# Codebook

## Aggregated Threshold Function Dataset (1945-2000)

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**Abstract**

This codebook provides the description and operationalisation of the variables used to characterise PR and plurality/majority electoral systems employed in worlwide parliamentary elections between 1946 and 2000. Characterisation is carried out using two values: the minimum proportion of votes necessary to win 1 seat in the parliament and the minimum proportion of votes required to win half of the seats in the lower chamber. This dataset is a modified version of a broader dataset elaborated by Golder (2005) and Przeworski et al (2000). Data is presented by country and election year.

## Bibliographic Citation

All works which use or refer to this dataset should acknowledge this source by means of bibliographic citation. To ensure that such source attributions are captured for bibliographic indexes, citations must appear in footnotes or in the reference section of publications. The bibliographic citation for this dataset is

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## Acknowledgement

Any publication, whether printed, electronic or broadcast, based wholly or in part on these dataset, should acknowledge the original data creator.

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**CCODE** – Country code. Appendix 1 shows the codes for every country.

**REGION** – Regions of the World. Labels for these regions are

| | |
|---|---|
| 1 - Sub-Saharan Africa | 6 - Middle East-North Africa |
| 2 - South Asia | 7 - Latin America |
| 3 - East Asia | 8 - Non-hispanic America |
| 4 - South-East Asia | 9 - Eastern Europe |
| 5 - Pacific Islands-Oceania | 10 - Western Europe |

**COUNTRY -** Name of the country in the database. .

**ELECYEAR** – Year of Election. Three criteria have been used to select each election. First a temporal one. The election must have occurred between 1945 and 2000. Second, a political one. The election must have occurred under a democratic period. A democratic period is defined as one in which two or more political parties compete periodically for office, or as Przeworski defines "democracy is a system in which parties lose elections" (Przeworski 1991; Przeworski, Limongi, Cheibub, and Alvarez 2000). Finally, an institutional criterion is used. Only those electoral systems that allow the application of aggregated threshold functions are chosen.

**TYPE_SYST** – Type of electoral system used in each election. Labels for this variable are

1 - Winner-takes-all_Plurality
2 - Winner-takes-all_Majority
3 - P.R.-Divisors
4 - P.R.-Quota

Since aggregated thresholds functions cannot be applied to all electoral formulae the following electoral formulae are included in these categories:

- Winner-takes-all_Plurality : First Past The Polls and Block Vote
- Winner-takes-all_Majority: Two Round System -includes Absolute Majority and Qualified Majority
- P.R.-Divisors: d´Hondt and Sainte-Laguë
- P.R.-Quota: Hare and Droop

**ASSEMBLY** – Total number of seats elected in the lower chamber

**DISTRICTS** – Number of districts in which the country is divided.

**MIN_E** – Minimum district magnitude in the first tier. If there is only one tier of seats allocation then this value shows the minimum district magnitude that can be found in the territory

**MAX_E** – Maximum district magnitude in the first tier. If there is only one tier of seats allocation then this value shows the maximum district magnitude that can be found in the territory

**AVERAGMA -** Average district magnitude is calculated as follows,

$$\widehat{M} = \frac{S}{E}$$

where $E$ refers to the number of districts in which the territory is divided and $S$ refers to the assembly size. See Lijphart (1994) and Taagepera (2007)

**FORMULA** – Electoral formula used in the first tier. If there is only one tier of seat allocation, then, this is the formula used in the whole territory. Labels for this variable are

| | |
|---|---|
| 1 - FPTP | 5 - S-L |
| 2 - TRS | 6 - Hare |
| 3 - BV | 7 - Droop |
| 4 - d´Hondt | |

**DIVISOR -** Divisor electoral formula used in electoral system. It corresponds to the $c$ values need to calculate the $V^{nec}$ functions. They have to values 1 and 0.5 which corresponds to D'hondt and Sainte-Laguë respectively.

**QUOTA -** Quota electoral formula used in electoral formula. It corresponds to the $n$ values need to calculate the $V^{nec}$ functions. They have to values 0 and 1 which corresponds to Hare and Droop quotas respectively

**PARTIES_ENP** – Effective number of competing parties. It is calculated following Laakso and Taagepera (1979) and Taagepera and Shugart (1989) as

$$P_{ENP} = \frac{1}{\sum \left(V_T^p\right)^2}$$

where $V_T^p$ refers to the total share of votes won by party $p$.

