



The Electoral and Institutional Database of the World

<http://www.aclmd.com/Kanitha/Electoral/default.asp>

Party System Fragmentation Tutorial

Introduction

Welcome to this tutorial accompanying the *Electoral and Institutional Database of the World*. The database will grow to include basic electoral data (at the district-level) and institutional rules for national public office in all democracies since World War II. Its key contribution is the generation of measures of importance to social scientists, policy-makers, and students and teachers of politics. It will include measures of concepts such as the ideological polarization of national legislatures, the national reach of political parties, and the degree of unity or separation of power between branches of government, to name just three. It will incorporate Geographic Information System technology to allow the mapping of many measures where appropriate.



Fragmentation

1. What is Party System Fragmentation?
2. Computing Effective Number of Parties (ENP)
3. Example of Fragmentation based upon votes
4. Practice computing Fragmentation based upon votes



1. What is Party System Fragmentation

Fragmentation measures the degree to which electoral support or legislative representation is divided among various political parties. In the database, we measure fragmentation using the Effective Number of Parties based upon votes (ENPV) or seats (ENPS). ENP differs from a simple count of the number of political parties in that it weighs larger parties more than smaller parties.

Laakso, Markku, and Rein Taagepera. 1979. The Effective Number of Parties: A Measure with Application to Western Europe. *Comparative Political Studies* 12(1)



2. Computing ENP

$ENP = 1/(1-F)$, where F is Party Fractionalization Index

$F = 1 - \sum(p_i^2)$, where p is the proportion of seats or votes of the i th party



3. Example of ENP based upon votes

This table shows the hypothetical election results in a country:

Election	Party	% Votes
2000	A	50
2000	B	30
2000	C	20

To compute ENPV:

Step 1: convert the vote percentages into vote proportions.

Step 2: square the individual proportions.

Step 3: sum up the squared proportions.

Step 4: compute F by subtracting the result of step 3 from 1.

Step 5: substitute F into $ENP=1/(1-F)$

Result: ENPV=2.63

Party	Step 1: Prop. of Votes	Step 2: Prop. of Votes ²
A	.50	.25
B	.30	.09
C	.20	.04
	Step 3:	.38
	Step 4:	F=1-.38=.62
	Step 5:	ENPV= $1/(1-.62)=2.63$

For Practice ENPV (Incomplete)

- Take the real case of Mexico's lower house elections in 2007. Using the same steps above, the ENPV can be determined fairly easily.

Election	Party	% Votes
2007	Party Name	Data
2007	Party Name	Data
2007	Party Name	Data
2007	Party Name	Data
2007	Party Name	Data
2007	Party Name	Data
2007	Party Name	Data
2007	Party Name	Data
2007	Party Name	Data

- Step 1: Step 2: Step 3: Step 4:

Votes	Votes	Votes	ENPV
Data	Data		
Data	Data	Data	Data
Data	Data		
Data	Data		
Data	Data		
Data	Data		
Data	Data		
Data	Data		
Data	Data		

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