the extent to which the political parties in the system represent broad political interests.* This concept is not easy to measure – as witnessed by the many efforts to do so. A systematic and semi-historical explication of five efforts is in order.

Proposition P3 says: *The more aggregative the party system, the better the country governance.* Contemporary party theorists disagree over this proposition. One group accepts it, believing that aggregative parties compress political differences, resulting in compromises that serve citizenry generally (Horowitz 1991). Another argues the opposite, believing that government bargaining among several articulative parties better serves a country, particularly one divided into conflicting ethnic groups (Lijphart 1969). We devise hypotheses to test the conventional proposition.

Confronted with five alternative measures of party system aggregation, which one should we use to operationalize the concept in our hypotheses? All five measures loaded on the same factor as in Table 1, so they are highly intercorrelated. The mean intercorrelations for Party#1%, Mayer's A, Rae's F, and Laakso-Tagepera ENPP range from .80 to .84. The mean intercorrelation is only .65 between NPP (the number of parliamentary parties) and the other indicators. NPP (more accurately, its logarithm) seems to be measuring a somewhat different property of party systems.

To decide which we use, we ran 30 separate regression analyses, one for each of the six indicators using each of the five alternative measures.[22] Each analysis controlled for country size and wealth. The measure that consistently produced the strongest findings was NPP, a simple count of the total number of parliamentary parties (which ranged from 1 to 39, in the case of Colombia). The measure that consistently produced the least significant findings was ENPP – despite its status in the field as having

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22) We actually ran another set of six regressions using as independent variables the factor scores from the rotated "aggregation" factor identified earlier. As these results were largely insignificant, we do not report them.

reached "a high level of acceptance" (Dunleavy and Boucek 2003) as "the best known" method (Adrian 2008, 170), the "most popular" (Norris 2004), and the "purest measure" (Lijphart 1994, 70) of counting parties. Perhaps ENPP failed in our analyses because we had to adapt the formula to data for only the top three parties. Perhaps NPP succeeded because it counted all the parties seated in parliament, albeit not their seat shares. On the other hand, perhaps, as Nyblade and O' Mahony contend, a simple count may be a superior measure: "It might be that the fragmentation measure (which treats a move from 1 to 2 parties as much larger than a move from 3 to 4 parties) is inferior to a count measure" (Nyblade and O' Mahony 2010).

We cannot tell from our data why a simple count of the number of parties seated in parliament better predicts indicators of country governance than alternative formulae. The fruitful performance of NPP also defeats our desire to state hypotheses in a positive direction. NPP does not measure party system aggregation as much as it measures party system articulation. The more parties seated in parliament, the more particular interests are articulated rather than general interests are aggregated. We use NPP to operationalize party system "aggregation" in generating hypotheses H3.1 through H3.6:

H3.1: The lower the NPP, the greater the RL
H3.2: The lower the NPP, the greater the GE
H3.3: The lower the NPP, the greater the CC
H3.4: The lower the NPP, the greater the RG
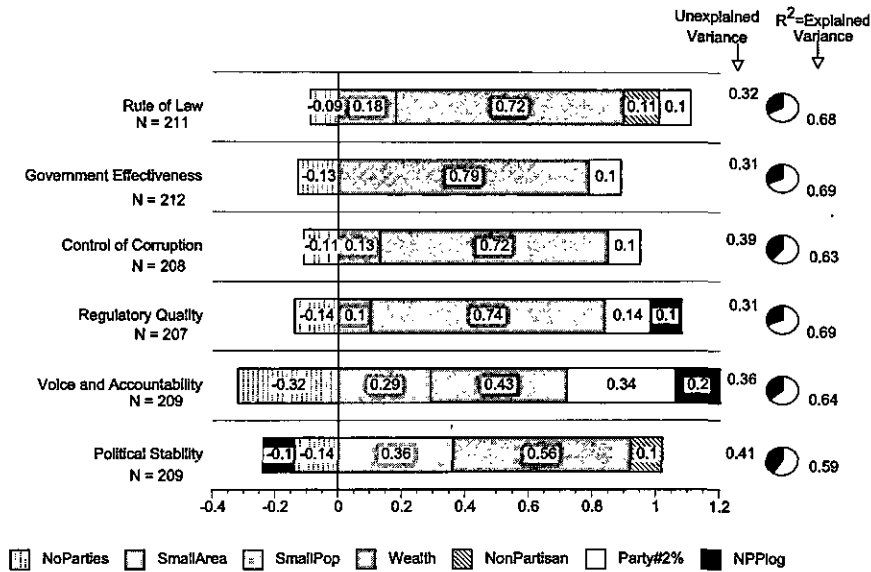H3.5: The lower the NPP, the greater the VA
H3.6: The lower the NPP, the greater the PS

