



# Database of Electoral Systems Codebook

Jean-Benoit Pilet, Alan Renwick, Lidia Núñez,  
Elwin Reimink and Pablo Simón

Electoral System Changes in Europe (ESCE) Project  
[www.electoralsystemchanges.eu](http://www.electoralsystemchanges.eu)

The project 'Electoral System Change in Europe since 1945' (ESCE) is coordinated by Jean-Benoit Pilet (Université libre de Bruxelles) and Alan Renwick (University of Reading).

The ESCE project aims at contributing to our understanding of electoral systems in Europe in two respects. First, the website gives access for 31 European countries to the details of the electoral system they have used since their first democratic elections for the lower chamber. Access to the electoral laws of these 30 countries (in national language and in English for some articles) is also possible.

Secondly, on basis of this unique material, researchers of the ESCE project produce analysis and research notes on the adoption and transformation of electoral systems in Europe. They can be found on the Publications and Working papers sections of this website.

Researchers using this dataset are kindly requested to use the appropriate bibliographic citation:

Jean-Benoit Pilet, Alan Renwick, Lidia Núñez, Elwin Reimink and Pablo Simón (2016). Database of Electoral Systems. 2016.

Version released on February, 2016.

More information is available at [www.electoralsystemchanges.eu](http://www.electoralsystemchanges.eu)

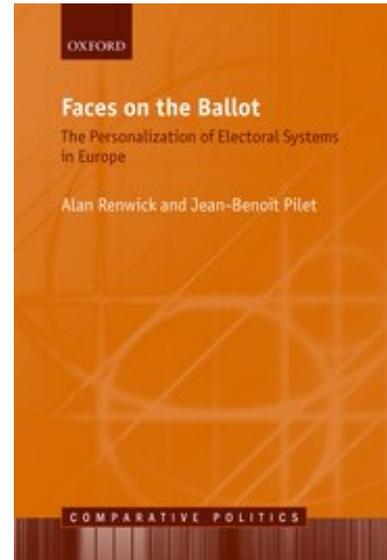
### **Project funding provisions**

The ESCE project team wishes to acknowledge that this research was made possible due to the financial support that the project has received from: the FRS-FNRS, the McDougall Trust and the Nuffield Foundation.

### **Publication of interest**

#### ***Faces on the Ballot. The Personalization of Electoral Systems in Europe.***

**By Alan Renwick and Jean-Benoit Pilet**



One of the key shifts in contemporary politics is the trend towards greater personalization. Collective actors such as political parties are losing relevance. Citizens are slowly dealigning from these actors, and individual politicians are therefore growing in importance in elections, in government, within parties, and in media reporting of politics. A crucial question concerns how this new pattern could be restructuring politics over the long run - notably, whether the personalization of politics is changing the institutional architecture of contemporary democracies.

The authors show that the trend towards personalization is indeed changing core democratic institutions. Studying the evolution of electoral systems in thirty-one European democracies since 1945, they demonstrate that, since the 1990s, there has been a shift towards more personalized electoral systems. Electoral systems in most European countries now allow voters to express preferences for candidates, not just for political parties. And the weight of these voters' preferences in the allocation of seats has been increased in numerous countries.

They examine the factors that appear to be driving this evolution, finding that the personalization of electoral systems is associated with the growing gap between citizens and politics. Politicians and legislators appear to perceive the personalization of electoral systems as a way to address the democratic malaise and to restore trust in politics by reducing the role of political parties in elections. The book also shows, however, that whether these reforms have had any success in achieving their aims is far less clear.

Renwick, A., & Pilet, J. B. (2016). *Faces on the Ballot: The Personalization of Electoral Systems in Europe*. Oxford University Press.

## Table of Contents

General coding guidelines .....	5
Section A: case ID .....	6
Section B: National Electoral System Variables.....	7
Section C: First tier .....	9
Section D: Second tier.....	11
Section E: Third tier .....	13
Section F: Highest tier .....	14
Appendix: Country details .....	17
Austria .....	17
Belgium.....	17
Bulgaria .....	17
Croatia .....	18
Cyprus.....	18
Czech Republic .....	18
Denmark .....	19
Estonia .....	20
Finland .....	20
France.....	20
Hungary.....	21
Germany.....	22
Greece .....	22
Iceland .....	24
Ireland.....	25
Italy .....	25
Latvia .....	27
Lithuania .....	27
Luxembourg.....	27
Poland .....	28
Portugal.....	28
Romania.....	28
Slovakia .....	29

Slovenia .....	29
Sweden .....	29
Switzerland .....	30
United Kingdom .....	30

### **General coding guidelines**

The dataset contains 1359 country-year observations. Whenever two elections have been held in the same year in a country, there is one observation for each election.

The code for missing cases is 9999.

When a variable is not applicable to a case it is coded 8888.

Changes to the electoral law regarding the elements included in the dataset are reflected on the year in which the reform is introduced. When there are several reforms included in the same reform package (see country summaries at [www.electoralsystemchanges.eu](http://www.electoralsystemchanges.eu)), the date of the reform coded is the one of the first reform bill passed.

Regarding ballot structure in multi-tiered systems, please note that if the list is open or flexible in the first tier, and the second tier is not independent from the first tier, then the variables for ballot structure and preference votes are coded as 'not applicable' (8888).

