PARTY SYSTEM EFFECTS ON COUNTRY GOVERNANCE, II[1]

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This paper describes research recently completed for a forthcoming book, Party Systems and
Country Governance*. The paper's presentation parallels chapters in the forthcoming book. It
provides thumbnail sketches of the first five chapters and summaries of later ones. It is also the
sequel to a paper delivered at the 2010 meeting of the Midwest Political Science Association.
This paper summarizes research methodology reported at greater length in the Midwest paper
and uses two additional variables. Its extended findings show that party system traits have
significant and relatively consistent effects on country governance in 212 countries, as measured
by the Worldwide Governance Indicators.*

As explained in Chapter 1 of *Party Systems and Country Governance,*[2] "governance" has evolved
from a quaint term to a hot topic. Increasingly, the term has been applied to business firms, labor unions,
and social clubs—as well as to government corporations and international organizations. Consequently,
the term has lost its special political meaning, even becoming synonymous with "government." For
example, the *Wall Street Journal* reported that the 2010 referendum in Kyrgyzstan "will usher in a
parliamentary system of governance."[3] We return to the term's 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*.[4] Including the
adjective "country" to modify "governance" should help distinguish this conceptualization from others.

Proposing a definition of country governance is one thing, measuring it adequately across
countries is something else. As explained in Chapter 2, scholars at the World Bank developed a set of
Worldwide Governance Indicators and applied them to 212 countries.[5] Identifying six abstract "meta-
values" and using numerous reports from thirty-five 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. 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

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[1] Janda, Kwak, and Suarez-Cao presented "Party System Effects on Country Governance, I" at the 2010 Annual
Meeting of the Midwest Political Science Association, Chicago, Illinois.

[2] Kenneth Janda, with Jin-Young Kwak, *Party Systems and Country Governance* (Boulder, CO: Paradigm
Publishers, forthcoming).

[3] Kadyr Toktogulov and Richard Boudreaux, "Kyrgyz Voters Back Democratic Rule," *Wall Street Journal* (June 28,
2010), p. A11.

[4] For a structurally similar definition applied to governance at the micro-level see Jamus Jerome Lim, "Governance
Indicators in the Social Sectors, Paper prepared for presentation at the Annual Meeting of the Midwest Political
Science Association, Chicago, 2009. Lim defines micro-level governance as *the extent to which social, political,
and institutional structures successfully align the incentives of actors with the overall objectives for which these
structures were designed (or evolved) to accomplish* (p. 3). Similarly, Mark E. Warren says, "The democratic
potentials of governance reside in the potentially responsive linkages between what governments do and what
citizens receive," in "The Concept of Governance-Driven Democratization, Prepared for Presentation at the Midwest
Political Science Association National Annual Conference, Palmer House, Chicago, April 2-4, 2009

[5] Daniel Kaufmann, Aart Kraay, and Pablo Zoido-Lobatón launched the first major cross-national set of indicators in
what became the World Bank Governance Indicators.

their critics, the data are widely recognized as the best data set available on country governance.[6] We use the 2007 scores for all six indicators for 212 countries to operationalize the concept of country governance. The WGI scores constitute six dependent variables in our hypothesis tests.

Chapter 3 considers whether country governance should be a dependent or an independent variable. It considers as independent variables two exogenous factors—country size (clearly exogenous) and country wealth (arguably exogenous). Strong theory implies that poor countries are harder to govern than rich countries and that large countries are harder to govern than small ones. The chapter also distinguishes between country governance and democratic governance.

Regression analyses begin in Chapters 4 and 5. Country size—usually measured by area but also by population—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 did not happen with the party system factors.

Ch. 6:   PARTY SYSTEMS EFFECTS: A THEORY

Chapter 6 lays out the empirical theory, which originates in the normative statement: *It is good to have political parties competing to control government in open elections*. Underlying that normative theory is the empirical assumption: C*ountries with competitive party systems perform better than those without competitive party systems*. We unpack that assumption in a testable, empirical theory explaining why and how competitive party systems "perform better." Our standard for performance is country governance. Seven assumptions (unstated here) about political parties are the basis for four major propositions that guide the empirical research:

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

Ch. 7:   PARTY SYSTEMS: DATA AND MEASURES

We used the WGI data for 2007 as dependent variables but collected our own data on party systems for the same 212 countries. The data collection is thoroughly described in an earlier paper.[7] Chapter 7 reports data in Table 7.1 on the status of parliamentary parties in all the countries. The data were derived mostly from the 2006 CIA World Factbook and apply to unicameral parliaments or to the lower chambers of bicameral parliaments.[8]

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[6] Steven Radelet, *Challenging Foreign Aid: A Policymaker's Guide to the Millennium Challenge Account* (Washington, DC: Center for Global Development, 2003). For criticism of the World Bank Indicators, See Marcus J. Kurtz and Andrew Schrank, "Growth and Governance: Models, Measures, and Mechanisms," *The Journal of Politics*, Vol. 69, No. 2, May 2007, pp. 538-554; and Sandra Botero and Katherine Schlosse, "What We Talk About When We Talk About Governance: Measurement and Conceptual Issues in the World Governance Indicators," Paper presented at the 2010 Midwest Political Science Association Annual Meeting, Chicago Illinois, at p. 34.

[7] Kenneth Janda and Jin-Young Kwak, "Competition and Volatility in Parliamentary Party Systems for 212 Polities," Prepared for Delivery at the 2009 Annual Meeting of the Midwest Political Science Association, Palmer House Hotel; Chicago, Illinois.

[8] The CIA provides access to the most recent *World Factbook* on its own web site at https://www.cia.gov/library/publications/the-world-factbook/index.html. Earlier editions, including the 2006 edition, are available through the private site, http://www.theodora.com/wfb/.

Table 7.1: Status of Parliamentary Parties in Lower Chambers in 2006[a]

Were Deputies Popularly Elected to Parliament?	Did deputies represent political parties?				Total
	Public parties	Shadowy parties	No parties	No parliament	
All deputies were popularly elected	**152**		8 *American Samoa*[b] *Marshall Islands* *Micronesia* *Nauru* *Nieue* *Oman* *Palau* *Tuvalu*		160
Most were popularly elected	**28**	4 of 8 **Iran** **Jordan** **Kyrgyzstan** **Uganda** Afghanistan Bahrain Lebanon Maldives	1 Swaziland		37
Some were popularly Elected	**1** **Macao**	1 Tonga	1 United Arab Emirates		3
None were popularly elected	**4** **China** **Congo (Kinshasa)** **Eritrea**[c] **Sudan**		6 Bhutan Brunei Libya Qatar Saudi Arabia Somalia		10
No parliament existed				2 Nepal Myanmar	2
Total	**185**	9	16	2	212

[a] Based on data in the 2006 CIA *World Factbook*. **Boldface** identifies the 189 countries for which we collected parliamentary seat data. *Italics* identify the 8 countries with non-partisan elections.
[b]American Samoa had 1 appointed and 20 elected deputies.
[c]Eritrea's parliament was chosen in one election, in 1994.

Table 7.1 cross-classifies countries by two criteria: Did the deputies represent parties and were deputies popularly elected? The first column shows that 185 of the parliaments in 2006 seated deputies by publicly identified political parties. Only 152 countries popularly elected *all* parliamentary seats. In another 28, most seats were elected but some were indirectly elected or appointed, and in one country fewer than half were directly elected. Only 181 chose at least some of their deputies through "popular elections"—applying the phrase generously to direct selection by voters, regardless of the quality of the process. Four countries did not select deputies through popular elections yet seated them by parties.

Column 2 classifies 9 countries with "shadowy" parties (unofficial or underground) by how deputies were selected. Seat data was obtained for only 4 (in boldface) of the 9. Column 3 shows 16

parliaments without party deputies, and half (mostly small island nations) elected them through nonpartisan elections. Two nations in 2006 (Nepal and Myanmar) had no parliament or legislative body.

Using Internet sources, we found parliamentary seat data for 189 counties: the 185 with publicly identified parties and 4 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 election. We identified 15 additional countries that did not hold elections for parliamentary parties and 8 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 7.6.

Table 7.6: Ten Measures of Party Systems

Measure	Terms and Formulae	Source
1. Strength of largest party	p_1, the proportion of seats held by the largest party	Anonymous
2. Number of parties seated, NPP	NPP = number of parties with at least one seat	Anonymous
3. Fractionalization Index, F	$1 - \sum_{i}^{N} p_i^2$, where p = proportion of seats held by party i	Rae[9]
4. Effective number of parliamentary parties, $ENPP$	$\dfrac{1}{\sum_{i}^{N} p_i^2}$, where p = proportion of seats held by party i	Laakso and Taagepera[10]
5. Aggregation Index	$\dfrac{p_1}{NPP}$, where p_1 = percentage of seats held by the largest party; NPP = all seated parties	Mayer[11]
6. Seat Volatility	$\dfrac{\sum_{i=1}^{N} p_{i,t} - p_{i,t-1}}{2}$, where $p_{i,t}$ = percent seats held by party i at election t	Pedersen[12]
7. Repeat party representation	Number of three top parties in stimulus election that won seats after the referent election	Janda, Kwak, and Suarez-Cao
8. Strength of 2nd 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 3rd 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* number of parliamentary parties, the greater Rae's fractionalization index, and the greater the *effective* number of

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[9] Douglas Rae, "A Note on the Fractionalization of Some European Party Systems", *Comparative Political Studies*, 1 (October 1968), 413-418.

[10] Markku Laakso and Rein Taagepera, "Effective Number of Parties: A Measure with Applications to West Europe," *Comparative Political Studies*, 12 (1979), 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), 515-520.

[12] Mogens N. Pedersen, "The Dynamics of European Party Systems: Changing Patterns of Electoral Volatility," *European Journal of Political Research*, 7 (1979), 1-26.

