## **Election indices**

The figures below represent the values of three indices:

- (i) the least squares index (LSq), which measures disproportionality between the vote distribution and the seat distribution;
  - (ii) the effective number of parties at the electoral level (Eff N<sub>v</sub>, also termed ENEP);
- (iii) the effective number of parties at the parliamentary or legislative level (Eff  $N_{s,\,}$  also termed ENPP).

The N of seats refers to the number given in the sources used and is the number on which the calculations were based (though see point (i) below).

These indices were originally outlined in

Markku Laakso and Rein Taagepera, "Effective" number of parties: a measure with application to west Europe', *Comparative Political Studies* 12:1 (1979), pp. 3–27 (effective number of parties), and

Michael Gallagher, 'Proportionality, disproportionality and electoral systems', *Electoral Studies* 10:1 (1991), pp. 33–51 (least squares index).

Details of these indices, and of how they have been calculated, can be found in Appendix B of:

Michael Gallagher and Paul Mitchell (eds), *The Politics of Electoral Systems* paperback edition (Oxford and New York: Oxford University Press, 2008).

For further details on this book, see:

https://global.oup.com/academic/product/the-politics-of-electoral-systems-9780199238675?cc=ie&lang=en&

The 'Calculate the indices for any election' paragraph on the page www.https://www.tcd.ie/Political\_Science/abut/people/michael\_gallagher/ElSystems/index.php also has information on the indices and how they are calculated.

The main historical sources for the election results from which these indices are calculated are:

Thomas T. Mackie and Richard Rose, *The International Almanac of Electoral History*, 3rd ed (Basingstoke: Macmillan, 1991);

Annual Data Section in European Journal of Political Research since 1990;

Richard Rose and Neil Munro, *Elections and Parties in New European Democracies* (Washington: CQ Press, 2003);

Dieter Nohlen, Michael Krennerich and Bernhard Thibaut (eds), *Elections in Africa: a data handbook* (Oxford: Oxford University Press, 1999);

Dieter Nohlen, Florian Grotz and Christof Hartmann (eds), *Elections in Asia and the Pacific: a data handbook*, 2 vols (Oxford: Oxford University Press, 2001);

Dieter Nohlen (ed.), *Elections in the Americas: a data handbook*, 2 vols (Oxford: Oxford University Press, 2005).

More recent election results, and indeed some earlier ones, are drawn from a range of internet sites, where possible official ones such as an election commission or electoral tribunal; these days, most of these are readily accessible online. A list of some of these is given in Appendix E of Gallagher and Mitchell (eds), *The Politics of Electoral Systems*. Other useful sites, not listed there, include:

www.caribbeanelections.com (very informative on all aspects of Caribbean politics, at least up to 2019)

africacheck.org/

africanelections.tripod.com (active until around 2012)

Adam Carr's Psephos site, while tending to bunch minor parties and independents together in an 'Others' category that limited its value as a source for the calculation of indices, nonetheless provided a useful cross-check until it was wound up in March 2022. And, while it is not a source of raw data, Matthew Shugart's Fruits and Votes site (fruitsandvotes.wordpress.com) is a prime forum for discussion of electoral systems topics generally.

While any user of printed and internet sources must appreciate the time that has been spent in compiling these and the care taken to ensure accuracy, the main problems associated with sources (and, implicitly, the main appeals to those who compile election results) are:

- (i) bunching of 'Others', i.e. small parties and independents not listed separately. In the calculation of indices, the greater the amount of disaggregation in the data, the better. Ideally, every party winning more than 0.1 per cent of the national vote, certainly 0.5 per cent, should be listed separately. The votes of Independents are very rarely disaggregated, so when they are a significant force (Japan, South Korea, Maldives, Ukraine and sometimes other countries too), there are problems in trying to compute indices given that each independent candidate must be treated as a separate 'party'. The approach taken here in such cases has been that outlined in the IndicesCalc file at <a href="https://www.tcd.ie/Political\_Science/about/people/michael\_gallagher/ElSystems/Docts/IndicesCalc.pdf">https://www.tcd.ie/Political\_Science/about/people/michael\_gallagher/ElSystems/Docts/IndicesCalc.pdf</a> Fortunately, many countries now provide 'perfect' data, i.e. complete disaggregation down to the level of each individual independent candidate.
- (ii) occasionally, the problem is the opposite of (i), namely that results exist only in disaggregated form that no-one has yet taken the trouble to aggregate (or to make the figures generally available if they have been aggregated), as with the constituency-level votes at a number of elections in Lithuania and several countries that employ single-member constituencies. This is a problem that also arises in mixed parallel systems (also known as mixed-member majoritarian systems, or MMM systems) in which constituency seats are allocated on the basis of constituency votes and list votes on the basis of list votes, with no linkage between the two. While national-level figures for the list votes are almost always available, that is not always the case for the constituency votes, or, if they are available, they have not been aggregated and the researcher would have to embark on the sizeable task of putting together overall results from the results in dozens of individual constituencies. This is a problem for some elections in, for example, Georgia, South Korea, Lithuania and Ukraine.
- (iii) occasional logical inconsistency, i.e. the number of votes or seats for the listed parties does not add to the stated total, or a party with no votes is stated to have won seats. A list of corrections that need to be made to the Mackie and Rose figures can be found in Arend Lijphart, *Electoral Systems and Party Systems: A Study of Twenty-Seven Democracies*, 1945–1990 (Oxford and New York: Oxford University Press, 1994), pp. 163–77. Generally, the approach adopted here has been the same as Lijphart's, i.e. when the reported number of total valid votes (or seats) does not equal the sum of the reported

votes (or seats) for individual parties, the number used as the basis for calculations has been the sum of the parties' votes (or seats)

(iv) absence of official results in Roman script. While, understandably, the main audience for national election results consists of citizens of that country, the absence of results in Roman script for some well-resourced countries such as Japan, the Republic of Korea and (in the past) Taiwan makes the reconstitution of results from these countries quite time-consuming and sometimes impossible for those who are able to read only Roman script.

An issue that arises occasionally under mixed systems (those where some candidates are elected from small constituencies and others from a national or regional list) is that some constituency seats are won by independent candidates or small parties that do not run in the list element of the election. (Examples include Egypt, Morocco, Nepal, Palestine.) When only list vote totals are available, or when list votes alone are the basis for allocating seats to parties, this creates a situation where it appears, comparing national votes with seats, that somehow a party that won no votes nonetheless won a seat. Anomalous as this is, it seems preferable to simply ignoring these candidates / parties and basing the calculations on the other seats, which would distort every other party's percentage of the seats. In cases where the number of seats won by parties or candidates that did not run in the list element is large (for example, Ukraine's election of 2012, where 49 of the 225 constituency seats were won by small parties or independents that won no list votes and for which there is no data on constituency votes), the election is not included in the dataset.

The countries included here include the standard set that tend to feature in comparative politics analyses and, relatedly of course, are covered in the historical sources listed above. As many other countries as possible are also included for particular elections, dependent on the availability of reliable and adequately disaggregated results. The elections included are confined to those that could plausibly be deemed occasions of choice for the voting population, which is not to imply that every single election included here can be regarded as meeting the highest (or in some cases even acceptable) democratic standards.

A complication that affects the calculation of Eff N<sub>s</sub> in a few cases is that groups of parties may contest an election as an alliance in order to reap the benefits of size and then disaggregate after the election. For example, in Greece's 1958 election only five groupings contested the election and have recorded vote totals, but because two of these groupings were umbrellas, seat totals are recorded for nine different parties (Mackie and Rose, *International Almanac*, pp. 198–200). In the figures below, Eff N<sub>s</sub> is based on seat totals for the same groups as are used for the calculation of Eff N<sub>v</sub>, disregarding any post-election splitting of the groupings that contested the election together. In a growing number of elections in some other countries such as Italy, Malaysia, Mexico and San Marino, figures are available both for individual parties and for the broader alliances or 'cluster parties' into which some of them group; in most cases, the figures in the tables are based on treating individual parties as the units, with figures using alliances given in

the Notes. When, in mixed systems, parties compete in the PR element as independent actors but in the SMD element the alliances are the only actors, the alliances are the units of analysis. It is not always clear to an observer whether the individual parties or the cluster parties / alliances are the primary actors in quotidian political life. Notes to the data should clarify the decisions made.

Many countries hold elections at fixed intervals, but in others the timing can be at the discretion of political actors. There is just one case in this dataset of a country holding three elections in one calendar year, just one case where two elections were held in the same month, and just one case where an election took place across two calendar years.

Conditions of use: there aren't any, but citations are always appreciated ...

Suggested citation format:

Gallagher, Michael, 2024. Election indices dataset at <a href="http://www.tcd.ie/Political\_Science/about/people/michael\_gallagher/ElSystems/index.php">http://www.tcd.ie/Political\_Science/about/people/michael\_gallagher/ElSystems/index.php</a>, accessed [date].

Albania 2001 2005 2009 2013 2017 2021 See Notes.	LSq 8.12 30.21 7.60 5.58 4.09 4.57	Eff N <sub>v</sub> 3.18 10.46 3.18 3.61 2.94 2.51	Eff N <sub>s</sub> 2.60 3.75 2.60 2.78 2.55 2.18	N seats 140 139 140 140 140 140 N seats
2012	21.34	18.08	4.09	462
2017 See Notes.	8.57	9.70	5.41	462
Andorra	LSq	Eff $N_{\rm v}$	Eff $N_s$	N seats
2001	9.97	3.28	2.70	28
2005	6.10	2.77	2.28	28
2009	8.41	2.94	2.40	28
2011	17.20	2.35	1.78	28
2015 2019	14.40 6.89	3.46 3.26	2.60 2.99	28 28
2013	16.47	3.34	2.36	28
See Notes.	10.17	3.31	2.50	20
Angola	LSq	Eff $N_v$	Eff N <sub>s</sub>	N seats
1992	3.95	2.46	2.24	220
2008	4.34	1.47	1.31	220
2012	6.41	1.80	1.53	220
2017	5.84	2.21	1.91	220
2022	4.32	2.20	2.06	220
Antigua &				
Barbuda	LSq	$\mathrm{Eff}\ \mathrm{N_{v}}$	Eff $N_s$	N seats
1971	16.90	2.09	1.56	17
1976	18.54	2.04	1.97	17
1980	20.35	2.04	1.61	17
1984 1989	24.97 24.99	1.94 1.98	1.12 1.27	17 17
1989	12.85	2.05	1.27	17
1999	19.64	2.09	1.80	17
2004	17.19	2.07	1.80	17
2009	5.59	2.07	2.21	17
2014	24.94	2.02	1.41	17
2018	30.32	2.04	1.27	17
2023	8.79	2.33	2.43	17

Argentina	LSq	$Eff N_v$	Eff $N_s$	N seats
1951	25.17	1.97	1.21	149
2005	4.99	8.94	6.49	127
2011	7.55	3.67	2.70	129
2013	4.82	7.52	7.50	127
2017	5.85	4.11	3.31	127
2019	4.86	2.68	2.33	130
2021	6.75	3.27	2.57	127
2023	5.14	3.42	3.04	130
See Notes.				
<b>A</b>	Ι. Ο	ECC NI	Ecc N	N
Armenia	LSq	Eff $N_v$	Eff N <sub>s</sub>	N seats
2012	6.73	3.33	2.74	131
2017	5.68	3.04	2.47	105
2018	11.04	1.95	1.99	132
2021	10.74	2.92	1.93	107
See Notes.				
Australia	LSq	$Eff  N_v $	Eff $N_s$	N seats
1946	9.61	2.74	2.40	74
1949	7.53	2.64	2.62	121
1951	5.39	2.49	2.58	118
1954	2.88	2.46	2.47	114
1955	6.84	2.73	2.47	112
1958	11.05	2.97	2.59	122
1961	7.12	2.81	2.52	122
1963	9.00	2.79	2.66	122
1966	10.83	2.97	2.63	124
1969	6.95	2.84	2.61	125
1972	6.90	2.77	2.47	125
1974	5.96	2.66	2.52	127
1975	13.93	2.69	2.52	127
1977	14.93	3.11	2.46	124
1980	8.25	2.81	2.66	125
1983	10.31	2.67	2.24	125
1984	7.95	2.79	2.43	148
1987	10.42	2.90	2.28	148
1990	12.48	3.37	2.35	148
1993	8.12	2.91	2.39	147
1996	10.97	3.21	2.62	148
1998	10.87	3.44	2.48	148
2001	9.37	3.44	2.49	150
2004	8.60	3.17	2.44	150
2007	10.27	3.03	2.25	150
2010	11.29	3.83	2.92	150
2013	9.54	4.26	3.23	150
2016	11.48	4.47	3.07	150

2019 2022	12.35 16.72	4.71 5.25	3.17 3.15	151 151
See Notes.				
Austria	I Ca	Eff N	Eff N	N goots
Austria	LSq	Eff N <sub>v</sub>	Eff $N_s$	N seats
1945	2.65 3.05	2.22 2.78	2.09	165
1949			2.54	165
1953 1956	3.99	2.76	2.47	165
1950	4.02 4.39	2.48	2.22 2.20	165
		2.48		165
1962	3.98	2.46	2.20	165
1966	3.81	2.39	2.14	165
1970 1971	2.99	2.29	2.12	165
1971	1.19 1.04	2.28 2.26	2.21 2.21	183 183
1973	0.93		2.21	
1979	0.93 2.44	2.27 2.40	2.22	183 183
1985	0.93	2.40	2.20	
1980	2.07	3.16	2.03	183 183
1990	1.03	3.10	3.73	183
1994	1.03	3.59	3.49	183
1999	3.53	3.39	3.49	183
2002	1.33	3.02	2.88	183
2002	2.80	3.71	3.38	183
2008	2.92	4.79	4.24	183
2013	3.31	5.15	4.59	183
2017	3.73	4.08	3.60	183
2017	1.85	4.20	3.94	183
2017	1.03	7.20	3.74	103
Bahamas	LSq	$Eff N_{v}$	Eff $N_s$	N seats
1972	13.89	1.99	1.63	38
1977	22.58	2.52	1.45	38
1982	16.63	2.03	1.61	43
1987	10.20	2.11	1.97	49
1992	12.20	1.98	1.79	49
1997	27.10	1.97	1.34	40
2002	22.24	2.30	1.79	40
2007	5.03	2.13	1.97	41
2012	24.30	2.38	1.57	38
2017	30.06	2.16	1.23	39
2021	25.01	2.42	1.42	39
Bangladesh	LSq	$\mathrm{Eff}\mathrm{N}_{\mathrm{v}}$	$Eff N_s$	N seats
1973	17.34	1.79	1.10	289
2001	21.38	2.94	2.16	300

Barbados	LSq	Eff $N_v$	Eff N <sub>s</sub>	N seats
1971	17.50	1.96	1.60	24
1976	17.72	2.03	1.70	24
1981	10.42	2.02	1.87	27
1986	29.35	1.94	1.25	27
1991	12.47	2.29	1.85	28
1994	16.75	2.52	1.84	28
1999	27.96	1.84	1.15	28
2003	20.81	1.98	1.56	30
2008	13.33	2.00	1.80	30
2013	1.88	2.01	1.99	30
2018	24.86	1.72	1.00	30
2022	28.92	1.72	1.00	30
Belgium	I Sa	Eff N <sub>v</sub>	Eff N <sub>s</sub>	N seats
_	LSq 2.04		=	
1946	3.04	3.21	2.91	202
1949 1950	4.89	3.25	2.75 2.49	212
1950	3.23 3.61	2.71 2.97	2.49	212 212
1954	3.37	2.72	2.03	212
1956	4.12	3.08	2.43	212
1965	2.45	3.08	3.59	212
1968	3.50	5.31	4.97	212
1908	2.42	5.87	5.45	212
1971	1.93	6.13	5.76	212
1974	2.52	5.69	5.24	212
1978	2.32	7.50	6.80	212
1981	4.17	9.01	7.62	212
1985	3.31	8.15	7.00	212
1987	3.24	8.14	7.13	212
1991	3.49	9.81	8.41	212
1995	3.04	9.47	8.03	150
1999	2.99	10.28	9.05	150
2003	5.16	8.84	7.03	150
2007	3.37	9.04	7.91	150
2010	3.77	10.04	8.42	150
2014	4.60	9.62	7.82	150
2019	3.92	10.94	9.70	150

Belize	LSq	$Eff N_v$	Eff $N_s$	N seats
1979	19.68	2.00	1.67	18
1984	20.02	2.06	1.60	28
1989	2.65	2.00	1.99	28
1993	6.43	2.00	1.98	29
1998	29.53	1.96	1.23	29
2003	22.10	2.04	1.58	29
2008	22.69	2.03	1.45	31
2012	3.74	2.06	1.98	31
2015	10.02	2.07	1.90	31
2020	23.51	1.98	1.37	31
Benin	LSq	$Eff  N_v $	$EffN_s$	N seats
1991	3.39	9.76	8.83	64
1995	11.22	14.16	6.68	83
1999	11.16	12.02	6.16	83
2011	14.17	5.03	2.64	83
2015	7.58	6.93	4.66	83
2019	0.40	1.97	1.97	83
2023	9.08	3.48	2.71	109
See Notes.				
Bermuda	LSq	$Eff N_v$	Eff $N_s$	N seats
1989	7.50	2.53	2.12	40
1993	4.24	2.15	1.98	40
1998	10.00	2.05	1.83	40
2003	9.28	2.01	1.91	36
2007	8.55	2.00	1.91	36
2012	1.28	2.09	1.99	36
2017	7.53	1.95	1.80	36
2020	19.02	2.03	1.38	36
Bhutan	LSq	$Eff  N_v$	$Eff  N_s$	N seats
2008	28.76	1.79	1.09	47
2013	29.57	2.97	1.77	47
2018	30.81	3.55	1.86	47
2023/24	24.70	3.72	1.86	47
See Notes.				

