PARTY SYSTEM EFFECTS ON COUNTRY GOVERNANCE, I

Kenneth Janda, Jinyoung Kwak, and Julieta Suarez-Cao
Northwestern University, Konkuk University, and Northwestern University

Prepared for Delivery at the 2010 Annual Meeting of the Midwest Political Science Association, Chicago, Illinois

Does the nature of a country’s political party system affect the quality of its governance? Thomas Carothers, a leading authority on democratization and governance, thinks it does. He calls political parties the “weakest link” in establishing popular control of government in new or struggling democracies. He describes “the standard lament” about political parties as follows: they are corrupt, self-interested, do not stand for anything except winning elections, squabble with one another, and are ill-prepared for governing. Nevertheless, Carothers says:

Yet problematic, aggravating, and disappointing though they are, political parties are necessary, even inevitable. No workable form of democratic pluralism has been invented that operates without political parties.

Contemporary theorists agree that a modern state cannot practice democracy without competitive political parties. A United Nations publication says, “In many countries today, political parties are an essential part of the apparatus of governance:

Parties in a democratic system serve several purposes. They aggregate interests by persuading voters to support various issues, and they lend coherence to voter choices. They may mobilize the masses outside of elections. In conflict situations, they can be crucial in determining whether there is a move forward into recovery or a relapse back into hostilities. Once elected, parties play a major role in shaping public policy, securing resources and orienting the government around certain platforms. Parties also foster future political leaders and monitor elected representatives. An institutionalized party system can hold elected politicians accountable.

Underscoring the importance of political parties in democratic governance, international organizations and non-governmental organizations have poured millions of dollars into party development under the rubric of democratic assistance. These expensive party aid efforts have

---

1 “Party System Effects on Country Governance, II” will be presented at the 2010 Annual Meeting of the American Political Science Association, Washington, DC.
3 Ibid., p. 4.
4 Ibid., p. 213.
generated mixed results. According to one scholar, African leaders have “only grudgingly permitted multiparty politics under donor pressure” against “a current of underlying skepticism,” arguing that parties breed conflict, represent urban elites not the grassroots, and are themselves corrupt.\(^8\) Another scholar sees the same skepticism in Asia:

> Ironically, in the eyes of many people, political parties, the hallmark of modern democratic government, have become the biggest obstacles to democratic consolidation and good governance in much of democratic Southeast Asia.\(^9\)

In truth, people across the world have a love-hate relationship with political parties. Parties are highly valued by most scholars for enabling popular control of government but are mistrusted by many leaders and citizens.\(^10\) As two experts write, “The widespread perception that parties are procedurally necessary for the effective functioning of democracy does not translate into their being widely supported or respected.”\(^11\) Ambivalent judgments about the role of parties in government appear in these conflicting statements by other party scholars. One praises their contributions to democratic theory—

> In truth, people across the world have a love-hate relationship with political parties. Parties are highly valued by most scholars for enabling popular control of government but are mistrusted by many leaders and citizens.\(^10\) As two experts write, “The widespread perception that parties are procedurally necessary for the effective functioning of democracy does not translate into their being widely supported or respected.”\(^11\) Ambivalent judgments about the role of parties in government appear in these conflicting statements by other party scholars. One praises their contributions to democratic theory—

— but another thinks that parties have not delivered on their promised contributions:

> In representative democracies, political parties perform a variety of functions that maintain and foster democratic governance. Perhaps the most important role they play is that of a linkage between the governed and the governors.\(^12\)

—but another thinks that parties have not delivered on their promised contributions:

> Some contemporary models of political parties reinforce the fears of early theorists that political parties would intervene between elected governments and the achievement of the public good.\(^13\)

Is there a body of research specifying how parties affect the popular control of government? Not according to these comparative scholars:

> But whilst there is a striking consensus on the importance of the actual or potential contribution parties can make to the democratization process and specifically to democratic consolidation, within the relevant literature there is not in fact any extensive body of writing that explicitly seeks to pin this contribution down.\(^14\)

---


Democratization is not governance, of course. We define governance as the extent to which a state delivers to its citizens the desired benefits of government at acceptable costs.\textsuperscript{15} Government benefits may reflect specific values, such as sanitation, or abstract meta-values, such as the rule of law.

Governance occurs in both democratic and autocratic governments—under multiple political parties, single parties, and no parties. We investigate whether differences in country party systems explain variation in country governance, as measured by the World Bank’s six meta-value governance indicators: Rule of Law, Government Effectiveness, Control of Corruption, Regulatory Quality, Voice and Accountability, and Political Stability.\textsuperscript{16} These indicators were applied to 212 countries, which included all 192 members of the United Nations, some non-member nations (such as Taiwan), and some entities (such as Guam and Hong Kong) not normally regarded as independent nations. We chose the World Bank data for 2007 and focus on one indicator, Rule of Law, for this study.

**Focusing on Parliamentary Party Systems**

Most scholars contend that a party “system” requires more than one party. Sartori’s definition is typical: a party system is “the system of interactions resulting from inter-party competition.”\textsuperscript{17} Earlier and later writers agree that a party system requires competition between at least two parties.\textsuperscript{18} However, often the same writers bluntly talk about a one-party system.\textsuperscript{19} In the concluding essay to his edited book on comparative political parties, an eminent scholar once wrote, “Only the co-existence of at least one other competitive group makes a political party real.”\textsuperscript{20} Nevertheless, his book included a chapter on the “Communist Party of the Soviet Union”—a one-party state.

In truth, comparative party scholars repeatedly refer to one-party, two-party, and multiparty systems, so we need a definition that accommodates one-party systems—such as China. Accordingly, we define a party system as the pattern of interactions of one or more

\textsuperscript{15} See Kenneth Janda, “Country Governance, Rule of Law, and Party Systems,” forthcoming in the Russian journal, \textit{Политическая Наука [Political Science]} for more discussion of the concept of governance. The original English version is posted at \url{http://janda.org}. 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. He 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). 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

\textsuperscript{16} The data are available at \url{http://info.worldbank.org/governance/wgi2007/}.


\textsuperscript{19} Sartori, \textit{Parties and Party System}, however, avoids speaking of a one-party system, which he refers to instead as a “party-state system,” p. 45.

political parties with government, citizens, and other parties. In short, we broaden the concept of a party system to include the government and the public as actors—not just competing parties. In this study, we narrow the concept’s application to parties in parliaments or legislatures, excluding elections.

In countries with competitive elections, political parties operate most publicly during election campaigns. Parties are more widely visible in parliamentary than presidential elections. Virtually all countries have parliaments or legislatures, while relatively few countries elect presidents. Moreover, parties are banned from presidential elections in some countries. Parliaments, in contrast, offer a nearly universal basis for cross-national analysis of political parties. Unfortunately, data for parliamentary elections often go unreported in smaller countries. Fortunately, one can almost always learn the percentage distribution of parliamentary party seats after elections. Needing to score as many polities as possible on features of their party systems, we collected data on the percentage of party seats held in lower chambers, not on the percentage of votes cast for parties in parliamentary or legislative elections.

The percentage of party seats held in parliament is also theoretically more relevant to our research than the percentage of party votes. Because most electoral systems distort translating votes won to seats won, party success in elections does not necessarily produce party control of parliament. In presidential systems—which comprise about 25 percent of the 212 countries in our population—party success in legislative elections does not even correspond to heading the government. Granted that parties play different roles in presidential than parliamentary governments, parties in parliament play a more direct role in government than parties in elections. So both practical and theoretical considerations led to collecting data on parliamentary parties. While we use “parliamentary,” it is equivalent to “legislative.”

To assess the effect of parliamentary party systems on World Bank governance scores in 2007, we collected data on the distribution of party seats at two points in time: after a stimulus

---

21 Here, a political party is defined an organization that seeks to place its avowed representatives in government positions. “To place” means through competitive elections or political appointments, which occurs in authoritarian governments. “Avowed representatives” means that candidates must compete under the party’s name or publicly identify with the party when in office. “Government positions,” for our purposes, means seats in a parliament or legislature. See Kenneth Janda, Political Parties: A Cross-National Survey (New York: The Free Press, 1980), p. 5.
election prior to 2007 and after a referent election adjacent to the stimulus election.\textsuperscript{25} The stimulus election captured the party system that was positioned to affect governance in 2007, while the referent election reflected the party system’s stability over time.

