Coalition Management in Multiparty Presidential Regimes

Carlos Pereira
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Presidentialism 25 Years After Linz
The rise of presidentialism (and hybrids)

Figure 1.1. Percentage of Democratic Regimes by Executive-Legislative Structure, 1950–2005.

From Samuels & Shugart 2010
Economic Performance and Political Regimes

PPP - All Regimes

- Parliamentary
- Presidential
- Hybrid
Inequality by Wealth

The graph illustrates the relationship between the Gini coefficient and log PPP across different regimes. The Gini coefficient is a measure of income inequality, ranging from 0 to 100. The log PPP (Purchasing Power Parity) is a measure of the exchange rate adjusted for cost of living differences.

- **Regime Types:**
  - Hybrid
  - Parliamentary
  - Presidential

The graph shows distinct clusters for each regime, with different trend lines indicating the strength of correlation. The R² (coefficient of determination) values for each regime are provided:

- **Hybrid:** R² Linear = 0.168
- **Parliamentary:** R² Linear = 0.055
- **Presidential:** R² Linear = 0.144
Poverty Mitigation by Wealth

- Hybrid: $R^2$ Linear = 0.572
- Parliamentary: $R^2$ Linear = 0.213
- Presidential: $R^2$ Linear = 0.389
Motivation: Lack of Models for Multiparty Presidential Regimes

- Parliamentary regimes of Europe
- Two-party presidential case of United States
- Very little modeling of multiparty presidential regimes – modal form of democratic government in Latin America, Africa, and Post-Soviet Union, which operates under the principle of “separate origins and survival” with no built-in incentives for parties to cooperate.
  - Regime type different in ways consequential for political exchange and policy outcomes
    - Lack majoritarian forces of two-party systems
    - Lack deadlock solutions of parliamentarism (confidence vote, early elections, fused responsibility)
    - Low formal accountability between branches and between individuals and parties
Pessimistic View of Coalition Presidentialism

• “The Perils of Presidentialism” (Linz 1990), casted doubts on the viability of presidentialism, warning that minority presidents facing fragmented legislatures would be prone of conflicts and lack of cooperation.

• The “Difficult Combination” (Mainwaring 1993) of presidentialism with multipartism has persisted and in some parts of the world appears to be on the rise. The difficult combination does not necessarily impede coalition governments (Cheibub et al. 2004). It has proved rather durable and stable coalitions.
  – 78% of parliamentarism there is majority coalition governments
  – But, it also happens in 66% of presidentialisms
Coalition-based Presidential Regimes

- Presidentialism does in fact break down more frequently than parliamentarism, but not for the main reasons hypothesized by Linz (inter-branch deadlock by the minority status of the executive)
  - Institutional features beyond constitutionally fused powers and single-party majorities, such as legislative powers of the executive (Cheibub and Limongi 2002), have contributed to the survival and success of multiparty presidential regimes.
  - Multiparty presidencies have avoided serious policymaking stalemate by developing relatively complex and flexible inter-branch systems of exchange that utilize multiple different currencies.
Existing Models of Exchange

- Cooperative Games (credible commitments)
  - Minimal winning coalition (Riker)
  - Minimal ideological connected winning coalition (Alexrod) with the smallest possible ideological range (de Swaan)
  - Size and ideology (Laver & Shepsle)
  - Size and surplus among coalition partners (Strom; Diermeier/Eraslan/Merlo); “minimal necessary coalitions” (Carrubba & Volden)
- Criticisms: Rejection of the assumption that parties can make credible commitments and that the most efficient government will emerge. Structure-induced Equilibrium in portfolio allocation occurs only under very special circumstances – three parties, two dimensions, and circular preferences (Austen-Smith & Banks)
Existing Models of Exchange (cont.)