Bolivia	LSq	$Eff N_v$	Eff $N_s$	N seats
1966	12.49	2.07	1.47	102
1979	4.66	3.51	3.29	117
1980	5.16	4.35	4.13	130
1985	3.16	4.58	4.31	130
1989	6.94	5.00	3.92	130
1993	6.43	4.67	3.71	130
1997	3.16	5.92	5.50	130
2002	5.33	5.77	4.96	130
2005	4.00	2.62	2.36	130
2009	3.76	2.06	1.85	130
2014	5.53	2.26	1.91	130
2020	2.60	2.46	2.28	130
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Bosnia and	1.0	ECCN	ECCNI	NT 4
Hercegovina	LSq	Eff N <sub>v</sub>	Eff $N_s$	N seats
1996	7.02	4.33	3.41	42
1998	6.72	6.02	4.59	42
2000	4.11	7.75	7.29	42
2002	4.31	8.03	7.95	42
2006	5.62	8.90	7.17	42
2010	4.60	9.92	7.67	42
2014	4.99	9.42	7.60	42
2018	5.65	10.68	8.73	42
2022 Saa Natas	5.30	10.58	9.00	42
See Notes.				
Botswana	LSq	$Eff N_v$	Eff N <sub>s</sub>	N seats
1965	8.38	1.50	1.21	31
1969	7.46	1.99	1.62	31
1974	6.74	1.65	1.39	32
1979	12.50	1.69	1.21	32
1984	14.13	1.96	1.35	34
1989	22.86	2.02	1.19	34
1994	11.50	2.34	1.78	40
1999	20.89	2.44	1.42	40
2004	21.30	2.74	1.56	57
2009	21.69	2.71	1.56	57
2014	16.91	2.88	1.95	57
2019	12.26	2.44	1.94	57

Brazil	LSq	$Eff N_v$	Eff $N_s$	N seats
1990	4.63	9.80	8.69	503
1994	4.41	8.52	8.16	513
1998	3.19	8.14	7.14	513
2002	3.07	9.28	8.47	513
2006	3.00	10.62	9.32	513
2010	2.50	11.21	10.36	513
2014	2.14	14.06	13.22	513
2018	2.91	18.01	16.46	513
2022	3.53	12.34	9.91	513
Bulgaria	LSq	Eff N <sub>v</sub>	Eff N <sub>s</sub>	N seats
1990 SMD	9.99	2.89	2.24	200
1990 list	1.40	2.75	2.59	200
1990 overall	5.37	2.82	2.42	400
1991	12.50	4.19	2.41	240
1994	7.78	3.85	2.73	240
1997	3.94	3.00	2.52	240
2001	7.82	3.91	2.92	240
2005	3.97	5.80	4.80	240
2009	7.00	4.40	3.34	240
2013	10.88	5.34	3.15	240
2014	2.52	5.77	5.06	240
2017	7.42	4.69	3.39	240
2021 Apr	6.78	6.75	4.84	240
2021 Jul	4.82	6.12	4.94	240
2021 Nov	3.11	6.20	5.31	240
2022	4.02	6.57	5.49	240
2023	3.77	5.54	4.73	240
Burkina Faso	LSq	$Eff  N_v$	$Eff  N_s$	N seats
2012	6.28	3.73	2.86	127
2015	7.67	5.37	3.59	127
2020	8.16	6.45	4.11	127
Cabo Verde	LSq	Eff N <sub>v</sub>	Eff $N_s$	N seats
1995	7.00	2.13	1.76	72
2001	5.51	2.41	2.07	72
2006	4.19	2.14	2.05	72
2011	1.95	2.18	2.10	72
2016	2.56	2.24	2.12	72
2021	3.54	2.41	2.20	72

Cambodia /				
Kampuchea	LSq	$Eff N_v$	Eff $N_s$	N seats
2013	5.38	2.29	1.98	123
Canada	LSq	$\mathrm{Eff}\mathrm{N}_{\mathrm{v}}$	Eff $N_s$	N seats
1945	8.10	3.71	2.85	245
1949	20.62	2.83	1.75	262
1953	14.05	2.86	2.13	261
1957	2.91	2.99	2.84	263
1958	21.15	2.44	1.54	265
1962	6.43	3.23	2.84	265
1963	7.45	3.19	2.65	265
1965	10.19	3.31	2.59	265
1968	11.58	2.97	2.33	264
1972	6.26	3.25	2.84	264
1974	9.86	2.96	2.38	264
1979	10.41	3.09	2.45	282
1980	8.72	2.93	2.39	282
1984	20.91	2.74	1.69	282
1988	11.33	3.04	2.33	295
1993	17.67	3.93	2.35	295
1997	13.26	4.09	2.98	301
2000	13.56	3.77	2.54	301
2004	9.81	3.78	3.03	308
2006	8.61	3.75	3.22	308
2008	10.09	3.87	3.15	308
2011	12.42	3.43	2.41	308
2015	12.01	3.33	2.50	338
2019	12.18	3.79	2.79	338
2021	13.39	3.83	2.76	338
See Notes.				
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Chile	LSq	Eff N <sub>v</sub>	Eff $N_s$	N seats
1945	6.30	6.64	5.25	147
1949	3.99	7.07	6.02	147
1953	9.58	11.89	9.01	147
1957	12.63	8.60	6.76	147
1961	9.51	6.44	5.89	147
1965	9.37	4.06	2.80	147
1969	5.82	4.92	4.08	150
1973	3.45	5.10	4.45	150
1989	7.09	2.59	2.04	120
1993	6.18	2.24	1.95	120
1997	7.97	2.54	2.07	120
2001	5.17	2.33	2.03	120
2005	7.08	2.36	2.02	120

2009 2013 2017 2021 See Notes.	5.65 8.04 7.22 9.58	2.56 2.75 4.03 6.11	2.17 2.09 3.14 4.13	120 120 155 155
Colombia	LSq	$Eff N_v$	Eff $N_s$	N seats
2010	4.53	5.97	4.95	164
2014	6.68	7.36	5.69	153
2018	5.31	8.46	6.38	166
2022	4.60	9.69	8.74	171
Costa Rica	LSq	Eff N <sub>v</sub>	Eff N <sub>s</sub>	N seats
1953	10.24	2.38	1.96	45
1958	3.52	3.57	3.21	45
1962	2.30	2.71	2.64	57
1966	3.01	2.33	2.14	57
1970	5.13	2.56	2.15	57
1974	9.15	4.01	3.13	57
1978	5.47	2.88	2.38	57
1982	3.22	2.53	2.27	57
1986	3.25	2.48	2.21	57
1990	4.10	2.56	2.21	57
1994	4.78	2.73	2.30	57
1998	6.28	3.37	2.56	57
2002	4.53	4.52	3.68	57
2006	7.13	4.63	3.32	57
2010	4.96	4.78	3.90	57
2014	6.23	6.23	4.92	57 57
2018	9.57	7.66	4.73	57 57
2022	8.26	7.99	4.90	57
Croatia	LSq	$\text{Eff } N_v$	Eff $N_s$	N seats
2000	5.65	5.50	4.01	151
2003	9.60	5.93	3.56	152
2007	7.58	4.23	3.07	153
2011	12.31	4.57	2.59	150
2015	7.07	3.93	2.92	143
2016	5.92	3.82	2.97	143
2020	7.47	4.44	3.19	143
See Notes.				
Cyprus	LSq	$Eff  N_v$	Eff N <sub>s</sub>	N seats
2001	1.59	3.76	3.64	56
2006	2.42	4.29	3.90	56

2011	1.69	3.86	3.60	56
2016	3.02	5.12	4.51	56
2021	6.44	6.34	4.81	56
Czechia 1990 1992 1996 1998 2002 2006 2010 2013 2017 2021	LSq 11.54 8.57 5.55 5.70 5.73 5.72 8.76 6.12 7.21 10.34	Eff N <sub>v</sub> 3.50 7.31 5.33 4.69 4.82 3.91 6.75 7.61 6.92 5.23	Eff N <sub>s</sub> 2.22 4.80 4.15 3.71 3.67 3.10 4.51 6.12 4.81 3.34	N seats 200 200 200 200 200 200 200 200 200 20
Denmark 1945 1947 1950 1953 Apr 1953 Sep 1957 1960	LSq 1.82 4.24 0.38 0.81 2.16 1.81 2.07	Eff N <sub>v</sub> 4.57 3.80 4.01 3.92 3.81 3.91 3.81	Eff N <sub>s</sub> 4.48 3.56 3.99 3.84 3.63 3.76 3.59	N seats 148 148 149 149 175 175
1964 1966 1968 1971 1973 1975	1.89 1.80 1.87 3.45 1.20 1.42 0.41	3.75 4.23 4.56 4.52 7.11 5.59 5.23	3.50 3.96 4.23 3.94 6.86 5.41 5.17	175 175 175 175 175 175 175
1979	1.49	4.99	4.83	175
1981	1.57	5.76	5.47	175
1984	1.38	5.24	5.04	175
1987	2.11	5.82	5.31	175
1988	2.34	5.83	5.31	175
1990	2.62	4.85	4.36	175
1994	1.57	4.76	4.54	175
1998	0.42	4.73	4.71	175
2001	1.58	4.69	4.48	175
2005	1.76	5.19	4.89	175
2007	0.72	5.41	5.33	175
2011	0.73	5.71	5.61	175
2015	0.79	5.86	5.75	175
2019	2.39	6.46	5.85	175
2022	1.13	7.57	7.24	175

Dominica 1980 1985 1990 1995 2000 2005 2009 2014 2019 2022 See Notes.	LSq 26.06 15.19 3.97 15.88 4.41 6.31 17.85 14.39 26.71 6.55	Eff N <sub>v</sub> 2.96 2.11 2.69 2.99 2.56 2.16 2.01 1.96 1.94 1.47	Eff N <sub>s</sub> 1.49 1.76 2.55 2.58 2.38 2.11 1.45 1.69 1.32 1.21	N seats 21 21 21 21 21 21 21 21 21 21 21 21
Dominican				
Republic	LSq	$Eff N_v$	$Eff N_s$	N seats
2002	4.95	3.12	2.71	150
2006	1.63	2.08	1.99	178
2010	2.17	2.11	2.01	183
2016	10.61	4.27	2.66	190
2020	7.32	3.65	2.75	190
East Timor see Timor Les	te			
Egypt	LSq	Eff N <sub>v</sub>	Eff N <sub>s</sub>	N seats
2011	7.71	4.21	3.38	498
See Notes.				
El Salvador	LSq	Eff N <sub>v</sub>	Eff $N_s$	N seats
1964	3.25	2.28	2.15	52
1966	5.40	2.54	2.25	52
1968	5.95	2.39	2.44	52
1970	6.27	2.29	1.91	52
1972	7.68	1.96	1.69	52
1978	2.31	1.21	1.16	54
1985	10.45	2.69	2.56	60
1988	4.87	2.75	2.41	60
1991 1994	3.88 4.70	3.34 3.48	3.01 3.06	84 84
1997	4.70	3.95	4.03	84
2000	5.48	3.68	3.49	84
2003	5.39	4.09	3.54	84
2006	1.62	3.03	3.04	84
2009	3.35	2.92	2.94	84

2012 2015 2018 2021	3.36 3.90 1.78 3.16	3.33 3.28 4.31 3.03	3.19 3.31 4.06 2.99	84 84 84 84
Estonia 1992 1995 1999 2003 2007 2011 2015 2019 2023	LSq 7.23 7.34 4.57 3.50 3.43 5.09 2.34 5.28 4.66	Eff N <sub>v</sub> 8.84 5.93 6.88 5.42 5.02 4.78 5.14 5.16 5.52	Eff N <sub>s</sub> 5.90 4.15 5.50 4.67 4.37 3.84 4.72 4.19 4.52	N seats 101 101 101 101 101 101 101 101
Faeroe Islands 1998 2002 2004 2008 2011 2015 2019	LSq 3.59 1.99 3.49 1.73 1.55 1.86 1.66	Eff N <sub>v</sub> 5.25 4.67 5.03 5.31 5.37 5.37 5.27	Eff N <sub>s</sub> 4.70 4.49 4.74 5.16 5.21 5.53 5.26	N seats 32 32 32 33 33 33
Fiji 1972 1977 Apr 1977 Sep 1982 1987 1992 1994 1999 2001 2006 2014 2018 2022	LSq 4.32 4.22 16.10 2.58 5.49 8.27 10.76 19.26 15.76 7.52 4.70 2.79 4.75	Eff N <sub>v</sub> 2.18 2.38 2.69 2.27 2.14 3.90 4.23 5.32 4.66 2.80 2.30 2.41 3.11	Eff N <sub>s</sub> 1.86 2.16 1.86 2.13 1.99 3.75 3.23 3.21 2.81 2.23 1.99 2.21 2.63	N seats 52 52 52 52 70 70 71 71 71 50 51 55

Finland	LSq	$Eff N_v$	$Eff N_s$	N seats
1945	2.72	5.10	4.77	200
1948	3.05	4.89	4.54	200
1951	1.74	4.97	4.78	200
1954	2.15	4.97	4.71	200
1958	2.18	5.20	4.87	200
1962	4.13	5.85	5.09	200
1966	2.93	5.22	4.96	200
1970	2.90	6.16	5.58	200
1972	2.33	5.95	5.51	200
1975	3.22	5.89	5.31	200
1979	2.68	5.75	5.21	200
1983	2.19	5.44	5.14	200
1987	4.98	6.13	4.93	200
1991	3.24	6.03	5.23	200
1995	3.81	5.82	4.88	200
1999	3.24	5.93	5.15	200
2003	3.16	5.65	4.93	200
2007	3.20	5.88	5.13	200
2011	2.95	6.47	5.83	200
2015	3.03	6.57	5.84	200
2019	3.55	7.46	6.36	200
2023	3.99	6.65	5.56	200
France	LSq	Eff N <sub>v</sub>	Eff N <sub>s</sub>	N seats
1945	4.15	4.62	4.20	522
1946 Jun	3.76	4.52	4.16	522
1946 Nov	3.05	4.65	4.32	544
1951	7.69	5.42	5.93	544
1956	3.27	6.09	5.73	544
1958	21.22	6.09	3.45	465
1962	14.99	4.93	3.43	465
1967	10.03	4.56	3.76	470
1968	19.21	4.31	2.49	470
1973	11.01	5.68	4.52	473
1978	6.57	5.08	4.20	474
1981	16.04	4.13	2.68	474
1986	7.23	4.65	3.90	556
1988	11.84	4.40	3.07	555
1993	25.25	6.89	2.86	577
1997	17.69	6.56	3.54	577
2002	21.95	5.22	2.26	576
2007	13.58	4.32	2.49	577
2012	17.66	5.27	2.83	577
2017	21.12	6.82	3.00	577
2022	12.81	5.47	3.72	577
See Notes.				

Gambia	LSq	$Eff N_v$	$Eff N_s$	N seats
2017	16.84	4.78	2.66	53
2022	7.93	5.73	4.80	53
Georgia	LSq	$Eff N_v$	$Eff N_s$	N seats
2008	15.95	2.58	1.55	150
2012	2.98	2.15	1.97	150
2016	21.66	3.17	1.61	150
2020	8.71	3.20	2.37	150
See Notes.				
Germany	LSq	Eff N <sub>v</sub>	Eff N <sub>s</sub>	N seats
1919	2.71	4.31	4.10	421
1920	1.19	6.72	6.42	459
1924 May	1.14	7.59	7.10	472
1924 Dec	0.81	6.51	6.24	493
1928	1.54	6.69	6.14	491
1930	0.87	7.26	7.09	577
1932 Jul	0.71	4.40	4.29	608
1932 Nov	0.82	4.94	4.79	584
1933	0.81	3.83	3.72	647
1949	3.85	5.70	4.65	402
1953	3.67	4.21	3.63	487
1957	4.69	3.59	3.07	497
1961	3.43	3.50	3.11	499
1965	2.31	3.15	2.93	496
1969	3.92	3.03	2.71	496
1972	0.67	2.85	2.79	496
1976	0.59	2.91	2.85	496
1980	1.41	3.10	2.96	497
1983	0.50	3.22	3.16	498
1987	0.76	3.56	3.47	497
1990	4.63	3.75	3.17	662
1994	2.22	3.75	3.45	672
1998	3.15	3.78	3.31	667
2002	4.61	4.09	3.38	603
2005	2.16	4.46	4.05	614
2009	3.40	5.58	4.83	622
2013	7.83	4.81	3.51	631
2017	1.95	6.18	5.58	709
2021	3.48	6.50	5.51	735
See Notes.				