We are unaware of any comprehensive statistical data on the presence of parties in parliaments in all 212 countries we are studying.\textsuperscript{26} We collected our own data for this research from various Internet resources. By far the most important sources for the stimulus election were Adam Carr Election Archives\textsuperscript{27} and Wikipedia Election Results by Country.\textsuperscript{28} Finding data for the referent election proved to be more difficult, forcing us to scour the Internet for information. The Inter-Parliamentary Union\textsuperscript{29} helped considerably, as did the African Elections Database.\textsuperscript{30} The obscure site, Travel Documents System, was the only source found for parliamentary seat data for the tiny polity, Reunion, an island east of Madagascar.\textsuperscript{31}

Data in Table 1 (next page) on the status of parliamentary parties in 212 countries were derived mostly from the 2006 CIA World Factbook and apply to unicameral parliaments or to the lower chambers of bicameral parliaments.\textsuperscript{32} The table cross-classifies countries by two criteria: do 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—using the phrase generously for 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 four (identified in boldface). 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 council.

**Parliamentary Party Data after Stimulus Elections**

Although party seat data are more readily available than party vote data, obtaining even party seat data for 212 polities after the stimulus election was challenging and tedious. Despite


\textsuperscript{26} Michael Gallagher maintains an important web site with information on various party system measures, including the effective number of parties at \url{http://www.tcd.ie/Political_Science/staff/michael_gallagher/ElSystems/index.php}.

\textsuperscript{27} \url{http://psephos.adam-carr.net}.

\textsuperscript{28} \url{http://en.wikipedia.org/wiki/List_of_election_results_by_country}.

\textsuperscript{29} \url{http://www.ipu.org/english/home.htm}.

\textsuperscript{30} \url{http://africanelections.tripod.com/}.

\textsuperscript{31} \url{http://traveldocs.com/}.

\textsuperscript{32} The CIA provides access to the most recent World Factbook on its own web site at \url{https://www.cia.gov/library/publications/the-world-factbook/index.html}. Earlier editions, including the 2006 edition, are available through the private site, \url{http://www.theodora.com/wfb}. 


Table 1: Status of Parliamentary Parties in Lower Chambers in 2006

<table>
<thead>
<tr>
<th>Were Deputies Popularly Elected to Parliament?</th>
<th>Did deputies represent political parties</th>
<th>Public parties</th>
<th>Shadowy parties</th>
<th>No parties</th>
<th>No parliament</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>All deputies were popularly elected</td>
<td></td>
<td>152</td>
<td>0</td>
<td>8</td>
<td>0</td>
<td>160</td>
</tr>
<tr>
<td>Most were popularly elected</td>
<td></td>
<td>28</td>
<td>8</td>
<td>1</td>
<td>0</td>
<td>37</td>
</tr>
<tr>
<td>Iran, Kyrgyzstan, Jordan, Uganda</td>
<td></td>
<td></td>
<td>4</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Some were popularly elected</td>
<td></td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>Macao</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>None were popularly elected</td>
<td></td>
<td>4</td>
<td>0</td>
<td>6</td>
<td>0</td>
<td>10</td>
</tr>
<tr>
<td>China, Congo (Kinshasa)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sudan, Eritrea</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No parliament existed</td>
<td></td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>185</td>
<td>9</td>
<td>16</td>
<td>2</td>
<td>212</td>
</tr>
</tbody>
</table>

*a Based on data in the 2006 CIA World Factbook

Boldface identifies the 189 countries for which we collected parliamentary seat data.

*American Samoa had 1 appointed and 20 elected deputies. The other countries with all non-partisan parliaments were Marshall Islands, Micronesia, Nauru, Nieuw, Oman, Palau, and Tuvalu.

Eritrea’s parliament was chosen in one election, in 1994.

the abundance of Internet resources on the world’s countries, party politics are not well covered in many smaller countries. We narrowed the task by collecting data on only the three largest parliamentary parties elected in a national election held prior to 2007—the year of our World Bank’s governance indicators. We recognized that some lag would occur between election of new parliament and its impact on governance, but could only guess at the minimum lag time—which we arbitrarily chose as two years. With one exception, we fixed 2005 as the last date for a stimulus election—the parliamentary election that could affect World Bank governance scores in 2007. The distribution of years in which stimulus elections were held is reported in Table 2 (next page). It shows that about 20 percent of the stimulus elections were held in 2005 and almost 85 percent occurred from 2002 to 2005. The earliest elections (1992 and 1994) were in Angola and Eritrea, respectively. Ten nations (Bhutan, Brunei, Libya, Myanmar, Nepal, Oman, Qatar, Saudi Arabia, Somalia, and United Arab Emirates) did not hold elections to elect a parliament or legislative council, although all but Nepal and Myanmar had such a body.

As implied by Table 1, some of the 202 elections in Table 2 were non-partisan, and elected no party deputies. In all, we scored 189 countries for seats held by the three largest parties after the stimulus election. Table 3 (next page) reports that the three largest parties in those countries held an average 82.5 percent of all the parliamentary seats. The median (not
shown) was 89 percent, meaning that in half the countries the three largest parties accounted for nearly 90 percent of all the seats in parliament. While we excluded some parliamentary representation by focusing on the top three parties, we did not miss much.

Table 2: Dates for the Stimulus Elections

<table>
<thead>
<tr>
<th>Year</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>1992</td>
<td>1</td>
<td>.5</td>
</tr>
<tr>
<td>1994</td>
<td>1</td>
<td>.5</td>
</tr>
<tr>
<td>2000</td>
<td>3</td>
<td>1.4</td>
</tr>
<tr>
<td>2001</td>
<td>19</td>
<td>9.0</td>
</tr>
<tr>
<td>2002</td>
<td>44</td>
<td>20.8</td>
</tr>
<tr>
<td>2003</td>
<td>37</td>
<td>17.5</td>
</tr>
<tr>
<td>2004</td>
<td>51</td>
<td>24.1</td>
</tr>
<tr>
<td>2005*</td>
<td>46</td>
<td>21.2</td>
</tr>
<tr>
<td>Total elections</td>
<td>202</td>
<td>95.3</td>
</tr>
<tr>
<td>No elections</td>
<td>10</td>
<td>4.7</td>
</tr>
<tr>
<td>Total countries</td>
<td>212</td>
<td>100.0</td>
</tr>
</tbody>
</table>

*Includes the January 25, 2006 election in the Palestinian Territories

However, we did miss a lot of small parliamentary parties. A separate count of the total number of parties seated in parliament revealed that the average parliament seated 6.7 parties, with a high of 39 in Colombia. In few countries, however, did any parties ranking fourth or lower hold an appreciable percentage of seats. As disclosed in Table 3, the largest party in 189 parliaments after the stimulus election averaged almost 52 percent of the seats, compared with about 23 percent for the next largest and 8 percent for the third. In one country (Malta), the second largest party held 49.3 percent of the seats to 50.7 for the largest party. The close division of parliamentary seats in Malta between its two largest parties implies a high degree of interparty competition. Later we rely on the percentage of seats held by the second largest party as a prime indicator of party system competitiveness.

Table 3: Seats Held by Three Largest Parties after Stimulus Elections in 189 Countries

<table>
<thead>
<tr>
<th></th>
<th>Minimum</th>
<th>Mean</th>
<th>Maximum</th>
</tr>
</thead>
<tbody>
<tr>
<td>Largest party % of seats</td>
<td>7.0^a</td>
<td>51.7</td>
<td>100.0</td>
</tr>
<tr>
<td>Second party % of seats</td>
<td>.0^b</td>
<td>23.2</td>
<td>49.3</td>
</tr>
<tr>
<td>Third party % of seats</td>
<td>.0^c</td>
<td>7.6</td>
<td>24.0</td>
</tr>
<tr>
<td>Sum of all three parties</td>
<td>11.0^d</td>
<td>82.5</td>
<td>100.0</td>
</tr>
</tbody>
</table>

^aSome countries (e.g., Belarus, Macao and Kyrgyzstan) elected few deputies by parties, resulting in the largest party having a tiny percentage of all parliamentary seats.

^bThe “second largest” party got 0 percent of seats in 11 one-party parliaments.

^cThe “third largest” party held 0 percent of seats in 27 two-party parliaments.

^dParty deputies accounted for just 11 percent of all parliamentary seats in Belarus.
Parliamentary Party Data after Referent Elections

To evaluate party system stability, we compare how the three largest parties in the stimulus election performed in a referent election—an election temporally adjacent to the stimulus election. Initially, we thought that the referent election should be prior to the stimulus election. One can argue to the contrary that stability should be assessed over the lifespan of the parliament responsible for governance in 2007, not for a prior period. For some nations, moreover, an election after 2005 may more accurately represent the party systems’ maturity.