- **Non-cooperative Games** (Nash EQ as main solution concept)
  - Formateur with disproportional sizable advantages, especially if parties are impatient (Baron & Ferejohn; Ansolabehere et al.)
  - Gamson’s law: proportionality in portfolio distribution (Morelli; Montero; Morelli & Montero) demand bargaining model (Merlo & Wilson)
  - Parties must pay one another for contributions in legislative arena *and* electoral arena (Carroll & Cox)
  - Supermajorities may be cheaper; keep small parties from acting as leverage points and hostage takers (Groseclose & Snyder)
When Does Coalition Presidentialism Exist?

- A political strategy in which directly elected minority presidents seek to build legislative coalitions in order to secure the success of their political agenda.
  - The party of the president does NOT enjoy a majority of seats in the legislature
  - Visible attempts of coalition formation
  - The president is the *de facto formateur*
  - More than one political party opts to support the president
    - Formal acceptance of a cabinet post, declaration of support, and/or *de facto* systematic support
<table>
<thead>
<tr>
<th></th>
<th>What do we already know about coalition presidentialism?</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Size of President’s Party matters (Shugart &amp; Carey 1992)</td>
</tr>
<tr>
<td>2.</td>
<td>Powers available to the president matters (Carey &amp; Shugart 1998)</td>
</tr>
<tr>
<td>3.</td>
<td>Coalition discipline varies positively with cabinet coalescence (Amorim Neto 2002; Raile et al 2011) and with the allocation of budgetary resources (Pereira &amp; Mueller 2004)</td>
</tr>
<tr>
<td>4.</td>
<td>The use of unilateral powers (Decree; Amorim Neto 2006) and Urgency; Pereira &amp; Mueller 2009) varies positively with non-partisan ministers</td>
</tr>
<tr>
<td>5.</td>
<td>Coalitions tend to erode toward the end of the term (honeymoon and lame duck)</td>
</tr>
<tr>
<td>6.</td>
<td>Multipartism is reduced to two main political blocks: the government (Cartel) and the opposition (Cox et al. 2003)</td>
</tr>
</tbody>
</table>
What we do NOT know yet?

- How executives generate multiparty support from fragmented legislatures in the absence of hard-wired incentives for such support.
- If the successes of multiparty presidentialism *cannot* be attributed to intrinsic features of the regime type, as they plausibly could be under multiparty parliamentarism, what would be?
  - Agenda-setting power
  - Cabinet inclusion
  - Budgetary powers
  - Partisan powers
Managing the Coalition Toolbox in Multiparty Presidential Regimes

- Partisan loyalty, political ideology, and agenda-setting powers are not overwhelming determinants of legislative support.
- Governance requires various forms of exchange not independent of one another but rather conjointly.
- Presidential Toolbox:
  - Political transfers (cabinet positions)
  - Monetary Transfers (particularly pork)
  - Policy concessions
- Stability of voting coalitions depends on extent to which president is able to provide legislators with goods they want on an ongoing basis.
Toolbox: Country and Region Variations

- In Latin America, the distribution of cabinet posts and pork to supporters has helped to fine-tune the already considerable agenda powers enjoyed by executives;
- In the former Soviet Union, presidents have also enjoyed far-reaching agenda powers, but they have come to make far greater use of partisan powers over time.
- In Africa, it is informal strategies (patron–client relations) that have underpinned the capacity of incumbents to control legislative processes.
- The use of the toolbox is neither random nor predetermined. Cabinet seats, policy concessions, and pork comes at a considerable cost, presidents prefer to rely on their control over party and agenda-setting powers where possible.
# Index of Coalition Necessity - ICN