---

**Section A: case ID**

---

v.01. **IDNR**: Identification number for each country-year observation (1 to N).

v.02. **country\_ID**

	Country_ID
Austria	1
Belgium	2
Bulgaria	3
Croatia	4
Cyprus	5
Czech Republic	6
Denmark	7
Estonia	8
Finland	9
France	10
Germany	11
Greece	12
Hungary	13
Iceland	14
Ireland	15
Italy	16
Latvia	17
Lithuania	18
Luxembourg	19
Malta	20
Poland	21
Portugal	22
Romania	23
Slovakia	24
Slovenia	25
Spain	26
Sweden	27
Switzerland	28
The Netherlands	29
UK	30

v.03. **country**: Country name.

v.04. **year**: « The first year included is the year of the first democratic election in the current democratic period. The last year is 2011

v.05. **Full election date:** dd/mm/yy

v.06. **Year of election** (yyyy).

v.07. **Most recent election** (yyyy).

v.08. **Reform bill:** Binary variable that indicates whether a bill introducing changes in the electoral system is introduced (code '1').

v.09. **Date of introduction of an electoral reform:** If several bills affecting the elements addressed in the ESCE project<sup>1</sup> are introduced in the same year, the date of the first bill is coded in this variable. This variable also includes constitutional amendments that refer to elements of the electoral system.

---

## Section B: National Electoral System Variables

---

v.10. **Assemblysize:** Total number of seats in the lower chamber.

v.11. **Change\_assemblysize:** Change in assembly size included in the reform. Dummy variable (Automatic changes linked to population increases or decreases are not considered).

0. No change.

1. Change.

v.12. **ES\_family:** Electoral system family.

1. Majoritarian: including plurality systems, qualified majority systems.

2. Proportional: including list PR systems and STV.

3. Mixed: A mixed system is one in which a mixture of majoritarian and proportional electoral rules are used. The two electoral formulas may be dependent or independent (see v.09).

4. Reinforced proportional system:

v. 13. **Mixed\_system\_type:** Classification of mixed electoral systems based on Blais and Massicotte (1999<sup>2</sup>).

---

<sup>1</sup> For more details, see <http://www.electoralsystemchanges.eu/>

<sup>2</sup> Massicotte, L., & Blais, A. (1999). Mixed electoral systems: a conceptual and empirical survey. *Electoral Studies*, 18(3), 341-366.

1. Coexistence: Independent mixed electoral system in which some districts use a majoritarian formula, while others employ a proportional formula.
2. Superposition: Independent mixed electoral system in which two different electoral formulas are applied within the same district with some seats allocated under a majoritarian formula and others under a PR formula. Voters cast two votes, one for the majoritarian seat(s) and one for the PR seats.
3. Fusion: Independent mixed electoral system in which two different electoral formulas are applied within the same district with some seats allocated under a majoritarian formula and others under a PR formula. Voters cast only one vote. The first seat is allocated under a majority formula, and the others under a PR formula.
4. Correction: Dependent mixed electoral system in which seats distributed by proportional representation in one set of districts are used to correct or modify the distortions created by the majoritarian formula in another set of districts (ex: Germany, Hungary).
5. Conditional: Dependent mixed electoral system in which the actual use or not of one electoral formula depends on the outcome produced by the other (ex: France 1951–57).
6. other.

v.14. **Party\_threshold\_National**: Threshold imposed on parties at national level: code value between 0 and 100 for the percentage of votes at which threshold it set. Thresholds can apply for any tier; see the appendix for country-specific details.

v.15. **Coalition\_threshold\_National**: Threshold imposed on coalitions of parties at national level: dummy variable, code 1 if such a threshold exists. Details for each country are provided in the Appendix.

v.16. **Party\_threshold\_Subnational**: Threshold imposed on parties at subnational level (e.g.: only for one tier, at district level, at regional level, etc): code value between 0 and 100 for the percentage of votes at which threshold it set. Thresholds can apply to any tier; see the appendix for country-specific details.

v.17. **Thresholds\_upper\_tier**: Thresholds on participation in the distribution of seats in the upper tier.

0. No condition.

1. Seat requirements.
2. Vote requirements.
3. Vote and seat requirements.

v.18. **Number\_of\_tiers:** Number of tiers in the system. Tiers may be territorial tiers within PR or majoritarian systems, as well as PR/majoritarian tiers in mixed systems.

v.19. **Relation\_tiers:** Relation between tier 1 and tier 2:

1. Independent.
2. Remainder: undistributed seats at lower tier are distributed at upper tier, meaning the number of seats allocated at the upper tier may vary depending on how many seats are allocated at the lower tier.
3. Compensatory: pre-fixed number of compensatory seats are allocated to compensate for any disproportionality at the lower tier or to reinforce the majority (i.e. Hungary).

v.20. **Legal\_protection\_minorities:** Binary variable reflecting whether there is any legal protection of minorities (Seats, different thresholds, etc).

0. No.
1. Yes.

---

### Section C: First tier

---

In this section the characteristics of the electoral system at the first tier are coded. However it should be noted that:

- For non-mixed systems, the tier in which the smallest districts are used is coded.
- For mixed systems, the majoritarian tier is coded.
- For single tier systems, all variables are coded under section C, but the code 8888 is used for the variables in section D (second tier).

v.21. **FT\_PR\_formula:** Type of proportional electoral formula.

1. Single Transferable Vote.
2. List PR Hare Quota.
3. List PR Droop Quota (Hagenbach-Bischoff).

4. List PR Imperiali Quota.
5. List PR reinforced Imperiali Quota.
6. List PR D'Hondt Successive Divisors (1, 2, 3, 4, etc.).
7. List PR Imperiali Successive Divisors (2, 3, 4, etc.).
8. Sainte Laguë Highest Average (1, 3, 5, 7, etc.).
9. Modified Sainte Laguë Successive Divisors (1.4; 3, 5, 7, etc.).
10. Other.

v.22. **FT\_Maj\_formula:** Type of majoritarian electoral formula

1. Plurality.
2. Qualified majority (including run-off).

v.23. **FT\_No\_districts:** Number of districts at first tier (continuous variable).

v.24. **FT\_No\_seats:** Number of seats allocated at first tier (continuous variable). For systems where the upper tier(s) are for remainder seats, theoretically, all seats could be allocated at the first tier. Therefore, the total number of seats is coded. Same rule applies to conditional mixed systems.

v.25. **FT\_Mean\_DM:** Mean district magnitude (continuous variable).

v.26. **FT\_Legal\_changes:** Dummy variable reflecting whether legal changes in district magnitude not related to changes in population have been introduced.