Practical considerations resolved the argument in many cases. Elections prior to 2005 often occurred many years earlier and involved defunct parties. Elections after 2005 sometimes reflected more comparable party systems. The wide range of dates in Table 4 (next page) hints at our difficulty in choosing referent elections. Although we favored choosing earlier elections, we chose post-2005 elections for about 35 percent of the polities. In two cases (Cuba and Pakistan) we choose 2008. Also in two cases, we were forced to choose years before 1990 (Angola, 1986 and Rwanda, 1988). Eritrea’s parliament, elected in 1994, has had no election since. The 11 polities that had no reference elections match the 10 polities in Table 3 that had no stimulus elections plus Afghanistan, which had an election in 2005 but none (to date) afterward.

Although the Internet provided useful sources of information on parliamentary party compositions, the data had to be sifted and analyzed before determining how many seats each party held, and even which party was which. Different sources sometimes reported different figures. Often the sources differed on party names. Too often the parties experienced splits or mergers between elections, making it difficult to trace parties across elections and posing difficulties in deciding how to allocate percentages after party splits. Country experts, no doubt, will dispute some of our scoring decisions. We agonized over some calls ourselves as we rechecked our coding. We cannot verify that our data are error-free, but we can link every score to a party and a source.

Our scoring results for parliamentary seats following the referent election are presented in Table 5 (next page). The scoring procedures used in Tables 3 and 5 need explanation. Whereas Table 3 reports on the three largest parties according to their size after the stimulus election, Table 5 reports on the same three parties regardless of rank after the referent election. For example, the Mexican PRI was the largest party after the 2003 stimulus election, holding 45 percent of the seats. After the 2006 referent election, the PRI won only 24 percent, making it the second largest. Nevertheless, we compared the PRI’s seat percentages in 2003 with 2006. The process was reversed for the Mexican PAN, the second largest party in 2003 with 30 percent of the seats but the largest party in 2006, with 41 percent. The PRI’s percentage in Table 5 is included among the largest parties after the stimulus election and the PAN’s percentage is counted among the second largest parties.

Often the largest party after the stimulus election was no longer the largest after the referent election, causing the mean percentage of seats held by the largest party’s to drop substantially (51.7 versus 42.4) between Table 3 and 5. In some dramatic cases, parties holding a parliamentary majority after the stimulus election held no seats at all after the referent election.
Table 4: Dates for the Referent Elections

<table>
<thead>
<tr>
<th>Year</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>1986</td>
<td>1</td>
<td>.5</td>
</tr>
<tr>
<td>1988</td>
<td>1</td>
<td>.5</td>
</tr>
<tr>
<td>1993</td>
<td>2</td>
<td>.9</td>
</tr>
<tr>
<td>1995</td>
<td>1</td>
<td>.5</td>
</tr>
<tr>
<td>1996</td>
<td>4</td>
<td>1.9</td>
</tr>
<tr>
<td>1997</td>
<td>7</td>
<td>3.3</td>
</tr>
<tr>
<td>1998</td>
<td>14</td>
<td>6.6</td>
</tr>
<tr>
<td>1999</td>
<td>32</td>
<td>15.1</td>
</tr>
<tr>
<td>2000</td>
<td>28</td>
<td>13.2</td>
</tr>
<tr>
<td>2001</td>
<td>18</td>
<td>8.5</td>
</tr>
<tr>
<td>2002</td>
<td>12</td>
<td>5.7</td>
</tr>
<tr>
<td>2003</td>
<td>4</td>
<td>1.9</td>
</tr>
<tr>
<td>2005</td>
<td>1</td>
<td>.5</td>
</tr>
<tr>
<td>2006</td>
<td>44</td>
<td>20.8</td>
</tr>
<tr>
<td>2007</td>
<td>30</td>
<td>14.2</td>
</tr>
<tr>
<td>2008</td>
<td>2</td>
<td>.9</td>
</tr>
<tr>
<td>Total Elections</td>
<td>201&lt;sup&gt;a&lt;/sup&gt;</td>
<td>94.8</td>
</tr>
<tr>
<td>No Elections</td>
<td>11</td>
<td>5.2</td>
</tr>
<tr>
<td>Total Countries</td>
<td>212</td>
<td>100.0</td>
</tr>
</tbody>
</table>

<sup>a</sup>Eritrea had only one election, in 1994.

Nevertheless, the correlation is substantial (r = .60) between the percent of seats held by the largest party in the stimulus election and that party’s performance in the referent election. Figure 1a (next page) graphs that correlation for all 189 party systems. Figures 1b and 1c graph the correlations of .52 and .48 between the seats won by the second and third parties in the stimulus elections and the referent elections. Note that the maximum percentage of seats held after the stimulus election is logically limited to 49.9 percent for the second largest party and to 33.3 percent for the third largest party. Note also that their seat percentages are not bounded for the referent election, that is, they can win greater seat percentages in referent elections.

Table 5: Seats Held by Three Largest Parties after Referent Elections in 189 Countries

<table>
<thead>
<tr>
<th>Size Status in Stimulus Year</th>
<th>Minimum</th>
<th>Mean</th>
<th>Maximum</th>
</tr>
</thead>
<tbody>
<tr>
<td>Largest party % of seats</td>
<td>.0</td>
<td>42.4</td>
<td>100.0</td>
</tr>
<tr>
<td>Second party % of seats</td>
<td>.0</td>
<td>23.0</td>
<td>100.0</td>
</tr>
<tr>
<td>Third party % of seats</td>
<td>.0</td>
<td>7.8</td>
<td>55.0</td>
</tr>
<tr>
<td>Sum of all three parties</td>
<td>.0</td>
<td>73.2</td>
<td>100.0</td>
</tr>
</tbody>
</table>
Figure 1: Correlation Plots for the 1st, 2nd, and 3rd Largest Parties in Parliament after the Stimulus Election, and How They Fared in the Referent Election

We use these six variables (three measures of party strength in two different elections) in deriving alternative measures of parliamentary party systems.

The Dimensions of Party Systems

The cross-national literature offers numerous alternative measures of party-system properties. Lane and Ersson identified fifteen:

1. **Electoral participation**: votes cast as a percentage of eligible voters
2. **Strength of largest party**: percent of seats held by largest party in parliament
3. **Actual Number of parties in parliament**: parties holding at least one seat
4. **Number of parties reported in Rose and Mackie**: taken part in elections
5. **Fragmentation Index**: created by Rae [measures party number and size]
6. **Effective number of parties**: created by Laakso and Taagepera
7. **Aggregation Index**: share of the largest party / the number of parties, by Mayer.
8. **Left-right score**: parties’ scores from 0 to 10 weighted by electoral strength
9. **Polarization Index**: weighted differences in scores on a left-right scale
10. **Strength of socialist parties**: 
11. **Strength of parties to the left of socialist parties**: 
12. **Strength of agrarian, ethnic, and religious parties**: 
13. **Strength of class-based parties**: #10 plus #11

---

35 Douglas Rae, "A Note on the Fractionalization of Some European Party Systems", *Comparative Political Studies*, 1 (October 1968), 413-418.
36 Markku Laakso and Rein Taagepera, “Effective Number of Parties: A Measure with Applications to West Europe,” *Comparative Political Studies*, 12 (1979), 3-27.
14. **Strength of non-structural parties**: 100 (#12 plus #13)

15. **Volatility**: created by Pedersen [changes in party strength over time]^{38}

The Lane and Ersson study is just one in a huge literature on conceptualizing and measuring party systems.\(^{39}\) These writings reflect vastly different perspectives. Some are devoted to classifying party systems according to parties’ relative strength and size.\(^{40}\) At least one entire book focuses on conceptualizing competition in just two-party systems.\(^{41}\) More recently, scholars have pushed for more extensive “assessment of the different arenas—distinguished vertically, horizontally, and functionally—in which parties interact with one another.”\(^{42}\) The point is that conceptualizing and measuring party systems is an extensive and complex enterprise. Moreover, most writings that propose different concepts and measures of party systems simply describe and analyze how their measures differ technically from others. Few proceed to determine what the measures explain about government and governance—assuming they explain anything at all. Lane and Ersson say:

There are a number of relevant party-system properties and little justification for the use of one or two of these to the exclusion of the others. The study of party systems faces a conceptual problem about what the semantically relevant properties of a party system are.\(^{43}\)

Although we do not expect to achieve definitive results in our empirical analysis of party system effects on governance, we hope to contribute to understanding by analyzing the alternative measures laid out by Lane and Ersson and applying them in empirical research. We skip their measure #1, electoral participation, which pertains to voters not to parties. The next six measures (#2 through #7) deal in some way with the number and strength of parties—fitting under the broader concept of degree of party fragmentation. Four items (#8 through #11) involve estimating party ideology, and three (#12 through #14) rely on estimating social bases of support. All of the first fourteen measures assess party systems at just one point in time. Only #15, volatility, measures changes in party strength over two or more elections, making it truly different from the others.