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."[13] In addition, Pedersen's volatility measure accords no special weight to the strength of the largest party. Table 7.7 summarizes a factor analysis of the 10x10 intercorrelation matrix of these ten measures. It extracted three factors that explained 80 percent of their total variance.[14] Table 7.7 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 percent 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 7.7: 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)	.97		
Rae	-.90		
Laakso/Taagepera (log)	-.88		
# of all parties (log)	-.84		
Party #3 % stimulus year			
Party #2 % stimulus year		.94	
Margin Party #1 - #2		-.75	
Pedersen (log)			.78
Repeat party representation			-.85

Extraction Method: Principal Component Analysis.
Rotation Method: Varimax with Kaiser Normalization.

The five variables that loaded highly on Factor 1 are often described in the literature as measuring party system fragmentation. Unfortunately, the literature often employs measures of fragmentation in confusing and contradictory ways.[15] Hoping to write on a cleaner slate, we label the factor "party system aggregation," which describes the party system factor positively rather than negatively. (The labeling issue is discussed further in the section on Chapter 10.)

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[13] Mogens N. Pedersen, "On Measuring Party System Change: A Methodological Critique and a Suggestion," *Comparative Political Studies*, 12 (January 1980), p. 398.

[14] The first edition of Lane and Ersson, *Politics and Society in Western Europe* (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.

[15] See Benjamin Nyblade and Angela O'Mahony, "Counting Parties: Different Measures for Different Purposes," Paper prepared for presentation at the 2010 Midwest Political Science Association Annual Meeting, Chicago, IL.

We labeled Factor 2 "party system competitiveness" because it attracted a common measure of party competition (percent margin between the largest and next largest parties in parliament) and our preferred measure of system competition (percent 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. (They did in only 45 percent of the countries.)

Ch. 8: GOVERNANCE WITHOUT PARTY SYSTEMS

The overwhelming majority (about 90 percent) of the 212 countries covered by the Worldwide Governance Indicators 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, 8 chose deputies via popular elections while 15 had no elections for parliament. Many of the 15 countries without party systems have familiar names, such as Afghanistan, Lebanon, Libya, Nepal, Saudi Arabia, and Somalia. As shown in Table 8.1, countries in this group vary widely in land area, population, and wealth (Gross Domestic Product Per Capita). Table 8.1 expresses their "average" values as medians (rather than means) to eliminate the skewing effects of extreme scores (e.g., reducing the impact of Myanmar's population of 50 million population). About half the countries in the mid-2000s had less than 47,000 square kilometers in area, had 4 million inhabitants or less, and had a GDP per capita of les than $7,500. Only the three island nations of Bahrain (off the coast of Saudi Arabia), Maldives (in the Indian Ocean), and Tonga (in the South Pacific) are "tiny" in area—less than 1,000 square kilometers. All except Bhutan, Myanmar, Nepal, Swaziland, and Tonga have Muslim majorities.

Table 8.1: Fifteen Countries without Elections and Parliamentary Parties

Country	Area Land only in 1000 sq kilometers[a]	Population 2005[b]	GDP Per Capita 2004[c]
Afghanistan	652.1	27,145,300	800
Bahrain	0.7	726,617	18,817
Bhutan	47.0	637,013	3,095
Brunei Darussalam	5.3	373,819	24,143
Lebanon	10.2	4,010,740	5,930
Libya	1759.5	5,853,452	10,769
Maldives	0.3	329,198	7,327
Myanmar (Burma)	657.6	50,519,492	1,364
Nepal	143.0	27,132,629	1,402
Qatar	11.0	812,842	28,919
Saudi Arabia	2149.7	23,118,994	13,955
Somalia	627.3	8,227,826	600
Swaziland	17.2	1,131,000	4,995
Tonga	0.7	102,311	7,415
United Arab Emirates	83.6	4,533,145	23,818
15 Country Median	**47.0**	**4,010,740**	**7,327**
World Median	**95.7**	**5,470,728**	**6,324**

[a]United Nations GEO-3 Data Compendium and CIA Factbooks.
[b]Population from the World Bank at http://data.worldbank.org/data-catalog
[c]GDP percap calculated as Purchasing Power, from PPP INEX 2004 Wikipedia Article ID: 695403

The eight countries with elections but without parties are listed in Table 8.2. Few names are familiar, except perhaps for American Samoa. All but Oman are tiny island countries in the Pacific

Ocean with small populations and low incomes. Oman differs from the others in several ways: It shares a land border with Saudi Arabia, it has more people and territory than all other seven countries combined, and it has a Muslim majority. Oman is also the only one not classified as an Electoral Democracy in 2005 by the Washington organization Freedom House, which concluded that Oman's elections for the national legislature were not free and fair.[16] The other seven countries choose nonpartisan parliamentary deputies in free elections.

Table 8.2: Eight Countries with Elections but without Parliamentary Parties

Country	Area Land only in 1000 sq kilometers[a]	Population 2005[b]	GDP Per Capita 2004[c]
American Samoa	0.2	57,663	8,000
Marshall Islands	0.2	63,266	1,600
Micronesia	0.7	110,487	2,000
Nauru	0.0	10,200	5,000
Niue	0.2	1,800	5,800
Oman	309.5	2,566,981	15,649
Palau	0.5	20,100	9,000
Tuvalu	0.0	11,992	1,100
8 Country Median	**0.2**	**38,882**	**5,400**
World Median	**95.7**	**5,470,728**	**6,324**

[a]United Nations GEO-3 Data Compendium and CIA Factbooks.
[b]Population from the World Bank at http://data.worldbank.org/data-catalog
[c]GDP percap calculated as Purchasing Power, from PPP INEX 2004 Wikipedia Article ID: 695403

The seven countries with free elections (excluding Oman) are also tiny, averaging about 200 square kilometers in land area (slightly larger than Washington, DC) and having fewer people than Jasper, Wyoming. They are close to the city-states that the Greeks thought were needed to sustain democracy.[17] It appears that free nonpartisan elections to parliament can be sustained only in tiny countries.[18] Micronesia, with just over 100,000 people living on less than 1,000 square kilometers of land is the largest Electoral Democracy governed without political parties.

Effects of NoParties and NonPartisan Countries on Governance

The distribution of Rule of Law governance scores for all countries is plotted in Figure 8.1 along with the names of countries without parties. The names in boldface identify **NoParties** countries, those lacking both elections and parliamentary parties. The names in normal type identify **NonPartisan** countries, those holding elections but lacking parliamentary parties. Three observations stand out. First, no country without political parties stands near the top of the Rule of Law distribution. Second, an equal number of **NoParties** and **NonPartisan** countries are above the mean of all countries on Rule of Law. Third, the remaining NoParties countries (six) rate below the mean of all countries. (Somalia, which rates at the bottom, has a parliament filled by members appointed by four major clans in 2004.) Figure 8.1

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[16] Freedom House also had other criteria. See
http://www.freedomhouse.org/template.cfm?page=351&ana_page=298&year=2006.
[17] Robert A. Dahl and Edward R. Tufte, *Size and Democracy*. (Stanford: Stanford University Press, 1973), p. 4.
[18] For discussion of how government operates in tiny island states without political parties, see Dag Anckar, "Dominating Smallness: Big Parties in Lilliput Systems," *Party Politics*, 3 (April 1997), 243-263 at p. 248.

shows that it is possible for countries without parties to rank above average on Rule of Law. However, not having parties seems associated with lower scores on Rule of Law.

Figure 8.1: Rule of Law Scores for Countries without Parties*
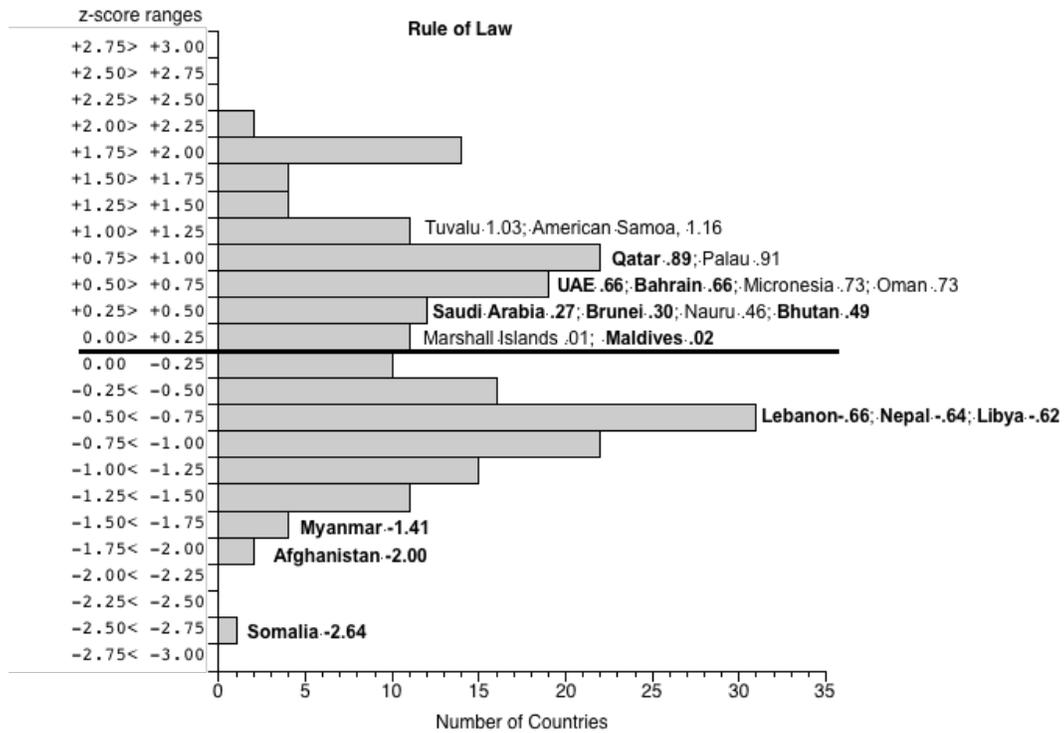
*Niue was not scored for Rule of Law, reducing the total number of countries to 211.