0. No change.
1. Change.

v.27. **FT\_DM\_low:** Number of seats allocated in the smallest electoral district (continuous variable).

v.28. **FT\_DM\_high:** Number of seats allocated in the largest electoral district (continuous variable).

v.29. **FT\_No\_preference:** Maximum number of intraparty preferential votes a voter is allowed to cast (continuous variable). For ordinal systems like STV or AV, the maximum number of candidates that can be ranked is coded.

6666: Candidates on the party list.

If voters can cast as many votes as seats are available in the district, then the average district magnitude is coded.

If it is a function of district magnitude, then the result of the calculation with the average district magnitude is coded.

If there is no specific limit, then district magnitude is coded.

v.30. **FT\_ballot**: Type of ballot structure.

1. Closed list system.
2. Flexible list system.
3. Open list system.
4. Panachage system.
5. Ordinal systems (STV, AV, modified Borda count, limited vote).
6. Other.

---

## Section D: Second tier

---

- For non-mixed systems, the tier in which the second smallest districts are used is coded.
- For mixed systems, the proportional tier is coded in this section.
- For those systems without a second tier the code 8888 is used for the variables in this section.

v.31. **ST\_Party\_threshold**: threshold imposed on parties at the second tier: code value between 0 and 100 for the percentage of votes at which threshold it set.

v.32. **ST\_Coalition\_threshold**: threshold imposed on coalitions of parties at the second tier: dummy variable, code 1 if such a threshold exists. Details for each country are provided in the Appendix.

v.33. **ST\_PR\_formula**: Type of proportional electoral formula.

1. Single Transferable Vote.
2. List PR Hare Quota.
3. List PR Droop Quota (Hagenbach-Bischoff).
4. List PR Imperiali Quota.
5. List PR reinforced Imperiali Quota.
6. List PR D'Hondt Successive Divisors (1, 2, 3, 4, etc.).
7. List PR Imperiali Successive Divisors (2, 3, 4, etc.).
8. Sainte Laguë Highest Average (1, 3, 5, 7, etc.).

9. Modified Sainte Laguë Successive Divisors (1.4; 3, 5, 7, etc.).
10. Other.

v.34. **ST\_Maj\_formula:** Type of majoritarian electoral formula.

1. Plurality.
2. Qualified majority (including run-off).

v.35. **ST\_No\_districts:** Number of districts at second tier (continuous variable).

v.36. **ST\_No\_seats:** Number of seats allocated at second tier (continuous variable). For systems where the upper tier does not allocate a fixed number of seats but only remainder seats not allocated at first tier, code 0 is used because, theoretically, there could be no remainder seats. The same rule is applied for conditional mixed systems. For compensatory mixed systems, if the number of PR seats may vary (as in Germany), the minimum number of PR seats is coded.

v.37. **ST\_Mean\_DM:** Mean district magnitude (continuous variable). If only remainder seats are allocated, the code '0' is used (see v.15).

v.38. **ST\_DM\_low:** Number of seats allocated in the smallest electoral district: continuous variable. The code '0' is used if only remainder seats are allocated at the second tier (see v.15).

v.39. **ST\_DM\_high:** Number of seats allocated in the largest electoral district: continuous variable. The code '0' is used if only remainder seats are allocated at the second tier (see v.15).

v.40. **ST\_No\_preference:** Maximum number of intraparty preferential votes a voter is allowed to cast (continuous variable). For ordinal systems like STV or AV, the maximum number of candidates that can be ranked is coded.

v.41. **ST\_ballot:** Type of ballot structure.

1. Closed list system.
2. Flexible list system.
3. Open list system.
4. Panachage system.
5. Ordinal systems (STV, AV, modified Borda count, limited vote).

---

## Section E: Third tier

---

It should be noted that:

- All variables are coded under section E with the code 8888 for those systems with up to two tiers.

v.42. **TT\_Party\_threshold:** threshold imposed on parties at the third tier: code value between 0 and 100 for the percentage of votes at which threshold it set.

v.43. **TT\_Coalition\_threshold:** threshold imposed on coalitions of parties at the third tier: dummy variable, code 1 if such a threshold exists. Details for each country are provided in the Appendix.

v.44. **TT\_PR\_formula:** Type of proportional electoral formula.

1. Single Transferable Vote.
2. List PR Hare Quota.
3. List PR Droop Quota (Hagenbach-Bischoff).
4. List PR Imperiali Quota.
5. List PR reinforced Imperiali Quota.
6. List PR D'Hondt Successive Divisors (1, 2, 3, 4, etc.).
7. List PR Imperiali Successive Divisors (2, 3, 4, etc.).
8. Sainte Laguë Highest Average (1, 3, 5, 7, etc.).
9. Modified Sainte Laguë Successive Divisors (1.4; 3, 5, 7, etc.).
10. Other.

v.45. **TT\_Maj\_formula:** Type of majoritarian electoral formula.