After computing intercorrelations among all fifteen indicators for 201 elections from 1945 to 1989 in 16 countries, Lane and Ersson found that the six strength and competition measures co-varied together as did most of the several policy and social support measures.\(^{44}\) They said, however, “Volatility does not co-vary with any of the other party system dimension,

---


\(^{39}\) Wolinetz summaries that literature in “Party Systems and Party System Types.” Whole books have been devoted to measuring party system change, see Mair, *Party System Change: Approaches and Interpretation* and Paul Pennings and Jan-Erik Lane (eds.), *Comparing Party System Change* (London: Routledge, 1998).


\(^{43}\) Lane and Ersson, *Politics and Society in Western Europe, 3rd Edition*, p. 175.

\(^{44}\) *Ibid*, p. 180. However, the left-right scores and polarization index correlated only -.42.
which reflects the circumstance that volatility stands for party system instability in general." \(^{45}\)

We build on these findings in identifying attributes of party systems likely to affect the governance scores for the 212 countries in our study.

### Measuring Party Systems

We did not compute all fifteen Lane-Ersson measures of party systems for our countries. The first on electoral participation (#1) was deemed irrelevant, as was the number of parties competing in elections (#4). Lack of sufficient cross-national data precluded calculating their measures #8 to #14 involving party ideology and social support. Given Dalton’s evidence of the importance of party system polarization, this omission is unfortunate. \(^{46}\) We are, however, able to generate measures that match Lane’s and Ersson’s other six measures, and we generated two measures of our own, as reported in Table 6.

#### Table 6: Eight Measures of Party Systems

<table>
<thead>
<tr>
<th>Measure</th>
<th>Terms and Formulae</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>#2 Strength of largest party</td>
<td>( p_1 ), the proportion of seats held by the largest party</td>
<td>anonymous</td>
</tr>
<tr>
<td>#3 Actual number of parties in parliament</td>
<td>( N = ) number of parties with at least one seat</td>
<td>anonymous</td>
</tr>
<tr>
<td>#5 Fractionalization Index, ( F )</td>
<td>( 1 - \sum_{i}^{N} p_i^2 ), where ( p = ) proportion of seats held by party ( i )</td>
<td>Rae (^{47})</td>
</tr>
<tr>
<td>#6 Effective number of parties, ( ENP )</td>
<td>( \frac{1}{\sum_{i}^{N} p_i^2} ), where ( p = ) proportion of seats held by party ( i )</td>
<td>Laakso and Taagepera (^{48})</td>
</tr>
<tr>
<td>#7 Aggregation Index</td>
<td>( \frac{p_1}{N} ) where ( p_1 = ) percentage of seats held by the largest party; ( N = ) all seated parties</td>
<td>Mayer (^{49})</td>
</tr>
<tr>
<td>#15 Seat Volatility</td>
<td>( \frac{\sum_{i=1}^{N} p_{i,t}^2 - p_{i,t-1}^2}{2} ), where ( p_{i,t} ) = percent seats held by party ( i ) at election ( t )</td>
<td>Pedersen (^{50})</td>
</tr>
<tr>
<td>Strength of second largest party</td>
<td>( p_2 ), proportion of seats held by the second largest party</td>
<td>Janda, Kwak, and Suarez-Cao</td>
</tr>
<tr>
<td>Strength of third largest party</td>
<td>( p_3 ), proportion of seats held by the third largest party</td>
<td>Janda, Kwak, and Suarez-Cao</td>
</tr>
</tbody>
</table>

47 Rae, "A Note on the Fractionalization of Some European Party Systems."
48 Laakso and Taagepera, “Effective Number of Parties: A Measure with Applications to West Europe.”
49 Mayer, “A Note on the Aggregation of Party Systems.”
Table 6 reveals that measures #5, #6, and #7 are affected by #2, the strength of the largest party, \( p_1 \), and by #3, the number of parties in parliament, \( N \). In all three measures, the proportion of seats held by the largest party affects the formula more than the share of any other party. More subtly, increases in the number of parties in a system also affect the value’s magnitude. In essence, all of these measure what might be called party system “fragmentation” either positively or negatively. For example, the greater the strength of the largest party and the greater the aggregation index—the less fragmented the system. Conversely, the larger the actual number of parties, the greater the fractionalization index, and the greater the effective number of parties—the more fragmented the system. (As for the meaning of “fragmentation,” we explore that below.)

The formula 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.” In addition, Pedersen’s volatility measure accords no special weight to the strength of the largest party. That is also true of the strength of the second and third largest parties, but their values are to some extent a function of the seats held by the largest one: the greater its share, the less is available for them. Not surprisingly, all measures based on the strength of the largest party, as shown in Table 7, tend to intercorrelate about .60 or higher. The actual number of parties in parliament and the strength of the third largest party tended to be moderately related to all those measures. The strength of the second largest and the volatility score tended to be unrelated to any of the other six indicators. The right-hand column (\( |\text{mean}| \)) in the table shows the average correlation of the measure in that row with all other indicators. In a rough way, it implies how much that indicator has in common with the other indicators.

| Indicator | A | B       | C | D | E | F | G | H | |mean|  
|-----------|---|---------|---|---|---|---|---|---|-----|     |
| A         | Party #1 % | 1  | 0.80  | -0.78 | -0.89 | -0.55 | -0.57 | -0.32 | -0.28 | .60 |
| B         | Mayer (log) | 0.80 | 1    | -0.67 | -0.77 | -0.92 | -0.56 | -0.31 | -0.01 | .58 |
| C         | Rae (log)  | -0.78 | -0.67 | 1    | 0.59  | 0.55  | 0.44  | 0.44  | 0.40  | .55 |
| D         | Laakso/T (log) | -0.89 | -0.77 | 0.59 | 1    | 0.48  | 0.43  | 0.25  | -0.10 | .50 |
| E         | # all parties (log) | -0.55 | -0.92 | 0.55 | 0.48 | 1 | 0.50 | 0.30 | -0.03 | .48 |
| F         | Party #3 % | -0.57 | -0.56 | 0.44 | 0.43 | 0.50 | 1 | 0.21 | 0.11 | .40 |
| G         | Pedersen (log) | -0.32 | -0.31 | 0.44 | 0.25 | 0.30 | 0.21 | 1 | 0.09 | .27 |
| H         | Party #2 % | -0.28 | -0.01 | 0.40 | -0.10 | -0.03 | 0.11 | 0.09 | 1 | .15 |

\( a \) Some of the measures were converted to logarithms to normalize highly skewed distributions.

\( b \) This column reports the mean of the absolute correlation coefficients, ignoring signs.

Factor analysis provides a more precise way of determining what a set of variables has in common. Applied to a correlation matrix, like that in Table 7, the mathematics of factor assesses the amount of variance (called communality) that each variable shares with the others and determines whether subsets of variables differ from one another. The typical factor structure

---

reports how each variable correlates with one or more underlying and uncorrelated “factors,” the meaning of which is left to interpretation. Various criteria specify the number of meaningful factors extracted through factor analysis. Our analysis, summarized in Table 8, extracted two factors that explained 70 percent of the total variance among the eight indicators. Although the set of indicators shared a considerable amount of variance, two indicators were distinctly different from the other six.

The decimal values in Table 8 are the correlations of each variable with the unobserved, underlying factors. (These correlations are called factor loadings.) Standard practice drops loadings below a certain level to prevent distracting statistical “noise” from obscuring the factor structure. We dropped all loadings below .60. The factor analysis reveals that six indicators load on Factor 1, one loads on the uncorrelated Factor 2, and one does not load on either factor. The inference is that the various indicators measure three different dimensions of party systems, tapped by two underlying factors and one “missing” factor—volatility.