Ghana	LSq	Eff $N_v$	Eff $N_s$	N seats
2008	4.81	2.40	2.12	230
2012	5.76	2.26	2.04	275
2016	7.01	2.20	1.90	275
2020	2.64	2.14	2.01	275
Gibraltar	LSq	$Eff N_v$	$Eff N_s$	N seats
2000	5.61	1.98	1.99	15
2003	7.81	2.33	1.99	15
2007	7.87	2.21	1.94	17
2011	7.33	2.78	2.70	17
2015	8.53	2.70	2.70	17
2019	12.88	3.73	3.04	17
See Notes.				
Greece	LSq	Eff $N_v$	Eff N <sub>s</sub>	N seats
1946	1.54	2.73	2.60	354
1950	7.12	7.99	5.72	250
1951	9.48	4.15	3.05	258
1952	27.27	2.71	1.41	300
1956	6.69	2.19	2.05	300
1958	13.88	3.52	2.44	300
1961	7.27	2.55	2.17	300
1963	5.98	2.83	2.42	300
1964	4.39	2.40	2.19	300
1974	15.79	2.74	1.72	300
1977	13.58	3.73	2.35	300
1981	8.40	2.69	2.09	300
1985	7.08	2.58	2.15	300
1989 Jun	4.37	2.73	2.40	300
1989 Nov	3.94	2.56	2.32	300
1990	3.97	2.63	2.37	300
1993	7.57	2.63	2.17	300
1996	9.45	3.07	2.36	300
2000	6.78	2.64	2.21	300
2004	7.37	2.66	2.19	300
2007	6.99	3.02	2.62	300
2009	7.29	3.16	2.59	300
2012 May	12.88	8.95	4.83	300
2012 Jun	9.96	5.20	3.76	300
2015 Jan	9.98	4.43	3.09	300
2015 Sep	9.69	4.51	3.24	300
2019	9.66	3.68	2.71	300
2023 May	7.43	4.35	3.11	300
2023 Jun	8.97	4.48	3.09	300

Greenland	LSq	Eff N <sub>v</sub>	Eff N <sub>s</sub>	N seats
2002	3.43	4.44	4.01	31
2005	1.40	4.25	4.09	31
2009	2.26	3.38	3.17	31
2013	2.30	3.16	2.92	31
2013	2.51	3.78	3.55	31
2014	1.44	4.87	4.73	31
2018	2.75	3.85	3.52	31
2021	2.13	3.63	3.32	31
Grenada	LSq	Eff N <sub>v</sub>	Eff N <sub>s</sub>	N seats
1962	6.13	2.00	1.92	10
1967	15.42	1.98	1.72	10
1972	27.86	1.94	1.30	15
1976	7.47	2.07	1.92	15
1984	32.28	2.11	1.14	15
1990	9.71	3.85	3.08	15
1995	18.32	3.65	2.42	15
1999	33.10	2.16	1.00	15
2003	4.35	2.30	1.99	15
2008	21.74	2.03	1.64	15
2013	40.95	1.96	1.00	15
2013	40.93	1.96	1.00	15
2022	7.97	2.01	1.92	15
2022	1.91	2.01	1.92	13
Guatemala	LSq	Eff N <sub>v</sub>	Eff N <sub>s</sub>	N seats
2011	9.33	6.40	4.14	158
2015	9.45	9.88	6.07	158
2019	12.00	14.89	6.73	160
2023	8.85	12.79	7.26	160
α:	1.0	ECC NI	E-CC NI	NT .
Guinea	LSq	Eff $N_v$	Eff N <sub>s</sub>	N seats
2013 SMP	10.09	3.36	2.64	38
2013 PR	1.40	3.19	3.22	76
2013 overall	4.02	3.28	3.03	114
2020	2.14	1.93	2.06	114
Guinea-Bissau	LSq	Eff N <sub>v</sub>	Eff N <sub>s</sub>	N seats
1994	12.85	3.51	2.28	100
2008	13.15	3.13	1.89	100
2014	9.71	3.02	2.11	102
2019	9.33	4.51	3.05	102
2023	10.81	4.05	2.64	102
See Notes.	10.01	7.03	2.04	102
500 110105.				

Guyana	LSq	$Eff N_v$	$Eff N_s$	N seats
1964	1.12	2.57	2.53	53
1968	0.76	2.22	2.20	53
1980	0.79	1.56	1.57	53
1985	0.97	1.55	1.53	53
1992	1.17	2.15	2.14	53
1997	1.12	2.13	2.12	53
2001	1.15	2.19	2.23	65
2006	1.08	2.37	2.34	65
2011	0.81	2.42	2.42	65
2015	0.40	2.02	2.00	65
2020	0.52	2.08	2.06	65
See Notes.				
Honduras	LSq	Eff N <sub>v</sub>	Eff N <sub>s</sub>	N seats
1971	2.62	1.99	2.00	64
1980	2.40	2.16	2.17	71
1981	0.91	2.15	2.17	82
1985	1.34	2.14	2.12	134
1989	2.62	2.13	2.00	128
1993	2.13	2.14	2.03	128
1997	3.73	2.37	2.15	133
2001	2.41	2.58	2.41	128
2005	4.08	2.69	2.37	128
2009	2.58	2.46	2.30	128
2013	5.60	4.14	3.58	128
2021	6.41	3.55	3.26	128
See Notes.				
Hungary	LSq	Eff N <sub>v</sub>	Eff N <sub>s</sub>	N seats
1990 SMD	30.37	7.36	2.15	176
1990 list	2012.	6.71		152
1990 overall	13.75	7.05	3.77	386
1994 SMD	39.95	5.99	1.38	176
1994 list		5.50		152
1994 overall	16.18	5.74	2.90	386
1998 SMD	23.15	5.73	2.70	176
1998 list		4.65		152
1998 overall	10.88	5.18	3.45	386
2002 SMD	12.15	3.05	2.05	176
2002 list		2.84		152
2002 overall	8.20	2.94	2.21	386
2006 SMD	12.13	2.89	2.17	176
2006 list	6.69	2.70	2.17	152
2006 overall	5.13	2.80	2.40	386
2010 SMD	36.50	2.77	1.05	176
2010 list	6.03	2.86	2.82	152

2010 overall 2014 SMD 2014 list 2014 overall 2018 SMD 2018 list 2018 overall 2022 SMD 2022 list 2022 overall See Notes.	11.67 38.09 5.84 17.80 31.52 6.85 14.38 25.23 5.50 11.76	2.82 3.22 3.22 3.29 3.31 3.31 2.40 2.40 2.40	2.00 1.21 3.20 2.01 1.34 3.30 2.09 1.42 2.29 1.84	386 106 93 199 106 93 199 106 93 199
Iceland	LSq	Eff $N_v$	Eff $N_s$	N seats
1946	1.61	3.59	3.61	52
1949	6.75	3.55	3.47	52
1953	8.00	4.15	3.44	52
1956	13.57	3.62	3.48	52
1959 Jun	7.55	3.40	3.20	52
1959 Oct	3.07	3.65	3.44	60
1963	2.80	3.37	3.33	60
1967	2.34	3.77	3.54	60
1971	2.67	4.10	3.85	60
1974	2.78	3.47	3.38	60
1978	3.39	4.21	3.85	60
1979	2.67	3.89	3.79	60
1983	3.72	4.26	4.06	60
1987	2.31	5.77	5.34	63
1991	2.79	4.23	3.78	63
1995	1.98	4.30	3.95	63
1999	1.06	3.55	3.45	63
2003	1.85	3.94	3.71	63
2007	3.49	4.06	3.62	63
2009	2.58	4.55	4.18	63
2013	6.23	5.83	4.42	63
2016	4.46	6.08	5.09	63
2017	1.91	6.76	6.54	63
2021	3.96	7.05	6.29	63
India	LSq	Eff N <sub>v</sub>	Eff N <sub>s</sub>	N seats
2004	4.53	7.59	6.52	543
2009	7.83	7.74	5.01	543
2014	17.53	6.82	3.45	543
2019	16.06	3.73	2.17	542
See Notes.	_ 0.00	20	,	J.=

Indonesia 1955 2004 2009 2014 2019	LSq 1.54 4.45 6.84 2.79 4.51	Eff N <sub>v</sub> 6.36 8.55 9.59 8.90 9.33	Eff N <sub>s</sub> 6.41 7.07 6.13 8.16 7.47	N seats 257 550 560 560 575
Iraq 2005 2010 See Notes.	LSq 4.40 5.17	Eff N <sub>v</sub> 4.03 5.63	Eff N <sub>s</sub> 3.45 4.35	N seats 275 267
Ireland 1922 1923 1927 Jun 1927 Sept 1932 1933 1937 1938 1943 1944 1948 1951 1954 1957 1961 1965 1969 1973 1977 1981 1982 Feb 1982 Nov 1987 1989 1992 1997 2002 2007 2011	LSq 5.54 3.25 3.94 3.29 3.97 2.08 3.33 3.20 5.29 5.18 5.59 2.60 2.35 4.40 4.46 2.17 5.38 2.40 4.91 2.73 1.69 2.74 5.14 3.85 3.10 6.55 6.62 5.85 8.69	Eff N <sub>v</sub> 4.03 3.95 5.73 3.49 3.04 2.84 2.97 2.56 3.80 3.33 4.10 3.37 3.25 3.16 3.23 2.72 2.83 2.81 2.75 2.87 2.69 2.72 3.47 3.38 3.94 4.03 4.13 3.77 4.77	Eff N <sub>s</sub> 3.39 3.55 4.85 3.09 2.65 2.68 2.64 2.41 3.24 2.83 3.66 3.26 3.01 2.72 2.78 2.61 2.46 2.59 2.36 2.62 2.53 2.52 2.89 2.94 3.46 3.00 3.38 3.03 3.52	N seats  90 150 152 149 149 149 137 131 137 134 146 146 146 143 143 143 143 143 145 165 165 165 165 165 165 165 165
2016 2020 See Notes.	5.62 2,22	6.57 6.16	4.93 5.98	157 159

Ireland EP				
elections	LSq	$Eff N_v$	Eff $N_s$	N seats
1979	10.15	3.84	3.81	15
1984	13.93	3.67	2.23	15
1989	9.55	5.56	3.95	15
1994	11.80	4.82	3.17	15
1999	7.79	4.34	3.81	15
2004	9.77	5.14	3.76	13
2009	13.38	5.48	4.00	12
2014	17.00	6.57	4.17	11
2019	10.37	6.55	4.33	13
	T C	ECCN	ECCN	NT.
Israel	LSq	Eff N <sub>v</sub>	Eff N <sub>s</sub>	N seats
1949	2.62	5.38	4.73	120
1951	0.70	5.10	5.02	120
1955	1.26	6.31	5.96	120
1959	1.12	5.17	4.89	120
1961	0.64	5.49	5.35	120
1965	0.84	4.91	4.71	120
1969	0.72	3.63	3.56	120
1973	2.86	3.83	3.35	120
1977	2.69	5.03	4.37	120
1981	2.98	3.59	3.13	120
1984	2.17	4.31	3.86	120
1988	2.53	5.03	4.38	120
1992	2.22	4.93	4.39	120
1996	1.65	6.15	5.61	120
1999	2.22	10.07	8.69	120
2003	2.53	7.05	6.17	120
2006	2.49	8.98	7.84	120
2009	1.61	7.37	6.77	120
2013 2015	3.09	8.68 7.71	7.28 6.94	120 120
2013 2019 Apr	2.77 4.45	6.33	5.24	120
2019 Apr 2019 Sep	2.10	6.11	5.24 5.57	120
2019 Sep 2020	0.86	5.19	5.01	120
2020	1.09	8.92	8.52	120
2021	4.40	7.99	6.51	120
2022	7.70	1.55	0.51	120
T4 - L	1.0	ECC N	TOON	NT .
Italy	LSq	Eff N <sub>v</sub>	Eff N <sub>s</sub>	N seats
1946	1.60	4.68	4.39	556
1948	3.64	2.95	2.57	574
1953	3.68	4.18	3.54	590 506
1958	2.74	3.87	3.45	596
1963	2.58	4.16	3.74	630
1968	2.66	3.94	3.53	630
1972	3.25	4.08	3.55	630

1976	2.75	3.53	3.16	630
1979	2.69	3.91	3.47	630
1983	2.57	4.52	4.02	630
1987	2.52	4.62	4.07	630
1992	2.51	6.63	5.71	630
1994	7.81*	7.58*	7.67	630
1996	6.91*	7.17*	6.09	630
2001	10.22*	6.32*	5.30	630
2006	3.61	5.69	5.06	629
2008	5.73	3.82	3.07	617
2013	17.34	5.33	3.47	617
2018	5.70	3.42	2.90	630
2022	12.37	3.49	2.40	400
* refers to	list votes only			

<sup>\*</sup> refers to list votes only See Notes.

1967

1969

1972

1976

Jamaica	I Ca	Eff N	Eff N	N seats
	LSq	Eff N <sub>v</sub>	Eff N <sub>s</sub>	
1949	7.83	2.69	2.23	32
1955	5.73	2.45	1.97	32
1959	9.23	2.01	1.85	45
1962	7.11	2.06	1.95	45
1967	11.48	2.01	1.89	53
1972	13.34	1.98	1.73	53
1976	21.57	1.96	1.51	60
1980	26.08	1.94	1.34	60
1989	18.36	1.97	1.60	60
1993	26.40	1.94	1.30	60
1997	27.08	2.15	1.34	60
2002	5.82	2.02	1.95	60
2007	4.82	2.00	1.98	60
2011	13.33	2.00	1.80	63
2016	0.61	2.01	2.00	63
2020	20.62	1.97	1.53	63
Japan	LSq	$Eff N_v$	$Eff N_s$	N seats
1946	5.10	7.78	5.76	464
1947	3.95	4.74	4.02	466
1949	9.53	4.05	2.77	466
1952	3.45	3.49	3.06	466
1953	3.73	4.39	3.86	466
1955	4.13	4.03	3.67	467
1958	3.58	2.26	1.98	467
1960	6.23	2.41	2.00	467
1963	5.15	2.56	2.15	467

3.06

3.39

3.44

4.07

2.41

2.50

2.67

3.18

486

486

491

511

6.46

9.02

7.00

7.44

1979	4.00	3.79	3.30	511
1980	6.59	3.45	2.74	511
1983	4.27	3.67	3.24	511
1986	7.22	3.38	2.58	512
1990	6.73	3.48	2.71	512
1993	6.36	5.29	4.20	511
1996 SMD	15.82	3.89	2.36	300
1996 list	2.96	4.28	3.84	200
1996 overall	10.67	4.12	2.94	500
2000 SMD	15.57	3.77	2.36	300
2000 list	2.49	5.15	4.72	180
2000 overall	11.49	4.56	3.17	480
2003 SMD	1064	2.99	2.29	300
2003 list	4.01	3.42	3.03	180
2003 overall	8.52	3.26	2.59	480
2005 SMD	23.00	2.73	1.77	300
2005 list	4.65	3.72	3.15	180
2005 overall	15.63	3.22	2.27	480
2009 SMD	22.47	2.65	1.70	300
2009 list	5.85	3.66	2.91	180
2009 overall	15.11	3.15	2.10	480
2012 SMD	28.55	3.82	1.57	300
2012 list	3.89	5.79	4.95	180
2012 overall	19.96	4.88	2.45	480
2014 SMD	22.81	3.26	1.69	295
2014 list	4.41	4.97	4.14	180
2014 overall	16.32	4.12	2.42	475
2017 SMD	22.78	3.42	1.73	289
2017 list	3.67	4.85	4.20	176
2017 overall	16.28	4.22	2.48	465
2021 SMD	14.73	3.02	2.12	289
2021 list	5.54	4.89	3.88	176
2021 overall	11.43	3.90	2.69	465
See Notes.				
Kenya	LSq	$Eff  N_v$	$Eff  N_s$	N seats
2007	12.30	6.61	3.54	208
2013	8.26	7.54	5.16	337
See Notes.				
Korea, South	LSq	Eff N <sub>v</sub>	Eff N <sub>s</sub>	N seats
2000	8.91	3.43	2.39	273
2004	12.11	3.36	2.36	299
2012 SMD	7.36	2.99	2.21	246
2012 list	3.48	3.05	2.64	54
2012 overall	7.15	3.02	2.28	300
2016 SMD	6.24	3.27	2.69	253
2016 list	3.42	3.92	3.44	47

2016 overall 2020 SMD 2020 PR 2020 overall See Notes.	9.45 11.91 5.81 13.65	3.68 2.37 4.10 3.10	2.85 1.90 3.10 2.09	300 253 47 300
Kosovo / Kos	ova LSq	$Eff N_v$	Eff $N_s$	N seats
2001	1.02	3.24	3.22	100
2004	1.78	3.32	3.08	100
2007	4.40	4.88	4.19	100
2010	3.33	5.02	4.36	100
2014	3.93	5.22	5.18	120
2017	2.26	3.86	4.14	120
2019	2.75	5.14	5.71	120
2021	3.58	3.26	3.49	120
See Notes.				
Kyrgyzstan	LSq	Eff $N_v$	Eff $N_s$	N seats
2010	12.83	8.98	4.90	120
2015	6.69	6.29	4.82	120
See Notes.	0.05	0.2	1.02	120
See I votes.				
Latvia	LSq	$Eff N_{v}$	Eff $N_s$	N seats
1993	4.14	6.21	5.05	100
1995	5.18	9.62	7.59	100
1998	4.66	6.94	5.49	100
2002	7.28	6.78	5.02	100
2006	4.77	7.49	6.00	100
2010	2.80	4.43	3.93	100
2011	2.76	5.06	4.52	100
2014	2.30	5.60	5.13	100
2018	5.51	8.07	6.39	100
2022	10.65	10.34	6.14	100
Lesotho	LSq	Eff $N_v$	$Eff N_s$	N seats
1965	14.18	2.79	2.14	60
1970	8.70	2.32	1.97	60
1993	23.99	1.64	1.00	65
1998	32.46	2.27	1.03	79
2002	8.17	2.78	2.16	118
2007	_	_	3.15	120
2012	0.94	3.69	3.67	120
2015	1.05	3.30	3.18	120
2017	0.94	4.01	3.93	117
2022	6.03	4.44	3.42	119
See Notes.				