<table>
<thead>
<tr>
<th>Country</th>
<th>ENP</th>
<th>Seat Share President’s Party</th>
<th>ICN</th>
</tr>
</thead>
<tbody>
<tr>
<td>Brazil (2010)</td>
<td>10.36</td>
<td>17.10</td>
<td>85.88</td>
</tr>
<tr>
<td>Armenia (2003)</td>
<td>5.27</td>
<td>0.00</td>
<td>52.70</td>
</tr>
<tr>
<td>Ecuador (2002)</td>
<td>6.71</td>
<td>25.00</td>
<td>50.33</td>
</tr>
<tr>
<td>Chile (2009)</td>
<td>5.64</td>
<td>14.17</td>
<td>48.41</td>
</tr>
<tr>
<td>Russia (1999)</td>
<td>5.49</td>
<td>16.30</td>
<td>46.17</td>
</tr>
<tr>
<td>Colombia (2010)</td>
<td>5.07</td>
<td>28.31</td>
<td>36.35</td>
</tr>
<tr>
<td>Panama (2009)</td>
<td>3.69</td>
<td>21.13</td>
<td>29.10</td>
</tr>
<tr>
<td>Kenya (2002)</td>
<td>3.48</td>
<td>17.40</td>
<td>28.74</td>
</tr>
<tr>
<td>Benin (2006)</td>
<td>3.89</td>
<td>42.17</td>
<td>22.56</td>
</tr>
<tr>
<td>Mexico (2012)</td>
<td>3.56</td>
<td>42.40</td>
<td>20.52</td>
</tr>
<tr>
<td>Ukraine (2010)</td>
<td>3.30</td>
<td>40.00</td>
<td>19.80</td>
</tr>
<tr>
<td>Malawi (1994)</td>
<td>2.69</td>
<td>48.00</td>
<td>13.99</td>
</tr>
</tbody>
</table>

Chaisty, Paul et al. 2012
Decisions to take (*trade-offs*):

- Size (number of players)
  - Small *versus* large
- Ideology (preferences)
  - Homogeneous *versus* heterogeneous
- Participation of coalition members (weight)
  - Proportional *versus* monopolized
Each choice of how to manage the coalition engenders different transaction costs

- The greater the coalition’s size;
- The more heterogeneous it is; and
- The higher the concentration of power (i.e, the more monopolistic allocation of cabinets)

the more coordination problems will emerge, the higher the cost of governing (Dependent Variable)
Multiparty Presidential Model: How do Presidents select the tool of coalition management?

- Executive
  - One agent with a preferred policy $x_c = 1$.

- Legislature
  - Large number of agents uniformly distributed on the interval $[0, 1]$.
  - The preferred policy of member \( \text{“} i \text{”} \) is $x(i)$, with $x(i)$ continuous and strictly increasing in $[0, 1]$.

- The status quo is set at $x_s = 0$ and the executive proffered policy is $x = 1$.

- The president maximizes policy “x” and minimizes costs (political “p” and monetary “m” costs).
• Policy “x” is implemented if and only if it has support of (at least) “majority” of the legislature

• We motivate the need for exchanges between the executive and the legislature by assuming that \( x(1/2) < 1/2 \). This implies that the political agendas of the majority of the legislature, which prefers the status quo \( x=0 \), and the executive, who prefers \( x=1 \), are not aligned.

• The executive can make monetary (m) and/or political (p) transfers to the members of the legislature simultaneously.

• We assume the costs at the status quo is zero.
Multiparty Presidential Model (cont.)

• Payoffs

Assume that the executive implements policy \( x \) and chooses transfers \( \{m(i), p(i)\}_{i \in [0,1]} \) to the legislature.

**Executive:**

\[
U_e \left[ x, \{m(i), p(i)\}_{i \in [0,1]} \right] = -(1 - x)^2 - \beta_m^e \int_0^1 m(i) di - \beta_p^e \int_0^1 \left[ \frac{1}{2} - x(i) \right] p(i) di
\]

**Legislature:**

\[
U_i \left[ x, \{m(i), p(i)\}_{i \in [0,1]} \right] = -[x - x(i)]^2 + \beta_m^l m(i) + \beta_p^l p(i)
\]
Multiparty Presidential Model (cont.)

- Policy outcome depends on how members of legislature are distributed across different factions.

- We represent factions as sub-intervals of the interval \([0,1]\), and each faction \(A=(a,\mu_A)\) is defined by its size \(\mu_A\) and its median member “\(a\)”, the leader. For tractability, we evaluate the faction’s utility by the utility function of its median member.