<table>
<thead>
<tr>
<th>Table 8: Factor Analysis of Correlation Matrix in Table 7</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Factor 1: Party Fragmentation</strong></td>
</tr>
<tr>
<td>Party #1 % stimulus year</td>
</tr>
<tr>
<td>Mayer (log)</td>
</tr>
<tr>
<td>Rae (log)</td>
</tr>
<tr>
<td>Laakso/Taagepera (log)</td>
</tr>
<tr>
<td># of all parties (log)</td>
</tr>
<tr>
<td>Party #3 % stimulus year</td>
</tr>
<tr>
<td>Party #2% stimulus year</td>
</tr>
<tr>
<td>Pedersen (log)</td>
</tr>
</tbody>
</table>


As mentioned above, analysts must interpret the meaning of an underlying factor. After observing which variables correlate (and how much) with the factor, they try to embrace the pattern under a conceptual umbrella, which amounts to “naming” the factor. We named Factor 1 “party system fragmentation” and Factor 2 “party system competitiveness.” The factor analysis failed to capture a “party system volatility” factor simply because the one volatility measure (Pedersen’s) did not correlate systematically and sufficiently with any of the other indicators. Volatility is a distinctly different dimension of party systems—as Lane and Ersson found.

---

52. The signs were reversed on the loadings on Factor 1 to correspond with the signs of the correlations in the matrix.
53. 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.
Party System Effects on Country Governance

We began asking this question, “Does the nature of a country’s political party system affect the quality of its governance?” Armed now with alternative measures of party systems along three major dimensions—fragmentation, competitiveness, and volatility—we aim at assessing their effects on country governance, as measured by the Rule of Law (RL). The World Bank scored 211 of its 212 countries on RL. RL’s average intercorrelation with the other five World Bank indicators stood the highest \((r=.87)\). Moreover, the “rule of law” is central to many conceptions of governance. The United States’ Agency for International Development has rule of law as its “strategic focus,” because it fosters order and security, legitimacy, checks and balances, fairness, and effective enforcement.\(^{54}\) As Carothers notes, however, aid practitioners are uncertain of the meaning of “rule of law,” which is a topic “of great conceptual and practical complexity.”\(^ {55}\) Kleinfeld identifies different meanings and ways of defining it.\(^ {56}\)

Note that rule of law differs from democracy. Writing about the decision at the 15\(^{th}\) Congress of the Chinese Communist Party in 1997 “to give priority to the rule of law rather than democracy,” Qian and Wu observe: “The rule of law is not the same as democracy. For example, the two most free market economies, Hong Kong and Singapore, have the rule of law but are not democracies by Western standards.”\(^ {57}\) Rule of law, they say, is necessary for a modern market economy but does not “directly and immediately threaten the governing power of the Party.”

The World Bank standardized its RL scores to have a mean of 0 and a standard deviation of 1. Commonly called z-scores, they tell—in standard deviation units—where each country stands in relationship to all other countries on the Rule of Law, which measures perceptions of the extent to which agents have confidence in and abide by the rules of society, and in particular the quality of contract enforcement, property rights, the police, and the courts, as well as the likelihood of crime and violence.\(^ {58}\)

Figure 2 graphs the distribution of World Bank RL scores for 211 countries in 2007, with the scores and position for five countries identified to illustrate the scoring. Switzerland (2.01) scored the highest for Rule of Law, while Somalia (-2.64) scored lowest. The U.S. score (1.59)

\(^{54}\) USAID devotes a web page to its focus on the rule of law at http://www.usaid.gov/our_work/democracy_and_governance/technical_areas/rule_of_law/


stood at approximately the 90th percentile, while South Korea (.82) and Russia (-.97) stood respectively at approximately the 75th and 20th percentiles.

**Figure 2: Histogram of Rule of Law Scores for 211 Countries in 2007**

The distribution of the world’s countries in Figure 2 is roughly bimodal, bunched into two groups above and below the mean of 0. Countries appear to cluster around two poles: those that tend to practice the Rule of Law and those that do not. This pattern suggests a fundamental division among countries concerning the Rule of Law. Can any of this variation be explained by differences in their party systems?

Not even the most enthusiastic advocate of party politics would argue that party system characteristics are prime causal factors in the quality of country governance. Governments cannot govern well if they lack adequate resources. Accordingly, country wealth is commonly cited as a major factor in governance. Virtually all researchers find strong positive relationships between country wealth (using GDP per capita) and country governance (regardless of the measures used). In addition, several scholars have hypothesized that the larger the country, the lower the quality of governance. Kurtz and Schrank supplied the reasoning: “larger societies are more complex and in principle more difficult to administer.” Other factors besides country wealth and size have been proposed (such as colonial status and settlement histories), but such data are difficult to collect for all 212 countries rated by the World Bank. We managed to collect data on wealth and country size for every country in our study. Because both variables were

---


highly skewed in the direction of great wealth and large size, we computed their logarithms to normalize the distributions, and we used logarithms throughout our analyses.

We measure country wealth using the logarithm of gross domestic product per capita, which we hereafter call Wealth. We measure country size using the variable SmallArea, which is the logarithm of the country area in square kilometers times -1. Multiplying by -1 rescores the variable as “smallness” rather than “bigness” to formulate positive (rather than negative) hypotheses, which generates positive (not negative) signs in regression equations. We measure country size using area rather than population simply because area usually provided stronger relationships than population. Both variables, Wealth and SmallArea, were also converted into z-scores with means of 0 and standard deviations of 1, matching the scoring system for Rule of Law.

We entered Wealth and Small Area as independent variables in regression analysis to predict RL (Rule of Law). Entered alone in the analysis, Wealth alone explains 61 percent of the variance in RL. Entered together, they generate an R-square of .66, explaining almost two-third of its variance. The coefficients in the Equation 1 are beta coefficients and can be interpreted in standard deviation units. (Unless otherwise noted, all coefficients reported in following equations are significant beyond the .01 level using a one-tailed test.) Adding together the effects of both variables, we can say that for each .73 increase in the standard deviation of country wealth plus each .23 decrease in the standard deviation of country size, a country’s RL score is expected to increase almost 1 standard deviation (.96). Equation 1 reports the regression equation for all 211 countries scored for Rule of Law.

\[
RL = .73 \times \text{Wealth} + .23 \times \text{SmallArea} \quad R^2_{adj} = .66
\] (1)

Given that country wealth and size together explain almost two-third of the variation in country ratings on Rule of Law, one should not expect variations in party systems to explain much more. However, international aid programs assume that party systems have governmental consequences and have spent untold millions of dollars to strengthen, stabilize, and democratize party systems. Presumably, they think that their spending has measurable effects. We are in a position to test three theoretical propositions concerning the effects of party systems on Rule of Law as a key indicator of governance:

1. The more fragmented the party system, the less the Rule of Law.
2. The more competitive the party system, the greater the Rule of Law.
3. The more volatile the party system, the less the Rule of Law.

**Party System Fragmentation**

Of these three dimensions of party systems (fragmentation, competitiveness, and volatility) most scholarly attention has been given to measuring fragmentation—as witnessed by the efforts of Rae, Mayer, Laakso and Taagepera, and other scholars who classify party systems.

---

61 The constant terms for regression equations with beta coefficients are 0, so they are routinely dropped in reporting equations.
by numbers of parties. In his 1980 review of alternative measures in this literature, Pedersen concludes,

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.

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.” 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. Golosov’s review said that Dunleavy’s and Boucek’s “proposed solution is insufficient,” 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.

In this literature, party scholars devoted far more attention to tweaking fragmentation formulas than to clarifying the underlying concept they were trying to measure. In a critical shortcoming, writers skirted party theory almost completely. Instead of testing alternative fragmentation measures in parallel hypotheses predicting to some political process or governmental outcome, they simply tended to “eyeball” how their measures apply to different party systems, judging how well the measures fit their images of a fragmented party system.

Rae’s F, published almost half a century ago, sparked the cottage industry of fragmentation measures. Rae deserves credit for defining then what he called “fractionalization”:

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].

Rae proposed his measure in response to this question: “Is competitive strength concentrated in one party, or is it divided among many parties?” In so doing he suggested (but did not actually

---

66 Grigorii V. Golosov, “The Effective Number of Parties,” Party Politics, 16 (March 2010), 171-192, at pp. 172 and 188
68 Ibid.
say) that fractionalization is a measure of party system competition. Others have used it in precisely that way, to measure competition. Later we argue that fractionalization (or fragmentation, the terms are used interchangeably) does not measure party system competitiveness as commonly understood. Instead, fragmentation seems to measure party system entropy—the extent to which there exists a large number of equally weak parties. Entropy may be a form of competitiveness, but it is a bizarre form, unstructured and random, that reflects a chaotic party system. A more reasonable model of structured competition envisions rival parties with established voter support alternating in government in response to popular evaluations of their policies and performance via elections.