1. Plurality.
2. Qualified majority (including run-off).

v.46. **TT\_No\_districts:** Number of districts at third tier (continuous variable).

v.47. **TT\_No\_seats:** Number of seats allocated at the third tier (continuous variable). For systems where the upper tier does not allocate a fixed number of seats but only remainder seats not allocated at the second tier, code 0 is used because, theoretically, there could be no remainder seats. The same rule is applied for conditional mixed systems. For compensatory mixed

systems, if the number of PR seats may vary, the minimum number of PR seats is coded.

v.48. **TT\_Mean\_DM**: Mean district magnitude (continuous variable). If only remainder seats are allocated, the code '0' is used (see v.15).

v.49. **TT\_DM\_low**: Number of seats allocated in the smallest electoral district: continuous variable. The code '0' is used if only remainder seats are allocated at the second tier (see v.15).

v.50. **TT\_DM\_high**: Number of seats allocated in the largest electoral district: continuous variable. The code '0' is used if only remainder seats are allocated at the second tier (see v.15).

v.51. **TT\_No\_preference**: Maximum number of intraparty preferential votes a voter is allowed to cast (continuous variable). For ordinal systems like STV or AV, the maximum number of candidates that can be ranked is coded.

v.52. **TT\_ballot**: Type of ballot structure.

1. Closed list system.
2. Flexible list system.
3. Open list system.
4. Panachage system.
5. Ordinal systems (STV, AV, modified Borda count, limited vote).

---

## Section F: Highest tier

---

It should be noted that:

- All variables are coded under section F with the code 8888 for those systems with up to two tiers.

v.53. **HT\_Party\_threshold**: threshold imposed on parties at the highest tier: code value between 0 and 100 for the percentage of votes at which threshold is set.

v.54. **HT\_Coalition\_threshold:** threshold imposed on coalitions of parties at the highest tier: dummy variable, code 1 if such a threshold exists. Details for each country are provided in the Appendix.

v.55. **HT\_PR\_formula:** Type of proportional electoral formula.

1. Single Transferable Vote.
2. List PR Hare Quota.
3. List PR Droop Quota (Hagenbach-Bischoff).
4. List PR Imperiali Quota.
5. List PR reinforced Imperiali Quota.
6. List PR D'Hondt Successive Divisors (1, 2, 3, 4, etc.).
7. List PR Imperiali Successive Divisors (2, 3, 4, etc.).
8. Sainte Laguë Highest Average (1, 3, 5, 7, etc.).
9. Modified Sainte Laguë Successive Divisors (1.4; 3, 5, 7, etc.).
10. Other.

v.56. **HT\_Maj\_formula:** Type of majoritarian electoral formula.

1. Plurality.
2. Qualified majority (including run-off).

v.57. **HT\_No\_districts:** Number of districts at second tier (continuous variable).

v.58. **HT\_No\_seats:** Number of seats allocated at the highest tier (continuous variable). For systems where the upper tier does not allocate a fixed number of seats but only remainder seats not allocated at the third tier, code 0 is used because, theoretically, there could be no remainder seats. The same rule is applied for conditional mixed systems. For compensatory mixed systems, if the number of PR seats may vary, the minimum number of PR seats is coded.

v.59. **HT\_Mean\_DM:** Mean district magnitude (continuous variable). If only remainder seats are allocated, the code '0' is used (see v.15).

v.60. **HT\_DM\_low:** Number of seats allocated in the smallest electoral district: continuous variable. The code '0' is used if only remainder seats are allocated at the highest tier (see v.15).

v.61. **HT\_DM\_high:** Number of seats allocated in the highest electoral district: continuous variable. The code '0' is used if only remainder seats are allocated at the second tier (see v.15).

v.62. **HT\_No\_preference:** Maximum number of intraparty preferential votes a voter is allowed to cast (continuous variable). For ordinal systems like STV or AV, the maximum number of candidates that can be ranked is coded.

v.63. **HT\_ballot:** Type of ballot structure.

1. Closed list system.
2. Flexible list system.
3. Open list system.
4. Panachage system.
5. Ordinal systems (STV, AV, modified Borda count, limited vote).

## Appendix: Country details

This section contains clarifications for some observations. Each explanation begins with the name of the variable and the first year for which the explanation is valid. In the case that no year is mentioned, the explanation applies for the whole period covered in the dataset.

### Austria

Party\_threshold\_National from 1992: Threshold applies to the second and third tiers. Additional access through seats won in the first tier.

### Belgium

FT\_PR\_formula from 1993: Either Hare or D'Hondt, depending on the district.

Number\_of\_tiers from 2003: In the three electoral provinces of Brabant - Brussels-Halle-Vilvoorde, Leuven and Nivelles - the two-tier system is maintained

ST\_Party\_threshold from 2003: Threshold does not apply to the electoral district of Brussels-Halle-Vilvoorde.

### Bulgaria

Note: The 2009 system was only used in the 2009 elections because the law was declared unconstitutional in 2011.

Party\_threshold\_National in 1990: Threshold applies to the second tier.

Party\_threshold\_National 1991-2008: Threshold does not apply to independent candidates.

Party\_threshold\_National 2009-2010: Threshold applies to the second tier.

Party\_threshold\_National 2011: Threshold does not apply to independent candidates.

FT\_Maj\_formula 2009: This is coded as plurality though in the event that two candidates get the same share of votes a re-run election must be held.

ST\_DM\_low 2009: The figure (2) reflects the data as shown by <http://rezultati.cik2009.bg/results/mandates/hnm.html#step2>. However the law requires that MMDs were to be allocated a minimum of 3 mandates.

## **Croatia**

The system is coded as a list system, though it should be noted that seats for minorities are elected in SMD. The number of such districts has varied from 5 (from 1999 to 2002) to 8 (from 2003 onwards).

Party\_threshold\_National 1999-2011: Threshold does not apply to minority seats.

FT\_Maj\_formula 1990: An electoral result over 7% was needed in order to access the second round.

Assemblysize 1992: Assembly size might be augmented by additional minority seats.

Assemblysize 1999: Assembly size might be augmented by mandates for voters abroad.

## **Cyprus**

Legal\_protection\_minorities 1970: For Turkish citizens; not implemented.