In the following analysis, we estimate the effects of both Party#2% (competitiveness) and NPP (aggregation) on all six indicators of country governance with the standard controls of country size, wealth, and presence of parties. We can easily do that because there was virtually no correlation ($r = -.09$) between Party#2% and NPP. Given no appreciable overlap between the variables, their individual significant effects (if any) can be added together to explain the dependent variables. Values for NPP were converted to z-scores, and the 23 countries without parties were assigned the mean NPP value of 0.

As shown in Figure 6, party system aggregation (as measured by NPP) has no significant effect on Rule of Law, Government Effectiveness, and Control of Corruption. However, NPP does have significant effects on the other three indicators, but in two cases the effects are opposite from that hypothesized. The findings contradict the hypotheses for Regulatory Quality and Voice and Accountability. For each standard deviation increase in NPPlog, RQ increases .11 points, while a similar increase in the number of parliamentary parties results in a .20 increase in VA. These results suggest

that – on those two dimensions – country governance increases not with party system aggregation (fewer parliamentary parties) but with party system articulation (more parliamentary parties).

<Figure 6> Effects of NoParties, Country Size[a], Wealth, NonPartisan, Party#2%, and Number of Parties on All Six Governance Indicators[b]

[a] SmallArea measures Country Size except for Political Stability, which uses SmallPopulation.
[b] Entries in the bar graph are β coefficients from the regression equations.
All are significant at the .05 level or beyond. R2 are adjusted.

One possible interpretation for Voice and Accountability is that citizens react positively to having more parties represented in parliament – resulting in higher VA scores. Presumably, citizens like having many parties in parliament articulating their particular interests rather than having fewer parties aggregating them into a compromising blend. On the surface, this finding seems to support the contrary view, concerning the aggregative capacity of multi-party parliaments. In some instances, public interests may be better aggregated through negotiations among multiple small parties than by representation by a small number (ideally two) large parties.[23]

However, the results for Political Stability and the Absence of Violence are in the opposite direction. For each standard deviation increase in NPP, the country's PS rating decreases .10 points. This implies

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23) This is one of the explanations based on our finding. However, it could be debatable, as it has been discussed quite a long time, as addressed in the beginning of section C ("The Effects of Party System Aggregation").

that multiple parliamentary parties provoke political instability with their squabbling, whereas troublesome issues can be settled more quietly within a parliament with a more aggregative party system. Our conflicting findings shed new light on old controversies in comparative politics.

D. The Effects of Party System Stability

Party system stability – meaning little change across elections – is distinct from and unrelated to competitiveness. Although party system aggregation and stability are also distinct concepts, they are somewhat related empirically.

Two indicators loaded highly on the factor labeled "party system stability" in our factor analysis. One was Pedersen's well-known and commonly-used measure of volatility (Pedersen 1979). The other was a new variable stating whether the three largest parties in the stimulus election won seats in the referent election. Scored to measure stability, its highest score went to the 45 percent of countries in which the same three parties won seats (regardless of order) in both elections. Because the Pedersen index measured volatility while the new one measured stability, they were negatively correlated (r = -.36). All preliminary analyses showed that the Pedersen measure consistently explained more variation in country governance, so it was used throughout in this analysis.[24] Although our measure of stability is based on the Pedersen index, we reverse its scoring and re-label it to align our measure with the concept of stability.