A problem with drawing conclusions from Figure 8.1 is that it does not provide for the effects of country size and wealth. As demonstrated in Chapters 4 and 5, country size and wealth have substantial independent effects on country governance. Although Figure 8.1 shows that small countries without parties stand above the mean on Rule of Law, small countries *tend to* rate higher on Rule of Law. Without political parties, do they rate higher or lower than they should? A similar argument applies for country wealth. The rich oil states of Qatar, UAE, Bahrain, and Saudi Arabia stand above the mean for Rule of Law, but wealthy states *tend to* rate higher on Rule of Law. Lacking political parties, do they rate higher or lower than expected, allowing for country size and wealth?

Chapter 6 on the theory of party system effects on country governance advanced this proposition, *ceteris paribus*:

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

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 8 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.

Including the NoParties and NonPartisan variables permit 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

At least, that's the theory.

**All Six Governance Indicators:**

The regression results for all six indicators of country governance are given in Figure 8.2 (page 10). The values in the graph are standardized regression coefficients (ßs), 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.[19] 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.[20] In fact, the NonPartisan coefficients were not significant for four of the six indicators. The regression analysis results clearly support all six hypotheses H1.1.1-6, but only H1.2.1 and H1.2.6.

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[19] Freedom House in Washington, DC, calls itself "an independent watchdog organization that supports the expansion of freedom around the world." See http://freedomhouse.org.

[20] 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

**Figure 8.2: Effects of NoParties, Country Size,[a] Wealth, and NonPartisan
on All Six Governance Indicators[b]**
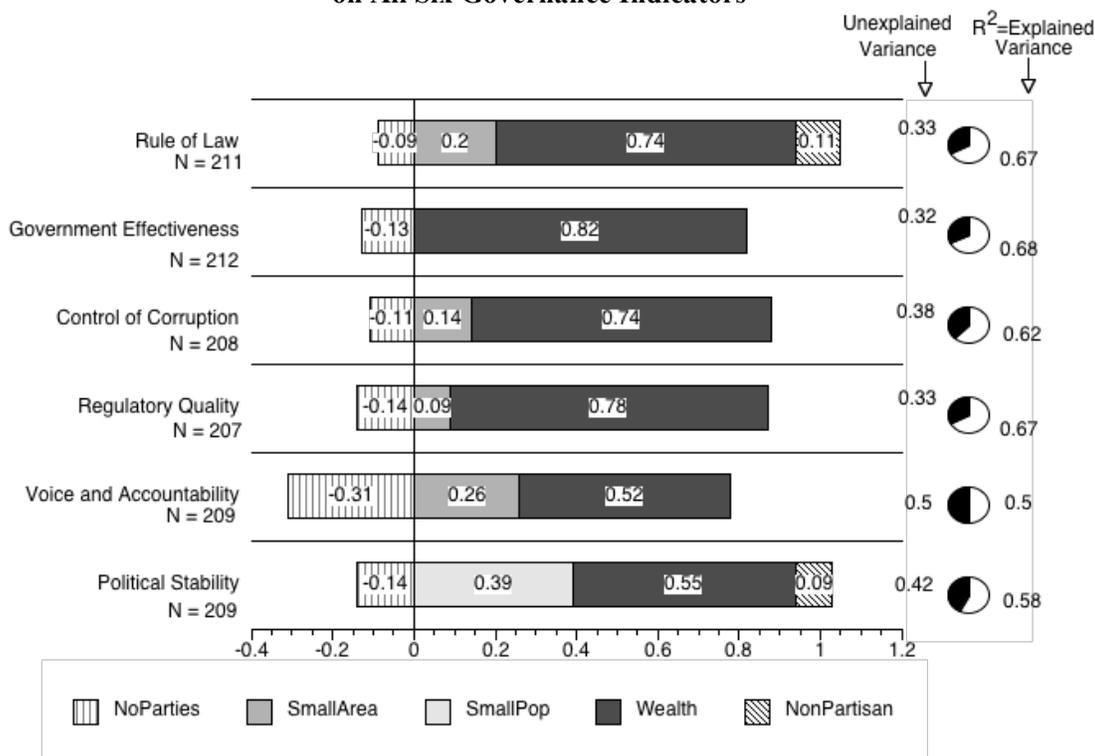
[a]SmallArea measures Country Size except for Political Stability, which uses SmallPopulation.
[b]Entries in the bar graph are ß coefficients from the regression equations.
All are significant at the .05 level or beyond. R^2 are adjusted.

Ch. 9: THE EFFECTS OF COMPETITIVENESS

The factor analysis in Chapter 7 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 measure of party system competitiveness.[21] The other was the percentage of seats held by the second largest party, which has rarely been used that way.[22] After considering the concept of competitiveness and looking at the data, we conclude that the second indicator is the better measure. 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 and the "effective number of parties."[23] They simply do not measure competitiveness. Neither does the third,

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[21] For example, see Alicia Adsera, "Are You Being Served? Political Accountability and Quality of Government," *Journal of Law Economics & Organization*, 19 (October, 2003), 445-490; and Conor O'Dwyer, *Runaway State-Building: Patronage Politics and Democratic Development* (Baltimore: Johns Hopkins University Press, 2006), p. 40.
[22] For works that do use the strength of the parliamentary opposition in assessing competitiveness, see Jonathan van Eerd, "Dominance and Fluidity: Conceptualizing and Explaining Party System Characteristics in Sub-Saharan Africa," Paper prepared for presentation at the 2010 Midwest Political Science Association Annual Meeting, Chicago Illinois; and Grzymala-Busse, Anna, *Rebuilding Leviathan: Party Competition and State Exploitation in Post-Communist Democracies* (New York: Cambridge University Press, 2007).
[23] The size of the largest party was used to measure competitiveness by Tatu Vanhanen, *Prospects of Democracy: A Study of 172 Countries* (New York: Routledge, 1997). The "effective number of parties" was used by Michelle Kuenzi and Gina Lambright, "Party Systems and Democratic Consolidation in Africa's Electoral Regimes," *Party Politics*, 11 (July 2005), 423-446. Other scholars have used these measures too.

fractionalization—despite its frequent use to measure competitiveness.

The formula for fractionalization was devised by Rae and is described in detail in Chapter 10. Rae based the measure on the proportions of seats held by parliamentary parties:

> *A highly fractionalized system has a great many shares of about equal magnitude so that no one of them contains a very large share of the total pool of strength* [emphasis in original].[24]

Rae proposed his measure in response to this question: "Is competitive strength concentrated in one party, or is it divided among many parties?"[25] In so doing he suggested that fractionalization is a measure of party system competition, and scholars have used it that way.[26] When many parties hold small proportions of seats, however, that is not party system competitiveness as commonly understood. Instead, the existence of a large number of equally weak parties indicates party system entropy—random disorder. If entropy is a form of competitiveness, it is a bizarre form, unstructured and stochastic, that reflects a chaotic party system. A more reasonable form envisions rival parties with substantial support alternating in government in response to popular evaluations of their policies and performance via elections.

The Concept of Competitiveness

The terms "competition" and "competitive" have been applied to very different aspects of party politics. Parties are said to compete for votes won in elections, for control of government, and even for ownership of issues.[27] According to Sartori's formulation, *competition* establishes the "rules of the game" being played, while *competitiveness* is "a particular state of the game."[28] In election games, candidates compete to win office (decided by number of votes won). In governmental games, parties compete to win control of parliament (decided by number of seats won). In issue games, parties compete to win support for their policies (decided by public opinion). In all these games, competitiveness reflects the likelihood of winning—or not losing. Sartori continues, "competition is 'competitive' when two or more parties obtain close returns and win on thin margins."[29]

Using the "most different systems" research design,[30] 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."[31] If no party has a majority, parties form a government coalition, receiving "payoffs" (e.g., cabinet positions) according to their proportion of seats.[32] This

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[24] Douglas W. Rae, *The Political Consequence of Electoral Laws* (New Haven: Yale University Press, 1967), quoted from the 1971 edition, p. 53.

[25] *Ibid.*

[26] Michelle Kuenzi and Gina Lambright, "Party Systems and Democratic Consolidation in Africa's Electoral Regimes," *Party Politics*, 11 (July 2005), 423-446. See also Mark Kesselman, "French Local Politics: A Statistical Examination of Grass Roots Consensus," *American Political Science Review*, 60 (December, 1966), 963-973 at pp. 968-969.

[27] Steven B. Wolinetz, "Party Systems and Party System Types," in Richard S. Katz and William Crotty (eds.), *Handbook of Party Politics* (London: Sage Publications, 2006), p, 53.

[28] Giovanni Sartori, *Parties and Party Systems: A Framework for Analysis* (New York: Cambridge University Press, 1976), p. 218.

[29] *Ibid.*

[30] Adam Przeworski and Henry Teune, *The Logic of Comparative Social Inquiry* (New York: Wiley Interscience, 1970), p. 32.

[31] Maurice Duverger, *Political Parties* (New York: John Wiley, 1951), p. 283.

[32] This has been confirmed in research. See Eric C. Browne and Mark N. Franklin, "Aspects of Coalition Payoffs in

"proportionality rule" makes party control of government a function of the seats they won.[33] The relationship between seats held and cabinet posts acquired is strong in parliamentary systems, less strong in presidential systems.[34] 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.[35] 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 adequately staff government ministries.[36]

Measuring Competitiveness

We collected data on two measures of party system competitiveness for 189 parliaments. Figure 9.1a graphs the point margin between the percentages of seats held by the two largest parties. Figure 9.1b graphs the percentage of seats held by the second largest party after the stimulus election.

