

## New Tools in Comparative Political Economy: The Database of Political Institutions

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This article introduces a large new cross-country database, the Database of Political Institutions. It covers 177 countries over 21 years, 1975–95. The article presents the intuition, construction, and definitions of the different variables. Among the novel variables introduced are several measures of checks and balances, tenure and stability, identification of party affiliation with government or opposition, and fragmentation of opposition and government parties in the legislature.

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Research into the institutional and political roots of government decisions has accelerated rapidly in the past 20 or more years. However, cross-country empirical work has been handicapped by a lack of detailed data on countries' political and institutional characteristics and on how they change over time. Therefore, comparative political economy has been restricted to small-sample case studies, which are important in their own right but impose unavoidable limits on researchers seeking to generalize their results beyond the case study sample.

The lack of data has been a serious obstacle to better understanding of numerous areas of political economy, particularly the political conditions under which governments choose policies that promote rather than retard economic development. We are still far away from the answers to two fundamental questions. First, which political institutions are most conducive to development and reform? Second, under what conditions do such institutions emerge? Unfortunately, cross-country data that could help to answer these questions, data that would provide a disaggregated picture of a country's political institutions and operations, have been scarce. In this article we introduce a new data set that fills many of these data gaps, the Database of Political Institutions (DPI). It has been compiled in the Development Research Group of the World Bank, but it rests on an intellectual foundation laid by a large body of political economy research.

The DPI contains 108 variables for 177 countries over the years 1975–95 (see the appendix). The variables provide details about elections, electoral rules,

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type of political system, party composition of the opposition and government coalitions, and the extent of military influence on government. The DPI also contains a number of new variables compiled from the raw data, including original measures of checks and balances and political stability. In contrast to other databases, these variables are nearly all objective and their construction is entirely transparent. They are also disaggregated, allowing researchers to get away from such useful but broad indicators as whether countries allow elections, whether elections are “free,” or whether the executive is “constrained.” Instead, the DPI allows researchers to use precise and concrete institutional features of countries and to combine them in ways appropriate for theoretical analysis.

The remainder of the article and the appendix provide details on sources and collection methodology. The database is described in more detail in Beck and others (2000).<sup>1</sup>

### I. THE POLITICAL SYSTEM AND ELECTORAL COMPETITIVENESS

Two fundamental characteristics of a political system are the relationship of the executive and legislative branches and the competitiveness of elections of the political actors who occupy these branches. The DPI has information on both. With regard to the first, the variable *SYSTEM* was created to capture whether countries are presidential, assembly-elected presidential, or parliamentary (see the chief executive variables in the appendix). For countries with both a president and a prime minister, the decision whether to call the system presidential or parliamentary is based on the power that the president has relative to the prime minister. Our criteria were taken, with some modification, from the literature (for example, Shugart and Carey 1992).<sup>2</sup> However, as with the other variables in this database, the criteria on which we base this decision are stated explicitly, allowing researchers to determine more easily the adequacy of variables to their testing requirements.

The database also contains two indexes that characterize the competitiveness of elections in countries, one for executive elections and one for legislative elections. The core of the two indexes is the number of parties that could and did compete in the last election. Building on work by Ferree and Singh (1999), we scale countries as follows:

1. No executive/legislature
2. Unelected executive/legislature
3. Elected, one candidate
4. One party, multiple candidates

1. The database will be put on a Web site. Until then, the extended working paper, codebook, and database can be obtained by sending e-mail to Paulina Sintim-Aboagye at [psintimaboagye@worldbank.org](mailto:psintimaboagye@worldbank.org).

2. For example, we place less weight on the nonlegislative powers of the president, such as the formal right to choose cabinet members.

5. Multiple parties are legal, but only one won seats (because other parties did not exist, compete, or win seats)
6. Multiple parties competed and won seats (but one party won 75 percent or more of the seats)
7. The largest party received less than 75 percent of the seats.

Three other variables supplement these indexes. The first and second variables indicate whether the chief executive and the minister of defense, respectively, are military officers. The third records whether our sources mention voting irregularities or candidate intimidation that is serious enough to affect electoral outcomes. Nonconstitutional irregularities are also recorded as present when important parties boycott elections or the election results.

## II. PREFERENCES AND PARTIES

For most political economy questions, the main concern is not only the structure of political decisionmaking but also the policy preferences or ideological leanings of decisionmakers. For many countries of the world, however, such information is not available, not germane, or not a reliable indicator of the preferences of decisionmakers.