Electoral volatility, as popularized by Pedersen, assesses changes in percentages of·*votes* cast for all parties in adjacent elections (Pedersen 1979). Seat volatility refers to changes in percentages of parliamentary *seats* for all parties in adjacent elections.[25] Unfortunately, volatility has negative connotations for party politics. Volatility measures instability, and volatility implies a *lack* of institutionalization. To avoid such terminological mismatch, we prefer the physics term, *viscosity*, which refers to a fluid's resistance to flow or movement.[26] While not quite an antonym for volatility, viscosity invites talk of party system stability rather than instability.

Pedersen's original volatility formula calculated the percentage point differences in votes cast for all parties in two adjacent elections. Our formula differs in a minor way by calculating the differences in percentages of seats won by parties in two adjacent elections. More importantly, we calculate the

24) The independence of party system stability and competitiveness is demonstrated by the insignificant correlation (r = -.09) between the Pedersen Volatility Index and the percentage of seats held by the second largest party (our measure of competitiveness). A relationship between stability and fragmentation is confirmed by the significant correlation (r = .30) between Volatility and NPPlog.

25) Naturally, measures of electoral and seat volatility tend to be highly correlated. Ersson and Lane find they correlate .77 for measures for 18 European countries.

26) Encyclopedia Britannica, at http://www.britannica.com/EBchecked/topic/630428/viscosity.

percentage point differences only for the three largest parties at the stimulus election.[27]

Because we favor talking about party system stability instead of instability, we prefer to measure viscosity not volatility.

$$\text{Viscosity}_{seats} = \text{Volatility}_{seats} *-1. [28]$$

Proposition P4 says: *The more stable the party system, the better the country governance.* This accords with standard party theory, which holds that favorable governmental consequences flow from party system stability – usually measured by Pedersen's Volatility Index. However, some scholars dissent from standard theory. Lane and Ersson, say, "In contrast this article argues that electoral volatility bolsters the position of the principal [the electorate] and makes the agents [elected officials] more inclined to work more for the interests of the principal relative to their own interests" (Lane and Ersson 2007, 97). Despite some scholarly dissent about the consequences of party system volatility, we propose the standard view: *The more stable the party system, the better the country governance.* Country governance, as usual, is operationalized by the WGI for 2007. We used our measure of party system viscosity to operationalize "stability" in generating hypotheses H4.1 through H4.6:

H4.1: The more viscous the party system, the greater the RL

H4.2: The more viscous the party system, the greater the GE

H4.3: The more viscous the party system, the greater the CC

H4.4: The more viscous the party system, the greater the RQ

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27) Accordingly, the formula adjusts for the share of seats won by k parties in adjacent elections when not all parties are included in calculating changes in seat shares. It replaces 2 in the divisor in Pedersen's formula with the sum of the seats won in each election by the set of parties (k) included in the calculation. The modified formula no longer ranges from 0 to 100 but from 0 to 1 and expresses the proportion of change in seat percentages held by k parties in two adjacent elections

$$\text{Volatility}_{seats} = \sum_{i=1}^{k} |p_{i(t)} - p_{i(t-1)}| \Big/ \left(\sum_{i=1}^{k} p_{i(t)} + \sum_{i=1}^{k} p_{i(t-1)} \right)$$

Where $p_{i(t)}$ = percentage of seats in stimulus year
          $p_{i(t-1)}$ = percentage of seats in reference year
          k = 3, number of parties for which we collected data

28) To accomplish this, the formula multiplies Pedersen's measure by -1. High viscosity values indicate little seat change and high party system stability. For example, after the 2004 election to the U.S. House of Representatives, the Republican Party held 53.3 percent of the seats, which was slightly more than the 52.6 percent it had won in 2002. The Democrats dropped slightly from 46.9 to 46.4 percent. (One of the 435 House members was an independent.) The U.S. Volatility score computed to .01 and the Viscosity score was .99. The U.S. had a very stable system compared against the mean Viscosity core of .75 for all 189 countries with parliamentary data. China, however, had a *perfect* Viscosity score of 1.00 – indicating no change between elections in the party composition of the National People's Congress.