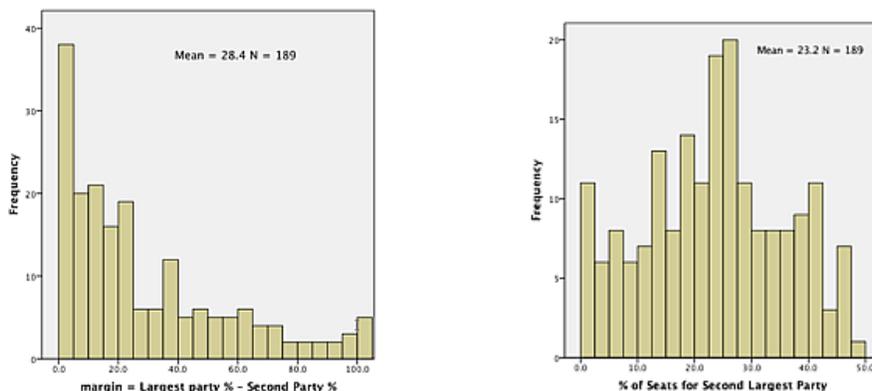**Figures 9.1a and 9.1b: Two Measures of Party System Competitiveness**

Figure 9.1a 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

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European Parliamentary Democracies," *American Political Science Review,* 67 (1973), 453-69. Their finding was supported nearly three decades later by Paul V. Warwick and James N. Druckman, "Portfolio Salience and the Proportionality of Payoffs in Coalition Governments," *British Journal of Political Science*, 31 (Oct., 2001), pp. 627-649. In presidential systems, however, awarding of cabinet seats may deviate from proportionality. See Octavio Amorim Neto, "Presidential Cabinets, Electoral Cycles, and Coalition Discipline in Brazil,"in Scott Morgenstern and Benito Nacif (eds.), *Legislative Politics in Latin America* (New York: Cambridge, Press, 2002), 48-78.

[33] The term comes from Lieven De Winter and Patrick Dumont, "Parties into Government: Still Many Puzzles," in Richard S. Katz and William Crotty (eds.), *Handbook of Party Politics* (London: Sage Publications, 2006), p, 181.

[34] In presidential systems, awarding of cabinet seats may deviate from proportionality. See Octavio Amorim Neto, "Presidential Cabinets, Electoral Cycles, and Coalition Discipline in Brazil," in Scott Morgenstern and Benito Nacif (eds.), *Legislative Politics in Latin America* (New York: Cambridge, Press, 2002), 48-78. More cabinet posts may also be nonpartisan. See Octavio Amorim Neto and Kaare Strøm, "Breaking the Parliamentary Chain of Delegation: Presidents and Non-partisan Cabinet Members in European Democracies," *British Journal of Political Science*, 36 (2006), 619-643.

[35] Anna Grzymala-Busse looks to share of parliamentary seats by "plausible" governing parties as an indicator of competitiveness. See *Rebuilding Leviathan: Party Competition and State Exploitation in Post-Communist Democracies* (New York: Cambridge University Press, 2007), p. 12..

[36] See Asbjørn Skjæveland, "Modeling Government Formation in Denmark and Beyond," *Party Politics,* 15 (November 2009), 715-735.

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 9.1b displays a more statistically desirable distribution that is symmetrical and unimodal (one category containing a plurality of the countries).

Although point margin and percent of seats for the second party are highly correlated (r = .67), they express competitiveness very differently, as shown in Figure 9.2. 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 9.2: Seat Point Margin by Size of Second Party
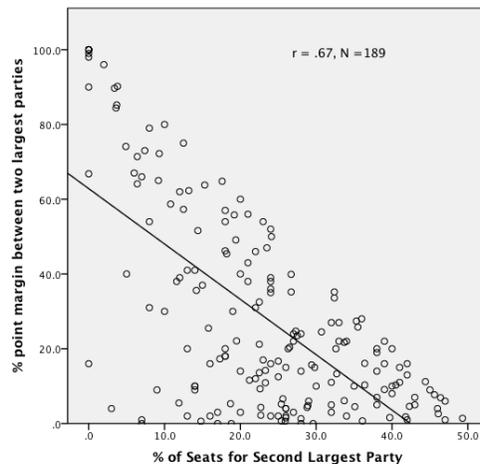
The issue can be illustrated by considering these scenarios: (1) A two-party system in which the parties split 52 to 48 in percentage of seats held, and (2) a multi-party system in which the two largest parties split 30 to 26. In both cases the margin in percentage of seats held by the two largest parties 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."

Testing Hypotheses about 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."[37]   Therefore in testing hypotheses in Chapters 8, 9, and 10, we routinely include both country size and county wealth as control variables, allowing in advance for their effects on country governance.

We also routinely include variables NoParties and NonPartisan introduced in Chapter 8. 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 8 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.[38]

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),[39] 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, 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 Worldwide Governance Indicators for 2007. Here are our hypotheses concerning P2 in Chapter 6:

> 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. Weale says, "Party competition in open elections is the principal institutional device used in modern political systems to implement the ideals of democracy and to secure representative government."[40] Grzymala-Busse argues more forcefully for *robust competition* having "opposition parties that offer a clear, plausible, and critical governing alternative that threatens the governing coalition with replacement."[41] In addition, she says that "the availability of multiple and

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[37] G. Bingham Powell, Jr., "Party Systems and Political System Performance: Voting Participation, Government Stability and Mass Violence in Contemporary Democracies," *American Political Science Review,* 75 (December 1981), 861-879, at pages 873 and 874.

[38] 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%.

[39] Land area and population were converted to logs and multiplied by -1, measuring "smallness" not "bigness."

[40] Albert Weale, "Party Competition and Deliberative Democracy," in Judith Bara and Albert Weale (eds.), *Democratic Politics and Party Competition.* (New York. Routledge, 2006), 271-286 at p. 271.

[41] Grzymala-Busse, *Rebuilding Leviathan*, p. 1.

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."[42] 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."[43] One could cite other sources making essentially the theoretical argument in P2: *The more competitive the party system, the better the country governance.* That is the theory. Does the evidence support H2.1 through H2.6 implied by the theory?

All Six Indicators

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 9.4 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 9.4: Effects of NoParties, Country Size,[a] Wealth, NonPartisan, and Party#2%
on All Six Governance Indicators[b]**
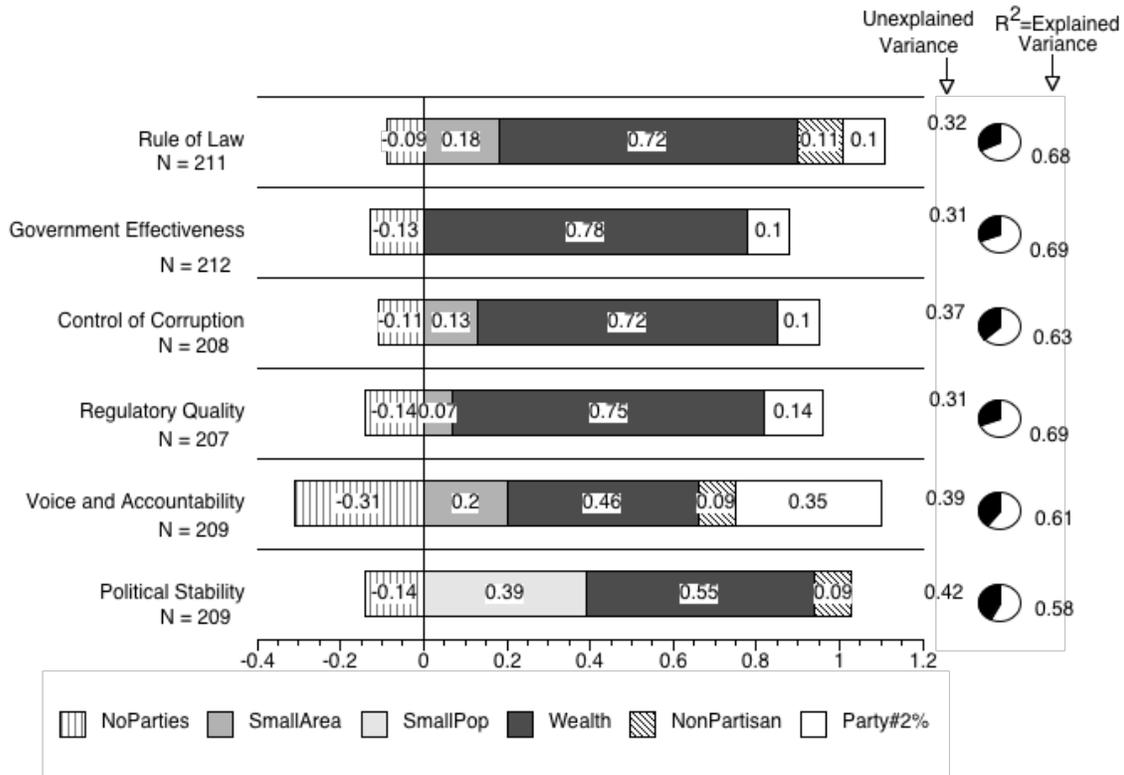
[a]SmallArea measures Country Size except for Political Stability, which uses SmallPopulation.
[b]Entries in the bar graph are ß coefficients from the regression equations.
All are significant at the .05 level or beyond. R^2 are adjusted.

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[42] Anna Grzymala-Busse, "Encouraging Effective Democratic Competition," *East European Politics and Societies*, 21 (2007), 91-110, at pp. 92-93.