Liberia	LSq	$Eff \ N_v$	$Eff  N_s$	N seats
2005	6.80	10.05	8.22	64
2011	11.14	13.03	6.34	73
2017	15.18	14.42	5.81	71
2023	10.13	12.65	6.44	73
See Notes.				
Liechtenstein	LSq	Eff $N_{\rm v}$	Eff N <sub>s</sub>	N seats
1945	1.39	1.98	1.99	15
1949	0.41	1.99	1.99	15
1953 Feb	5.98	2.26	1.99	15
1953 Jun	2.90	2.00	1.99	15
1957	0.98	2.00	1.99	15
1958	5.53	1.98	1.92	15
1962	8.81	2.41	1.99	15
1966	7.59	2.35	1.99	15
1970	3.27	2.06	1.99	15
1974	2.94	2.12	1.99	15
1978	4.48	2.00	1.99	15
1982	0.37	1.99	1.99	15
1986	5.95	2.27	1.99	15
1989	7.63	2.44	2.00	25
1993 Feb	2.81	2.42	2.32	25
1993 Oct	3.78	2.33	2.15	25
1997	3.47	2.45	2.29	25
2001	3.95	2.32	2.15	25
2005	1.78	2.47	2.47	25
2009	4.78	2.36	2.15	25
2013	1.17	3.24	3.31	25
2017	1.63	3.46	3.49	25
2021	5.62	3.46	2.93	25
See Notes.				
T '41 '	1.0	TOCONT	Ticent	NT .
Lithuania	LSq	$\operatorname{Eff} N_{v}$	Eff $N_s$	N seats
1992 SMD	13.55	5.59	3.08	71
1992 list	7.02	3.83	2.86	70
1992 overall	9.61	4.62	2.99	141
1996 SMD	19.29	7.81	3.24	69
1996 list	14.22	7.16	3.40	70
1996 overall	15.17	7.52	3.41	139
2000 SMD	12.30	9.38	5.00	71
2000 list	10.52	5.59	3.43	70
2000 overall	10.42	7.22	4.22	141
2004 SMD	4.40	5.50	5.81	71
2004 list	4.40	5.78	4.82	70

2004 overall 2008 SMD 2008 list	5.03* 8.43	5.78* 8.90	5.46 4.80 5.92	141 <i>71</i> <i>70</i>
2008 overall	11.14*	8.90*	5.78	141
2012 list	5.53	7.59	5.82	70
2012 overall	9.08*	7.59*	5.28	140
2016 SMD	23.37	7.67	3.50	71
2016 list	8.58	6.79	4.69	70
2016 overall	13.49	7.27	4.41	141
2020 SMD	12.88	8.21	4.61	71
2020 list	8.63	7.28	4.76	70
2020 overall	9.49	7.77	4.84	141
* See Notes.				
Luxembourg	LSq	$Eff  N_v $	$Eff  N_s$	N seats
1945	3.56	3.34	3.05	51
1948/51	1.32	3.16	3.07	52
1954	3.95	3.00	2.68	52
1959	1.59	3.26	3.14	52
1964	3.54	3.51	3.17	56
1968	2.21	3.50	3.40	56
1974	1.83	4.27	4.05	59
1979	5.17	4.17	3.46	59
1984	2.99	3.56	3.23	64
1989	5.03	4.65	3.77	60
1994	4.67	4.71	3.90	60
1999	3.22	4.71	4.34	60
2004	3.36	4.26	3.81	60
2009	4.22	4.25	3.63	60
2013	5.20	4.85	3.93	60
2018	5.57	5.58	4.56	60
2023	5.96	5.59	4.43	60
Macedonia	LSq	Eff N <sub>v</sub>	Eff N <sub>s</sub>	N seats
1998	15.12	5.04	3.09	120
2002	8.15	4.13	2.81	120
2006	5.16	5.29	4.06	120
2011	5.70	3.63	2.91	123
2014	4.45	3.43	2.86	123
2017	3.72	3.24	2.80	120
2020	3.27	3.68	3.25	120
See Notes.	<u></u> .	2.00	3. <b>2</b> 3	120

Malawi 2014 2019 See Notes.	LSq 7.43 8.56	Eff N <sub>v</sub> 8.27 7.64	Eff N <sub>s</sub> 6.43 5.19	N seats 192 193
See Trotes.				
Malaysia	LSq	Eff N <sub>v</sub>	Eff $N_s$	N seats
2008	8.35	5.60	5.43	222
2008	6.33 10.79	5.48	4.53	222
2013	8.63	7.00	6.29	222
2018	6.99	8.17	7.72	222
See Notes.	0.99	0.17	1.12	222
See Notes.				
Malta	LSq	$Eff N_v$	Eff $N_s$	N seats
1945	11.61	1.74	1.22	10
1947	3.06	2.42	2.45	40
1950	3.97	4.21	3.96	40
1951	2.29	3.39	3.29	40
1953	6.87	2.78	2.31	40
1955	2.74	2.06	1.96	40
1962	6.30	3.22	2.74	50
1966	7.29	2.39	1.97	50
1971	1.06	2.04	2.00	55
1976	0.77	2.00	2.00	65
1981	3.23	2.00	2.00	65
1987	0.34	2.01	2.00	69
1992	1.52	2.06	2.00	65
1996	1.37	2.06	2.00	69
1998	1.77	2.04	1.99	65
2003	1.81	2.02	1.99	65
2008	1.44	2.08	2.00	69
2013	1.75	2.05	1.97	69
2017	1.01	2.03	1.98	67
2022	2.24	2.09	1.97	79
Mauritius	LSq	$Eff N_v$	Eff $N_s$	N seats
2010	12.96	2.40	2.00	69
2014	20.44	2.56	1.66	69
2019	17.94	3.48	2.29	70
		_	_	_

Mexico	LSq	$Eff  N_v$	Eff N <sub>s</sub>	N seats
1997 SMD	12.39	3.42	2.48	300
1997 list	2.59	3.42	3.34	199
1997 overall	6.77	3.42	2.85	499
2000 SMD	10.50	3.00	2.35	300
2000 list	2.36	3.00	2.78	200
2000 overall	6.70	3.00	2.54	500
2003 SMD	9.86	3.19	2.47	298
2003 list	4.42	3.19	3.12	198
2003 overall	4.74	3.19	2.76	496
2006 SMD	10.44	3.42	2.76	300
2006 list	0.37	3.42	3.38	200
2006 overall	6.34	3.42	3.03	500
2009 SMD	17.30	3.77	2.23	300
2009 list	0.94	3.77	3.68	200
2009 overall	10.46	3.77	2.75	500
2012 SMD	15.79	3.16	2.31	300
2012 list	6.70	3.16	3.30	200
2012 overall	6.87	3.16	2.80	500
2015 SMD	17.85	4.37	2.33	300
2015 list	6.74	5.65	5.72	200
2015 overall	9.26	4.38	3.11	500
2018	7.72	2.39	2.18	500
2021	8.80	2.69	2.13	500
See Notes.	0.00	2.03	2.12	200
Sec 1 (otes.				
Moldova	LSq	Eff N <sub>v</sub>	Eff N <sub>s</sub>	N seats
1994	9.49	3.95	2.62	104
1998	10.28	5.78	3.43	101
2001	16.24	3.52	1.85	101
2005	9.13	3.27	2.31	101
2009 Apr	8.64	3.43	2.45	101
2009 Jul	2.94	3.70	3.32	101
2010	3.65	3.73	3.23	101
2014	7.06	6.58	4.80	101
2021	8.44	2.79	2.03	101
See Notes.	0.77	2.17	2.03	101
See Notes.				
Monaco	LSq	Eff N <sub>v</sub>	Eff N <sub>s</sub>	N seats
1998	29.10	1.93	1.00	18
2003	29.05	1.94	1.28	24
2008	32.27	2.26	1.28	24
2013	30.27	2.40	1.40	24
2018	25.96	2.34	1.40	24
2023	10.37	1.23	1.29	24
See Notes.	10.57	1.23	1.00	24
See Moles.				

Montenegro	LSq	$Eff N_v$	$Eff N_s$	N seats
2002	4.20	2.84	2.57	77
2006	2.39	3.36	3.16	81
2009	6.64	3.19	2.47	81
2012	2.28	3.44	3.18	81
2016	2.99	4.16	3.66	81
2020	1.71	3.96	3.71	81
2023	4.93	6.04	4.85	81
Morocco	LSq	Eff N <sub>v</sub>	Eff N <sub>s</sub>	N seats
2011	5.22	8.82	6.70	396
2016 SMD	6.08	6.56	4.88	305
2016 list	3.68	6.42	5.41	90
2016 overall	5.20	6.49	5.01	395
2021	4.18	6.34	5.68	395
See Notes.				
Mozambique	LSq	$Eff  N_v$	Eff $N_s$	N seats
1994	7.84	2.92	2.14	250
1999	7.39	2.57	1.99	250
2004	5.01	2.11	1.85	250
2009	2.51	1.69	1.60	250
2014	2.14	2.25	2.16	250
2019	2.45	1.79	1.67	250
Myanmar	LSq	$Eff N_v$	$Eff N_s$	N seats
1990	22.13	2.37	1.52	485
2015	20.65	2.46	1.57	323
See Notes.				
Namibia	LSq	$Eff  N_v$	Eff $N_s$	N seats
1989	0.93	2.41	2.41	72
1994	0.74	1.69	1.71	72
1999	0.69	1.67	1.66	72
2004	0.94	1.69	1.68	72
2009	1.09	1.72	1.73	72
2014	0.90	1.55	1.54	96
2019	0.98	2.17	2.16	96

Nepal	LSq	$Eff N_v$	Eff N <sub>s</sub>	N seats
2008 SMP	16.60	5.03	3.22	240
2008 PR	0.90	5.58	5.32	335
2008 overall	7.00	5.30	4.43	575
2013 SMP	13.62	4.99	2.88	240
2013 PR	1.79	6.55	5.82	335
2013 overall	6.09	5.73	4.31	575
2017	11.33	4.12	3.44	275
2022	6.02	5.89	4.75	275
See Notes.				
N 41 1 1	1.0	ECCNI	ECCNI	N
<b>Netherlands</b>	LSq	Eff N <sub>v</sub>	Eff N <sub>s</sub>	N seats
1946	1.10	4.68	4.47	100
1948	1.27	4.98	4.68	100
1952	1.56	5.00	4.65	100
1956	0.98	4.26	4.07	150
1959	1.64	4.47	4.15	150
1963	1.30	4.80	4.51	150
1967	1.60	6.23	5.71	150
1971	1.73	7.09	6.40	150
1972	1.19	6.84	6.42	150
1977	1.52	3.96	3.70	150
1981	1.30	4.56	4.29	150
1982	1.16	4.24	4.01	150
1986	1.67	3.77	3.49	150
1989	0.90	3.90 5.72	3.75	150
1994	1.08		5.42	150
1998	1.28	5.15	4.81	150
2002	0.88	6.04 4.99	5.79	150 150
2003 2006	1.05 1.03	5.80	4.74 5.54	150
	0.81			150
2010 2012	0.81	6.97 5.94	6.74 5.70	150
2012	0.99	3.94 8.56	8.12	150
2021	1.31	9.26	8.54	150
2023	1.46	7.64	7.03	150
2023	1.40	7.04	7.03	130
N	1.0	T CC N	FICENT	NT .
New Zealand	LSq	Eff N <sub>v</sub>	Eff N <sub>s</sub>	N seats
1946	1.09	2.01	2.00	80
1949	5.18	2.03	1.96	80
1951	8.41	1.99	1.88	80
1954	11.57	2.48	1.97	80
1957	6.38	2.30	2.00	80
1960	9.31	2.37	1.96	80
1963	8.60	2.39	1.97	80
1966	12.44	2.61	2.02	80

1969	8.87	2.45	1.99	84
1972	12.06	2.43	1.87	87
1975	12.93	2.56	1.87	87
1978	15.55	2.87	2.01	92
1981	16.63	2.90	2.08	92
1984	15.40	2.99	1.98	95
1987	8.89	2.34	1.94	97
1990	17.24	2.77	1.74	97
1993	18.19	3.52	2.16	99
1996	4.38	4.39	3.76	120
1999	2.99	3.86	3.45	120
2002	2.54	4.16	3.76	120
2005	1.13	3.04	2.98	121
2008	3.84	3.07	2.78	122
2011	2.38	3.15	2.78	121
2014	3.72	3.13	2.96	121
2014				
	2.73	2.91	2.67	120
2020	4.15	3.04	2.61	120
2023	2.63	4.10	3.81	122
<b>3</b> .7•	1.0	ECON	ECCNI	NT .
Nicaragua	LSq	Eff N <sub>v</sub>	Eff N <sub>s</sub>	N seats
1990	1.79	2.19	$\begin{array}{c} \text{Eff N}_s \\ 2.05 \end{array}$	92
1990 1996 natnl lis	1.79	2.19 2.87	_	92 22
1990 1996 natnl lis 1996 deptal li	1.79 ts ists	2.19 2.87 2.93	2.05	92 22 70
1990 1996 natnl lis 1996 deptal li 1996 overall	1.79 ists 2.34	2.19 2.87 2.93 2.90	_	92 22 70 92
1990 1996 natnl lis 1996 deptal li	1.79 ists 2.34	2.19 2.87 2.93	2.05	92 22 70
1990 1996 natnl lis 1996 deptal li 1996 overall	1.79 ists 2.34	2.19 2.87 2.93 2.90	2.05	92 22 70 92
1990 1996 natnl lis 1996 deptal li 1996 overall 2001 natnl lis	1.79 ists 2.34	2.19 2.87 2.93 2.90 2.16	2.05	92 22 70 92 22
1990 1996 natnl lis 1996 deptal li 1996 overall 2001 natnl lis 2001 deptal li	1.79  its ists 2.34  ts ists	2.19 2.87 2.93 2.90 2.16 2.20	2.05	92 22 70 92 22 70
1990 1996 natnl lis 1996 deptal li 1996 overall 2001 natnl lis 2001 deptal li 2001 overall	1.79  its ists 2.34  ts ists	2.19 2.87 2.93 2.90 2.16 2.20	<ul><li>2.05</li><li>2.74</li><li>2.04</li></ul>	92 22 70 92 22 70 92
1990 1996 natnl lis 1996 deptal li 1996 overall 2001 natnl lis 2001 deptal li 2001 overall 2006	1.79  its ists 2.34  its 3.18  6.41	2.19 2.87 2.93 2.90 2.16 2.20 2.18	2.05 2.74 2.04 3.14	92 22 70 92 22 70 92 90
1990 1996 natnl lis 1996 deptal li 1996 overall 2001 natnl lis 2001 overall 2006 2011 2016 natnl lis	1.79  its  ists  2.34  its  3.18  6.41  its 3.53	2.19 2.87 2.93 2.90 2.16 2.20 2.18	2.05 2.74 2.04 3.14 1.80	92 22 70 92 22 70 92 90 92
1990 1996 natnl lis 1996 deptal li 1996 overall 2001 natnl lis 2001 deptal li 2001 overall 2006 2011	1.79  its  ists  2.34  its  3.18  6.41  its 3.53	2.19 2.87 2.93 2.90 2.16 2.20 2.18 2.11 2.14	2.05 2.74 2.04 3.14 1.80 1.92	92 22 70 92 22 70 92 90 92 20
1990 1996 natnl lis 1996 deptal li 1996 overall 2001 natnl lis 2001 deptal li 2006 2011 2016 natnl lis 2016 deptal li 2016 overall	1.79  its  ists  2.34  its  3.18  6.41  its 3.53  ists 11.38	2.19 2.87 2.93 2.90 2.16 2.20 2.18 2.11 2.14 2.16	2.05 2.74 2.04 3.14 1.80 1.92 1.51	92 22 70 92 22 70 92 90 92 20 70
1990 1996 natnl lis 1996 deptal li 1996 overall 2001 natnl lis 2001 overall 2006 2011 2016 natnl lis 2016 deptal li	1.79  its  ists  2.34  its  3.18  6.41  its 3.53  ists 11.38	2.19 2.87 2.93 2.90 2.16 2.20 2.18 2.11 2.14 2.16	2.05 2.74 2.04 3.14 1.80 1.92 1.51	92 22 70 92 22 70 92 90 92 20 70
1990 1996 natnl lis 1996 deptal li 1996 overall 2001 natnl lis 2001 deptal li 2006 2011 2016 natnl lis 2016 deptal li 2016 overall	1.79  its  ists  2.34  its  3.18  6.41  its 3.53  ists 11.38	2.19 2.87 2.93 2.90 2.16 2.20 2.18 2.11 2.14 2.16	2.05 2.74 2.04 3.14 1.80 1.92 1.51	92 22 70 92 22 70 92 90 92 20 70
1990 1996 natnl lis 1996 deptal li 1996 overall 2001 deptal li 2001 overall 2006 2011 2016 natnl lis 2016 deptal li 2016 overall See Notes.	1.79  ts  ists  2.34  ts  ists  3.18  6.41  ts 3.53  ists 11.38  9.55	2.19 2.87 2.93 2.90 2.16 2.20 2.18 2.11 2.14 2.16 2.15	2.05  2.74  2.04  3.14  1.80  1.92  1.51  1.59	92 22 70 92 22 70 92 90 92 20 70 90
1990 1996 natnl lis 1996 deptal li 1996 overall 2001 natnl lis 2001 overall 2006 2011 2016 natnl lis 2016 deptal li 2016 overall See Notes.	1.79  its  ists  2.34  its  3.18  6.41  its 3.53  ists 11.38  9.55	2.19 2.87 2.93 2.90 2.16 2.20 2.18 2.11 2.14 2.16 2.15	2.05  2.74  2.04 3.14 1.80 1.92 1.51 1.59	92 22 70 92 22 70 92 90 92 20 70 90
1990 1996 natnl lis 1996 deptal li 1996 overall 2001 natnl lis 2001 deptal li 2006 2011 2016 natnl lis 2016 deptal li 2016 overall See Notes.  Niger 2011	1.79  its  ists  2.34  its  3.18  6.41  its 3.53  ists 11.38  9.55  LSq  2.83	2.19 2.87 2.93 2.90 2.16 2.20 2.18 2.11 2.14 2.16 2.15	2.05  2.74  2.04  3.14  1.80  1.92  1.51  1.59  Eff N <sub>s</sub> 4.64	92 22 70 92 22 70 92 90 92 20 70 90 N seats 107
1990 1996 natnl lis 1996 deptal li 1996 overall 2001 natnl lis 2001 overall 2006 2011 2016 natnl lis 2016 deptal li 2016 overall See Notes.	1.79  its  ists  2.34  its  3.18  6.41  its 3.53  ists 11.38  9.55	2.19 2.87 2.93 2.90 2.16 2.20 2.18 2.11 2.14 2.16 2.15	2.05  2.74  2.04 3.14 1.80 1.92 1.51 1.59	92 22 70 92 22 70 92 90 92 20 70 90