H4.5: The more viscous the party system, the greater the VA

H4.6: The more viscous the party system, the greater the PS

Once again, we look first at the Rule of Law and test H4.1: *The more viscous the party system, the greater the Rule of Law*. This time, we find no support for the hypothesis. After controlling for SmallArea and Wealth and the party system variables (NoParties, NonPartisan, Party#2%, and NPPlog), we found no significant effect of Viscosity on Rule of Law for all countries. Nor does Viscosity have independent effects on the other administrative indicators of country governance – Government Effectiveness, Control of Corruption, and Regulatory Quality. However, Viscosity did have a significant effect on Political Stability. For each one-point increase in the Viscosity z-score, PS increased by .13.

Recalling that China had a highly stable party system (like all other one-party systems), we rethought the theory and formulated a revised proposition P4.1: *In democratic countries, the more viscous the party system, the better the country governance*. Perhaps party system stability functions differently where elections actually decide who controls the government (i.e., in democracies) opposed to where they don't (i.e., in non-democracies). To test the revised proposition P4.1, we separated the countries into two groups using Freedom House's classification of a country as an Electoral Democracy if its last nationwide election for the national legislature was free and fair.[29] For 2005, Freedom House classified 123 of 192 countries (64 percent) as electoral democracies. We applied Freedom House's criteria to the 20 countries in our study that it did not score and arrived at 137 Electoral Democracies. China was excluded as was Russia, which did not qualify "because of the flawed nature of the country's parliamentary elections in December 2003 and presidential elections in 2004."[30] The criteria also automatically excluded all 15 countries that scored 1 on NoParties. We also excluded the eight countries with nonpartisan elections, which could not be scored for party system stability. That left for analysis 130 countries or fewer, depending on the indicators used. Note that Party#2% could not be used in the regression equation due to its high correlation with Electoral Democracy (r = .53).

Whereas Viscosity had no significant effect on Rule of Law for all 189 countries, it did have a significant effect on RL using only the 130 electoral democracies, as specified in the following Equation:

$$RL = .75*Wealth + .13*SmallArea + .13*Viscosity \qquad R^2_{adj} = .70$$

For each one point increase in Viscosity's z-score, RL increased by .13, and the explanation of variance in RL scores increased to 70 percent. The significant effect of Viscosity in predicting to RL for

29) Freedom House also had other criteria. See http://www.freedomhouse.org/template.cfm?page=351&ana_page=298&year=2006.

30) See http://www.freedomhouse.org/template.cfm?page=70&release=242.

Electoral Democracies invited extending the analysis to the other five country governance indicators.

Based on our rewarding analysis for Rule of Law, we generated the following six hypotheses from a revised proposition P4.1: *In democratic countries, the more viscous the party system, the better the country governance.*