A starting point for any analysis that requires the preferences of the policymakers is the party identification of the decisionmakers. Our data set identifies the party of the prime minister and/or president, the three largest parties in the government coalition, and the largest party in the opposition. In addition, our sources provide useful information for some countries about the policy preferences of key decisionmakers on five dimensions: economic, nationalistic, regional, rural, and religious. The first dimension refers to preferences regarding more or less state control of the economy—the standard left–right scale. The other dimensions—reported as zero/one dummies—do not necessarily correlate with each other or with the economic dimension. Coverage is far from exhaustive, unfortunately, but constitutes the most comprehensive characterization of parties and decisionmakers that could be extracted from the sources we used.

## III. TENURE, TURNOVER, AND THE SHARE OF THE POPULAR VOTE OF THE CHIEF EXECUTIVE AND THE CHIEF EXECUTIVE'S PARTY

A key hindrance to development is the tendency of many political leaders to make opportunistic decisions that entail long-run costs to society that outweigh short-run benefits. Leaders with shorter horizons in office are more likely to find such choices to be worthwhile, and there is evidence suggesting that this effect is significant, at least in less democratic countries (Clague and others 1996, Alesina and others 1996). The DPI presents indicators of the turnover and tenure of governments, and it provides opportunities to circumvent several ambiguities that arise when using existing data.

First, this data set presents indicators of whether there are constitutional restrictions on executive terms and whether sitting executives can be reelected. Second, executives with more popular support can be expected to have a longer horizon. We therefore record the share of votes that presidents received in their last election and the share of votes of the prime minister or president's party. Third, it would be expected that stronger parties would rein in party members who happen to have shorter horizons. The DPI therefore reports the number of years that the party of the executive has been in office (independent of the particular executive who has represented the party) and how long the party has existed under its current name.

Finally, the DPI records whether parties are in the government coalition and whether the party of the executive controls the lower house. Based on this information, the data set contains two new variables on government stability—*STABS* and *STABNS*—that capture the extent of turnover of a government's key decision-makers in any year. The two variables are calculated by dividing the number of exits between year  $t$  and year  $t + 1$  by the total number of veto players in year  $t$ . Veto players are defined as the president and the largest party in the legislature for a presidential system and as the prime minister and the parties in the government coalition for a parliamentary system.

The DPI also has several variables that provide different perspectives on tenure. It includes the tenure of the veto players who have been in office the longest and the shortest periods of time, assuming multiple veto players. It also includes the tenure of the political system—the length of time executive elections have been competitive (where “competitive” means at least a six for the executive index of electoral competitiveness). If elections have not been competitive, the variable indicates how long the executive has been in office.

#### IV. THE LEGISLATURE

The role of the legislature in the political process is influenced not only by constitutional restrictions on the scope of its initiative and veto authority but also by its composition and the relative strength of government and opposition coalitions. The data set introduced here allows for the calculation of the traditional measure of legislative fragmentation. Our sources also allowed us to identify which parties were inside and outside of the governing coalition. We created variables that record separately the fragmentation of the government coalition and the opposition. The correlation of government and opposition fragmentation measures is only 0.27 (for all countries and all years), suggesting that average fragmentation for the entire legislature is likely to be misleading for many purposes.

#### V. ELECTORAL RULES

The incentives of political decisionmakers and their ability to act independently of each other depend in large measure on the electoral rules under which they

operate. Among other effects, electoral rules influence whether candidates have an incentive to pursue individual or party interests, whether small and single-interest parties have an incentive to coalesce or to remain independent, and whether party leaders exercise significant or weak influence on party candidates (see Cox and McCubbins 2001).

One electoral rule that affects responsiveness to narrow interests is the mean district magnitude (given as *MDMH* for the House of Representatives and *MDMS* for the Senate in the section on electoral rules in the appendix). The database defines *MDM* as the average number of representatives elected by each electoral district in a country. A second electoral characteristic that the data set captures is whether the districts of the upper house are states or provinces.

Voting rules are a third aspect of electoral rules. The *DPI* records whether legislators are elected using majority or proportional representation systems. For proportional systems, the data set records whether there is a threshold that parties have to overcome to gain any seats in the legislature. And it records whether the D'Hondt system, which is less favorable to small parties, is used to calculate the number of seats that each party receives. The *DPI* also contains a variable that records whether the country has an open or closed-list electoral system. The *DPI* classifies a system as closed if voters cannot express preferences within a list—that is, if the position on a party's candidate list combined with the number of votes received by the party is the sole determinant of whether a candidate is elected.