FT\_No\_preference 1970-2011: The number of preference votes in each electoral district is defined by the number of seats contested divided by four (disregarding fractions). This number is increased by one in the electoral districts with a magnitude between five and seven. In the electoral districts where fewer than four candidates are elected, voters can 'cross' one candidate. Party leaders are excluded from the 'cross of preference' and their election is based on the total number of votes cast for their party.

Party\_threshold\_National 1979-1994: Threshold applies to the second tier. When a party does not win any seat in the lower tier, the threshold is ten percent.

Party\_threshold\_National 1995-2011: Threshold applies to the second tier.

ST\_Coalition\_threshold 1979: Up to 1994: 20 percent for two-party coalitions, 25 percent for coalitions of three parties and more.

ST\_Coalition\_threshold 1995-2011: 10 percent for two-party coalitions, 20 percent for three-party coalitions and more.

## **Czech Republic**

Data for 1990–93 relate to the Czech National Council elections, not to the Czechoslovak federal assembly.

Party\_threshold\_National 1990-2001: Threshold applies to both tiers.

Coalition\_threshold\_National 1992-1999: 7 percent for two-party coalitions, 10 percent for three-party coalitions, 15 percent for four-party coalitions.

Coalition\_threshold\_National 2000-2001: 10 percent for two-party coalitions, 15

percent for three-party coalitions, 20 percent for four-party coalitions. Czech Republic 2000: Reform (preference votes and coalition threshold) remained of a more comprehensive plan which was invalidated.

## Denmark

ST\_No\_districts 1945: This is considered to be a nationwide district, because the distribution of these seats across parties was determined nationally, though the number of seats going to each of three regions was determined in the law. Following the election, the seats were allocated to parties in the multi-member constituencies.

Thresholds\_upper\_tier 1945: The thresholds on participation in the distribution of seats in the upper tier are coded in the dataset as "seat requirements". However, it should be noticed that several requirements were included in the law: parties had to obtain at least one multimember constituency seat or as many votes as the average number of votes cast per seat nationally within one of the three electoral provinces, to qualify for the distribution of compensatory seats.

FT\_No\_districts 1945: The figure corresponds to the multimember constituencies and not to the nomination districts.

Party\_threshold \_National 1953-1960: Threshold applies to the second tier. Parties needed to obtain at least one constituency seat; or at least 60,000 of the valid votes cast in the whole of Denmark; or, within each of the three regions, at least a number of votes equivalent to the average number of valid votes per constituency seat in that region. During this period, 60,000 votes constituted about three percent of the total number of votes cast; as a result, the threshold in the database has been estimated at three percent.

FT\_PR\_formula 1953: The modified Saint-Laguë formula was used in the majority of the districts. However, the dataset does not reflect that D'Hondt was retained for the two seats elected from the Faroe Islands. The two new seats representing Greenland were filled by plurality in single-member districts until 1974, when D'Hondt in one two-member district was introduced there too.

Party\_threshold \_National 1961-2011: Threshold applies to the second tier. In order to participate in the distribution of compensatory seats, parties had to win either

- at least one seat in a multi-member constituency (as before);
- within at least two of the three electoral provinces (rather than, as previously, all three), at least as many votes as the average number of valid votes cast per constituency seat in the region; or

- at least 2 per cent of the valid votes cast nationwide (this last point is the only one that is coded).

### **Estonia**

Party\_threshold\_National 1992-2011: Threshold applies to the second and the third tiers; a party has to win 5% of the votes nationwide, or alternatively have won three seats by simple quota.

ST\_PR\_formula 1992-2001: A modified d'Hondt distribution method is used with the distribution series of 1, 20.9, 30.9, 40.9 , etc.

FT\_ballot 1992-2002: Flexible. According to the 1992 reform, only those candidates who had won more than 10 per cent of the district Hare quota could win district seats. In the event that a party did not had enough candidates surpassing this quota, the seats to be filled were transferred to the national tier, where the system operated as a closed list system.

ST\_ballot 2002-2011: Flexible list. Until the 2002 reform, candidates could be elected for compensation mandates even if they had not received personal votes. With the 2002 reform, only those candidates who reach 5% of the Hare quota at the district level can be awarded a seat from the compensation mandates.

### **Finland**

FT\_ballot 1945: Technically closed lists with apparentement (until 1969). However Törnudd (1968: 84)<sup>3</sup> explains that "before one-person lists were made compulsory in 1954, the party organizations could still manipulate the outcome to some extent, usually by placing some particular candidate or candidates on several lists together with popular vote-getters. In this way, the election of at least one or two particular candidates could be ensured beforehand, although it was not possible to determine in advance the final order of all candidates. Under the present rules, the maximum power left with the district party organization is the power to decide who shall be a candidate."

### **France**

Assembliesize 1945: including 64 overseas departments.

---

<sup>3</sup> Törnudd, Klaus (1968). The Electoral System of Finland. London: Hugh Evelyn.

FT\_No\_preference 1946-1953: Since there is no specific limit to the number of preference votes, it is coded as the average district magnitude.

Party\_threshold\_Subnational 1951-1957: Threshold only valid if seats in a district were distributed through a proportional formula (conditional system).

FT\_Maj\_formula 1958: In 1958 the winner at the district level requires an absolute majority and at least 25% of registered voters. All those candidates who passed a 5% threshold of the votes cast in the first round could enter the second round.

FT\_Maj\_formula 1966: In 1966 the threshold for the second round is increased to 10% of registered voters.

FT\_Maj\_formula 1976: In 1976 the threshold for the second round it is increased to 12.5% of registered voters.

## **Hungary**

Number\_of\_tiers 1989: There was a national tier to allocate undistributed seats that is not included in the dataset (D'Hondt formula).

Mixed\_system\_type 1989: The system is coded as "correction" but votes unallocated at the SMD tier are taken into account in the upper tier.