[43] Sarah Leary, "Electoral Authoritarianism: A Cross-National Study of the Influence of Elections on Responsiveness to the People and Regime Longevity," Paper prepared for presentation at the 2010 Midwest Political Science Association Annual Meeting, Chicago Illinois, p. 3.

Country wealth: 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). Chapter 2 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.

Country size: Adding party system competitiveness to the equation has notable consequences for the importance 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.[44]

NoParties and NonPartisan: The coefficients are identical to those reported previously in Table 8.2. The consistent negative effects of NoParties and the two positive effects of NonPartisan are unchanged by adding Party#2%.

Party System Competitiveness: The percentage of seats held by the second largest party also had significantly similar effects (ß ≈ .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.

Ch. 10: THE EFFECTS OF AGGREGATION

The concepts of interest "aggregation" and "articulation," are usually associated with individual parties, not party systems. Political parties vary in the extent to which they *aggregate* (gather) and *articulate* (express) political interests.[45] Green parties, for example, typically articulate policies that protect the environment, overriding all other interests. Leftist parties tend to favor green policies too, but they also balance environmental issues against job losses in fossil fuels industries—aggregating conflicting interests in the process. Large parties usually aggregate broad interests; small parties articulate narrow interests. Party systems too can vary in articulation and aggregation according to the number and size of their parties. Lijphart contends:

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[44] 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).

[45] This discussion draws from Kenneth Janda, "Interest Articulation and Interest Aggregation," in *The International Encyclopedia of Political Science* (Washington, DC: CQPress, forthcoming).

> The best aggregators are parties in two-party systems like the Anglo-American democracies, but the larger the number and the smaller the size of the parties in a system, the less effectively the aggregation function will be performed; in the Continental European multi-party systems only a minimum of aggregation takes place.[46]

Mayer says, "Aggregation becomes a meaningful concept only when its converse, fragmentation, is a possible alternative," and continues, "a party system with many parties fits with what is commonly understood by the term fragmented than a system with fewer parties."[47] 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.

There is a contrary view, however.[48] It is that a multi–party system can be more aggregative than a two party system as a result of legislative bargaining among the multiple parties. In the process of articulating interests of their own voters, multiple parties can reach a consensus that effectively aggregates interests of most voters.[49] This intriguing proposition, which runs counter to the standard argument in party theory, deserves to be studied on its own. We will adopt the standard view that the more political parties in a party system, the less aggregative it is.

Party system aggregation (or fragmentation) and party system competitiveness are distinct and unrelated concepts. The extent to which they are empirically correlated, however, depends on how aggregation is measured—which is a disputed issue. The inventory of party system measures by Lane and Ersson in Chapter 7 identified no less than five variously-named indicators involving the number and strength of parties in the system—the essential ingredients in formulas purporting to measure party system fragmentation or aggregation. Terminological confusion attends the concepts as well as the measures.

The Concept of Aggregation

Decades ago, scholars stressed aggregation as an important property of party systems. In 1960, Almond wrote, " [I]t is the party system which is the distinctively modern structure of political aggregation," which is "crucial to the performance of the political system as a whole."[50] In a famous article a few years later, Kirchheimer said that European party systems had been "transformed" by the rise of "catch-all" parties that aggregated broad rather than narrow interests.[51] In 1980, Mayer devised a method for measuring party system aggregation, which has been largely neglected.[52] Today, democracy assistance groups still value the aggregative function of party systems, particularly in conflict-prone societies.[53] 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

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[46] Arend Lijphart, "Consociational Democracy," *World Politics,* 21,(January, 1969), 207-225, at 210.

[47] Lawrence C. Mayer, "A Note on the Aggregation of Party Systems," in Peter H. Merkl (ed.), *Western European Party Systems* (New York: The The Free Press, 1980), pp. 515-520, at p. 516.

[48] This view was effectively argued by Julieta Suarez-Cao.

[49] This is a variant of the argument inherent in Arend Lijphart, *Democracies: Patterns of Majoritarian and Consensus Government in Twenty-One Countries* (New Haven, CT: Yale University Press, 1984), pp. 22–23.

[50] Gabriel A. Almond, "Introduction: A Functional Approach to Comparative Politics," in Gabriel Almond and James S. Coleman (eds.), *The Politics of the Developing Areas* (Princeton, NJ: Princeton University Press, 1960), pp. 40 and 44.

[51] Otto Kirchheimer, "The Transformation of the Western European Party Systems," in Joseph LaPalombara and Myron Weiner (eds.), *Political Parties and Political Development* (Princeton, NJ: Princeton University Press, 1966), pp. 177-200.

[52] Mayer, "A Note on the Aggregation of Party Systems."

[53] Benjamin, Reilly and Per Nordlund (eds.) *Political Parties in Conflict-Prone Societies: Regulation, Engineering and Democratic Development*. (Tokyo: United Nations University Press, 2008); and Democratic Governance Group, *A Handbook on Working With Political Parties*. New York: United Nations Bureau for Development Policy, United Nations Development Programme, 2006.

extent to which numerous parties in a system have relatively equal political power. Writers claim or imply various consequences of high party system fragmentation. Enikolopov and Zhuravskaya think that fragmentation produces weak governing parties with each having little influence over governing policies.[54] Lane and Ersson summarize 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."[55] 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 behaviour."[56]

　　　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.[57] Mainwaring, in contrast, believes that high fragmentation reduces a president's capacity to introduce political reforms.[58] Grzymala-Busse contends that high fragmentation of east central European party systems caused electoral uncertainty, constraining the extraction of state resources by one-party dominant governments.[59] Again in contrast, Doherty holds that high fragmentation *prevents* the emergence of adequate political opposition.[60] Toka and Henjak worry about the destabilizing effects of *both* very high and very low party fragmentation.[61] Finally, Sanchez says that variations in fragmentation are unimportant when party systems vary in institutionalization.[62]

　　　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 witness by the many efforts to do so. A systematic and semi-historical explication of five efforts is in order.

Measuring Aggregation

　　　Scholars have historically classified party systems by the number of parties that regularly contest elections (one-party, two-party, or multi-party) and have recently created more elaborate classifications.[63] These categorical schemes usually sought to reflect competitiveness rather than either aggregation or fragmentation. Two-party systems were thought more competitive than one-party systems and multi-

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[54] Ruben Enikolopov and Ekaterina Zhuravskaya, "Decentralization and Political Institutions," *Journal of Public Economics*, 91 (December 2007), 2261-90.

[55] Jan-Erik Lane, with Svante Ersson, "Party System Instability in Europe: Persistent Differences in Volatility between West and East?" *Democratization*, 14 (February 2007), 92-110, at p. 94.

[56] *Ibid*., p. 95.

[57] Christopher J. Anderson, "Parties, Party Systems, and Satisfaction with Democratic Performance in the New Europe," *Political Studies*, 46 (1998), 572-588.

[58] Scott Mainwaring, *Rethinking Party Systems in the Third Wave of Democratization: The Case of Brazil* (Stanford, CA: Stanford University Press, 1999), p. 285.

[59] Anna Grzymala-Busse, "Political Competition and the Politicization of the State in East Central Europe," *Comparative Political Studies*, 36 (December 2003), 1123-1147.

[60] Ivan Doherty, "Democracy Out of Balance: Civil Society Can't Replace Political Parties," *Policy Review* (April-May 2001), 25-35.

[61] Gabor Toka, and Andrija Henjak, "Institutional Design and Voting Behavior in East Central Europe: A Cross-National Comparison of the Impact of Leaders, Partisanship, Performance Evaluation and Ideology on the Vote," Paper presented at the 2009 World Congress of the International Political Science Association, Santiago, Chile.

[62] Omar Sanchez, "Party Non-systems: A Conceptual Innovation," *Party Politics*, 15 (July, 2009), 487-520.

[63] See Alan Siaroff, *Comparative European Party Systems: An Analysis of Parliamentary Elections Since 1945* (New York: Garland, 2000).

party more competitive than two-party. Partly in an effort to distinguish among party systems *within* a classification, scholars devised formulae involving the strength and number of parties to score systems by continuous values instead of categories. In creating these formulae, scholars also attempted to capture properties of party systems—e.g., fragmentation and aggregation—instead of competitiveness.

Reviewing the measures and formulae:

Readers need some understanding of the various approaches used to operationalize the concepts of fragmentation and its converse, aggregation. We briefly review five measures, their components, and their formulae.

Strength of the largest party, Party#1%: The strength of the largest party, measured by percentage of the electoral vote received or by parliamentary seats held, offers the simplest operationalization of fragmentation and aggregation. The greater the votes or seats won by the largest party, the fewer available to others—so the less the fragmentation. Conversely, the larger the party, the greater the assumed interest aggregation. For our 189 countries with parliamentary seat data, the largest party averaged 52 percent of the seats (about half), and the distribution was unimodal and satisfactorily symmetrical. These statistical virtues, however, are overshadowed by the fact that this simple measure says nothing about the other parties in the system. Its information content is low.

Number of parties in parliament, NPP: The number of parties that compete in parliamentary elections in any country is very difficult to determine, because results often go unreported for the many parties with few votes. Fortunately, data usually are available (but tedious to collect) for parties that win seats and gain representation in parliament. Clearly, the more parties represented in parliament, the greater the fragmentation. By inference, the fewer parties, the greater the aggregation. Our count of the total number of parties seated in 189 parliaments found that the average parliament represented 6.7 parties. The distribution was highly skewed, however, with a high of 39 parties seated in Colombia. Taking the logarithm of the number of parliamentary parties reduced the skew and produced an acceptable statistical distribution. Nevertheless, the number of parties (or its log) says nothing about the percentages of seats held by each party.