Northern				
Ireland	LSq	$Eff N_{v}$	$Eff N_s$	N seats
1945	16.60	3.27	2.25	52
1949	10.81	2.12	1.86	52
1953	20.36	3.83	1.80	52
1958	20.53	4.08	1.88	52
1962	17.44	3.05	2.15	52
1965	15.58	2.49	1.95	52
1969	14.29	6.19	3.48	52
1973	3.68	5.98	5.19	78
1975	4.57	5.65	5.62	78
1982	5.86	5.07	4.23	78
1996	3.89	5.85	5.31	110
1998	3.66	6.06	5.41	108
2003	2.88	4.91	4.54	108
2007	3.12	4.81	4.30	108
2011	4.22	4.83	4.16	108
2016	5.33	5.54	4.32	108
2017	3.34	5.07	4.43	90
2022	7.80	5.70	4.52	90
See Notes.				
Norway	LSq	Eff N <sub>v</sub>	Eff N <sub>s</sub>	N seats
1945	7.83	4.11	3.18	150
1943 1949				
1949	9.23 4.07	3.62 3.52	2.67 3.09	150 150
1955	3.64	3.35	2.99	150
1961	3.04	3.50	3.22	150
1965	4.23	3.82	3.51	150
1969	3.81	3.52	3.18	150
1973	5.03	5.01	4.14	155
1977	5.93	3.76	2.97	155
1981	4.94	3.87	3.19	155
1985	4.75	3.63	3.09	157
1989	3.67	4.84	4.23	165
1993	3.95	4.73	4.04	165
1997	3.44	4.94	4.36	165
2001	3.31	6.18	5.35	165
2005	2.67	5.11	4.56	169
2009	3.01	4.55	4.07	169
2013	2.56	4.87	4.39	169
2017				
<b>=</b> 017	3.01	5.55	4.95	169
2021	3.01 3.65	5.55 6.43	4.95 5.56	169 169

<b>Palestine</b>	LSq	$Eff N_v$	Eff $N_s$	N seats
1996	9.96	2.68	2.31	132
2006	10.00	2.68	2.32	132
See Notes.				
D	I C ~	Ett M	Eee M	N acata
Panama	LSq	Eff N <sub>v</sub>	Eff N <sub>s</sub>	N seats
1945	6.21	5.04	5.57	48
1960	5.00	4.72	5.12	53
1984	19.07	6.59	3.14	67
1994	15.24	8.64	4.33	72
1999	12.53	5.67	3.26	71
2004	14.03	4.46	2.70	73
2009	7.21	4.18	3.66	71
2014	7.87	3.83	3.01	71
2019	14.96	5.68	3.07	71
See Notes.				
Paraguay	LSq	$Eff N_v$	Eff $N_s$	N seats
1000	0.46	1.60	1.00	
1989	8.46	1.68	1.89	72
1989 1993	8.46 6.27	1.68 2.81	1.89 2.45	72 80
1993	6.27	2.81	2.45	80
1993 1998	6.27 3.46	2.81 2.07	2.45 1.94	80 80
1993 1998 2003	6.27 3.46 8.50	2.81 2.07 4.23	2.45 1.94 3.18	80 80 80
1993 1998 2003 2008	6.27 3.46 8.50 5.81	2.81 2.07 4.23 4.36	2.45 1.94 3.18 3.43	80 80 80 80
1993 1998 2003 2008 2013	6.27 3.46 8.50 5.81 11.51	2.81 2.07 4.23 4.36 3.76	2.45 1.94 3.18 3.43 2.39	80 80 80 80
1993 1998 2003 2008 2013 2018	6.27 3.46 8.50 5.81 11.51 10.79	2.81 2.07 4.23 4.36 3.76 4.87	2.45 1.94 3.18 3.43 2.39 2.86	80 80 80 80 80
1993 1998 2003 2008 2013 2018 2023	6.27 3.46 8.50 5.81 11.51 10.79 9.53	2.81 2.07 4.23 4.36 3.76 4.87 4.10	2.45 1.94 3.18 3.43 2.39 2.86 2.68	80 80 80 80 80 80
1993 1998 2003 2008 2013 2018 2023	6.27 3.46 8.50 5.81 11.51 10.79 9.53	2.81 2.07 4.23 4.36 3.76 4.87 4.10	2.45 1.94 3.18 3.43 2.39 2.86 2.68	80 80 80 80 80 80
1993 1998 2003 2008 2013 2018 2023 <b>Peru</b> 1995	6.27 3.46 8.50 5.81 11.51 10.79 9.53	2.81 2.07 4.23 4.36 3.76 4.87 4.10	2.45 1.94 3.18 3.43 2.39 2.86 2.68 Eff N <sub>s</sub> 2.91	80 80 80 80 80 80 N seats 120
1993 1998 2003 2008 2013 2018 2023 <b>Peru</b> 1995 2000	6.27 3.46 8.50 5.81 11.51 10.79 9.53 LSq 3.49 1.39	2.81 2.07 4.23 4.36 3.76 4.87 4.10 Eff N <sub>v</sub> 3.42 4.00	2.45 1.94 3.18 3.43 2.39 2.86 2.68 Eff N <sub>s</sub> 2.91 3.80	80 80 80 80 80 80 N seats 120 120
1993 1998 2003 2008 2013 2018 2023 <b>Peru</b> 1995 2000 2001	6.27 3.46 8.50 5.81 11.51 10.79 9.53 LSq 3.49 1.39 8.95	2.81 2.07 4.23 4.36 3.76 4.87 4.10 Eff N <sub>v</sub> 3.42 4.00 6.60	2.45 1.94 3.18 3.43 2.39 2.86 2.68 Eff N <sub>s</sub> 2.91 3.80 4.37	80 80 80 80 80 80 N seats 120 120
1993 1998 2003 2008 2013 2018 2023 <b>Peru</b> 1995 2000 2001 2006	6.27 3.46 8.50 5.81 11.51 10.79 9.53 LSq 3.49 1.39 8.95 13.95	2.81 2.07 4.23 4.36 3.76 4.87 4.10 Eff N <sub>v</sub> 3.42 4.00 6.60 7.31	2.45 1.94 3.18 3.43 2.39 2.86 2.68 Eff N <sub>s</sub> 2.91 3.80 4.37 3.78	80 80 80 80 80 80 80 N seats 120 120 120
1993 1998 2003 2008 2013 2018 2023 <b>Peru</b> 1995 2000 2001 2006 2011	6.27 3.46 8.50 5.81 11.51 10.79 9.53 LSq 3.49 1.39 8.95 13.95 10.23	2.81 2.07 4.23 4.36 3.76 4.87 4.10 Eff N <sub>v</sub> 3.42 4.00 6.60 7.31 5.71	2.45 1.94 3.18 3.43 2.39 2.86 2.68 Eff N <sub>s</sub> 2.91 3.80 4.37 3.78 3.97	80 80 80 80 80 80 N seats 120 120 120 130
1993 1998 2003 2008 2013 2018 2023 <b>Peru</b> 1995 2000 2001 2006	6.27 3.46 8.50 5.81 11.51 10.79 9.53 LSq 3.49 1.39 8.95 13.95	2.81 2.07 4.23 4.36 3.76 4.87 4.10 Eff N <sub>v</sub> 3.42 4.00 6.60 7.31	2.45 1.94 3.18 3.43 2.39 2.86 2.68 Eff N <sub>s</sub> 2.91 3.80 4.37 3.78	80 80 80 80 80 80 80 N seats 120 120 120

Poland	LSq	Eff N <sub>v</sub>	Eff N <sub>s</sub>	N seats
1991	3.62	13.82	10.86	460
1993	17.81	9.81	3.88	460
1997	10.63	4.59	2.95	460
2001	6.33	4.50	3.60	460
2005	6.97	5.86	4.26	460
2007	4.67	3.32	2.82	460
2011	5.95	3.74	3.00	460
2015	12.56	4.45	2.75	460
2019	6.60	3.41	2.76	460
2023	6.46	3.95	3.13	460
Portugal	LSq	Eff N <sub>v</sub>	Eff N <sub>s</sub>	N seats
1975	5.70	3.66	2.93	247
1976	3.68	3.99	3.43	259
1979	3.74	3.00	2.61	246
1980	3.93	2.89	2.50	246
1983	3.04	3.73	3.34	246
1985	3.63	4.78	4.19	246
1987	6.12	2.98	2.37	246
1991	6.09	2.79	2.23	230
1995	4.60	2.97	2.55	230
1999	4.90	3.13	2.61	230
2002	4.64	3.03	2.50	226
2005	5.75	3.13	2.56	230
2009	5.63	3.83	3.13	230
2011	5.68	3.66	2.93	230
2015	5.65	3.59	2.86	230
2019	7.77	4.01	2.87	230
2022	7.85	3.65	2.66	230
Romania	LSq	$Eff  N_v$	$EffN_s$	N seats
1990	0.90	2.21	2.20	396
1992	6.81	6.96	4.78	341
1996	6.34	6.09	4.31	343
2000	8.56	5.25	3.56	346
2004	3.74	3.90	3.36	332
2008	3.32	3.93	3.60	334
2012	6.20	2.54	2.12	412
2017	2.69	3.76	3.54	329
2020	6.14	5.36	4.30	330

Russia	LSq	$Eff N_v$	Eff N <sub>s</sub>	N seats
1995 SMD	9.95	26.20	11.59	225
1995 list	20.11	10.06	3.31	225
1995 overall	12.97	15.42	6.14	450
1999 SMD	6.19	24.31	14.30	216
1999 list	5.57	6.10	4.57	225
1999 overall	5.05	11.24	7.96	441
2003 SMD	14.86	9.85	4.42	222
2003 list	12.11	4.75	2.79	225
2003 overall	12.01	6.61	3.60	447
2007	4.33	2.22	1.92	450
2011	3.40	3.10	2.80	450
2016 SMD	30.41	3.43	1.22	225
2016 list	6.10	2.88	2.28	225
2016 overall	17.49	3.14	1.67	450
2021 SMD	30.72	3.59	1.29	225
2021 list	4.70	3.20	2.65	225
2021 overall	16.96	3.39	1.85	450
See Notes.				
St Kitts &				
Nevis	LSq	$Eff N_v$	Eff N <sub>s</sub>	N seats
1971	26.71	2.48	1.59	
1971	20.71 16.96	2.46	1.59	9 9
1973	5.91	2.26	2.79	9
1980	20.95	2.30	2.19	11
1989	20.93 15.94	2.43	2.47	11
1993	7.92	3.08	3.27	11
1995	22.04	2.64	2.20	11
2000	28.46	2.60	1.75	11
2004	19.68	2.70	2.20	11
2010	12.04	2.94	2.69	11
2015	12.94	2.41	2.05	11
2020	23.97	2.25	1.42	11
2022	15.97	3.49	2.57	11
See Notes.	•- •	2	,	

St Lucia	LSq	$Eff N_v$	Eff $N_s$	N seats
1974	4.74	2.07	1.94	17
1979	14.38	1.97	1.71	17
1982	24.07	2.40	1.44	17
1987 Apr 6	9.03	2.32	1.99	17
1987 Apr 30	6.15	2.21	1.99	17
1992	7.96	1.97	1.84	17
1997	31.56	1.92	1.12	17
2001	23.66	2.18	1.41	17
2006	13.12	2.01	1.84	17
2011	12.83	2.08	1.84	17
2016	9.41	2.02	1.84	17
2021	28.97	2.28	1.65	17
St Vincent an				
Grenadines	LSq	$Eff N_v$	Eff $N_s$	N seats
1961	16.04	2.12	1.80	9
1966	6.47	2.00	1.98	9
1967	12.89	1.99	1.80	9
1972	4.48	2.17	2.32	13
1974	8.43	1.92	1.61	13
1979	25.20	2.57	1.35	13
1984	14.99	2.28	1.74	13
1989	32.10	1.88	1.00	15
1994	21.21	2.43	1.51	15
1998	7.98	1.99	1.99	15
2001	22.32	2.05	1.47	15
2005	24.71	1.98	1.47	15
2010	2.12	2.01	1.99	15
2015	0.91	2.01	1.99	15
2020	10.37	2.00	1.92	15
See Notes.				
San Marino	LSq	Eff N <sub>v</sub>	Eff N <sub>s</sub>	N seats
1998	0.88	3.73	3.65	60
2001	0.85	3.55	3.52	60
2006	2.10	4.22	3.88	60
2008	3.81	4.24	3.97	60
2012	5.07	6.60	5.23	60
2016	3.37	7.13	6.14	60
2019	1.91	4.91	4.63	60
See Notes.	1.71	1.71	1.05	30

Sao Tome e				
Principe	LSq	$Eff N_v$	Eff $N_s$	N seats
1991	4.66	2.16	1.98	55
1994	5.81	3.20	2.70	55
1998	4.58	2.76	2.36	55
2002	4.55	2.76	2.36	55
2006	6.12	3.78	2.92	55
2010	6.29	3.14	2.59	55
2014	7.27	2.84	2.21	55
2018	2.10	2.59	2.56	55
2022	7.04	2.95	2.41	55
Scotland	LSq	Eff N <sub>v</sub>	Eff N <sub>s</sub>	N seats
1999	7.55	4.36	3.34	129
2003	7.31	5.64	4.23	129
2007	6.99	4.71	3.41	129
2011	7.45	3.52	2.61	129
2016 SMD	28.97	3.11	1.50	73
2016 overall	5.60	3.70	2.99	129
2021 SMD	31.40	3.06	1.37	73
2021 overall	7.03	3.85	2.96	129
See Notes.	7.05	5.05	2.50	12)
See Motes.				
Senegal	LSq	Eff N <sub>v</sub>	Eff N <sub>s</sub>	N seats
1978	1.12	1.43	1.39	100
1983	10.43	1.52	1.16	120
1988	12.77	1.75	1.32	120
1993	11.19	2.40	1.84	120
1998	12.40	3.22	2.10	140
2001				
	19.28			
2007	19.28 13.54	3.27	1.76	120
2007 2012	13.54	3.27 2.04	1.76 1.31	120 150
2012	13.54 19.80	3.27 2.04 3.16	1.76 1.31 1.57	120 150 150
2012 2017	13.54 19.80 19.82	3.27 2.04 3.16 3.45	1.76 1.31 1.57 1.70	120 150 150 165
2012	13.54 19.80	3.27 2.04 3.16	1.76 1.31 1.57	120 150 150
2012 2017 2022	13.54 19.80 19.82 2.73	3.27 2.04 3.16 3.45 2.89	1.76 1.31 1.57 1.70 2.61	120 150 150 165 165
2012 2017 2022 <b>Serbia</b>	13.54 19.80 19.82 2.73	3.27 2.04 3.16 3.45 2.89	1.76 1.31 1.57 1.70 2.61	120 150 150 165 165 N seats
2012 2017 2022 <b>Serbia</b> 2003	13.54 19.80 19.82 2.73 LSq 6.19	3.27 2.04 3.16 3.45 2.89 Eff N <sub>v</sub> 6.43	1.76 1.31 1.57 1.70 2.61 Eff N <sub>s</sub> 4.80	120 150 150 165 165 N seats 250
2012 2017 2022 <b>Serbia</b> 2003 2007	13.54 19.80 19.82 2.73 LSq 6.19 4.87	3.27 2.04 3.16 3.45 2.89 Eff N <sub>v</sub> 6.43 5.56	1.76 1.31 1.57 1.70 2.61 Eff N <sub>s</sub> 4.80 4.55	120 150 150 165 165 N seats 250 250
2012 2017 2022 <b>Serbia</b> 2003 2007 2008	13.54 19.80 19.82 2.73 LSq 6.19 4.87 1.49	3.27 2.04 3.16 3.45 2.89 Eff N <sub>v</sub> 6.43 5.56 3.73	1.76 1.31 1.57 1.70 2.61 Eff N <sub>s</sub> 4.80 4.55 3.48	120 150 150 165 165 N seats 250 250
2012 2017 2022 <b>Serbia</b> 2003 2007 2008 2012	13.54 19.80 19.82 2.73 LSq 6.19 4.87 1.49 6.53	3.27 2.04 3.16 3.45 2.89 Eff N <sub>v</sub> 6.43 5.56 3.73 6.32	1.76 1.31 1.57 1.70 2.61 Eff N <sub>s</sub> 4.80 4.55 3.48 4.87	120 150 150 165 165 N seats 250 250 250
2012 2017 2022 <b>Serbia</b> 2003 2007 2008 2012 2016	13.54 19.80 19.82 2.73 LSq 6.19 4.87 1.49 6.53 2.22	3.27 2.04 3.16 3.45 2.89 Eff N <sub>v</sub> 6.43 5.56 3.73 6.32 3.57	1.76 1.31 1.57 1.70 2.61 Eff N <sub>s</sub> 4.80 4.55 3.48 4.87 3.23	120 150 150 165 165 N seats 250 250 250 250
2012 2017 2022 <b>Serbia</b> 2003 2007 2008 2012 2016 2020	13.54 19.80 19.82 2.73 LSq 6.19 4.87 1.49 6.53 2.22 9.65	3.27 2.04 3.16 3.45 2.89 Eff N <sub>v</sub> 6.43 5.56 3.73 6.32 3.57 2.41	1.76 1.31 1.57 1.70 2.61 Eff N <sub>s</sub> 4.80 4.55 3.48 4.87 3.23 1.71	120 150 150 165 165 N seats 250 250 250 250 250
2012 2017 2022 <b>Serbia</b> 2003 2007 2008 2012 2016	13.54 19.80 19.82 2.73 LSq 6.19 4.87 1.49 6.53 2.22	3.27 2.04 3.16 3.45 2.89 Eff N <sub>v</sub> 6.43 5.56 3.73 6.32 3.57	1.76 1.31 1.57 1.70 2.61 Eff N <sub>s</sub> 4.80 4.55 3.48 4.87 3.23	120 150 150 165 165 N seats 250 250 250 250