> H4.1.1: In democratic countries, the more viscous the party system, the greater the RL
>
> H4.1.2: In democratic countries, the more viscous the party system, the greater the GE
>
> H4.1.3: In democratic countries, the more viscous the party system, the greater the CC
>
> H4.1.4: In democratic countries, the more viscous the party system, the greater the RQ
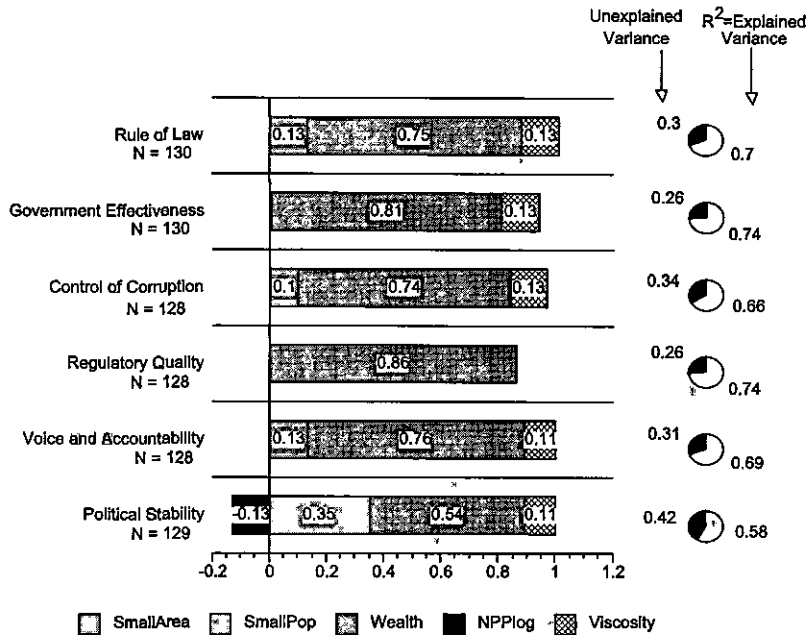>
> H4.1.5: In democratic countries, the more viscous the party system, the greater the VA
>
> H4.1.6: In democratic countries, the more viscous the party system, the greater the PS

Results of the regression analyses designed to test H4.1.1 to H4.1.6 are reported in Figure 7. As measured by Viscosity, party system stability has significant and approximately equal effects on every indicator except Regulatory Quality (RQ). Why Regulatory Quality deviated from the pattern is curious, because party competitiveness demonstrated a relatively strong effect on RQ. Given that country wealth alone explains almost 75 percent of the variation in RQ, perhaps the WGI of Regulatory Quality does reflect the "business elite" bias claimed by Kurtz and Schrank, who say that the indicator "is premised on the notion that minimal regulation and minimal barriers to trade and investment flows are optimal and is thus conflated with (controversial) policy prescriptions" (Kurtz and Schrank 2007). In Electoral Democracies, better Regulatory Quality (designed to aid business) in country governance appears to be driven by country wealth, not country size or party system stability.

Except for the deviation with RQ, the effects of Viscosity are significant and consistent for RL, GE, CC, VA, and PS. For each one point increase in the parliamentary seat Viscosity z-score, those country governance indicators increase from .11 to .13 for about 130 Electoral Democracies. It appears that party system stability contributes to country governance only in countries where elections are substantively meaningful – that is, only in Electoral Democracies. Also, once the analysis is restricted to only Electoral Democracies, NPPlog (fragmentation) has no effect on any governance indicator except Political Stability. There it seems that party system fragmentation decreases Political Stability. Or conversely, party system aggregation increases stability, even when the analysis is restricted to Electoral Democracies.

<Figure 7> Effects of Country Size[a], Wealth, Aggregation, and Stability
on all Six Governance Indicators, Only Electoral Democracies[b]

[a] SmallArea measures Country Size except for Political Stability, which uses SmallPopulation.

[b] Entries in the bar graph are β coefficients from the regression equations.

All are significant at the .05 level or beyond. R^2 are adjusted.

Note: the variables NoParties, NonPartisan, and Party#2% were excluded from the analysis.

When the analysis is restricted to countries in which election results determine the composition of government (operationalized as Electoral Democracies), our findings give some credence to the standard theory: the greater the party system stability, the better the country governance.

VI. Summary and Conclusion

According to the normative values of democratic theory, the presence of competitive, aggregative, stable systems of political parties contributes to better country governance. We used the six Worldwide Governance Indicators for 212 countries in 2007 to measure country governance. Our measures of party systems were derived from the percentage of seats held by the three largest parties in 189 parliaments or legislatures after two elections, usually in the mid-2000s. We scored all 189 party systems for their competitiveness, aggregation, and stability. The remaining 23 countries were scored as NoParties (if they

also lacked elections) or NonPartisan (if they had nonpartisan elections). All analyses controlled for country size and wealth.