Party\_threshold\_National 1989-2010: Threshold applies to the second and third tiers.

Relation\_tiers 1989: The relation between tier 1 and tier 2 is coded as "compensatory" but seats at the upper tiers are distributed using the aggregation of votes cast directly for the regional lists and also remainder votes from the SMDs. Remainder votes include votes cast for candidates in SMDs who were not elected. This is not reflected in the dataset.

Mixed\_system\_type 2011: It is different from a standard "correction system" in that the votes for the winning candidates at the SMD that are not used are transferred to the national tier.

Relation\_tiers 2011: Coded as "compensatory" but instead of compensating the lack of proportionality, the system can create the opposite result. Seats are distributed at the national tier using the aggregation of votes cast directly for the national lists and remainder votes from the SMDs. As before, remainder votes include votes cast for candidates in SMDs who were not elected. In addition, however, they now also include votes cast for the winning candidate that were not needed to secure that candidate's election: one vote more than the number of votes obtained by the second-placed candidate in each SMD is subtracted from the winning candidate's total, and the remaining votes are transferred to the national tier. This is not reflected in the dataset.

Party\_threshold\_National 2011: Threshold does not apply to minority candidates. Minorities can win representation if they secure one quarter of the votes that are necessary for the average seat.<sup>4</sup>

Coalition\_threshold\_National 2011: There are different thresholds for coalitions: 10% (two parties); 15% (more than two parties) of all valid votes for party lists and nationality lists (included in the law as published by the Venice Commission).

## **Germany**

Assemblysize 1949: Assembly size fixed at 'about 400 seats'.

Party\_threshold\_Subnational 1949-1952: Threshold applies to the second tier.

Party\_threshold\_National 1953-2011: Threshold applies to the second tier.

Party\_threshold\_National 1990: At the 1990 elections, there were separate thresholds for the former West Germany and the former East Germany.

## **Greece**

Party\_threshold \_National; and Coalition\_threshold\_National 1974: The threshold included in the dataset corresponds to the second tier only for parties and coalitions of two parties. For coalitions of more than two parties the threshold is 30%. There is an additional clause for the participation in the distribution of seats at the fourth tier: only parties that have nominated candidates in at least half of the lower electoral districts (23 out of 56) are allowed to nominate candidates for the closed list national ballot and participate in the distribution of the twelve (12) Deputies of State (Fourth Tier) seats.

FT\_No\_preference: This is coded as one, although there were three districts where up to two preference votes may be expressed.

FT\_No\_seats 1974: Number of seats in the first tier: The figure corresponds to the allocation of seats in the first distribution in 1974.

ST\_Coalition\_threshold 1974: 25 per cent.

TT\_PR\_formula 1974: Parties are allocated as many seats as the quotas they have obtained. Following this distribution, under article 90, 650/1974, if there remain unallocated seats, these are awarded to the party with the largest share of valid votes nationwide (majority bonus to first-past-the-post party).

HT variables (Highest tier) correspond to the State Deputies' tier.

---

<sup>4</sup> [http://www.fesbp.hu/common/pdf/Arbeitspapier\\_Jan\\_2012.pdf](http://www.fesbp.hu/common/pdf/Arbeitspapier_Jan_2012.pdf). Accessed on 15<sup>th</sup> March 2014

HT\_Party\_threshold and HT\_Coalition\_threshold 1974: Political parties and coalitions that had participated in the second and third tiers could be represented in the State Deputies' tier.

1985 System: Certain aspects of the "reinforced" proportional system introduced in 1985 are not reflected in the dataset, most notably the change in the majority bonus. In the 1974 system, unallocated seats (if any) were awarded to the parties or coalitions of parties with the largest remainders of votes. In the 1985 system, if there were still unallocated seats after the distribution of seats according to the procedures fixed by the law, then these are awarded to parties according to the largest mean of valid votes each party polled nationwide (article 1.6; presidential order 152/1985, article 3.6; for more information see 'Electoral System Change in Europe since 1945: Greece', ESCE project, at [www.electoralsystemchanges.eu](http://www.electoralsystemchanges.eu)). This system of reinforced proportionality is abolished in the 1989 reform.

Number\_of\_tiers 1989: The third tier disappears but the Deputies of State remain. Therefore, the new system is coded as having three tiers.

FT\_No\_preference 1989: Since in most of the districts only one preference vote can be expressed this is the figure included in the dataset. However, it should be noted that in two districts voters can 'cross' up to three candidates and another two districts they can vote for up to two candidates.

FT\_ballot 1989, 1990, 2004: The law introduced changes in the allocation of seats among candidates which is based on the number of votes the candidates of each party polled. It is coded in the dataset as a flexible list: former PMs and serving party leaders are excluded from the 'cross of preference' and their election is based on the total number of votes cast for their party in the electoral district in which they are nominated.

Party\_threshold\_National; and Coalition\_threshold\_National 1989: The following information is not reflected in the dataset: all parties or coalitions of parties contesting seats in more than three quarters of the electoral districts that poll a number of valid votes equal to or greater than two percent (2%) nationwide are awarded at least three seats nationwide; whilst parties or coalition of parties that poll a vote share smaller than two percent (2%) but larger than one percent (1%) nationwide are allocated at least one (1) seat. In the case that those parties have not managed to obtain the three seats in the second distribution, they are awarded one seat per major electoral district in which they polled the largest number of votes (excluding the major districts in which the party or coalition has already won one seat).

FT\_No\_preference 1990, 2004: The figure corresponds to the average number of preference votes that can be expressed across districts.