Seychelles	LSq	$Eff N_v$	Eff $N_s$	N seats
1970	11.99	2.06	1.80	15
1974	34.30	2.00	1.30	15
1993	21.78	2.23	1.44	33
1998	23.29	2.16	1.27	34
2002	12.11	2.10	1.78	34
2007	11.49	1.97	1.78	34
2011	11.18	1.26	1.00	31
2016	7.45	2.05	1.96	33
2020	15.33	2.08	1.69	35
Sierra Leone	LSq	$Eff  N_v$	Eff N <sub>s</sub>	N seats
1996	5.37	4.73	3.82	68
2002	5.14	1.89	1.65	112
2007	9.76	2.89	2.31	112
2012	6.09	2.30	1.90	109
2018	9.36	3.11	2.45	132
2023	2.44	2.08	1.92	135
Singapore	LSq	$Eff N_v$	Eff N <sub>s</sub>	N seats
2011	25.75	2.51	1.15	87
2016	17.74	1.97	1.14	89
2020	21.67	2.48	1.24	93
Slovakia	LSq	$Eff  N_v$	Eff $N_s$	N seats
1990	3.54	5.81	4.98	150
1992	11.15	5.36	3.19	150
1994	5.94	5.81	4.41	150
1998	2.90	5.33	4.75	150
2002	6.97	8.87	6.12	150
2006	5.53	6.11	4.81	150
2010	7.46	5.53	4.01	150
2012	9.77	4.36	2.85	149
2016	6.10	7.31	5.67	150
2020	12.37	7.80	4.37	150
2023	7.44	7.58	5.44	150
See Notes.				

Slovenia 1990 1992 1996 2000 2004 2008	LSq 2.94 5.33 3.59 1.51 4.79 3.89	Eff N <sub>v</sub> 9.00 8.37 6.32 5.15 6.02 4.94	Eff N <sub>s</sub> 8.21 6.61 5.53 4.86 4.90 4.23	N seats 80 90 90 90 90 88
2011	3.64	5.57	4.73	90
2014	6.57	5.33	3.97	88
2018	4.56	8.36	6.51	88
2022	11.49	5.25	3.04	88
South Africa	LSq	$Eff  N_v$	$Eff  N_s$	N seats
1994	0.36	2.24	2.21	400
1999	0.28	2.17	2.15	400
2004	0.26	1.97	1.97	400
2009	0.30	2.13	2.12	400
2014	0.37	2.27	2.26	400
2019	0.47	2.58	2.57	400
Spain	LSq	Eff $N_{\rm v}$	Eff N <sub>s</sub>	N seats
1977	10.05	4.30	2.91	350
1979	10.56	4.25	2.81	350
1982	8.02	3.19	2.34	350
1986	7.19	3.59	2.68	350
1989	9.35	4.13	2.85	350
1993	7.08	3.52	2.67	350
1996	5.36	3.21	2.72	350
2000	6.10	3.12	2.48	350
2004	4.25	3.00	2.53	350
2008	4.49	2.79	2.36	350
2011	6.93	3.34	2.60	350
2015	6.07	5.83	4.53	350
2016	5.37	5.03	4.16	350
2019 Apr	5.52	6.11	4.94	350
2019 Nov	6.36	6.07	4.68	350
2023	5.67	4.08	3.44	350
Sri Lanka	LSq	$Eff  N_v$	Eff N <sub>s</sub>	N seats
2000	2.65	2.70	2.59	225
2001	3.86	2.79	2.76	225
2004	2.80	2.78	2.76	225
2010	4.33	2.20	2.06	225
2015	2.59	2.55	2.46	225
2020	4.54	2.44	2.10	225

Surinam	LSq	Eff $N_v$	$Eff N_s$	N seats
1967	12.27	5.60	3.43	39
1969	9.37	3.65	2.78	39
1973	6.45	2.45	1.97	39
1977	8.91	2.47	1.97	39
1987	8.42	1.35	1.59	51
1991	4.63	2.69	2.31	51
1996	6.75	3.62	2.98	51
2000	13.70	3.74	2.15	51
2005	7.38	3.92	3.20	51
2010	8.94	3.49	3.21	51
2015	4.63	2.79	2.53	51
2020	8.70	4.15	3.53	51
C 1	1.0	ECCN	ECCNI	NT
Sweden	LSq	Eff $N_v$	$\operatorname{Eff} N_{s}$	N seats
1948	3.51	3.34	3.06	230
1952	2.19	3.27	3.09	230
1956	2.43	3.38	3.18	231
1958	2.16	3.31	3.17	231
1960	2.05	3.26	3.11	232
1964	2.27	3.43	3.25	233
1968	3.03	3.18	2.87	233
1970	1.61	3.48	3.32	350
1973	1.57	3.51	3.35	350
1976	1.23	3.57	3.45	349
1979	1.27	3.63	3.48	349
1982	2.40	3.39	3.13	349
1985	1.35	3.52	3.39	349
1988	2.45	3.92	3.67	349
1991	2.86	4.57	4.19	349
1994	1.18	3.65	3.50	349
1998	0.97	4.55	4.29	349
2002	1.52	4.51	4.23	349
2006	3.02	4.66	4.15	349
2010	1.25	4.79	4.54	349
2014	2.64	5.41	4.99	349
2018	0.63	5.79	5.63	349
2022	0.64	5.34	5.18	349

Switzerland	LSq	$Eff N_v$	Eff $N_s$	N seats
1947	3.41	5.34	5.00	192
1951	2.46	5.09	4.84	192
1955	1.70	4.96	4.75	192
1959	1.97	5.04	4.77	194
1963	1.15	4.99	4.84	194
1967	1.47	5.56	5.22	193
1971	2.47	6.08	5.52	198
1975	3.09	5.80	5.01	200
1979	1.73	5.51	5.14	198
1983	2.94	6.04	5.31	200
1987	3.78	6.82	5.74	198
1991	2.60	7.38	6.70	200
1995	4.37	6.79	5.60	200
1999	3.17	5.87	5.16	200
2003	2.47	5.44	5.01	200
2007	2.56	5.61	4.97	200
2011	3.76	6.35	5.57	200
2015	3.69	5.83	4.92	200
2019	2.46	6.47	5.83	200
2023	3.60	5.97	5.13	200
See notes.				
T-:	I C -	E.C. NI	ECC N	NI seeds
Taiwan	LSq	$\operatorname{Eff} N_{v}$	Eff $N_s$	N seats
1992	4.65	2.64	2.23	161
1995	4.14	2.95	2.54	164
1998	6.41	3.22	2.51	225
2001	4.70	4.23	3.49	225
2004	3.83	3.81	3.27	225
2008 SMD	22.79	2.31	1.60	79
2008 list	7.30	2.49	1.94	34
2008 overall	16.89	2.40	1.75	113
2012	9.07	2.81	2.23	113
2016 SMD	14.72	2.84	2.02	79 34
2016 list	8.70	3.59	2.52	34
2016 overall	11.72	3.23	2.17	113
2020 SMD	12.97	2.70	2.13	79 24
2020 list	6.61	4.02	3.11	34 112
2020 overall	10.91	3.32	2.45 2.10	113
2024 SMD	7.48	2.74		79 24
2024 list	3.82	3.33	2.88	34 112
2024 overall	8.19	3.13	2.38	113
See Notes.				
<b>T</b>	<b>T.</b> C	<b>T</b> (0.3.1	TI CO X Y	N.T.
Tanzania	LSq	$\operatorname{Eff} \operatorname{N}_{\operatorname{v}}$	Eff $N_s$	N seats
2010	12.15	2.32	1.72	341
2015	18.70	2.43	1.75	256

Thailand	LSq	$Eff  N_v $	$Eff  N_s$	N seats
2011	4.92	2.77	2.57	500
2019	3.81	6.16	5.64	500
2023	5.51	4.90	4.86	500
See Notes.				
Timor Leste	LSq	$Eff N_v$	Eff $N_s$	N seats
2007	4.48	5.40	4.37	65
2012	10.05	4.19	2.65	65
2017	6.23	4.96	3.67	65
2018	2.42	2.69	2.46	65
2023	6.06	3.85	3.02	65
Togo	LSq	Eff $N_v$	Eff N <sub>s</sub>	N seats
2007	16.46	3.33	2.02	81
2013	16.80	3.13	1.95	91
Trinidad and				
Tobago	LSq	$Eff N_v$	Eff $N_s$	N seats
1961	9.04	2.01	1.80	30
1966	12.13	2.50	1.80	36
1971	14.44	1.38	1.00	36
1976	9.75	2.65	1.91	36
1981	21.61	2.81	1.74	36
1986	24.57	1.84	1.18	36
1991	17.15	2.86	2.11	36
1995	1.65	2.23	2.23	36
2000	1.94	2.07	2.10	36
2001	3.16	2.15	2.00	36
2002	3.71	2.09	1.98	36
2007	20.81	2.84	1.87	41
2010	10.55	1.93	1.71	41
2015	4.25	2.33	2.05	41
2020	3.55	2.16	1.99	41
Tunicio	I C~	Eff M	Eff N	N coote
Tunisia	LSq	Eff N <sub>v</sub>	Eff N <sub>s</sub>	N seats
2004	5.77	1.30	1.52	189
2011	7.43	6.52	4.62	217
2014 See Notes	3.77	3.88	3.69	217
See Notes.				

Türkiye 2007 2011 2015 Jun 2015 Nov 2018 2023 See Notes.	LSq 11.76 7.40 4.90 6.69 3.15 3.61	Eff N <sub>v</sub> 3.47 2.96 3.65 2.99 2.40 2.64	Eff N <sub>s</sub> 2.25 2.34 3.13 2.45 2.27 2.35	N seats 550 550 550 550 600
Turkish Republic of Northern				
Cyprus	LSq	$Eff N_v$	Eff $N_s$	N seats
2003	4.15	3.74	3.25	50
2007	7.80	3.07	2.57	50
2009	6.50	3.33	2.68	50
2013	3.62	3.54	3.16	50
2018	6.25	4.57	3.63	50
2022	7.78	3.63	2.71	50
Uganda	LSq	$Eff N_v$	Eff N <sub>s</sub>	N seats
1961	9.07	2.41	2.13	82
1980	10.59	2.24	1.95	126
2011	15.67	3.56	1.91	341
2016 2021	18.75 14.90	3.87 4.67	1/88	401 499
See Notes.	14.90	4.07	2.34	499
Ukraine	LSq	$\text{Eff } N_v$	$Eff  N_s$	N seats
2002	7.44	6.98	4.67	225
2006	8.56	5.17	3.38	450
2007 See Notes.	3.59	3.85	3.30	450
United				
Kingdom	LSq	$Eff N_v$	$Eff N_s$	N seats
1945	11.62	2.72	2.12	637
1950	6.91	2.44	2.08	623
1951	2.61	2.13	2.06	621
1955	4.13	2.16	2.03	630
1959	7.30	2.28	1.99	630
1964	8.88	2.53	2.06	630
1966	8.44	2.42	2.02	630
1970 1074 Feb	6.59	2.46	2.07	630
1974 Feb	15.47	3.13	2.25	635

1974 Oct	14.96	3.15	2.25	635
1979	11.58	2.87	2.15	635
1983	17.45	3.46	2.09	650
1987	14.95	3.33	2.17	650
1992	13.55	3.06	2.27	651
1997	16.51	3.22	2.13	659
2001	17.76	3.33	2.17	659
2005	16.73	3.59	2.46	646
2010	15.13	3.72	2.57	650
2015	15.02	3.93	2.54	650
2017	6.47	2.89	2.48	650
2019	11.80	3.23	2.39	650

See also Northern Ireland, Scotland, Wales See Notes.

<b>United States</b>				
(House)	LSq	$Eff N_v$	$Eff N_s$	N seats
1946	2.27	2.04	1.98	435
1948	7.00	2.07	1.92	435
1950	3.96	2.06	2.00	435
1952	1.17	2.04	2.01	435
1954	0.58	2.01	1.99	435
1956	2.62	2.01	1.99	435
1958	8.33	1.98	1.84	437
1960	4.92	2.01	1.92	437
1962	7.42	2.01	1.93	435
1964	9.92	1.97	1.77	435
1966	5.69	2.03	1.96	435
1968	4.80	2.04	1.97	435
1970	3.62	2.03	1.94	435
1972	2.73	2.04	1.97	435
1974	7.90	2.00	1.80	435
1976	9.67	2.02	1.79	435
1978	9.15	2.04	1.86	435
1980	4.59	2.06	1.97	435
1982	5.71	2.02	1.89	435
1984	5.39	2.03	1.95	435
1986	4.02	2.01	1.93	435
1988	5.55	2.03	1.93	435
1990	7.89	2.08	1.91	435
1992	7.08	2.14	1.94	435
1994	1.31	2.08	2.00	435
1996	3.21	2.18	2.00	435
1998	2.71	2.21	2.01	435
2000	3.15	2.25	2.02	435
2002	2.00	2.15	2.00	435
2004	2.99	2.18	2.00	435
2006	1.57	2.10	1.99	435
2008	4.01	2.09	1.94	435

2019

1.73

2010	3.14	2.15	1.97	435
2012	4.79	2.13	1.99	435
2014	4.35	2.14	1.96	435
2016	5.25	2.14	1.98	435
2018	1.29	2.08	1.99	435
2020	1.44	2.10	2.00	435
2022	0.82	2.04	2.00	435
See Notes.	0.62	2.04	2.00	433
see Moles.				
United State	og.			
(Presidentia				
college)		Eff $N_v$	Eff $N_s$	N seats
•	LSq		=	
1860	23.08	3.40	2.34	303
1948	9.44	2.22	2.18	531
1952	27.86	2.00	1.39	531
1956	28.35	1.98	1.32	531
1960	8.26	2.03	2.00	537
1964	29.05	1.92	1.21	538
1968	10.82	2.57	2.24	538
1972	35.29	1.96	1.07	538
1976	4.34	2.08	1.98	538
1980	36.57	2.32	1.20	538
1984	38.48	1.96	1.05	538
1988	25.33	2.03	1.49	538
1992	23.02	2.80	1.75	538
1996	17.99	2.41	1.71	538
2000	2.68	2.16	2.00	538
2004	2.06	2.05	1.99	538
2008	14.24	2.05	1.77	538
2012	9.85	2.07	1.90	538
2016	9.34	2.26	1.96	538
2020	4.89	2.09	1.96	538
Uruguay	LSq	$Eff N_v$	Eff $N_s$	N seats
1946	1.05	3.07	2.97	99
1950	1.11	2.65	2.55	99
1954	0.86	2.60	2.53	99
1958	1.65	2.55	2.41	99
1962	1.62	2.40	2.35	99
1966	1.41	2.44	2.33	99
1971	0.52	2.76	2.72	99
1984	0.32	2.95	2.92	99
1989	0.54	3.38	3.33	99
1909	0.60	3.12	3.07	99
2004	1.32	2.49	2.39	99
2004	1.32	2.49	2.39	99 99
				99 99
2014	1.00	2.74	2.65	99

3.31

3.54

99

Venezuela	LSq	$Eff N_v$	Eff $N_s$	N seats
2010	9.60	2.19	1.97	162
2015	8.93	2.07	1.80	164
2020	18.40	1.94	1.17	274
See Notes.				
<b>XX</b> 7 - <b>1</b>	I C	E.C. M	E.C. NI	NI
Wales	LSq	Eff $N_v$	Eff N <sub>s</sub>	N seats
1999	8.61	3.82	3.03	60
2003	10.39	4.38	3.00	60
2007	11.36	5.08	3.33	60
2011	10.47	4.36	2.90	60
2016 SMD	25.80	4.36	2.00	40
2016 overall	13.02	4.95	3.11	60
2021 SMD	21.15	3.69	1.96	40
2021 overall	9.36	3.91	2.71	60
See Notes.				
Zambia	LSq	Eff $N_v$	Eff N <sub>s</sub>	N seats
1964	14.88	1.80	1.74	75
1968	3.74	1.67	1.55	105
1991	8.54	1.63	1.38	150
1996	21.29	2.50	1.31	150
2001	16.01	5.49	3.00	150
2006	8.32	3.90	2.87	148
2011	3.39	3.47	2.96	150
2016	7.53	2.84	2.49	156
2021	5.21	2.93	2.35	156
See Notes.				