The *DPI* provides some (albeit scant) information on the candidate selection process. Where possible, the data set includes a variable that reflects whether selection takes place on the national level, the subnational level, or by primary election. Finally, the *DPI* records the month when presidential or parliamentary elections were held.

## VI. CHECKS AND BALANCES

A key element in the description of any political system is the number of decision-makers whose agreement is necessary before policies can be changed. The *DPI* significantly extends one existing measure of checks and balances and introduces new measures and the possibility of constructing others.

Building on work by Roubini and Sachs (1989), we constructed the index of political cohesion, which records whether the same or different parties control the executive branch and the legislature in presidential systems. For parliamentary systems, the index records whether there is a minority government or a coalition of one, two, three, or more parties controlling the government. The index of political cohesion does not distinguish countries according to the effectiveness of electoral checks on government decisionmakers or according to electoral rules that influence party control over members. To adjust for these circumstances, the *DPI* includes two new variables, *CHECKS1* and *CHECKS2* (see the section on stability and checks and balances in the appendix).

These variables count the number of veto players in a political system, adjusting for whether these veto players are independent of each other, as determined by the level of electoral competitiveness in a system, their respective party affiliations, and the electoral rules. If the legislative index of electoral competitiveness is less than four, the two measures are set equal to one because, regardless of the formal constitutional arrangements in a system, where legislative elections are uncompetitive, constitutional checks on officials are unlikely to be binding. For all other countries, the variable *CHECKS1* is increased by the number of veto players in the system.<sup>3</sup> In presidential systems, it is increased by one for the president and one for each legislative chamber. However, if elections are conducted under closed-list rules and the president's party is the largest government party in a particular chamber, then the DPI assumes that the president exercises substantial control over the chamber and it is not counted as a check. For parliamentary systems, *CHECKS1* is increased by one for the prime minister and by one for each party in the government coalition, including the prime minister's own party. However, if it is a closed-list system and the prime minister's party is the largest in the government coalition, then this sum is reduced by one.

The extent to which one political decisionmaker might act as a check on another depends in part on the similarity of their policy preferences. To take into account the policy orientation of parties, we created a second checks-and-balances variable, *CHECKS2*. *CHECKS2* has the value of *CHECKS1* plus one for every veto player (defined as the largest government party in the legislative chamber in presidential systems and as all coalition members in parliamentary systems) whose orientation (left, right, or center) is closer to the opposition's orientation than to the average of the rest of the government. The opposition's orientation is given by the orientation of the largest opposition party.

## VII. FEDERALISM

Subnational political structure affects national-level policymaking in numerous ways. First, subnational units may have veto power over national-level policy decisions. Second, they may exert pressure for greater (or at least different) levels of redistribution than would otherwise be the case. Third, subnational units may affect the cohesiveness of national parties, which struggle for positions in both subnational and national jurisdictions, although the distribution of voter preferences in the two could be quite distinct.

The DPI contains several variables that capture the extent of federalism in a country's political structure. One indicates whether the country has contiguous autonomous or self-governing regions. A second dimension of information on

3. The values of *CHECKS1* and *CHECKS2* are nearly invariant to the use of the executive or legislative index of electoral competitiveness.

subnational governments is whether the local executive and legislature are locally elected. This variable is zero if neither is locally elected, one if one of the two is locally elected, and two if both are directly and locally elected. We also investigated, with limited success, whether municipal governments were locally elected. The third dimension on which we attempted to collect information is the jurisdiction of local governments. We asked whether the states or provinces had authority over taxing, spending, or legislating.

### VIII. SOURCES AND DATA COLLECTION

There were two main sources of data for this project, each used for a different time period. For 1975–84, we consulted *The Europa Year Book* (various years). For 1985–95, we used Banks's *Political Handbook of the World* (various years). We used *The Europa Year Book* for the latter time period to plug topical gaps in coverage, mostly for electoral rule and constitutional framework variables. The consistency of data between these two periods was extensively checked. We took information on electoral rules mostly from the Web site of the International Parliamentary Union (PARLINE, [www.ipu.org/parline-e.parlinesearch.asp](http://www.ipu.org/parline-e.parlinesearch.asp)). We obtained information on party orientation from a European Web site maintained by Agora Telematica ([www.agora.stm.it/elections/parties.htm](http://www.agora.stm.it/elections/parties.htm)). We also cross-checked party orientation against information in *Political Parties of Africa and the Middle East: A Reference Guide* (1993) and *Political Parties of Eastern Europe, Russia, and the Successor States: A Reference Guide* (1994).