Fractionalization index, F: More than four decades ago, Rae adapted an economic index of industrial concentration to the study of party systems.[64] Combining the number and strength of the parties, Rae called it the Fractionalization Index:[65]

$$F = 1 - \sum_{i}^{N} p_i^2 \text{, where } p = \text{proportion of parliamentary seats held by party } i \qquad (10.1)$$

F approaches 1.0 when a larger number of parties hold equally small proportions of seats; it is equal to 0 when one party holds all the seats. Thus it is a measure of fragmentation rather than aggregation. Computing Rae's F for our 189 parliaments produces a somewhat asymmetrical but acceptable distribution suitable for statistical analysis with a mean value of .61.

Effective Number of Parliamentary Parties, ENPP: Approximately a decade after Rae published his index, Laakso and Taagepera published a similar formula involving the same components.[66] They said it measured the "Effective Number of Parties (ENP)," in the sense that it reflected the "effective access" to power by parties of different sizes.[67] ENP has been applied both to electoral parties (ENEP) and to parliamentary parties (ENPP). We calculate ENPP:

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[64] It was the 1940s Herfindahl-Hirschman index. See Grigorii V. Golosov, "The Effective Number of Parties," *Party Politics*, 16 (March 2010), 171-192.
[65] Douglas Rae, "A Note on the Fractionalization of Some European Party Systems", *Comparative Political Studies*, 1 (October 1968), 413-418.
[66] Markku Laakso and Rein Taagepera, "'Effective"'Number of Parties: A Measure with Application to West Europe," *Comparative Political Studies*, 12 (April, 1979), 3-27.
[67] *Ibid*., p. 3.

$$ENPP = \frac{1}{\sum_{i}^{N} p_i^2}, \text{ where } p = \text{proportion of parliamentary seats held by party } i \qquad (10.2)$$

Whereas Rae subtracted $\sum_{i}^{N} p_i^2$ from 1 (producing decimal values ranging between 0 and 1), Laakso and

Taagepera divided $\sum_{i}^{N} p_i^2$ into 1 (producing numbers ranging from 1 to N). ENPP's scoring has more

intuitive appeal. An ENPP of 3.2 conjures the appropriate imagery of three relatively equal parties; the equivalent F of .69 is only an index score.[68] Unfortunately, ENPP requires complete data for all individual parties, but our data are only for the top three parties.[69] We adjusted the formula by replacing 1 in the numerator with the total proportion of seats held by the three parties after the stimulus election:

$$ENPP_{3 \text{ parties}} = \frac{\sum_{1}^{3} p_i}{\sum_{i}^{3} p_i^2}, \text{ note that } p_i \text{ is not squared} \qquad (10.3)$$

Computed for our data on 189 parliaments, ENPP generates a highly skewed distribution with a mean "effective number of parties" (ENPP) score of 2.9. Taking its logarithm produced an acceptable distribution for analysis.[70]

      Aggregation Index, A: In 1980, Mayer criticized Rae's F because it "did not distinguish between the fragmentation of the government and the opposition,"[71] Mayer devised an index based on the strength of the largest party (the governmental party) and the number of parliamentary parties (fragmentation of the opposition). His formula divided the percentage of the largest party by the number of parties:

$$A = \frac{Party\#1\%}{NPP}, \text{ where Party\#1\% and NPP are defined above}^{72} \qquad (10.4)$$

Applied to our data for 189 parliaments, the formula generates a mean of 16.5. Because a few countries had all seats held by one party, the distribution is skewed toward 100. Taking the log of A results in a relatively symmetrical, unimodal distribution.

Measurement issues and controversies

      When multiple indicators vie for attention in any field, controversy arises. Scholars framed the debate over which formula above was the best measure of party system fragmentation—not aggregation. In his 1980 review of alternative measures in this literature, Pedersen concluded:

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[68] Grigorii V. Golosov, "The Effective Number of Parties," *Party Politics*, 16 (March 2010), 171-192, at p. 174.

[69] Taagepera suggests a work-around that we use for both F and ENP. See Rein Taagepera, "Effective Number of Parties for Incomplete Data," Electoral Studies, 16, (1997), pp. 145-151. He suggests using this formula: ENP = $P^2 / \sum P^2_i$, where Pi stands for the number (rather than fractional share) of seats or votes for the i-th party, and P is the total number of seats or valid votes. Unfortunately, that work-around does not apply to this problem.

[70] Our attempt to adapt the Laakso-Taagepera formula for "Effective Number of Parties" produced some odd scores. The most extreme case concerned Belarus, where the top three parties (holding .07, .03, and .01 respectively) filled only .11 of the parliamentary seats after the 2004 election. Applying the adjusted formula to those data generated an ENPP score of 18.6. While Belarus obviously does not have "effectively" 18.6 parties, it does have an extremely fragmented party system, which the number shows.

[71] Mayer, "A Note on the Aggregation of Party Systems," p. 517.

[72] Mayer's original formula, A=100(Largest party seats/Seats in parliament)/Number of parties, was for raw data, not seat percentages.

None of these have led to significant improvements on Rae's F. Several of the new indices are merely complicating and redundant reformulations of F. It might be a good idea, therefore, if students of party systems would decide to stick to one measure—namely, F. Instead of inventing new indices of fragmentation, one could instead concentrate on the task of delimiting the contexts in which F can legitimately be used.[73]

Pedersen's advice went unheeded. Scholars persisted in writing about mathematical deficiencies in the various indices and proposing alternatives. After considering existing measures, Monilar proposed a new index that "behaves better in relation to the size of the largest party and to the gap between the two largest parties."[74] Nevertheless, Dunleavy and Boucek critiqued Monilar's index, dismissed it, and proposed a formula that "yields more stable and readily interpretable results" than the leading alternative—Laakso's and Taagepera's effective number of parties.[75] However, Golosov's own review of alternative indicators said that Dunleavy's and Boucek's "proposed solution is insufficient." He thought that Laakso and Taagepera created "a very good measure," but found that it "tends to produce unrealistically high scores for very concentrated party systems"—a problem that Golosov claimed he solved.[76] These brief exchanges illustrate the extensive debate in the literature over measuring party system fragmentation.[77]

Testing Hypotheses about Aggregation

Party scholars devoted far more attention to tweaking fragmentation formulas than to clarifying the underlying concept they were trying to measure.[78] Unfortunately, they neglected placing their proposed measures in the context of party theory.[79] Instead of testing alternative measures in parallel hypotheses predicting to some political process or governmental outcome, they simply tended to judge how well the measures fit their images of a fragmented party system. Some empirical tests of party theory may have helped more.

Proposition P3 in Chapter 6 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.[80] Another argues the opposite, believing that government bargaining among several articulative parties better serves a country, particularly one divided into conflicting ethnic groups.[81] They look more favorably on a contrary proposition P3': *The more articulative the party system, the better the country governance.* Most advocates of funding to improve political parties in foreign countries fit in the first group, representing the conventional view. They promote aggregative parties and non-fragmented

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[73] Pedersen, "On Measuring Party System Change," p. 397.

[74] Juan Molinar, "Counting the Number of Parties: An Alternative Index," *American Political Science Review,* 85 (December, 1991) 1383-91, at p. 1390.

[75] Patrick Dunleavy and Françoise Boucek, "Constructing the Number of Parties," *Party Politics,* 9 (May 2003), 291-315, at pp. 302 and 307.

[76] Grigorii V. Golosov, "The Effective Number of Parties," *Party Politics*, 16 (March 2010), 171-192, at pp. 172 and 188

[77] See Benjamin Nyblade and Angela O'Mahony, "Counting Parties: Different Measures for Different Purposes," Paper presented at the 2010 Midwest Political Science Association Annual Meeting, Chicago Illinois.

[78] Indeed, scholarship on this topic smacks of scholasticism, as described by Lawrence M. Mead, "Scholasticism in Political Science," *Perspectives on Politics*, 8 (June, 2010), 453-464.

[79] Dunleavy and Boucek say, "The root of these problems is primarily that the political scientists who devised or advocated the index never gave a systematic *experimental* account of how its results were patterned across the full range of possible empirical outcomes," in "Constructing the Number of Parties," p. 292.

[80] Donald L. Horowitz, "Making Moderation Pay: the Comparative Politics of Ethnic Conflict Management," in J.V. Montville (ed), *Conflict and Peacemaking in Multiethnic Societies* (New York: Lexington Books, 1991).

[81] See Arend Lijphart, "Consociational Democracy," *World Politics,* 21,(January, 1969), 207-225.

party systems.[82] 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 in Chapter 7, 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. Which should we use?

To decide, we ran thirty separate regression analyses, one for each of the six indicators using each of the five alternative measures.[83] Each analysis controlled for country size and wealth. The measure that consistently (and surprisingly) produced the strongest findings was NPP, a simple count of the number of parliamentary parties. The measure that consistently produced the *least* significant findings was ENPP— despite its status in the field as having reached "a high level of acceptance"[84] as "the best known" method,[85] the "most popular,"[86] and the "purest measure"[87] 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."[88]

We cannot tell from our data why a simple count of the number of parties seated in parliament predicts better to 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.

All Six Indicators

In the following analysis, we estimate the effects of both Party#2% (competitiveness) and NPP

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[82] Thomas Carothers, *Confronting the Weakest Link: Aiding Political Parties in New Democracies* (Washington, DC: Carnegie Endowment for International Peace, 2006), p. 98; Democratic Governance Group, *A Handbook on Working With Political Parties.* (New York: United Nations Bureau for Development Policy, United Nations Development Programme, 2006), p. 9; National Democratic Institute, *Minimum Standards for the Democratic Function of Political Parties* (Washington, DC: National Democratic Institute, 2008), p. ii.

[83] We actually ran another set of six regressions using as independent variables the factor scores from the rotated "aggregation" factor identified in Chapter 7. These results, which are unlikely to be easily understood by readers unfamiliar with factor analysis, were largely insignificant. We do not report them.

[84] Patrick Dunleavy and Françoise Boucek, "Constructing the Number of Parties," *Party Politics,* 9 (May 2003), 291-315.