Party\_threshold \_National; and Coalition\_threshold\_National 1990: If parties, coalitions or individual candidates reach the threshold (3%) they are awarded the minimum number of seats in the districts in which they polled the largest share of the vote. That is, the number of seats each party (or coalition) is awarded must not be less than the integer of seventy percent (70%) of the seats that correspond to the party's share of valid votes nationally multiplied by three hundred (300). This process is called 'standardisation' of the vote and ensures that all parties that have reached the electoral threshold are always awarded the number of seats tallied up in the first and second distributions.

2004 Electoral reform: The general elections of 2007 and 2009 were held under a new electoral law (law 3231/2004) which was enacted on 11 February 2004. Although the electoral law was issued before the March 2004 election it was not used in 2004 but in 2007.

Third tier variables (TT\_) refer to the bonus of forty (40) seats that were directly attributed to the party with the largest share of the vote..

Party\_threshold \_National 2004: There is a three percent threshold to participate in the distribution of the State Deputies' seats (ST).

Number\_of\_tiers 2004: The second and third tiers disappear with this reform, but the bonus of forty seats for the winning party is considered as an additional tier for the purposes of this coding scheme. This additional tier, together with the first distribution and the Deputies of State tier, makes three the number of tiers included in the 2004 reform.

## **Iceland**

FT\_No\_preference 1942 and 1959 reforms: This is coded as party list (code=6666). However, it shall be noticed that the 1959 law stated: "On each party's list, there shall be twice as many candidates as are to be elected in each constituency". However the functioning of the system is rather complex: Voters are presented with lists containing candidates in the order determined by the parties. Article 82 of the electoral law states that voters' first vote for one of the party lists. Article 82 goes on to say that voters can, if they wish, reorder the candidates by placing numbers next to their names; they can also strike through the name of a candidate.

FT\_ballot: It is coded as flexible. At least in principle, voters had considerable capacity to influence individual seat allocation under this law (cf. Helgason

2010: 4<sup>5</sup>). But only one candidate has ever been elected who would not have been elected under the party's ranking (in 1946).

Number\_of\_tiers 1942: There were two tiers:

- the lower tier was a mix of SMP, PR in 2MDs, and PR in one 8MD (Reykjavík). Only the 21 SMDs are coded in the first tier variables.
- the higher tier consisted on a nationwide upper tier with 11 seats.

ST\_ballot 1942: For the upper tier, parties could have a national closed list or their seats could be allocated to their best losers in the districts.

ST\_Party\_threshold 1942 and 1959 reforms: There was no threshold at the district level. The threshold for the national tier was that a party had to have won at least one district seat.

## **Ireland**

FT\_No\_preference: This is coded as average district magnitude.

## **Italy**

FT\_No\_seats 1946: The number of seats is the one that appears in the law (573), in spite of the fact that only 556 deputies were elected because the elections could not be held in South Tyrol, Trieste, Gorizia, Pola, Fiume and Zara, which were then under Allied or Yugoslav military control.

FT\_No\_districts, and FT\_Mean\_DM 1946 onwards: Aosta valley is taken into account.

FT\_No\_preference 1946: the figure introduced corresponds to the district with more than 15 seats (19 districts). In those where fewer seats were to be elected (9 districts), the number of preference votes is two.

FT\_PR\_formula 1946: Hagenbach-Bischoff formula is used in those districts with 20 seats or fewer (19 districts), Imperiali is employed when there are more than 20 seats (10 districts). The most common is Hagenbach Bischoff and this is the figure coded in the spreadsheet.

Those variables relating to the number of seats to be allocated at the second tier (ST\_No\_seats, ST\_Mean\_DM, ST\_DM\_low, ST\_DM\_high) are coded as variable because they depend on the number of residual votes.

FT\_No\_preference 1948: the figure introduced corresponds to the district with more than 15 seats (19 districts). In those where fewer seats were to be elected (9 districts), the number of preference votes is three.

---

<sup>5</sup> Helgason, Thorkell (2010). "Apportionment of Seats to Althingi, the Icelandic Parliament: Analysis of the Elections on May 10, 2003, May 12, 2007 and April 25, 2009". National Electoral Commission of Iceland. Available from <http://landskjor.is/>.

FT\_PR\_formula 1948: This is coded as Imperiali, but the system was in fact slightly different. The quota for the first tier allocation is modified: instead of dividing by the number of seats plus one or plus two, it is divided by the number of seats plus three.

The 1953 electoral law was 1953 election, though it is coded in the spreadsheet. Since the bonus provisions were conditional and the conditions were not met, the bonus is not coded in the dataset (for more information, see 'Electoral System Change in Europe since 1945: Italy', ESCE project, at [www.electoralsystemchanges.eu](http://www.electoralsystemchanges.eu)).

FT\_PR\_formula 1953: This is coded as Imperiali reinforced quota, which was the formula to be used in the event that no party got a majority of votes. In the case that a party or group of lists achieved the majority of votes (50% or more) two different quotas would have been calculated. The first one, the majority quotient, was the total number of votes won by the winning party or group of lists divided by the number of seats to be allocated to the winning party/coalition (390 seats). The second one, the minority quotient, consisted of the division of the total number of votes won by the rest of the parties by the seats to be allocated among them (210 seats).

ST\_PR\_formula 1953: It is coded as Hare quota though it is applied for candidates and not for parties' results. Instead of allocating the seats among the candidates listed by the parties for the upper tier, seats were allocated to candidates depending on who had won the highest number of votes. The same applies for 1957 system.

Change\_assemblysize 1956: This change is not reflected in the laws, though secondary sources (Mackie and Rose, 1991<sup>6</sup>; and the Ministry of the Interior) confirm this figure.

Mixed\_system\_type 1993: Though it could be coded as superposition because voters cast two votes, it is coded as correction due to the existence of the Scorporo system which, in the case of the Chamber of Deputies, meant that the number of votes that the second placed candidate won in the single-member district plus one was subtracted from the proportional votes of the linked party lists of the winning candidate in the multi-member districts.