### IX. CONCLUSION

This database is the product of an effort to bring systematic, cross-country information on political institutions within easy reach of researchers investigating comparative political economy. We have found no other source of information that provides as much objective data on these issues. We hope that the DPI will help illuminate a wide range of questions, from the determinants of democratic consolidation, the political conditions for economic reform, and the political and institutional roots of corruption to the appropriate and institutionally sensitive design of economic policy recommendations.

### APPENDIX. VARIABLES IN THE DATABASE OF POLITICAL INSTITUTIONS

#### *General Variables*

COUNTRYC	Country code
IFS	<i>International Financial Statistics</i> code
YEAR	Year

*Chief Executive Variables*

SYSTEM	Direct presidential (0); strong president elected by assembly (1); parliamentary (2)
YRSOFFC	Number of years in office
FINITTRM	Is there a finite term in office? (1 if yes, 0 if no)
YRCURNT	Years left in current term
MULTPL?	If there are formal restraints on the term (NA if not), can the chief executive serve multiple terms?
MILITARY	Is the chief executive a military officer?
DEFMIN	Is the defense minister a military officer?
PERCENT1	Percentage of votes the president got in the first/only round
PERCENTL	Percentage of votes the president got in the final round
PRTYIN	Length of time (years) the chief executive's party has been in office

*Chief Executive's Party*

EXECME	Name of party, if any
EXECLC	Orientation: right (R); left (L); center (C); not applicable (0)
EXECNAT	Nationalist (1 if yes)
EXECLURL	Rural (1 if yes)
EXECLREG	Regional (1 if yes)
EXECLME	Religion: not specified (1); Christian (CH); Catholic (CA); Islamic (IS); Hindu (HD); Buddhist (BD); Jewish (JW); other (O)
EXECLAGE	Length of time (years) since the party was formed under this name
ALLHOUSE	Does the party of the chief executive control all relevant houses?
NONCHIEF	In systems with both a nonceremonial prime minister and a president, what is the party affiliation of the one not called the chief executive?

*Party Variables in the Legislature*

HERFGOV	Herfindahl index for government
GOVFRAC	Government fractionalization (the probability that two random draws would produce legislators from different parties)
NUMGOV	Number of government seats

*Largest Government Party*

1GOVME	Name
1GOVSEAT	Seats
1GOVRLC	Orientation: right (R); left (L); center (C); not applicable (0)
1GOVNAT	Nationalist (1 if yes)
1GOVRURL	Rural (1 if yes)
1GOVREG	Regional (1 if yes)



1GOVREL Religion: not specified (1); Christian (CH); Catholic (CA); Islamic (IS); Hindu (HD); Buddhist (BD); Jewish (JW); other (O)  
 1GOVAGE Length of time (years) since the party was formed under this name

*Second-Largest Government Party*

2GOVME Name  
 2GOVSEAT Seats  
 2GOVRLC Orientation: right (R); left (L); center (C); not applicable (0)  
 2GOVNAT Nationalist (1 if yes)  
 2GOVRURL Rural (1 if yes)  
 2GOVREG Regional (1 if yes)  
 2GOVREL Religion: not specified (1); Christian (CH); Catholic (CA); Islamic (IS); Hindu (HD); Buddhist (BD); Jewish (JW); other (O)  
 2GOVAGE Length of time (years) since the party was formed under this name

*Third-Largest Government Party*

3GOVME Name  
 3GOVSEAT Seats  
 3GOVRLC Orientation: right (R); left (L); center (C); not applicable (0)  
 3GOVNAT Nationalist (1 if yes)  
 3GOVRURL Rural (1 if yes)  
 3GOVREG Regional (1 if yes)  
 3GOVREL Religion: not specified (1); Christian (CH); Catholic (CA); Islamic (IS); Hindu (HD); Buddhist (BD); Jewish (JW); other (O)  
 3GOVAGE Length of time (years) since the party was formed under this name  
 GOVOTH Number of other government parties  
 GOVOTHST Number of other government party seats  
 HERFOPP Herfindahl index for opposition  
 OPPFRAC Opposition fractionalization (the probability that two random draws would produce legislators from different parties)  
 NUMOPP Number of opposition seats