[85] Blau, Adrian , ""The Effective Number of Parties at Four Scales: Votes, Seats, Legislative Power and Cabinet Power," Party Politics, 14 (March, 2008), 167-187, at 170.

[86] Pippa Norris *Electoral Engineering: Voting Rules and Political Behavior* (New York: Cambridge University Press, 2004), p. 83.

[87] Arend Lijphart, *Electoral Systems and Party Systems*. (Oxford: Oxford University Press), 1994), p. 70.

[88] Benjamin Nyblade and Angela O'Mahony, "Counting Parties: Different Measures for Different Purposes," Paper prepared for presentation at the 2010 Midwest Political Science Association Annual Meeting, Chicago Illinois.

(aggregation) on all six indicators of county 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 in 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 10.1, 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 affects 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 10.1: Effects of NoParties, Country Size,[a] Wealth, NonPartisan, Party#2%, and Number of Parties on All Six Governance Indicators
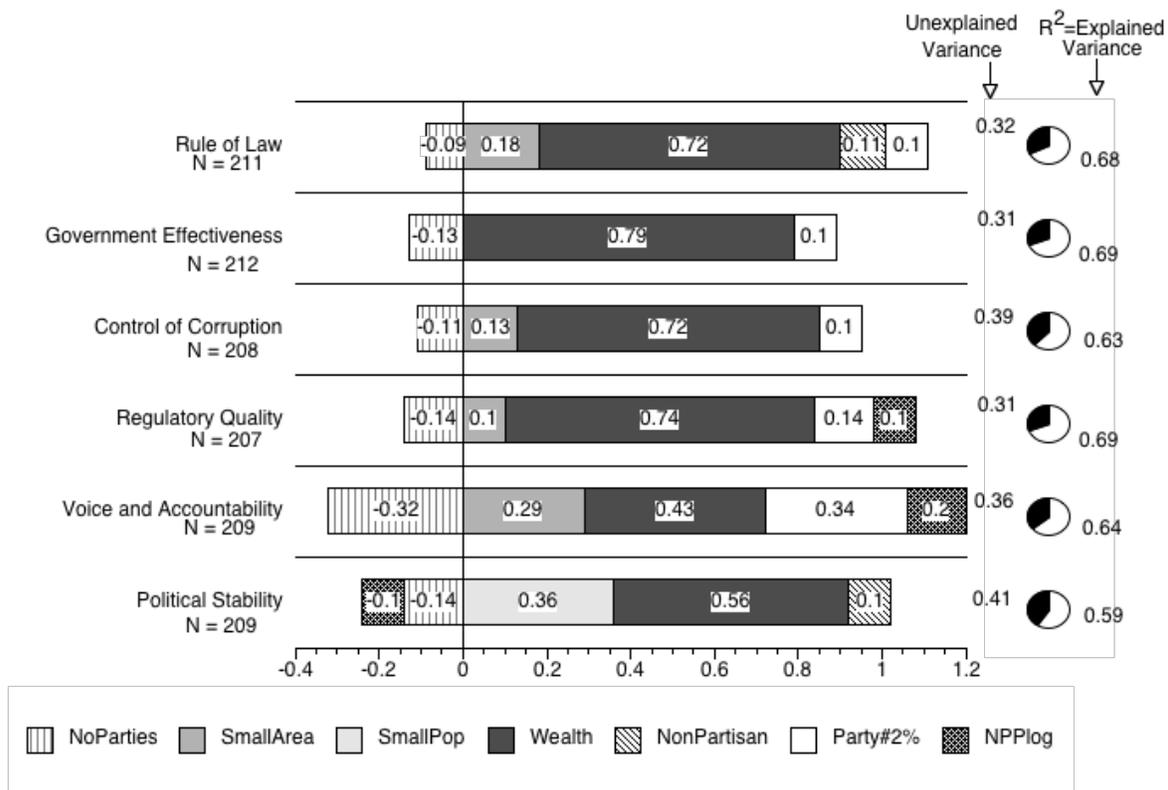
[a]SmallArea measures Country Size except for Political Stability, which uses SmallPopulation.
[b]Entries in the bar graph are ß coefficients from the regression equations.
All are significant at the .05 level or beyond. R^2 are adjusted.

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, discussed early in the chapter, 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.

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 that multiple parliamentary parties provoke political instability with their squabbling, whereas troublesome issues can be settled more quietly within a parliament with more aggregative party system. Or perhaps the effects of aggregation are not linear but curvilinear—holding within certain thresholds of aggregation. We will not try to resolve the theoretical ambiguities noted above in our review of scholarship concerning party system "fragmentation." Our conflicting findings, however, shed new light on old controversies in comparative politics.

Ch. 11: THE EFFECTS OF STABILITY

The previous chapter noted that party system competitiveness and aggregation are distinct and unrelated concepts. Party system stability—meaning little change across elections—is distinct from and unrelated to competitiveness. A party system can be relatively competitive and relatively stable (as in the United States) or very uncompetitive yet very stable (as in China). Although party system aggregation and stability are also distinct concepts, they are somewhat related empirically. We return to this relationship later.

Two indicators loaded highly on the factor labeled "party system stability" in Chapter 7's factor analysis. One was Pedersen's well-known measure of volatility.[89] 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 value 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.[90] 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.

The Concept of Stability

In ordinary discourse, the term "volatile" means inconstant, fleeting, capable of quick change. Applied separately to party votes and seats, the term has the same meaning in describing party systems. *Electoral* volatility, as popularized by Pedersen, assesses changes in percentages of *votes* cast for all parties in adjacent elections.[91] *Seat* volatility refers to changes in percentages of parliamentary *seats* for all parties in adjacent elections.[92] 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.[93]

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[89] Pedersen, "The Dynamics of European Party Systems."

[90] The independence of party system stability and competitiveness is demonstrated by the insignificant correlation (r = -.09) between the Pedersen Volatility Index and the percent 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.

[91] Pedersen, "The Dynamics of European Party Systems." Lane and Ersson also refer to electoral volatility as "net" volatility, see Jan-Erik Lane with Svante Ersson, "Party System Instability in Europe: Persistent Differences in Volatility between West and East?" *Democratization*, 14, (February 2007), 92-110. Powell and Tucker dissect Pedersen's formula to measure two types of volatility: type A captures volatility from party entry and exit, and type B captures volatility among stable parties. See Eleanor Neff Powell and Joshua A. Tucker, "New Approaches to Electoral Volatility: Evidence from Postcommunist Countries," Paper prepared for delivery at the 2009 Meeting of the American Political Science Association, Toronto, Canada. We do not distinguish between their types for we count both types of volatility.

[92] See Svante Ersson and Jan-Erik Lane, "Electoral Instability and Party System Change in Western Europe," in Paul Pennings and Jan-Erik Lane (eds.), *Comparing Party System Change* (London: Routledge, 1998), 23-39.

[93] *Ibid.*, p. 29.

Unfortunately, volatility has negative connotations for party politics. The term implies party system instability rather than stability, which leads to confusing statements in the literature. Consider the contradiction in this sentence by Lupu: "Scholars of Latin America have largely focused on electoral volatility as a broad measure of the stability of voter choices over time."[94] Similarly, Robbins says, "The first measure of party institutionalization is electoral volatility."[95] Surely volatility measures *instability* (Lupu)*, and volatility implies a *lack* of institutionalization (Robbins). To avoid such terminological mismatch, we prefer the physics term, *viscosity*, which refers to a fluid's resistance to flow or movement.[96] While not quite an antonym for volatility, viscosity invites talk of party system stability rather than instability.

Measuring Stability

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 percentage point differences only for the three largest parties at the stimulus election. 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.[97] 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.[98] 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.

$$\text{Volatility}_{\text{seats}} = \sum_{i=1}^{k} \left| p_{i(t)} - p_{i(t-1)} \right| / \left(\sum_{i=1}^{k} p_{i(t)} + \sum_{i=1}^{k} p_{i(t-1)} \right) \tag{11.1}$$

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

Because we favor talking about party system stability instead of instability, we prefer to measure viscosity not volatility. To accomplish this, Formula 11.2 multiplies Pedersen's measure by -1.

$$\text{Viscosity}_{\text{seats}} = \text{Volatility}_{\text{seats}} *\text{-}1 \tag{11.2}$$

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

[94] Noam Lupu, "Nationalization and Realignment in Twentieth-Century Argentina," Paper prepared for presentation at the Annual Meeting of the Midwest Political Science Association, Chicago, April 3-6, 2008, p. 6.

[95] Joseph W. Robbins, "Party System Institutionalization and Government Spending," Paper prepared for the annual meeting of the Midwest Political Science Association, Chicago, IL, 3-5 April 2008, p. 10.

[96] *Encyclopedia Britannica*, at http://www.britannica.com/EBchecked/topic/630428/viscosity.

[97] We learned that Sarah Birch used the same formula in *Electoral Systems and Political Transformation in Post-Communist Europe* (Basingstoke: Palgrave-Macmillan, 2003) Chapter 6.

[98] Not accounting for all parliamentary parties at both time points raises some unresolved methodological issues. A similar but not identical problem is discussed in articles concerning calculating the effective number of parties (the Laakos-Taagepera formula) when all the parties are not included in the analysis. See Rein Taagepera, "Supplementing the effective number of parties," *Electoral Studies*, 18 (1999), 497-504; and Patrick Dunleavy and Françoise Boucek, "Constructing the Number of Parties," *Party Politics*, 9 (May 2003), 291-315.

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. We return later to this fact.