## **Notes**

#### Albania

In 2001 and 2005, the first two measures are based on list votes. The highly disproportional outcome in 2005 results from the (deliberately) low list vote won by the two parties that together won virtually all of the SMD seats, thus, through manipulation of the system, earning a significant seat bonus for the alliances that they dominated by ensuring that most of the alliances' list votes were won by their smaller partners. Thus the Democratic Party won only 7.7 per cent of the list votes but received 40 per cent of the total seats in parliament, and the Socialist Party won 8.9 per cent of the list votes and received 30 per cent of the 140 seats. The electoral system was changed to a PR list system, with 12 regional constituencies, prior to the 2009 election.

2013 figures are based on treating parties (and independent candidates) as the units; there were 66 parties and two independent candidates. However, only four of the parties stood on their own; another 37 took part in the Socialist Party-led alliance of Edi Rama, with 25 in the Democratic Party-led alliance of Sali Berisha. Basing calculations on alliances, with only eight units (two large alliances, four small parties and two independent candidates), the values of the indices would be LSq 2.15,  $N_{\rm V}$  2.05,  $N_{\rm S}$  1.92.

# **Algeria**

2012 figures based on treating the 'List of Independents' which won nearly 9 per cent of the votes, as a party. The 2021 results are difficult to interpret; it appears from available figures that 72 per cent of the votes were cast for parties that won no seats, while sixty-six parties that each received fewer than 0.5 per cent of the votes did win seats.

# **Andorra**

Figures for elections from 2015 onwards are based on treating, as the units, the alliances that contest the seven 2-seat constituencies. Since in each of these constituencies the largest party is awarded both seats (this generates high disproportionality at that level – LSq in 2023 was 36.80), this incentivises parties to form alliances at this level while competing separately in the national 14-seat constituency. Basing the calculation of indices upon alliances at constituency level and parties at national level would produce slightly higher indices for disproportionality and for vote fractionalisation.

### **Argentina**

Aggregated figures from the 2015 elections are unavailable, and would be difficult if not impossible to compile given that parties formed different alliances in different constituencies.

### Armenia

Figures for 2012 based on list votes and total seats and on sources that are less than comprehensive. Two independent candidates won seats but no list votes; excluding these would make only a very marginal difference to the indices.

## Australia

2010 figures based on treating the Liberal Party, the Nationals, and the Liberal National Party of Queensland, as three separate parties. If instead they were treated collectively as one party the values would be LSq 11.37,  $N_v$  2.89,  $N_s$  2.14. Likewise, in 2013, 2016, 2019 and 2022 the Liberal Party, Liberal National Party, the Nationals and the Country Liberals are treated as separate parties.

#### **Benin**

Benin was for many years a model of west African democracy. However, new electoral rules with exceptionally high thresholds and ballot access requirements were adopted prior to the 2019 election that led all parties, apart from two supportive of the incumbent president, to be debarred from or to boycott the election. The elections of 8 January 2023 were held under slightly less restrictive rules, though the high threshold (10 per cent of the national vote required to win any seats) remained.

### Bhutan

Bhutan demonstrates the infinite capacity of electoral system designers to come up with new variations on old themes. It employs a two-round system, but whereas this is usually applied within each constituency (for example, in France, within each constituency only those candidates meeting certain criteria on the first round progress to the second round), in Bhutan this is applied at national level. Thus in 2018 four parties stood in the first round, receiving respectively 32 per cent, 31 per cent, 27 per cent and 10 per cent of the votes. As a result, only the first two parties were permitted to field candidates in any of the 47 constituencies on the second round. This raises the question of whether the seat outcome should be compared with the voters' preferences as expressed in the first round or with the constrained choices they made in the second round. As with France, the figures given here are based on first-round votes and final numbers of seats. If, instead, the indices were based on second-round votes, the values for 2013 would be LSq 13.21, N<sub>v</sub> 1.98, N<sub>s</sub> 1.77, and for 2018 they would be LSq 8.88, N<sub>v</sub> 1.98, N<sub>s</sub> 1.86. The same rules applied in 2008, but since only two parties came forward then there was only one round of voting.

For 2023/24 (the election straddled two years as the first round took place in November 2023 and the second in January 2024) the figures based on second round votes and second round seats would be LSq 8.85,  $N_v$  1.98,  $N_s$  1.86. This election was notable in that neither of the parties that between them won all the seats at the previous election qualified for the second round, so there was a complete turnover in parliament, not just of individuals but also in terms of party representation.

# **Bosnia and Hercegovina**

All figures are given at the level of BiH as a whole, though in practice the two 'entities' (the Federation and Republika Srpska) have virtually separate party systems. This means that fragmentation at the BiH level is higher than it is within either of the entities; for example, in 2022,  $N_{\nu}$  was 7.82 within the Federation and 4.39 within Republika Srpska.

No source gives entirely satisfactory results for the 2002 election, with excessive bunching of 'others' and discrepancies between sources, though with 'perfect' information the difference to the indices would almost certainly be at most marginal.

# Bulgaria

The votes cast for 'None of the above' are excluded from the calculations; in effect, these are treated as invalid or spoiled votes.

## Canada

While significant disproportionality is to be expected in single-member constituency elections, the Canadian election of 2021 produced a particularly striking discrepancy: the second-placed party (in votes) won 41 more seats than the party that received a plurality of the votes.

### Chile

From the restoration of democracy following the end of the military regime up to and including the 2013 election, the Chilean parliament was elected from 60 2-seat constituencies, a measure intended partly to minimise party system fractionalisation but also to protect the parliamentary position of the parties associated with the military dictatorship, which could be sure of winning a seat in any constituency where they could take a third of the votes. In response, the main parties formed what are sometimes termed 'cluster parties', umbrella organisations that stood as lists containing a number of different parties. The largest, known at most elections as the Concertación, contained both the Christian Democrats and the Socialist Party as well as several other parties. Thus the Chamber of Deputies contained quite a number of different parties (8 after the 2013 election, for example) as well as some Independent deputies. This practice continued even after the adoption of a more conventional PR system for the 2017 elections. Since the electoral system allocates seats to lists rather than to individual parties, the most relevant indices are those based on treating lists as the units of vote-seat comparisons, but for the sake of completeness the indices based on treating individual parties as the units (with the independents within each list grouped into a bloc rather than treated as separate units) at elections up to 2017 are as follows:

1989	6.74	7.13	5.07	120
1993	7.46	6.66	4.95	120
1997	8.46	7.19	5.34	120
2001	5.09	6.57	5.94	120
2005	6.79	6.58	5.59	120
2009	6.86	7.32	5.64	120
2013	6.12	8.75	6.59	120
2017	5.96	10.62	7.67	155

### Croatia

For 2011, the pattern whereby different alliances of parties contest different constituencies makes calculation of indices slightly problematic, but is likely to affect the figures only marginally. The figures for 2011 include the 8 'minority seats', apart from the one (in the Tajik constituency) where there was only one candidate. If these were excluded and figures were based on only the ten geographical constituencies plus the constituency for Croatians abroad, the figures would be LSq 12.40, N<sub>v</sub> 5.01, N<sub>s</sub> 2.70, with an N of 143 seats. Figures for 2015 and 2016 exclude these 8 minority seats.

Croatia's combination of high levels of disproportionality and medium-sized district magnitude (ten constituencies each returning 14 MPs) is anomalous and intriguing; with such a level of district magnitude, disproportionality would normally be expected to be significantly lower. The explanation lies in the application of a 5 per cent

constituency-level threshold, together with fairly high levels of vote fragmentation and the use of the D'Hondt method to allocate seats within each constituency, meaning that many votes are 'wasted' and that those parties that reach the threshold can be significantly over-represented. For example, at the 2011 election a party with 42 per cent of the votes won 64 per cent of the seats (9 out of 14) in both districts 6 and 7, while in district 9 the strongest two parties, with just 66 per cent of the votes between them, won all the seats.

### **Dominica**

The main opposition parties boycotted the 2022 election, and in six of the 21 constituencies the governing party candidate was returned unopposed.

# **Egypt**

2011 figures are based on votes cast for the PR seats (332 of them) but refer to total seats. There were 498 seats in all, the other 166 being filled from single-member constituencies. Of the single-member seats, 21 were won by independents, who did not contest the PR seats; if they were excluded the values of the indices would change only marginally ( $N_s$  would remain unaltered at 3.38). Calculation of indices is complicated by the fact that several of the largest 'parties' were in fact alliances of a number of different parties, for which separate figures are not available.

### **France**

Figures are based on first-round votes. The figures for  $N_V$  and  $N_S$  are probably slight under-estimates because of the habit in both official and unofficial sources of lumping independents and very minor parties together as 'divers extrême droite', 'divers droite', 'divers centre', 'divers gauche' and 'divers extrême gauche', rather than reporting vote and seat totals separately for each micro-group, which would be preferable. The practice of a ministry classifying candidates by perceived political outlook, and reporting these in official statistics, seems to be unique to France.

## Georgia

Figures based on list votes and total seats.

### Germany

The figure in the effective number of legislative parties ( $N_s$ ) column is based on treating the CDU and CSU as separate parties. However, the CDU and CSU, even though they stand separately at the election (and therefore seats are awarded to them on the basis of the vote totals for each party), form a single parliamentary party (*Fraktion*), and treating them as just one party at parliamentary level produces the following  $N_s$  figures:

1949	4.01
1953	2.79
1957	2.39
1961	2.51
1965	2.38
1969	2.24
1972	2.34
1976	2.31
1980	2.44

1983	2.51
1987	2.80
1990	2.65
1994	2.91
1998	2.91
2002	2.80
2005	3.44
2009	3.97
2013	2.80
2017	4.64
2021	4.84

## Gibraltar

The figures for 2011 are based on treating the Gibraltar Socialist Labour Party and the Liberal Party as separate parties. If they are treated as one unit (they ran in alliance), the figures would be LSq 8.64,  $N_v$  2.18,  $N_s$  1.94. Similarly, in 2015 those two parties are treated as separate units; again they ran in alliance, and if they were treated as one unit the figures would be LSq 9.62,  $N_v$  1.76,  $N_s$  1.94. Likewise in 2019; if they are treated as one unit, the figures would be LSq 13.22,  $N_v$  2.61,  $N_s$  2.11.

### Guinea-Bissau

Disproportionality in Guinea-Bissau is unusually high for a country that uses proportional representation to elect its parliament. The explanation lies in the exceptionally low number of seats per constituency; average district magnitude at the 2023 election, for example was only 3.5.

### Guyana

Figures based on national PR-list votes and total seats.

# **Honduras**

1980 figures refer to the election of a Constitutional Assembly. For the 2017 election no voting figures are available. The 128 seats were distributed among eight parties in this way: 61-30-26-4-4-1-1-1; the value of  $N_s$  is thus 3.07.

### Hungary

Prior to 2014, 176 seats were filled in single-member constituencies (districts) and 152 were filled in multi-member constituencies (districts). In addition, a further 58 seats were filled from national lists, based on votes not 'used' at the other two levels, which is why the seat totals for SMDs and lists for the elections of 1990–2010 do not sum to the overall total.

# India

In 2019 a large number of parties and independent candidates won seats but most of these were part of one of the two large alliances, one dominated by the BJP and the other by Congress. The figures are based on treating these blocs as the units. If instead individual parties and independent candidates were treated as the units, the indices would be LSq 15.06,  $N_v$  5.30,  $N_s$  3.03.

# Iraq

Available figures for Iraq's 2010 election suggest that the 8 seats reserved for christians and for 'minorities' were not filled through the regular election process. It has not proved possible to obtain full and authoritative results for the 2014 or 2018 elections.

### **Ireland**

N seats refers to contested seats only. The outgoing Ceann Comhairle (chairperson of the Dáil, or speaker) is automatically re-elected without contest, and has availed himself (no female holders of the office yet) of this option at every election bar that of 1997.

# Italy

In 1994, 1996 and 2001 the number of list seats was 155.

In 2013 (at which election the 12 seats filled by the votes of Italians overseas are omitted), figures are based on taking parties as the units. If instead alliances were used, the figures would be LSq 20.22,  $N_v$  4.01,  $N_s$  2.63. For 2018, figures are based on treating the main right-wing alliance (L, FI, FdI and NcI–UDC) and the main leftwing alliance (PD, +E, IEI, CPL and SVP–PATT) as units, and the same approach has been adopted for the 2022 figures.

# Japan

Overall figures from 1996 onwards based on total votes (sum of list and SMD votes) and total seats. Japan is a notable under-performer when it comes to the provision of detailed, authoritative and accessible official results. Detailed official results from Japanese elections are not available in Latin script and unofficial sources lump 'independents' and often small parties together, meaning that figures are best estimates.

# Kenya

### **Korea South**

No detailed constituency figures are available for the election of 2008, and in general the official results are not easy to follow for users unfamiliar with Korean script. Detailed figures from the 253 single-member constituencies are not always supplied in the official results, which is a problem since votes for independent candidates often amount to several percentage points and some independents win seats.

# Kosova (/Kosovo)

Figures prior to 2014 exclude the 20 'minority' seats. These are reserved (or, in a change made prior to the 2014 election, now 'guaranteed') for parties representing particular ethnic groups (10 for Serbs, 10 for four other ethnic groups) regardless of how many votes the parties win. Sometimes these parties also win sufficient votes to be awarded one or more of the 100 regular seats (filled in one nationwide constituency), but usually they win very few votes – for example, in 2010 8 reserved seats were won by parties that won fewer than 0.5 per cent of the national vote each. If those were included, the value of  $N_{\rm v}$  would hardly alter because their votes are so little different from zero, while the value of  $N_{\rm s}$  rises: to 4.15 in 2001, 4.31 in 2004, 5.90 in 2007, 6.03 in 2010. The value of LSq would also rise, not surprisingly, given that a sixth of the seats (20 out of 120) are being taken by parties with close to no votes: in 2010 from 3.33 to 5.65. This is better regarded as an artefact of the minority representation aspect of Kosovo's electoral law than as an electoral system effect.

This also has the effect of leaving most other parties under-represented in the 120-seat parliament in relation to their votes. For example, in 2021 Lëvizja Vetëvendosje! won a majority (50.3 per cent) of the votes but received only 58 of the 120 seats.

# Kyrgyzstan

An election took place on 4 October 2020 (LSq 15.91,  $N_v$  6.51,  $N_s$  3.15) but was later annulled by the country's electoral commission. For the 2021 election, voting figures are available only for the 54 list seats, while virtually all of the SMD seats were won by nominal independents, for whom voting figures are not available.

### Lesotho

Disproportionality and vote-fragmentation figures for 2007 are difficult to calculate meaningfully because of successful manipulation by the main parties of the mixed compensatory electoral system: the parties that won virtually all of the constituency seats did not run at all in the PR-list section of the election, thus freeing up their supporters to vote for allied parties, which duly won most of the list seats. This in effect converted the mixed compensatory electoral system into something akin to a mixed parallel system, as in Albania in 2005.

## Liberia

Liberia's electoral system, SMP (single member plurality), is sometimes seen as conducive to the emergence of a two-party system, but Liberian elections display high levels of electoral and legislative fragmentation. In 2023 independents received more than a quarter of the votes, and one independent (in Margibi County district 1) was elected with just 14.7 per cent of the votes. Disproportionality is affected by a degree of malapportionment, with the marked over-representation of rural areas. The fragmentation of Liberia's party system under SMP can be contrasted with its neighbour Sierra Leone, where a PR electoral system in 2023 delivered something very close to a pure two-party system.

#### Liechtenstein

Figures are based on vote figures that are adjusted for the different number of votes cast in the two constituencies. Since 1989, each voter in the Oberland constituency has been able to cast 15 votes while each voter in the Unterland constituency has had 10 votes; from 1974 to 1986 inclusive, the numbers of votes were 9 and 6 respectively. Thanks to Wilfried Marxer of the Liechtenstein Institut for supplying the data.

### Lithuania

For 1992–2000 results, plus those of 2016 and 2020, figures are based on total votes (sum of list votes and first-round SMD votes) and total seats, which is how the indices should be calculated given that Lithuania uses a mixed parallel electoral system (to complicate matters, the SMD seats are filled by the two-round system). For the period 2004–12, though, asterisked figures are calculated on the basis of list (regional) votes and total seats, because figures for SMD results are not available – or, in some cases, the results are available for each of the 71 constituencies individually but not in aggregated form.

# Macedonia

1998–2006: on the basis of PR-list votes and total seats. Subsequent elections have taken place under a single-tiered list system.

## Malawi

The figures for 2014 are based on results from 192 of the 193 constituencies; the seat in constituency 145 (Blantyre North) was not filled due to the death of a candidate during the campaign and was due to be filled in a separate election later. The 2019 figures include the result of the contest in Lilongwe South (number 091), which was postponed due to the death of a candidate and did not take place until February 2020, nine months after the general election. Figures for this election are based on including the votes and seats (of course, just one seat each) for the 55 independent candidates who won seats. If all independents were simply ignored – even though they won over a third of the votes between them and 55 of the 193 seats – the indices would not differ much from those in the table above (LSq would be 8.40,  $N_{\rm v}$  7.68,  $N_{\rm s}$  5.26); a striking demonstration of the validity, for most purposes, of simply ignoring smaller parties and independents. See the illustration of this point for the 2020 Burkina Faso election in the 'Calculate the indices for any election' paragraph on the page

https://www.tcd.ie/Political\_Science/about/people/michael\_gallagher/ElSystems/index.php

### Malaysia

In 2013, most parties were part of one or other of two large alliances. Using alliances rather than individual parties as the units, the values of the indices would be LSq 11.69,  $N_v 2.07$ ,  $N_s 1.92$ . This election produced an exceptionally perverse result, with the more popular alliance winning 51 per cent of the votes but only 40 per cent of the seats, while the less popular one (perhaps not coincidentally the incumbent government) won 47 per cent of the votes and 60 per cent of the seats.