*Largest Opposition Party*

1OPPME Name  
 1OPPSEAT Seats held  
 1OPPRLC Orientation: right (R); left (L); center (C); not applicable (0)  
 1OPPNAT Nationalist (1 if yes)  
 1OPPRURL Rural (1 if yes)  
 1OPPREG Regional (1 if yes)  
 1OPPREL Religion: not specified (1); Christian (CH); Catholic (CA); Islamic (IS); Hindu (HD); Buddhist (BD); Jewish (JW); other (O)  
 1OPPAGE Length of time (years) since the party was formed under this name

*Second-Largest Opposition Party*

2OPPME Name  
2OPPSEAT Seats

*Third-Largest Opposition Party*

3OPPME Name  
3OPPSEAT Seats  
OPPOTH Number of other opposition parties  
OPPOTHST Number of other opposition party seats  
ULPRTY Number of parties nonaligned or with allegiance unknown  
NUMUL Seats nonaligned or with allegiance unknown  
HERFTOT Herfindahl index total  
FRAC Total fractionalization (the probability that two random draws would produce legislators from different parties)  
OPPMAJH Does one opposition party have the majority in the House?  
OPPMAJS Does one opposition party have the majority in the Senate?

*Details on the Legislature*

DATELEG When were legislative elections held (number records month; 13 indicates unknown month)  
DATEEXEC When were executive elections held (number records month; 13 indicates unknown month)  
MAJ Majority (number of government seats divided by total seats)  
PARTYAGE Average age of parties  
LEGELEC Is there a legislative election? (1 if yes)  
EXELEC Is there an executive election? (1 if yes)  
EXECSPEC Is executive party special interest?  
GOVSPEC Is first government party special interest?  
COALSPEC Are any coalition parties special interest?

*Electoral Rules*

LIEC Legislative index of political competitiveness  
EIEC Executive index of political competitiveness  
MDMH Mean district magnitude (House)  
MDMS Mean district magnitude (Senate)  
S/S+H Number in Senate / (number in house + number in Senate)  
PLURALTY Plurality? (1 if yes, 0 if no)  
PR Proportional representation? (1 if yes, 0 if no)  
HOUSESYS If plurality and proportional representation, which governs the majority or all of the House seats? (1 if plurality, 0 if proportional)  
SENSYS If plurality and proportional representation, which governs the majority or all of the Senate seats? (1 if plurality, 0 if proportional)  
THRESH What is the vote threshold for representation?

<i>DHONDT</i>	Is the D'Hondt system used? (1 if yes, 0 if no)
<i>CL</i>	Are closed lists used? (1 if yes, 0 if no)
<i>SELECT</i>	Candidate selection: national (1); subnational (2); primary (3)
<i>FRAUD</i>	Were vote fraud or candidate intimidation serious enough to affect the outcome of the most recent elections?

#### *Stability and Checks and Balances*

<i>TENLONG</i>	Longest tenure of a veto player
<i>TENSHORT</i>	Shortest tenure of a veto player
<i>TENSYS</i>	Tenure of system of government if democratic; tenure of chief executive otherwise
<i>IPCOH</i>	Index of political cohesion (based on Roubini and Sachs 1989)
<i>CHECKS1</i>	Number of veto players
<i>CHECKS2</i>	$CHECKS2 = CHECKS1 + 1$ for each veto player whose orientation is closer to the opposition than to the government
<i>POLARIZ</i>	Maximum difference of orientation among government parties (0–2)
<i>STABS</i>	Percentage of veto players that dropped from government between year $t$ and year $t+1$ (assume Senate, if it exists, also changes)
<i>STABNS</i>	Percentage of veto players that dropped from government between year $t$ and year $t+1$ (assume Senate, if it exists, did <i>not</i> also change)

#### *Federalism*

<i>AUTON</i>	Are there autonomous regions?
<i>MUNI</i>	Are the municipal governments locally elected?
<i>STATE</i>	Are the state or province governments locally elected?
<i>AUTHOR</i>	Do subnational governments have extensive taxing, spending, or regulatory authority?
<i>STCONST</i>	Are the constituencies of the senators states/provinces?

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