Testing Hypotheses about Stability

Proposition P4 in Chapter 6 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. Birch cites four negative consequences of high party system volatility: less accountability to voters, slower party institutionalization, more political uncertainty, and higher stakes in elections.[99] In keeping with the standard view, Robbins contends that party system volatility corresponds negatively with public goods spending levels, presumably an ingredient of governance.[100]

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."[101] Mozoaffar and Scarritt also hold that "High electoral volatility can be viewed as a system-clearing device that eliminates inefficient parties, leaving a small number of parties to compete for votes and form governments."[102] Kuenzi and Lambright add that legislative volatility, particularly in new democracies "might help invigorate formerly stagnant systems."[103] Finally, Toka and Henjak contend that "particularly low and particularly high levels of party system stabilization are both usually detrimental for instilling strong electoral accountability of governments." [104]

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 Worldwide Governance Indicators 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.
H4.5: The more viscous the party system, the greater the VA.
H4.6: The more viscous the party system, the greater the PS.

Rule of Law

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 (Pedersen volatility*-1) 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

[99] Birch, *Electoral Systems and Political Transformation in Post-Communist Europe*, Chapter 6.

[100] Robbins, "Party System Institutionalization and Government Spending," p. 24.

[101] Lane and Ersson, "Party System Instability in Europe," p. 97.

[102] Shaheen Mozaffar and James R. Scarritt, "The Puzzle of African Party Systems," *Party Politics*, 11 (July 2005), 399-421.

[103] Kuenzi and Lambright, "Party Systems and Democratic Consolidation in Africa's Electoral Regimes," p. 426.

[104] Gabor Toka and Andrija Henjak, "Institutional Design and Voting Behavior in East Central Europe: A Cross-National Comparison of the Impact of Leaders, Partisanship, Performance Evaluation and Ideology on the Vote," Paper presented at the 2009 World Congress of the International Political Science Association, Santiago, Chile, p. 6.

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.[105] 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."[106] The criteria also automatically excluded all 15 countries scored 1 on NoParties. We also excluded the 8 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 Equation 11.5:

$$RL = .75*Wealth + .13*SmallArea + .13*Viscosity \qquad R^2_{adj} = .70 \qquad (11.3)$$

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

All Six 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 H4.6 are reported in Figure 11.1. 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 county 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

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[105] Freedom House also had other criteria, but they were all related to political parties and elections. See http://www.freedomhouse.org/template.cfm?page=351&ana_page=298&year=2006.
[106] See http://www.freedomhouse.org/template.cfm?page=70&release=242.

thus conflated with (controversial) policy prescriptions."[107] 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 in 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 11.1: Effects of Country Size,[a] Wealth, Aggregation, and Stability
on all Six Governance Indicators, Only Electoral Democracies[b]**
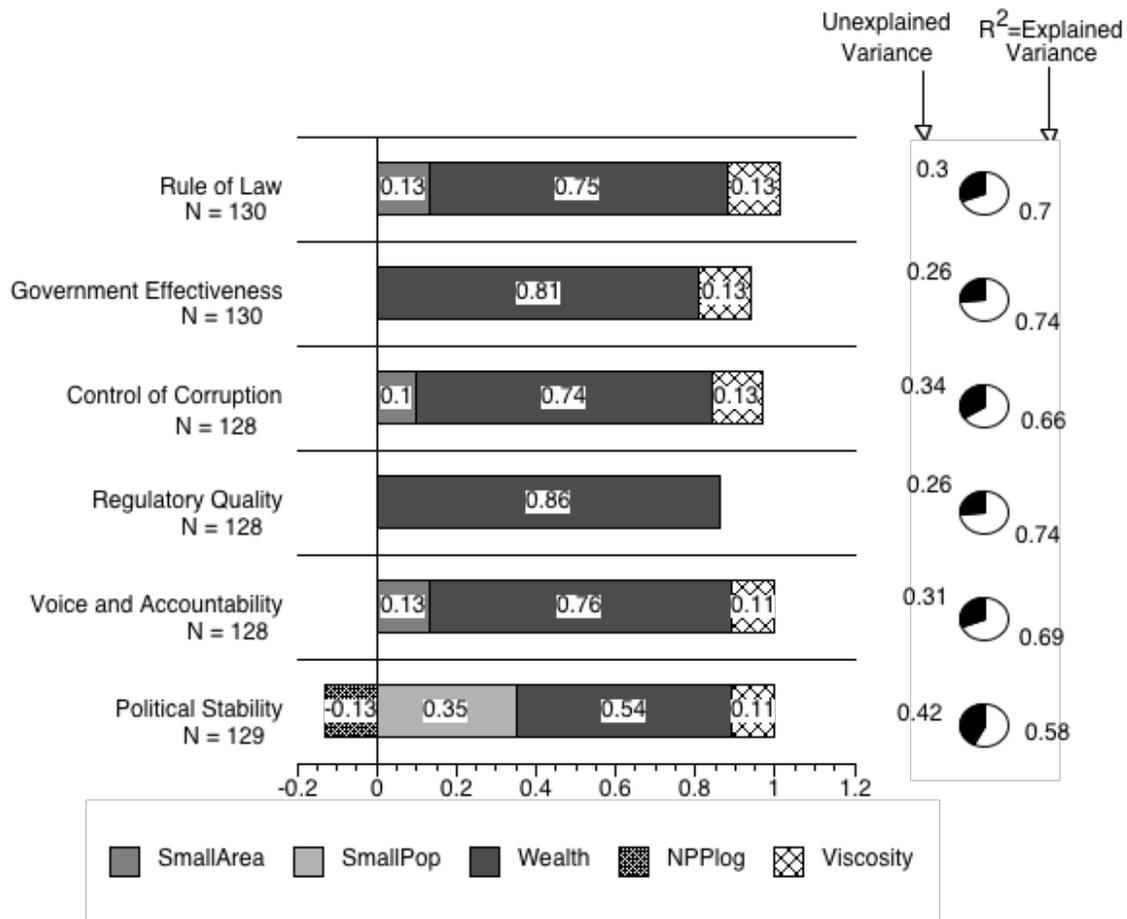
[a]SmallArea measures Country Size except for Political Stability, which uses SmallPopulation.
[b]Entries in the bar graph are ß coefficients from the regression equations.
All are significant at the .05 level or beyond. R^2 are adjusted.
NOTE: The variables NoParties, NonPartisan, and Party#2% were excluded from the analysis.

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[107] Marcus J. Kurtz and Andrew Schrank, "Growth and Governance: Models, Measures, and Mechanisms," *The Journal of Politics*, Vol. 69, No. 2, May 2007, 538-554, at pp. 542-543.

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.

SUMMARY AND CONCLUSION

Party Systems and Country Governance is mainly about party systems—their variations across the world and their effects on country governance. It is also about the conceptualization and measurement of country governance. Party system traits are the independent variables and country governance scores are the dependent variables. According to the normative values of democratic theory, the presence of competitive, aggregative, stable systems of political parties contributes to better country governance. International aid agencies have embraced the normative theory, assuming its truth. As a result, they have spent millions of dollars to develop competitive, aggregative, stable party systems. This study translates the assumed normative theory into testable empirical theory.

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. Here are the theoretical propositions and hypotheses tested, with the results checked if supported and drawn through if unsupported:

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

       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)

       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

P2.   *The more **competitive** the party system, the better the country governance.*

       H2.1: √ The larger the second party, the greater the RL.
       H2.2: √ The larger the second party, the greater the GE.
       H2.3: √ The larger the second party, the greater the CC.
       H2.4: √ The larger the second party, the greater the RQ.
       H2.5: √ The larger the second party, the greater the VA.
       H2.6:   ~~The larger the second party, the greater the PS.~~

P3.   *The more **aggregative** the party system, the better the country governance.*

       ~~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 RQ.~~
~~H3.5:   The lower the NPP, the greater the VA.~~
H3.6: √ The lower the NPP, the greater the PS.

*P4.   The more **stable** 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.

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.

This study has definite limitations. One stems from using the Worldwide Government Indicators for the dependent variable. Although highly regarded, they are usually used as independent variables in economic analyses, not as dependent variables in political analyses of governmental performance. Moreover, the indicators are highly intercorrelated, raising questions of whether they truly measure different aspects of governance. However, this study suggests that all indicators—particularly Voice and Accountability and Political Stability—have different causes. That the indicators respond differently to causal factors suggests that they do measure different qualities of governance.

A more serious limitation stems from the measures of party systems. They were essentially generated from only six items of data for each country: the percentages of seats held only by the three largest parties over only two elections. Because of the difficulty in acquiring data on parties' ideologies or issue positions in almost 200 party systems, it does also not study how policy polarization affects country governance. One might not expect such shallow data on political parties to produce mostly strong and consistent effects of party systems on country governance, but they did.

To some, the study might seem limited because it did not control for type of electoral system or executive structure of government. True, preliminary analyses show that controlling for various political factors both enhances and diminishes effects of party system traits on country governance. Introducing such controls into the study, however, requires additional chapters of description and explanation. That party system traits have significant effects across very different political systems without controls testifies to their general effects, leaving more specific effects to be determined.

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 is reflected in what Thomas Carothers (quoted in the book's Introduction) describes an international aid agency's view of "a desirable party system"—one "balanced between ideological polarization and homogeneity and between fragmentation and concentration."[108] 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 that should comfort those who fund international programs to develop party systems abroad. This cross–national study of 212 countries *could* have produced no evidence of any significant relationships between party systems and country governance. Instead, it produced relatively strong evidence that party system competitiveness and stability were significantly related to country governance. In the book's introductory chapter, we raised the question: "Does the nature of a country's political party system affect the quality of its governance?" Our research provides evidence that largely supports the normative assumptions of aid agencies. The nature of a country's party system does indeed positively affect the quality of its governance.

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[108] Thomas Carothers, *Confronting the Weakest Link: Aiding Political Parties in New Democracies* (Washington, DC: Carnegie Endowment for International Peace, 2006), pp. 98–99.