Regardless of what fragmentation means, some 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. 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.” 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.” 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. Mainwaring, in contrast, believes that high fragmentation reduces a president’s capacity to introduce political reforms. 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. Again in contrast, Doherty holds that high fragmentation prevents the emergence of adequate political opposition. Toka and Henjak worry about the destabilizing effects of both very high and very low party fragmentation. Finally, Sanchez says that variations in fragmentation are unimportant when party systems vary in institutionalization.


71 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.

72 Ibid., p. 95.


75 Anna Grzymala-Busse, “Political Competition and the Politicization of the State in East Central Europe,” Comparative Political Studies, 36 (December 2003), 1123-1147.


measure institutionalization by volatility—which stands unrelated to fragmentation measures.\(^79\)

Controlling for country wealth and size, we entered, in turn, each of the six variables that loaded on the fragmentation factor in Table 8. The equations are summarized in Table 9. The effects of the six fragmentation measures on RL are easy to summarize. None of them made anywhere near a significant contribution to explaining variation in Rule of Law. Based on data collected on parliamentary systems in 189 countries, there appears to be no systematic relationship between party system fragmentation (at least as measured by these six indicators) and country governance.

### Table 9: Effects of Six Fragmentation Measures on Rule of Law, N=189

<table>
<thead>
<tr>
<th></th>
<th>Wealth beta coefficients</th>
<th>SmallArea beta coefficients</th>
<th>Fragmentation measures beta coefficients</th>
</tr>
</thead>
<tbody>
<tr>
<td>(R^2_{\text{adj}})</td>
<td>(0.67)</td>
<td>(0.67)</td>
<td>(0.67)</td>
</tr>
<tr>
<td>Sig.</td>
<td>(\text{&lt;.001})</td>
<td>(\text{&lt;.001})</td>
<td>(\text{&lt;.001})</td>
</tr>
<tr>
<td>Wealth</td>
<td>0.75</td>
<td>0.74</td>
<td>0.73</td>
</tr>
<tr>
<td>Sig.</td>
<td>(\text{&lt;.001})</td>
<td>(\text{&lt;.001})</td>
<td>(\text{&lt;.001})</td>
</tr>
<tr>
<td>SmallArea</td>
<td>0.18</td>
<td>0.23</td>
<td>0.23</td>
</tr>
<tr>
<td>Sig.</td>
<td>(\text{&lt;.001})</td>
<td>(\text{&lt;.001})</td>
<td>(\text{&lt;.001})</td>
</tr>
<tr>
<td>Fragmentation</td>
<td></td>
<td></td>
<td>Party #1 -0.01</td>
</tr>
<tr>
<td>measures</td>
<td></td>
<td>Mayer (log) 0.02</td>
<td>Party #3 0.03</td>
</tr>
<tr>
<td>Fragmentation measures</td>
<td></td>
<td>Rae (log) 0.05</td>
<td></td>
</tr>
<tr>
<td>measures</td>
<td></td>
<td>L/T (log) 0.02</td>
<td></td>
</tr>
<tr>
<td>measures</td>
<td></td>
<td>N parties (log) -0.03</td>
<td></td>
</tr>
<tr>
<td>levels(^a)</td>
<td></td>
<td>Party #3 0.03</td>
<td></td>
</tr>
</tbody>
</table>

\(^a\) All tests are one-tailed tests.

Proposition 1 is flatly rejected.

1. The more fragmented the party system, the less the Rule of Law.

Adding these empirical results to the theoretical ambiguity in the above paragraph about the consequences of party fragmentation raises the question of whether any of those measures are useful for explaining anything important about government and politics. At the conclusion of our analysis, we provide a positive answer.

### Party System Competitiveness

According to Sartori’s formulation, *competition* establishes the “rules of the game,” while *competitiveness* is “a particular state of the game.”\(^80\) In electoral games, candidates compete to win office (decided by number of votes won), and parliamentary parties compete to win control of parliament (decided by number of seats won). Parties that win a majority of seats typically control that institution of government. If no party has a majority, parties form a government coalition, receiving “payoffs” (e.g., cabinet positions) according to their proportion of seats.\(^81\)


\(^81\) This has been confirmed in research. See Eric C. Browne and Mark N. Franklin, “Aspects of Coalition Payoffs in 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
This “proportionality rule” makes party control of government a function of the seats they won. We regard a parliamentary party system as competitive to the extent that there is a sizable rival party to challenge and possibly surpass the larger party in controlling government.

The sheer size of the parties competing for control is important. Rival governing parties must each be sufficiently large to have “office capacity,” enabling them to adequately staff government ministries. We use the percentage of seats held by the second party after the stimulus election (Party #2) to operationalize party system competitiveness. As shown by the factor analysis in Table 8, Party #2 is essentially unrelated to measures of fragmentation. The distribution of Party #2 over all 189 party systems has the additional advantage of being unimodal and relatively symmetrical. On close thought, the percentage of seats held by the second party also conveys more information about other parties in the system than the percentages held by the largest or third parties. We use Party #2 (stimulus election), which has not been used much (if at all) in the party literature, as our measure of party system competition.

Although party system competition may not have been adequately measured in the literature, the concept itself is theoretically important. 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.” Indeed, we find that Party #2 correlates .53 with the Freedom House’s classification of “Electoral Democracies” countries—those where “the last nationwide elections for the national legislature must have been free and fair.” (All of the fragmentation measures correlate below .25.) In contrast to our regression analysis using the various fragmentation variables, using Party #2 shows a statistically significant effect (<.01) on Rule of Law, increasing the R-square to .68. Equation 2 is for 189 countries having data on parties holding parliamentary seats:

\[
\text{RL} = .73*\text{Wealth} + .16*\text{SmallArea} + .10*\text{Party #2} \quad R^2_{\text{adj}} = .68
\]


84 To measure competitiveness, we first considered the percentage point difference between seats held by the two largest parties. That measure was not significant in predicting to Rule of Law, nor to explaining much of anything. For our data, the correlation was r = -.48 between percent seats held by the second largest party and the percentage point difference in party seat shares.

85 If one knows that the largest party holds 65 percent of the seats, one has no information about seat percentages held by the other parties, except that all together cannot have more than 35 percent. Knowing only that the second largest party holds 35 percent of the seats, one also knows that the largest party has at least 36 percent and that the next largest has at most 29.


Having converted Party #2 to z-scores, we re-ran the analysis substituting 0 for the 22 countries (10 percent of the total) for which we did not have parliamentary seat data. This allowed us to include all 211 countries in the analysis. While this inclusion preserved the original variance in RL scores, it introduced error associated with using means to estimate missing data. Equation 3 is for all 211 countries.

\[ RL = 0.70 \times \text{Wealth} + 0.22 \times \text{SmallArea} + 0.10 \times \text{Party #2} \quad R^2_{\text{adj}} = 0.665 \quad (3) \]

Error introduced by restoring the missing 22 countries in Equation 3 slightly lowered the explained variance observed in Equation 2, but the basic explanatory model was retained.

Perhaps the more relevant comparison is between Equations 1 (see p. 17) and 3, both based on all 211 countries. Equation 3 barely increases the explained variance, but (given the high significance of Party #2) one can argue that Equation 3 is more properly specified. Comparing the two regression plots in Figure 3, one sees that both the United States and Russia edge closer to the regression line because of the effect of party system competition. The second party in the U.S. after the 2004 congressional election held 46.4 percent of the seats, while the second party in Russia held 11.6 percent after the 2003 parliamentary election.

![Figure 3: Regression Plots of Equations 1 and 3](image)

Although its effect is very small, the percentage of seats held by the second largest party in parliament is significantly related to the quality of governance across the world's countries. That supports our second proposition:

2. \sqrt{2} \quad The more *competitive* the party system, the greater the Rule of Law.

---

88 The correlation between Party #2 and Wealth is .27 and between SmallArea and Party #2 is .19. Therefore, Wealth and SmallArea may exert indirect effects on RL. No path analysis has been conducted.
In contrast to the findings concerning party system fragmentation, this one should provide some reassurance for those working to develop competitive party systems in emerging democracies.