For 2018, too, the figures given in the table treat individual parties as the units. In practice 13 parties formed an alliance named the Pakatan Harapan and another five formed the Barisan Nasional. Treating these alliances, rather than the individual parties, as the units, generates values of LSq 7.21,  $N_v$  2.78,  $N_s$  2.54.

Similarly in 2022, most parties were in practice part of an alliance. Treating alliances as the units, the values of the indices would be LSq 8.03,  $N_v$  3.49,  $N_s$  3.60.

### Mexico

Changes to the Mexican party system create complications in attempting to calculate indices. The system used to consist de facto of just three parties: the centrist and dominant PRI, the slightly smaller and very similar PAN, and the left-wing PRD. These parties competed vigorously against each other. By 2021, though, these three parties were in an alliance together, opposing a broadly left-wing (often termed populist) three-party alliance dominated by the Morena party of President Andrés Manuel López Obrador (known as AMLO). The parties in the alliances contest the list component of the election (200 seats) as independent entities, but when it comes to the 300 single-member constituency seats each contests some under its own banner but others as part of the alliance, making it impossible to generate votes for each party at this level.

In 2018, the nine parties contested the 300 SMDs as three alliances each containing three parties, though each contested a few on its own or in alliance with just one other party. The figures given here are based on treating the three alliances as the units. Figures based on treating each of the nine parties as the units are available at the level of the 200 list seats; these are LSq 5.00,  $N_v$  4.43,  $N_s$  3.79.

In 2021 ten different parties contested; each of them stood alone in the list component, but in the SMD component only four stood alone with the other six being in one of the alliances, though each of these also sometimes competed outside its alliance. The figures given here are based on treating the two alliances and the four smaller parties as the units. Figures based on treating each of the parties as the units are available for the list component; these are LSq 3.96,  $N_v$  4.84,  $N_s$  4.18.

### Moldova

Full constituency results for the 2019 election, which took place under a mixed-member parallel system, are not available (results for most but not all of the 51 constituencies are available from the website of the Central Electoral Commission, but the figures are not aggregated). The indices for the 50 seats filled by PR are LSq 5.41,  $N_v$  4.27,  $N_s$  3.50, and for all 101 seats the value of  $N_s$  is 3.58. This electoral system was employed for only one election.

### Monaco

Since 2002, Monaco has used a parallel mixed system to fill its 24 seats. Sixteen seats are filled by the block vote (known in the USA as 'at-large'), the method well known to be likely to produce less proportional results than those produced by any other electoral system; the largest party usually wins all of these seats. (Prior to 2002 all the seats were filled at-large, using the two-round method.) The other eight seats are filled by proportional representation, but because the system is mixed parallel rather than mixed compensatory the largest party wins most of these seats as well. As a result, Monégasque elections consistently produce exceptionally high levels of disproportionality. Disproportionality plummeted in 2023, not because of a change in the electoral system to something less majoritarian but because the previous two opposition parties merged with the largest party and the resulting behemoth received almost 90 per cent of the votes and won all the seats.

## Morocco

The 2011 figures come with caveats. In all, 396 MPs were elected, and the figures here are based on total seats but on the votes cast for only 90 of these (the 90 elected from the national list constituency, confined to female and youthful candidates – the 'Listes nationales femmes et jeunes'). The other 306 MPs were elected from 92 multimember constituencies, and figures are not available for these. Moreover, 5 seats were won in the constituencies by parties that did not stand in the national constituency (the PRE won 2 seats and the AHD / PAD, the PRE and the PUD 1 each) and no vote figures are available for these parties. (Excluding them from the result and basing the calculations only on the other 391 seats would make only minor differences to the indices; LSq would rise to 5.46,  $N_{\rm v}$  would remain at 8.82,  $N_{\rm s}$  would drop to 6.54.)

# Myanmar

Voting figures for the 2019 election (generally judged free and fair but subsequently annulled by the military) are not available. The value of  $N_s$  was 1.47 (ignoring the 100 military-appointed seats and the 15 constituencies where the election did not take place).

# Nepal

Figures for 2017 refer to total seats but PR list votes only, given that aggregated voting figures for the SMD constituencies are unavailable. One of the 165 SMD seats (Humla in Province 6) was won by an independent candidate with 8,491 votes but no list votes.

# Nicaragua

Elections in Nicaragua have fallen steadily further below the minimum standards that would qualify them for the 'free and fair' sobriquet. At the 2021 election the ruling party won 74 per cent of the votes and 83 per cent of the seats after, on one pretext or another, debarring most of the opposition from participating. The indices for 2021 are LSq 7.56,  $N_v$  1.78,  $N_s$  1.42.

### **Northern Ireland**

Figures for 1945–65 include uncontested seats won. Figures for 1945–62 include votes cast in University seats.

Figures for 1969 and 1973 need to be treated with some caution, since the largest party was fundamentally split, with pro- and anti-leadership candidates, alongside a number of independent candidates who were de facto supporters of the leadership. Figures are presented here for the groupings reported in Sydney Elliott, *Northern Ireland Parliamentary Election Results 1921–72* (Chichester: Political Reference Publications, 1973), and Ian McAllister, *The 1975 Northern Ireland Convention Election* (Glasgow: Survey Research Centre, University of Strathclyde, 1975), p. 15.

## **Palestine**

Figures for LSq and  $N_v$  are based on list votes only. Votes in the multi-member constituencies are difficult to calculate, even though full figures are available, because the 'block vote' (the least proportional electoral system known to humanity) is used, with each voter having as many votes to cast as there are seats to fill.

A further complication is that in 2006 4 constituency seats were won by nominal Independents (albeit with, it seems, tacit Hamas support), and of course these candidates did not win any list votes. The figures are based on treating these candidates as if they each won 0 votes and 1 seat. That is not entirely satisfactory but is less unsatisfactory than the alternative of simply ignoring them and basing all calculations on the other 128 seats (which would give LSq 10.64,  $N_v$  2.68,  $N_s$  2.18).

### **Panama**

1948 figures refer to election to Constitutional Assembly.

### Russia

As noted above, the inclusion of a country or an election in this dataset should not be taken to imply that every single election included here can be regarded as meeting the highest (or even acceptable) democratic standards. In 2021 the ruling party won 51 per cent of the list seats and 56 per cent of the seats, 48 per cent of the SMD votes and 88 per cent of the seats, and overall 49 per cent of the votes and 72 per cent of the seats.

### St Kitts and Nevis

In 2015 and 2020 five different parties won seats, but three of these (CCM, PAM and PLP) formed an alliance known as 'Team Unity' and only one candidate from the alliance stood in each constituency. The figures are based on treating the alliance as a unit. If each party were treated as a separate unit, the 2015 figures would be LSq 11.07,  $N_{\rm v}$  3.72,  $N_{\rm s}$  3.90, and in 2020 they would be LSq 18.91,  $N_{\rm v}$  3.82,  $N_{\rm s}$  3.67. In 2020 the largest party won 37 per cent of the votes but only two of the 11 seats. In effect the small state has two separate party systems, with some parties contesting only the eight constituencies on the larger island (St Christopher / St Kitts) and others contesting only the three constituencies on Nevis.

# St Vincent and the Grenadines

The 1998 result did not produce an especially high level of disproportionality, especially by the standards of small Caribbean states employing SMP to fill seats in a parliament with fewer than 20 members, but was notable for producing an exceptionally 'perverse outcome'. The Unity Labour Party won a majority (54.6 per cent) of the 51,328 valid votes cast votes but only 7 of the 15 seats, while the rival New Democratic Party (NDP) won 8 seats with 45.3 per cent of the votes. The NDP won 6 constituencies with between 50 and 54 per cent of the votes, while the ULP won 5 of its 7 seats with 62 per cent or more of the votes, thus rendering many of its votes in effect 'wasted'. A switch of just 358 votes in the six seats won narrowly by the NDP could have given the ULP 13 seats overall and left the NDP with just 2. Full details are on the excellent, though unfortunately no longer active, caribbean elections.com website.

The same phenomenon occurred at the 2020 election, when the NDP won a bare majority (50.3 per cent) of the votes but only 6 of the 15 seats. It lost one constituency (North Leeward) by only 1 vote, and another by 62 votes out of over 5,200 cast there.

### San Marino

2008 figures calculated on the basis of parties as the units. In fact, the seven parties formed two alliances (three parties in one and four in the other); treating the alliances as the units, the figures would be LSq 4.11,  $N_v$  1.99,  $N_s$  1.95.

Likewise, in 2012 if the figures were calculated based on alliances as the units they would be LSq 6.17,  $N_v$  2.96,  $N_s$  2.46. In 2016 the figures based on alliances would be LSq 2.64,  $N_v$  3.06,  $N_s$  2.64. In 2019 the figures based on alliances would be LSq 1.87,  $N_v$  4.39,  $N_s$  4.16.

# **Scotland**

On the basis of list (regional) votes and total seats.

### Slovakia

In Slovakia, seats are awarded on the basis of one large nationwide constituency, which has the potential to produce highly proportional outcomes, as in South Africa. The main reason why Slovakian elections do not, however, deliver very proportional outcomes is that thresholds are relatively high (5 per cent for parties and 7 per cent for alliances), coupled with voters' uncertainty as to which parties will reach the threshold. In 2023, for example, one party won 4.8 per cent of the votes and another won 4.4 per cent, thus narrowly missing out on qualifying for seats. Altogether, 16.7 per cent of the votes were cast for parties that won no seats because they failed to reach the threshold.

# **Switzerland**

At the 2023 election, 'others' won almost 3 per cent of the votes; unfortunately, the official results do not disaggregate this into the votes for each individual small party. The indices are based on simply omitting these votes, which is the safest approach when information on small groups is incomplete; see

https://www.tcd.ie/Political\_Science/about/people/michael\_gallagher/ElSystems/Docts/IndicesCalc.pdf.

## **Taiwan**

2012 figures based on list votes and total seats. Sources for this election are less than comprehensive. Figures for the elections of 1992 to 2004 inclusive, during which time the country used the single non-transferable vote, kindly supplied by Matthew Shugart. The quality of election results published by Taiwan's Central Election Commission has improved greatly in recent years, with detailed results for each of the 79 single-member constituencies now available in Latin script.

# **Thailand**

For 2011 and 2019, on the basis of PR-list votes and total seats. For 2023, at which a parallel system (mixed-member majoritarian, with the emphasis on majoritarian as 400 of the 500 MPs were elected from single-member constituencies), indices based on total votes (the sum of list votes and SMD votes) and total seats.

# **Tunisia**

The 2004 election was not in any sense a genuinely democratic election and is included only as a comparator. Reliable figures are difficult to obtain for the competitive post-Arab spring 2011 election. The results used here, from tunisia-live.net, omit the 1.29 million votes (almost 32 per cent of the total) cast for parties or candidates who won no

seats, for whom no figures are available. If (as is likely) these were cast overwhelmingly for parties that won small numbers of votes, their inclusion would be likely to increase the values of LSq and  $N_v$  marginally; the value of  $N_s$  would not be altered.

Data on the results of the 2019 election are too far from complete to be usable.

# Türkiye

Figures for 2011 election are based on the assumption, as reported in various sources, that the 'Independents' who collectively won 6.57 per cent of the national vote were in effect all standing on behalf of the Kurdish BDP, adopting the tactic of standing as nominal independents in order to avoid the effects of the 10 per cent threshold in the electoral system, which parties, though not independents, need to reach in order to qualify for any seats.

For 2018 and 2023, the figures are based on treating the two main alliances (along with the other parties) as the units. If each party, including those in an alliance, was treated as a separate unit, the figures for 2018 would be LSq 5.71,  $N_v$  3.72,  $N_s$  3.07, and those for 2023 would be LSq 7.52,  $N_v$  4.54,  $N_s$  3.32.

# Uganda

Figures for the 2011 election are based on the 350 directly-elected seats (another 25 MPs are elected by interest groups and by the army). Of the 350 seats, all filled in single-member constituencies, 238 are open to male and female candidates while 112 are open only to female candidates (all electors are entitled to vote in both their local open constituency and their local women-only constituency). The official results contain no information on the outcome in one of the open constituencies (number 182) and seven of the female-only constituencies (numbers 42, 83, 87, 97, 102, 105 and 109), so the indices are based on results only from the other 342 constituencies.

### Ukraine

For 2012, only votes for the 225 list seats are available, and 49 of the 450 seats were won in one of the 225 single-member constituencies by independents or by parties that received no list votes, making it impossible to calculate indices, especially given that some of the independents were allegedly informally linked with particular parties. In 2014, (nominal) independents won 96 of the 225 single-member constituencies, and no details of the votes cast in these are available, so again it is not possible to calculate indices.

For 2019 the picture was further complicated by the circumstances that made it impossible to hold an election in 26 of the 225 constituencies, as well as the usual absence of aggregated figures for the constituencies that were contested. For the 225 PR seats, the indices are LSq 10.62,  $N_{\nu}$  4.43 and  $N_{s}$  2.79, and for all 424 constituencies the value of  $N_{s}$  is 2.64.

# **United Kingdom**

Figures for 1983 and for 1987 are calculated on the basis of treating the Liberal Party and the SDP as separate parties. The two parties fought the elections as an alliance and did not offer more than one candidate between them in any constituency. If the alliance is treated as a party in its own right, the figures for 1983 are LSq 20.58,  $N_v$  3.12 and  $N_s$  2.09; for 1987 they are LSq 17.75,  $N_v$  3.07 and  $N_s$  2.17.

## **United States**

The strongly federal nature of the USA can make definitive national figures surprisingly difficult to establish for some elections, and even when all the data are available (which is usually several months after an election) it may be necessary to exercise subjective judgement. For example, at the 2016 House elections the official results (published by the Office of the Clerk) state that over 2.4 million votes were cast for 'Other parties'. In most states these votes were indeed cast for small parties, but in Massachusetts the great majority (438,113 out of 471,914) were 'blank votes', and likewise in New York almost 700,000 of the 1.43 million votes supposedly cast for 'other parties' were in fact blank votes. These are treated here as invalid votes, which is how they would be regarded in most countries, and hence are not included in the valid vote total.

For the House in 2018, figures include the September 2019 election to fill the seat in North Carolina's 9th district, rather than the original (subsequently nullified) vote there.

Far from getting better, matters seem to be disimproving. For the 2022 election, the summary table in the booklet of official results (p. 55 in the document published by the Office of the Clerk) states that almost 1.5 million votes were cast for 'other parties'. Three states account for almost 1.2 million of these votes: New York, Maine and Massachusetts. Closer examination reveals a muddled picture. In New York, 697,970 votes are stated to have been cast for 'other parties'. However, over 320,000 of these were cast for 'Conservative' candidates, but in every case the Conservative candidate was also the Republican candidate; almost 170,000 were cast for a 'Working Families' candidate, but in every case the Working Families candidate was also the Democrat candidate; and just over 200,000 were blank votes, which in every other country would be excluded from the total of valid votes cast and would have been reported separately. In Maine, 331,900 votes are stated to have been cast for 'other parties'; but 322,778 of these are described as 'exhausted ballots' in the 2nd district. This is a reference to Maine's adoption of the alternative vote (known in the USA as 'ranked-choice' voting), which appears to have led election officials to believe that candidates' second-stage vote totals should be counted as valid votes along with their first-stage vote totals. In the 2nd district, none of the three candidates was elected on the first stage and hence the thirdplaced candidate was eliminated and her votes distributed according to the second preferences marked. This approach to recording the votes in effect leads to the number of valid votes reported as having been cast in the 2nd district being almost double the actual number of votes cast. Given that Australia has employed the alternative vote for elections to its national parliament for over a century, one might think that at least a cursory glance at the informative website of the Australian Electoral Commission would have been useful in understanding how results of elections held under AV are best presented. In Massachusetts 162,276 votes are stated to have been cast for 'other parties'; but examination of the detailed voting figures for the state shows that 153,464 of these were 'blank votes', which in every other country would be excluded from the total of valid votes cast and would have been reported separately. Fortunately, given that the two major parties almost invariably win over 95 per cent of the votes cast at US House elections and all of the seats, these idiosyncrasies make only a minor difference at the margins to the value of the indices, but anyone whose research relies on comprehensive US election results would welcome a more coherent approach in official documents. The 2022 figures here are based on the vote totals reported for the five main parties (Republicans, Democrats, Libertarian, Green and Constitution), plus the ten independent candidates who each won over 10,000 votes, disregarding all other votes.

### Venezuela

2010, 2015 and 2020 figures: omitting the three seats reserved for indigenous peoples. At the 2020 election, a number of parties clustered into three multi-party alliances, and the figures above are based on treating these alliances (along with the other parties) as the units. If each party, including those in an alliance, was treated as a separate unit, the figures would be LSq 13.20,  $N_v 2.47$ ,  $N_s 1.55$ .

### Wales

On the basis of list (regional) votes and total seats.

# Zambia

2006 figures are based on the results in 148 of the 150 constituencies. In the other two (numbers 94 and 104) polling was postponed, and the results do not appear in the official returns. The MMD won both seats and based on all 150 seats  $N_s$  is 2.84.

Polling in two constituencies was deferred in 2011 as well, but the results of these were made available on the web in due course.

Last updated 2 February 2024