



The Electoral and Institutional Database of the World

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

Electoral Volatility 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.



Electoral Volatility

1. What is Electoral Volatility?
2. Computing Electoral Volatility
3. Example of Volatility based upon votes
4. Practice computing Volatility based upon votes



1. What is Electoral Volatility

Volatility indicates the degree of stability in voter support of political parties over time. In the database, we measure volatility using the Pederson Index. This index computes the net aggregate vote shifts between elections.

Pedersen, Mogens. 1983. "Changing Patterns of Electoral Volatility in European Party Systems, 1948-1977." In *Western European Party Systems: Continuity and Change*, ed. Hans Daalder and Peter Mair. Beverly Hills, CA: Sage. Pp. 29-66.



2. Computing Volatility

Volatility = $(\sum(|p_{i,t} - p_{i,t-1}|))/2$, where $p_{i,t}$ is the percentage of the vote for party i at time t , and $p_{i,t-1}$ is the percentage of the vote for party i at time $t-1$.

Volatility ranges from 0 to 100, where 0 signifies that no parties lost or gained vote percentages, while 100 means that all the votes went to a new set of parties.



3. Example of Volatility based upon votes

This table shows the hypothetical election results in a country:

Party	% Votes 2000	% Votes 2004
A	50	45
B	30	25
C	20	30

To compute Volatility:

Step 1: Subtract the % in 2000 from the % in 2004 for each party

Step 2: Take the absolute value of each result in step 1.

Step 3: Add all the results of step 2.

Step 4: Divide the result of step 3 by 2.

Result: Volatility=10.

Party	Step 1: Subtract	Step 2: Absolute value
A	$45-50=-5$	5
B	$25-30=-5$	5
C	$30-20=10$	10
	Step 3:	20
	Step 4:	$20/2=10$
	Result	Volatility=10

For Practice (Incomplete)

- Using real data from the 2003 and 2007 Mexican lower house elections, the volatility score can be easily derived using the same steps above.

Party	% of votes 2003	% of votes 2007
Party Name	Data	Data
Party Name	Data	Data
Party Name	Data	Data
Party Name	Data	Data

- Note that the vote totals need to be turned to percentages.

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

Vote Differences	Absolute Value	Sum	Sum/2 = Volatility
Data	Data		
Data	Data	Data	Data
Data	Data		
Data	Data		