**Party System Volatility**

In ordinary discourse, the term “volatile” means inconstant, fleeting, capable of quick change. It has the same meaning in describing party systems but has been applied separately to party votes and seats. *Electoral* volatility, as popularized by Pedersen, assesses changes in percentages of votes cast for all parties in adjacent elections.\(^89\) *Seat* volatility refers to changes in percentages of parliamentary seats for all parties in adjacent elections.\(^90\) Of course, measures of electoral and seat volatility tend to be highly correlated; Ersson and Lane find they correlate .77 for measures for 18 European countries.\(^91\)

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, our 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.\(^92\) 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.\(^93\) 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.

\[
\text{Volatility}_{\text{seats}} = \frac{\sum_{i=1}^{k} p_i(t) - p_i(t-1)}{\left( \sum_{i=1}^{k} p_i(t) + \sum_{i=1}^{k} p_i(t-1) \right)}
\]

Where 
- \(p_i(t)\) = percentage of seats in stimulus year
- \(p_i(t-1)\) = percentage of seats in reference year
- \(k = 3\), number of parties for which we collected data

\(^{89}\) Pedersen, “The Dynamics of European Party Systems: Changing Patterns of Electoral Volatility.” 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.


\(^{91}\) Ibid., p. 29.


\(^{93}\) 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.
High seat volatility indicates high party system change. However, we prefer framing our research on party system change using different terminology. 

Unfortunately, volatility has negative connotations for party politics. The term implies party system instability rather than stability. This 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 uses electoral volatility to measure party institutionalization.95 Surely volatility measures instability and implies a lack of institutionalization. To avoid such terminological mismatch, we prefer the physics term, viscosity, which refers to a fluid’s resistance to flow or movement.96 While not quite an antonym for volatility, viscosity invites talk of party system stability rather than instability. As reported below, we operationalize viscosity simply by multiplying Pedersen’s measure of volatility by -1, thus changing its sign from positive to negative. This allows us to speak of party system stability, or lack of change, instead of instability. Accordingly, we reformulate proposition 3 as proposition 3’:

3’. The more viscous the party system, the greater the Rule of Law.

Because existing party literature talks about both party system stability and instability, readers must adjust to changing terminology. Standard theory 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.97 In keeping with the standard view, Robbins contends that party system volatility corresponds negatively with public goods spending levels, presumably an ingredient of governance.98 Proposition 3’ fits with the standard theoretical position.

However, as in the case of party system fragmentation, some scholars dissent from standard theory. Lane and Ersson, say, “In contrast this article argues that electoral volatility bolsters the position of the principal and makes the agents more inclined to work more for the interests of the principal relative to their own interests.”99 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.”100 Kuenzi and Lambright add that legislative volatility, particularly in new democracies “might help invigorate formerly stagnant systems.”101 Finally, Toka and Henjak contend that

---

97 Birch, Electoral Systems and Political Transformation in Post-Communist Europe, Chapter 6.
“particularly low and particularly high levels of party system stabilization are both usually detrimental for instilling strong electoral accountability of governments.”

We tested standard theory about party system volatility for 189 countries through regression analysis, using Wealth, Small Area, and Viscosity (Pedersen volatility*-.1). When Viscosity was entered alone as a third variable, the result was similar to the results for all the fragmentation measures. Viscosity was not statistically significant (sig. > .12), but it came closer to significance than the fragmentation measures. Thinking that stability in parliamentary party representation would be more important in competitive elections, we entered it as a fourth variable along with Party #2. (Recall from Table 7 that there was virtually no correlation, r = .09, between party system competition and volatility.) The results for 189 countries are reported in Equation 4, and those for 211 countries in Equation 5:

\[
RL = .71 \times \text{Wealth} + .16 \times \text{SmallArea} + .11 \times \text{Party#2} + .07 \times \text{Viscosity} \quad R^2_{\text{adj}} = .68 \quad (4)
\]

\[
RL = .69 \times \text{Wealth} + .22 \times \text{SmallArea} + .10 \times \text{Party#2} + .07 \times \text{Viscosity} \quad R^2_{\text{adj}} = .67 \quad (5)
\]

After one controls for the amount of competition in the party system, it seems that party stability tends to contribute to the Rule of Law. However, Viscosity fell just short of one-tailed tests of significance (<.06) in Equations 4 and 5. Although that shortcoming defeated the argument that including Viscosity improves the model’s specification, the close results inspired another test for the effect of party system stability only where elections seem to be important.

Above we mentioned that Freedom House classified a country as an Electoral Democracy if its last nationwide election for the national legislature was free and fair, among other criteria. For 2005, Freedom House classified 123 of 192 countries (64 percent) as electoral democracies. We applied their criteria to the 20 countries Freedom House did not score and arrived at 136 Electoral Democracies. Six were small countries with nonpartisan elections, leaving 130 for analysis in Equation 6.

\[
RL = .75 \times \text{Wealth} + .13 \times \text{SmallArea} + .13 \times \text{Viscosity} \quad R^2_{\text{adj}} = .70 \quad (6)
\]

Party #2 was excluded because of its high correlation, r = .53, with Electoral Democracy. That is, party system competitiveness itself is a hallmark of electoral democracy.

Viscosity’s effect on RL in Equation 6 was significant beyond the .01 level and explanation of variance in RL scores increased to 70 percent. It appears that party system stability contributes to government performance only in countries where elections are substantively meaningful, e.g., in Electoral Democracies.

---


What about the Other Governance Indicators?

We opted to carry out our study of party system effects on country governance using only one of the six World Bank indicators for 2007. Rule of Law, which taps a central dimension of country governance, seemed like a reasonable choice. Here are the other five indicators with the number of countries scored on each:

*Government Effectiveness (GE)* – measuring perceptions of the quality of public services, the quality of the civil service and the degree of its independence from political pressures, the quality of policy formulation and implementation, and the credibility of the government’s commitment to such policies. N= 212

*Control of Corruption (CC)* – measuring perceptions of the extent to which public power is exercised for private gain, including both petty and grand forms of corruption, as well as “capture” of the state by elites and private interests, N = 208

*Regulatory Quality (RQ)* – measuring perceptions of the ability of the government to formulate and implement sound policies and regulations that permit and promote private sector development, N = 207

*Voice and Accountability (VA)* – measuring perceptions of the extent to which a country’s citizens are able to participate in selecting their government, as well as freedom of expression, freedom of association, and a free media, N = 209

*Political Stability and Absence of Violence (PV)* – measuring perceptions of the likelihood that the government will be destabilized or overthrown by unconstitutional or violent means, including politically-motivated violence and terrorism.\(^\text{104}\) N = 209

Figure 4 displays the inter correlations among all six indicators. (A total of 205 countries were scored on all six indicators.) The diagonal values of 1.0 express the perfect correlation of each variable with itself. The sizes of the squares off the diagonal correspond to the magnitude of the correlation coefficients compared with a perfect correlation coefficient of 1.0. Compare the high correlations inside the shaded area of Figure 4 with the low correlations outside of it. Note that the lowest correlation within the shaded square exceeds the highest correlation outside it. This pattern indicates that the first four indicators (RL, GE, CC, and RQ) are all measuring common properties of governance.\(^\text{105}\) They are highly reliable indicators; one is about as good as another. RL, GE, CC, and RQ, however, have somewhat less in common with VA and PS. Moreover, Voice and Accountability is only correlated .68 with Political Stability. Perhaps VA and PS respectively are measuring qualities of governance different from those measured by the other indicators. Indeed, recent research has treated only RL, GE, CC, and RQ as measures of governance, while using VA separately as a measure of democracy and ignoring PS completely.\(^\text{106}\)

---


\(^\text{105}\) Factor analysis shows a single factor explaining 85 percent of the variance among all six indicators. The mean correlations reported in Figure 4 correspond in order to their loadings on the principle component.

Figure 4: Intercorrelations among All Six Worldwide Governance Indicators

Mean for all values (excluding the diagonal) within the shaded square = .92.
Mean for all values (excluding the diagonal) outside the shaded square = .74.

One sees by their conceptual descriptions and intercorrelations among their indicators that these indicators are not all measuring the same dimensions of governance. Because the dimensions are different their causes should be different too. We cannot here explore all the effects of party systems on the other five indicators, but we can hint at the differences by reporting data in Table 10 for parallel analyses using Wealth, Small Area, Party #2 plus an indicator of party fragmentation, the logarithm of the number of parties seated in parliament.