- We focus attention in a scenario in which the coalition that sustains the executive is formed by a **close faction** \(C=(c,\mu_C)\) with \(x(c)>1/2\), and a **distant faction** \(D=(d,\mu_D)\) with \(x(d)<1/2\).
Sequence of Events

- Executive chooses $x$ and makes a take it or leave it offer $(x, m_D, p_D)$ to faction $D$.

- If faction $D$ accepts the offer, the executive makes a take it or leave it offer $(m_C, p_C)$ to faction $C$.

- Faction $D$ accepts or rejects the offer.

- Faction $C$ accepts or rejects the offer.
Proposition 01: Ideological heterogeneity and transfers
Define $\Delta = x(c) - x(d)$ as the measure of ideological heterogeneity within the coalition. There exists a degree of ideological heterogeneity $\tilde{\Delta} \in (0,1)$, where
$$\tilde{\Delta} \equiv \frac{\beta_m^e \beta_p^l}{\beta_m^l \beta_p^e},$$
such that:

(i) if $\Delta > \tilde{\Delta}$, the executive makes monetary transfers to the distant faction, political transfers to the close faction.

(ii) if $\Delta \leq \tilde{\Delta}$, the executive only makes political transfers to the distant and to the close faction.
We solve the model by backward induction, starting with transfers to the close faction.

Executive does NOT make monetary transfers to the close faction because the close faction is strictly better off with the executive’s policy than with the status quo.

The executive thus distributes the remaining political transfers to the close faction.
Maximize Policy and Minimize Costs

1. Some tools are likely to be seen as more costly than others to deploy.
2. Costs of coalition management (operating) are also determined by the coalition formation.
3. Executive’s own perception of government’s performance affects coalition costs.
4. Time also affects coalition management. Honeymoon tends to have smaller costs...presidential popularity.
5. The costs of each coalition tool is in part affect by the use of other tolls in the presidential toolbox (Imperfect substitutes tools; Raile et al. 2011).
6. Exogenous factors (war, elections, economic crisis, corruption scandal etc.) also affects coalition costs.
Dynamic of the Coalition Management
<table>
<thead>
<tr>
<th>Party</th>
<th>Collor</th>
<th>Cardoso</th>
<th>Lula</th>
<th>Rousseff</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Cabinet Posts</td>
<td>% Posts</td>
<td>Coalition Seats</td>
<td>% Seats</td>
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<tr>
<td>PSDB</td>
<td>6</td>
<td>28.57</td>
<td>99</td>
<td>25.98</td>
</tr>
<tr>
<td>PFL</td>
<td>2</td>
<td>20.00</td>
<td>91</td>
<td>37.14</td>
</tr>
<tr>
<td>PMDB</td>
<td>1</td>
<td>10.00</td>
<td>130</td>
<td>53.06</td>
</tr>
<tr>
<td>PP</td>
<td>2</td>
<td>9.52</td>
<td>60</td>
<td>15.75</td>
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<tr>
<td>PPS</td>
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<td>4.76</td>
<td>3</td>
<td>0.79</td>
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<tr>
<td>PTB</td>
<td>1</td>
<td>4.76</td>
<td>31</td>
<td>8.14</td>
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<tr>
<td>PT</td>
<td>21</td>
<td>60.00</td>
<td>91</td>
<td>28.62</td>
</tr>
<tr>
<td>PDT</td>
<td>1</td>
<td>2.70</td>
<td>28</td>
<td>8.58</td>
</tr>
<tr>
<td>PCdoB</td>
<td>2</td>
<td>5.71</td>
<td>9</td>
<td>2.83</td>
</tr>
<tr>
<td>PL/PR</td>
<td>1</td>
<td>2.86</td>
<td>43</td>
<td>13.52</td>
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<tr>
<td>PSB</td>
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<tr>
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<td>6</td>
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<tr>
<td>PRN</td>
<td>1</td>
<td>10.00</td>
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</tr>
<tr>
<td>Ind.</td>
<td>6</td>
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<td>5</td>
<td>23.81</td>
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<tr>
<td>Totals</td>
<td>10</td>
<td>100</td>
<td>10</td>
<td>245</td>
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</table>
## Cabinet Disparity