**PARTIES_TAAG** – Number of competing parties that could win seats in the legislature, as suggested by Taagepera (2007). Given an assembly size, $S$, and a district magnitude, $M_d$, Taagepera estimates that the number of parties that could win seats can be obtained using the following formula[1]

$$P_{Taag} = (S * M_d)^{1/4}$$

Since generality is a distinctive feature of aggregated threshold functions, $M_d$ above can be subsituted by the average district magnitude in order to obtain

[1] For a full development of this predictor see Taagepera (2007:133-134)

the number of parties that could win seats in the assembly nationwide. After this substitution, the number of potentially seat-winning parties is

$$P_{Taag} = \left(\frac{S^2}{E}\right)^{1/4}$$

**Vnec_1_ENP** – Minimum necessary proportion of votes required to win 1 seat in the parliament nationwide using ENP as calculated by Laakso and Taagepera (1979)

**Vnec_half_ENP** – Minimum necessary proportion of votes required to win half of the seats in the parliament nationwide using ENP as calculated by Laakso and Taagepera (1979) in case of missing data

**Vnec_1_Taag** – Minimum necessary proportion of votes required to win 1 seat in the parliament nationwide using the number of parties that can win a seat as calculated by Taagepera (2007)

**Vnec_half_Taag** – Minimum necessary proportion of votes required to win half of the seats in the parliament nationwide using the number of parties that can win a seat as calculated by Taagepera (2007) in case of missing data.

# Appendix 1

This table shows the codes that have been used to identify each country.

Table 1: Country codes used in the database

| Country | Code |
|---|---|
| Albania | 1 |
| Andorra | 2 |
| Antigua | 3 |
| Argentina | 4 |
| Armenia | 5 |
| Bahamas | 6 |
| Bangladesh | 7 |
| Barbados | 8 |
| Belize | 9 |
| Benin | 10 |
| Bolivia | 11 |
| Brazil | 12 |
| Bulgaria | 13 |
| Canada | 14 |
| Cape Verde | 15 |
| Central Africa | 16 |
| Colombia | 17 |
| Comoros | 18 |
| Congo | 19 |
| Costa Rica | 20 |
| Croatia | 21 |
| Chile | 22 |
| Dominica | 23 |
| Dominican Rep. | 24 |
| Ecuador | 25 |
| El Salvador | 26 |
| Finland | 27 |
| France | 28 |
| Ghana | 29 |
| Greece | 30 |
| Grenada | 31 |
| Guatemala | 32 |
| Guyana | 33 |
| Haiti | 34 |
| Honduras | 35 |
| Iceland | 36 |
| India | 37 |
| Indonesia | 38 |

Table 1: Country codes used in the database (cont.)

| Country | Code |
|---|---|
| Israel | 39 |
| Jamaica | 40 |
| Japan | 41 |
| Kiribati | 42 |
| Korea, South (Rep) | 43 |
| Kyrgyzstan | 44 |
| Laos PDR | 45 |
| Latvia | 46 |
| Lebanon | 47 |
| Liechtenstein | 48 |
| Lithuania | 49 |
| Luxembourg | 50 |
| Macedonia | 51 |
| Madagascar | 52 |
| Malawi | 53 |
| Mali | 54 |
| Marshall Islands | 55 |
| Micronesia | 56 |
| Moldova | 57 |
| Mongolia | 58 |
| Myanmar | 59 |
| Namibia | 60 |
| Nepal | 61 |
| Netherlands | 62 |
| New Zealand | 63 |
| Nicaragua | 64 |
| Niger | 65 |
| Nigeria | 66 |
| Norway | 67 |
| Pakistan | 68 |
| Palau | 69 |
| Panama | 70 |
| Papua New Guinea | 71 |
| Peru | 72 |
| Philippine | 73 |
| Polan | 74 |
| Portugal | 75 |
| Russia | 76 |
| San Marino | 77 |
| Sao Tome and Principe | 78 |
| Sierra Leone | 79 |
| Slovak Rep. | 80 |

Table 1: Country codes used in the database (cont.)

| **Country** | **Code** |
|---|---|
| Solomon Islands | 81 |
| Somalia | 82 |
| Spain | 83 |
| Sri Lanka | 84 |
| St.Kitts and Nevis | 85 |
| St.Lucia | 86 |
| St.Vincent | 87 |
| Sudan | 88 |
| Suriname | 89 |
| Sweden | 90 |
| Switzerland | 91 |
| Taiwan | 92 |
| Thailand | 93 |
| Trinidad and Tobago | 94 |
| Turkey | 95 |
| Uganda | 96 |
| Ukraine | 97 |
| United Kingdom | 98 |
| USA | 99 |
| Uruguay | 100 |
| Venezuela | 101 |
| Zambia | 102 |

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