Table 10: Regression Summary for All Six Indicators, Two Party System Measures

<table>
<thead>
<tr>
<th>Governance Indicator</th>
<th>Country</th>
<th>Country</th>
<th>% Seats for Party #2</th>
<th>Parliamentary Parties (log)</th>
<th>R² adj</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rule of Law (RL)</td>
<td>0.70</td>
<td>0.22</td>
<td>0.10</td>
<td></td>
<td>0.66</td>
</tr>
<tr>
<td>Government Effectiveness (GE)</td>
<td>0.79</td>
<td></td>
<td>0.10</td>
<td></td>
<td>0.68</td>
</tr>
<tr>
<td>Control of Corruption (CC)</td>
<td>0.72</td>
<td>0.13</td>
<td>0.10</td>
<td></td>
<td>0.62</td>
</tr>
<tr>
<td>Regulatory Quality (RQ)</td>
<td>0.76</td>
<td></td>
<td>0.15</td>
<td></td>
<td>0.66</td>
</tr>
<tr>
<td>Voice and Accountability (VA)</td>
<td>0.44</td>
<td>0.30</td>
<td>0.34</td>
<td>0.21</td>
<td>0.55</td>
</tr>
<tr>
<td>Political Stability (PS)</td>
<td>0.55</td>
<td>0.39</td>
<td></td>
<td>-0.09</td>
<td>0.56</td>
</tr>
</tbody>
</table>

aLog of population used for Political Stability.
bAll coefficients sig. < .05, one-tailed test

Here are some things to note in Table 10:

1. Country Wealth had a significant effect (<.01) for all governance indicators, but its effect was much weaker for VA and PS.
2. Country size had a significant effect for four indicators, not for GE and RQ.
3. Size of Party #2 had a significant effect for five indicators, not for PS, but its effect for VA was double that of the other indicators.
4. The number of parties (log) seated in parliament had significant effects on VA and PS—but in different directions.
5. These variables explained more than 55 percent of the variance for all six indicators.

The most fascinating is #4: The number of parties (which correlated best of the fragmentation measures in this analysis) had different effects on Voice and Accountability and Political Stability, which themselves correlate only .68. Having more parties seated in parliament appears to increase a country’s Voice and Accountability score. That makes sense: seating many parties in parliament advances the articulation function of political parties. However, when more parties are seated in parliament, the country’s Political Stability and Absence of Violence score increases. That too makes sense: seating many parties in parliament detracts from parties’ aggregation function. In some way, these differential results sustain the theoretical ambivalence noted in the literature review for the fragmentation measures.

**Party System Properties: Cause or Effect?**

To this point, we have not specified why greater party system competitiveness and stability should be related to higher rule of law scores for countries. Does the party system contribute to their higher scores—as assumed in the propositions we tested—or does a more competitive and stable party system merely reflect the extent to which countries enforce the rule of law? It is easy to argue that party system competitiveness and stability are simply the effects of rule of law. When countries observe the rule of law, opposition parties are freer to compete with governmental parties for political power in multiple elections. According to this argument, positive properties of the party system are the effect, not the cause, of rule of law.

It is harder to argue the contrary case: that party system competitiveness and stability cause countries to promote the rule of law. Indeed, Carothers’ book, *Promoting the Rule of Law Abroad*, reveals that rule-of-law practitioners do not know what factors advance their objective. Primarily lawyers, they focus on revising specific laws or whole legal codes, training judges and paying better salaries, improving court records, reforming police and prosecutors, broadening access to courts, and so on. Carothers says, “Even when aid programs are able to facilitate fairly specific changes in relevant institutions, it is rarely clear what the longer-term effects of those changes are on the overall development of the rule of law in the country in question.”107 Reviewing ten analyses in his book, he finds:

---

Many of the chapter authors also urge aid organizations to be more political in their approach to promoting the rule of law. These authors’ broad command “to take politics more fully into account” has many variations.  

Some chapter authors contend that the authoritarian nature of regimes (e.g., in the Arab world) block progress in implementing the rule of law, while coalitions built across parties (e.g., in Africa) sometimes support reforms. Similarly, democratic winds of change in Latin America helped the criminal justice reform movement, while at least a period of political change temporarily advanced legal reforms in Russia.

Not all political parties see value in promoting the rule of law. Doing so, however, serves the purposes of leading parties in a competitive and stable system. Competitive parties promote policies that further the rule of law, because voters prefer government by rule of law in contrast to government by rulers. Such parties promote the rule of law because that policy meshes with their strategic goals: to win votes and seats. Put more generally, a competitive party system tends to promote country governance—of which rule of law is just one manifestation. Recall our earlier definition of governance as the extent to which a state delivers to its citizens the desired benefits of government at acceptable costs. Competitive political parties propose government benefits in order to win votes and seats. Hence, they promote the rule of law.

Our argument that competitive and stable party systems advance improved country governance in general is bolstered by the findings in Table 10. It shows that party system competitiveness also has comparably significant effects on Government Effectiveness, Control of Corruption, and Regulatory Quality. Let us grant that one can reasonably argue that Rule of Law causes party system competitiveness. A similar argument cannot easily be made for Government Effectiveness. Why should more effective government produce more competitive parties? Nor is it easy to argue that party competitiveness is a reasonable consequence of Control of Corruption—or of Regulatory Quality. That a competitive party system is significantly related to all four indicators of country governance suggests that the nature of the party system is causal, not consequential.

Party system competitiveness is also causally related to Voice and Accountability, but the mechanism is different. When experts see countries with competitive and stable political party systems, they tend to rate them high on Voice and Accountability. Moreover, that there is no relationship between party system competitiveness and Political Stability and the Absence of Violence indicates that the observed relationships between party system competitiveness and the five indicators are not simply the result of a methodological artifact from using the World Bank governance scores. The presence of a competitive party system obviously does not

---

110 Weingast argues that elites in democratic systems also serve their own interests by observing the rule of law. See Barry R. Weingast, “The Political Foundations of Democracy and the Rule of Law,” American Political Science Review, 91 (June, 1997), 245-263 at 254.
significantly hamper countries’ propensities to be politically unstable and violent. Much more research needs to be done concerning these other indicators, and we return to the analysis in a sequel paper, “Party System Effects on Country Governance, II.”

Summary and Conclusion

We reviewed various measures of party system properties and identified party system fragmentation, competitiveness, and volatility as central to scholarly attention and party theory. Assembling a unique set of data on seats held by parliamentary parties over two elections in 189 countries, we created measures for each of the three dimensions. We then tested three standard theories of the effects of party systems on country governance, using primarily data on the Rule of Law in 211 countries assembled in a World Bank project for 2007. Here are the tested propositions, with the results marked for failure and success:

1. The more fragmented the party system, the less the Rule of Law.
2. √ The more competitive the party system, the greater the Rule of Law.
3. √ The more volatile the party system, the less the Rule of Law.
3’. √ The more viscous the party system, the greater the Rule of Law.

Our findings concerning the various measures of party system fragmentation suggest that scholars have been more concerned with measurement issues than with actually using their measures to test hypotheses concerning the effects of party system fragmentation on government and political. Moreover, those who use fragmentation indicators to measure party system competitiveness are probably not tapping that concept. We proposed a much simpler and conceptually sounder measure of parliamentary party system competitiveness: the percentage of seats held by the second largest party. This measure has the added advantage of being significantly related to Rule of Law as an indicator of country governance, as hypothesized.

Throughout most of the analysis, we neglected the World Bank’s other five governance indicators. Our research suggests that even its four highly correlated indicators—Rule of Law, Government Effectiveness, Control of Corruption, and Regulatory Quality—have different underlying causes. The other two indicators—Voice and Accountability and Political Stability—tap quite different aspects of governance. When we extended the analysis to include them, studying party system effects became more complicated.

We ended by inquiring whether party system competitiveness and stability is a consequence of rule of law, rather than a cause. We concluded that political parties contribute to the enforcement of rule of law in the normal process of party politics. Citizens favor policies that promote the rule of law, and competitive parties tend to respond positively to what people want from government. In delivering to citizens the desired benefits of government, competitive party systems improve country governance. Rule of law is a major benefit of government that is advanced by a competitive and stable party system.

---

112 Kenneth Janda, Jinyoung Kwak, and Julieta Suarez-Cao, “Party System Effects on Country Governance, II” is being prepared for delivery at the 2010 Annual Meeting of the American Political Science Association, Washington, DC.