<table>
<thead>
<tr>
<th>Party</th>
<th>Collor</th>
<th>Cardoso</th>
<th>Lula</th>
<th>Rousseff</th>
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<tbody>
<tr>
<td>PSDB</td>
<td>2.59</td>
<td></td>
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<tr>
<td>PFL</td>
<td>-17.14</td>
<td>-8.51</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PMDB</td>
<td>-43.06</td>
<td>-12.26</td>
<td>-18.82</td>
<td>-8.02</td>
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<tr>
<td>PP</td>
<td>-6.23</td>
<td></td>
<td></td>
<td>-9.87</td>
</tr>
<tr>
<td>PPS</td>
<td>3.97</td>
<td>-3.43</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PTB</td>
<td>-3.38</td>
<td>-13.18</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PT</td>
<td></td>
<td></td>
<td>31.38</td>
<td>18.95</td>
</tr>
<tr>
<td>PDT</td>
<td></td>
<td></td>
<td></td>
<td>-5.88</td>
</tr>
<tr>
<td>PCdoB</td>
<td></td>
<td>2.88</td>
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<td>-1.9</td>
</tr>
<tr>
<td>PL/PR</td>
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<td>-10.66</td>
<td></td>
<td>-9.87</td>
</tr>
<tr>
<td>PSB</td>
<td></td>
<td>-3.43</td>
<td></td>
<td>-5.02</td>
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<tr>
<td>PV</td>
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</tr>
<tr>
<td>PRN</td>
<td>0.2</td>
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</tbody>
</table>
Governability Cost Index - GCI

- Number of Ministerial and bureaucratic positions
- Natural log of total spending with the appropriation of legislative amendments to the annual budget (Pork)
- Natural log of the total spending of ministerial positions
- Data is available from January 2001 to December 2011 (132 months)
- Factorial analysis with decomposition of the principal components
Size

Size of the Coalition

Coalition Size

3rd order polynomial (Coalition Size)
Heterogeneity

Ideological Heterogeneity of the Coalition

- FHC
- Lula
- Dilma

Coalition Ideological Heterogeneity
3rd order polynomial (Coalition Ideological Heterogeneity)
# Empirical exercise - OLS Regression

**Dependent variable: Governability Costs Index (GCI)**

<table>
<thead>
<tr>
<th>Hypothesis</th>
<th>Model 1</th>
<th>Model 2</th>
<th>Model 3</th>
<th>Model 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Proportionality</td>
<td>-.087*** (.012)</td>
<td>-.066*** (.012)</td>
<td>-.049*** (.013)</td>
<td>-.046*** (.013)</td>
</tr>
<tr>
<td>Coalition Size</td>
<td>.052*** (.012)</td>
<td>.037*** (.012)</td>
<td>-.020 (.013)</td>
<td>.044** (.019)</td>
</tr>
<tr>
<td>Heterogeneity</td>
<td>.028* (.017)</td>
<td>.030** (.016)</td>
<td>.007 (.015)</td>
<td>.064** (.029)</td>
</tr>
<tr>
<td>Popularity</td>
<td></td>
<td>.044*** (.010)</td>
<td>.024** (.010)</td>
<td>-.023* (.012)</td>
</tr>
<tr>
<td>Proportionality x Popularity</td>
<td></td>
<td>-.014 (.011)</td>
<td>-.032*** (.009)</td>
<td></td>
</tr>
<tr>
<td>Size x Popularity</td>
<td></td>
<td>.074*** (.018)</td>
<td>.103*** (.014)</td>
<td></td>
</tr>
<tr>
<td>Heterogeneity x Popularity</td>
<td></td>
<td>-.163*** (.020)</td>
<td>-.168*** (.017)</td>
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<tr>
<td>FHC 2</td>
<td></td>
<td></td>
<td>-.081 (.114)</td>
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<tr>
<td>Lula 1</td>
<td></td>
<td></td>
<td>.226*** (.031)</td>
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<tr>
<td>Lula 2</td>
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<tr>
<td>Constant</td>
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<td>.820*** (.007)</td>
<td>.866*** (.011)</td>
<td>.986*** (.025)</td>
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<tr>
<td>N</td>
<td>132</td>
<td>132</td>
<td>132</td>
<td>132</td>
</tr>
<tr>
<td>R2</td>
<td>0.716</td>
<td>0.753</td>
<td>0.853</td>
<td>0.918</td>
</tr>
</tbody>
</table>