In summary, P1's prediction that countries without parties have poorer governance is generally supported for countries that lack both parties and elections. Also in every case, countries with elected nonpartisan parliaments have higher governance scores (in keeping with the hypotheses), but the effects are statistically significant only for Rule of Law and Political Stability. P2's prediction that more competitive party systems have better governance holds for every indicator except Political Stability. P3's prediction that more aggregative party systems have better governance is mostly unsupported. It holds only for Political Stability. Party system aggregation is insignificant for three indicators, and it is significant in the opposite direction for Regulatory Quality and Voice and Accountability. P4's prediction that stable party systems have better governance was generally unsupported when tested using data for all 212 countries. When reformulated to apply only to Electoral Democracies, however, it was supported for all indicators except Regulatory Quality.

After controlling only for country size and wealth, we find that countries without elections and political parties consistently rate lower on all six indicators of country governance. That finding may agree with normative theory, but it was not preordained. We also find that countries with competitive party systems rate higher on all six indicators except Political Stability. Moreover, electoral democracies with stable party systems rate higher on all six indicators except Regulatory Quality. The tests of these hypotheses generally support the two propositions (P2 and P4) from which they were derived. The consistency of results across the six indicators also implied that party system traits were primarily a cause, not a consequence, of country governance.

However, deviant results occurred in testing the hypotheses derived from the proposition that party system aggregation would produce better governance (P3). That proposition was too simplistic, ignoring the scholarly debate over the majoritarian model of democracy (which favors fewer parties that aggregate interests) and the consensual model (which favors more parties that articulate interests). That debate's conflicting arguments are reflected in what Thomas Carothers describes as an international aid agency's view of "a desirable party system" – one "balanced between ideological polarization and homogeneity and between fragmentation and concentration (Carothers 2006)". The relationship of party system aggregation or fragmentation is much more complex than stated in P3 and probably needs to be studied using controls for ethnic, religious, and regional differences among countries. That is a task for future research.

On the other hand, the negative findings concerning party system aggregation may flow from a major limitation of this study: building our measures of aggregation based only on the percentages of seats held by the top three parties in parliament. The most popular measure of party system fragmentation,

Effective Number of Parties (ENP), assumes that data are available for all parties in parliament. As noted earlier, our modification of the ENP formula may have robbed it of explanatory power. Although the data limitation would not apply to our measure of party system competitiveness, it would apply to our measure of party system stability, based on changes in percentages of seats for only the top three parties at the first election. While the findings for party system stability are significant and mostly consistent theoretically, the paucity of data underlying the measure may have weakened the effects.

Despite its limitations concerning the depth of party data in each country, the study did produce mostly strong and consistent results. It produced relatively strong evidence that party system competitiveness and stability were significantly related to country governance. Our research provides evidence that the nature of a country's party system does indeed positively affect the quality of its governance.

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정당체제와 국가 거버넌스

제네스 젠다 · 박정영

본 연구는 정당체제가 국가 거버넌스에 미치는 영향을 경험적으로 탐색하는데 분석을 두고 있다. 이를 위해서 월드뱅크가 제공하는 세계 국가 거버넌스 지표와 본 연구자들이 직접 수집한 212개국 정당체제 데이터를 활용하여 정당체제가 국가 거버넌스의 차이를 가져오는지를 경험적으로 분석하였다. 국가의 크기와 부를 통제한 결과는 정당체제의 유무, 정당체제의 경쟁성, 안정성, 그리고 분파성 정도가 6개의 국가 거버넌스 지표에 중요한 영향을 미치고 있음을 보여 주었다.

주제어: 정당체제의 경쟁성, 정당체제의 분파성, 정당체제의 안정성, 국가 거버넌스, WGI