Relation\_tiers 1993: This is coded as compensatory due to the existence of the Scorporo system.

Party\_threshold \_National 1993: Threshold to participate in the allocation of seats under the proportional system.

Party\_threshold \_National; and Coalition\_threshold\_National 2005: The information that is coded in the spreadsheet is the following: There is a

---

<sup>6</sup> Mackie, T. T., & Rose, R. (1991). *The international almanac of electoral history*. Macmillan.

national party threshold of 4% for parties outside a coalition and 10% for coalitions.

The following thresholds are not coded in the dataset: Parties being part of a coalition needed individually to gather 2% of the national votes, except that the largest party below 2% was also included; there was a further exception in the case of officially recognized linguistic minorities, which need 20% of the vote in the district.

FT\_PR\_formula 2005: According to the 2005 electoral law, the party or the coalition of parties that wins the most votes is immediately awarded 340 seats. The size of the seat bonus granted to the winning party is not reflected in the data.

FT\_No\_seats, and FT\_Mean\_DM 2005: These figures do not include the districts of Italians living abroad (12).

### **Latvia**

FT\_No\_preference 1992: Voters have a large capacity of intra-party choice of candidates through preference votes. Voters can mark with a '+' those candidates they prefer, they can put a line through those names of candidates they wish to de-select, or they can vote for a party list without expressing any preference vote for individual candidates.

### **Lithuania**

Party\_threshold \_National 1992: To access the PR system, ethnic minorities require at least a Hare quota (1.4% of the total votes cast).

Thresholds\_upper\_tier 1992: The Hare quota is used for the first distribution of PR seats, the Hagenbach-Bischoff quota is used for remainders.

### **Luxembourg**

Change\_assemblysize 1988: Assembly size becomes fixed; that is, it was no longer linked to changes in population size.

### **Malta**

Number\_of\_tiers 1987-2011: The second tier corresponds to the top-up bonus for the party that gets the most first preference votes (more than 50% of the votes until 1996, or just a majority of votes from 1996 onwards). The 2007

reform introduced that the distribution of seats across parties should reflect the overall winning margin of votes.

Assemblysize 1987-2011: In 1987 it was established that there would be extra seats if one party won an absolute majority of first-preference votes but another one an absolute majority of seats. The extra seats would be used to correct the anomaly.

Variables in the second tier after 1987 refer to the top-up bonus seats that the winning party can get.

ST\_Maj\_formula 1996-2011: It is coded as majority/plurality because only the party getting most votes can gain access to the top-up bonus seats.

### **The Netherlands**

Party\_threshold \_National 1956: Also counts for combinations of lists and individual parties within these combinations (from 1972 onwards).

### **Poland**

Party\_threshold \_National 2001: In 2001 the 5% threshold will only be applied if more than one party is able to reach it. Otherwise, it will be used a 3% threshold.

FT\_PR\_formula 2001: In 2001, the system temporarily changed to modified Saint-Laguë, but D'Hondt was re-instated before new elections.

### **Portugal**

Assemblysize 1976-1979: The Constitution fixes the assembly size in a range between 240 and 250. Nonetheless, in the dataset the figure corresponds to the electoral laws of 1976 and 1979.

### **Romania**

Party thresholds: 5% of Hare quota for ethnic minorities while 8% for coalitions.

Mixed\_system\_type 2008: The 2008 law retained the allocation of seats in a multi-tier process according to the principles of proportional representation. However, instead of voting for closed-lists in multi-member districts, the new system introduces voting for candidates in single-member districts. Three levels of allocation: 1) candidates who win an absolute majority of votes in the uninominal colleges are automatically awarded a seat; 2) votes across uninominal colleges are pooled and the Hare quota is applied to determine

the number of seats of each party; 3) Remaining seats are allocated in the following tier applying the D'Hondt formula

### **Slovakia**

Data for 1990–93 relate to the Slovak National Council elections, not to the Czechoslovak federal assembly. Coalition\_threshold\_National 1992: 7% if 2 or 3 parties in coalition, and 10% if 4 or more parties in coalition.

Coalition\_threshold\_National 1998: 5% for each of the members that form a coalition, plus thresholds of 10% for coalitions of two parties, 15% for coalitions of three parties, and 20% for coalitions of four parties and more.

Coalition\_threshold\_National 1999: The Constitutional Court restored the previous thresholds: 7% when there are 2 or 3 parties in a coalition and 10% if there are 4 or more parties in a coalition.

### **Slovenia**

Party\_threshold\_National 1992: 3 seats to access second tier. This equated to about 3% of nationwide votes.

FT\_PR\_formula 1992: With one seat for each minority with run off system.

FT\_Mean\_DM The two minority seats are excluded

ST\_ballot 1992: Parties that entered in the second tier of election could allocate up to 50% of all mandates awarded according to the order on the original list

Party\_threshold\_National 2000: Nationwide threshold for representation (NOT ONLY SECOND TIER).

ST\_ballot 2000: The closed list element in the allocation of seats to the nation tier was erased.

FT\_PR\_formula 2006: Borda Count system enacted for minorities seats

### **Sweden**

FT\_No\_preference 1945: Voters could bring their own ballot, no candidate limit

FT\_ballot 1945: In practice closed-list.

Party\_threshold\_Subnational 1969: For a party to compete in a district, it has either to attain four percent of the votes nationwide, or twelve percent of the seats in the district.

### **Switzerland**

FT\_PR\_formula 1945: But with unallocated seats with D'Hondt system

### **United Kingdom**

FT\_Maj\_formula 1948: Removed the last two-seats geographical districts and eliminated the university districts (of which those electing more than one member used STV)

FT\_ballot 1948: Multi-member university districts used STV