*p<0.1 **p<0.05 ***p<0.01
Power sharing and legislative support

Cabinet Share
Coalition Surplus
Linéaire (Coalition Surplus)
Seat share (considering only coalition)
Legislative support to government
Linéaire (Legislative support to government)
Costs vs. Support - Efficiency ratio

Efficiency ratio = legislative support divided by GCI.
## Regressions on Post-Seat Differential

*party share of cabinet seats minus party’s share of Chamber seats*

<table>
<thead>
<tr>
<th>Variable</th>
<th>Coeff.</th>
<th>Rob. St. Error</th>
<th>P-value</th>
<th>Coeff.</th>
<th>Rob. St. Error</th>
<th>P-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ideological distance from President’s Party</td>
<td>-0.064</td>
<td>0.026</td>
<td>0.015</td>
<td>-0.078</td>
<td>0.037</td>
<td>0.034</td>
</tr>
<tr>
<td>Pro. Non-partisan Cabinet members</td>
<td>-0.486</td>
<td>0.060</td>
<td>0.001</td>
<td>-0.495</td>
<td>0.055</td>
<td>0.001</td>
</tr>
<tr>
<td>Party Seas as prop. of Chamber</td>
<td>-0.524</td>
<td>0.086</td>
<td>0.001</td>
<td>-0.553</td>
<td>0.088</td>
<td>0.001</td>
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<tr>
<td>President’s Party (0-1)</td>
<td>-0.036</td>
<td>0.042</td>
<td>0.394</td>
<td>-0.030</td>
<td>0.035</td>
<td>0.389</td>
</tr>
<tr>
<td>Presidents’ party ideological extremity</td>
<td>-0.055</td>
<td>0.033</td>
<td>0.098</td>
<td>-0.047</td>
<td>0.035</td>
<td>0.173</td>
</tr>
<tr>
<td>Constant</td>
<td>0.180</td>
<td>0.024</td>
<td>0.001</td>
<td>0.186</td>
<td>0.032</td>
<td>0.001</td>
</tr>
</tbody>
</table>

The cases are 262 cabinet-included parties from 12 different multiparty presidencies in the Americas, all within the timeframe of 1978-2004. Parties from the Fujimori cabinets in Peru were dropped from the analysis after diagnostic procedures revealed that some parties in these cabinets were severe outliers that influenced results. Dropping these cases does not change substantive conclusions. The dependent variable is the difference between a party’s proportion of cabinet posts and its proportion of intra-coalition seats in the lower legislative chamber. Adjusted R2 for the OLS equation is 0.382. All tests are two tailed.
Conclusion

• Executive will use political transfers (e.g., cabinet positions) in exchange for support from factions ideologically similar to executive and will use monetary transfers (e.g., pork) for ideologically distant factions within more heterogeneous voting coalitions.

• Use of monetary transfers to seduce a distant faction fits with the cross-national and Brazil-specific empirical evidence provided.

• Use of political or monetary transfers also depends on relative cost of each, which in turn depends on features of the institutional and bargaining environments.

• Model suggests that an executive with greater relative bargaining power concedes less on policies or makes fewer transfers to achieve a particular policy outcome.

• The preliminary evidence on the cost of governing indicates that coalition management generates more efficiency.