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Donald Dewar's mistake: Incomplete proportionality in the Scottish Parliament

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Abstract:

The Scottish Parliament has used the Mixed-Member Proportional (MMP) electoral system, since its inception in 1999. Its founder, Donald Dewar, chose MMP to ensure that no party could win a majority of seats without winning a majority of votes. However, that happened in 2011, taking the Scottish National Party (SNP) to a hegemonic position in Scottish politics which it retains. The system is less proportional than its creators anticipated, and it features election reversals in 2011 and 2026.

The paper analyses the choice of system; its performance; the reasons for the election reversal of 2011; the path-dependencies involved in choosing the system and those which followed the 2011 outcome.

Statements and Declarations

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Data availability statement

All data used in this paper is in the public domain from official sources. Data analysis is by the author. Table 6 was generated using webster-ste-laguë calculator-v4 available on a Creative Commons licence from its creator, S. Kellow.

Donald Dewar's mistake: Incomplete proportionality in the Scottish Parliament

The puzzle of MMP

The UK's Scotland Act 1998 created the devolved Scottish Parliament, to be elected under the mixed-member proportional (MMP) system of proportional representation A Labour government introduced the bill, which was largely drafted by the Secretary of State for Scotland (to become the inaugural First Minister), Donald Dewar (McLean 2004). Labour would probably have easily won an outright majority of its seats on a minority vote had the plurality system used for UK elections applied to the Scottish Parliament. Accordingly, Dewar called MMP 'the best example of charitable giving this century in politics' (Parliamentary Debates, vol. 312, 6 May 1998, col. 803). However, it guaranteed the legitimacy of the Scottish parliament and made it harder (Dewar thought: impossible) for the Scottish National Party (SNP) to gain a majority in it. The SNP has always campaigned for Scotland to leave the United Kingdom, in which case the Labour Party would lose seats – 56 in the Parliament that enacted the 1998 Act.

Dewar made two miscalculations about the effects of MMP. One was to believe that under MMP it would be impossible for a party to win a majority of seats without a majority of votes cast. However, the SNP was to do just that in 2011, an event which pushed the question of Scottish independence from the UK to the forefront, where it has remained. The other was to believe that it could not produce a reversal, in which the faction with fewer votes could win a majority of seats. If the parties are divided into unionist and nationalist, such election reversals happened (probably) in 2011 and (certainly) in 2026. A third surprise, although unlikely to count as one of Dewar's miscalculations, was that MMP has proved to be considerably less proportional than was to be expected *a priori*.

Scholars of electoral systems generally believe that the biggest determinant of proportionality is district magnitude, DM. Where the entire country is a single district, as in the Netherlands and Israel, and a legislature has n seats, then any party with at least $1/(n + 1)$ of the vote will be entitled to a seat unless there are other restrictions on minuscule parties. For the Netherlands lower house n = 150. For the Israeli Knesset, n = 120. Consider now the four best-known MMP legislatures, those of Germany, New Zealand, Scotland and Wales (1999-2021). The party vote (regional vote in Scotland and Wales, *Zweitestimme* in Germany) is used to determine the overall composition of seats in each district, in a way what compensates for the disproportionality of the single-member district component of the election. In New Zealand, the party vote is allocated over the whole parliament, giving DM = n = 120. In the other three MMP countries, the compensation is calculated at regional (Germany: *Land*) level. The DM is therefore the total number of seats (single-member and party-list) in each region. In Scotland, DM thus calculated is between 15 and 17 inclusive. For most regions it is 16, comprising 9 constituency and 7 additional seats. Therefore, naively, one might expect that every party which can achieve 1/17 of the vote in at least one region will get representation in the Scottish Parliament.

Table 1 shows the actual proportionality of election results in the four countries that have used MMP since its adoption (or, for Germany, since unification). (Dis)proportionality is calculated using the simplest available formula, viz., the LH (Loosemore and Hanby 1971) index. It takes the form

$$D(LH) = 1/2 \sum_{i=1}^{n} |v_i - s_i|$$

where v_i = the vote share of party *I* and s_i = its share of seats. Other indices produce the same orderings, although not the same numerical results. For each country, the LH index is calculated per region on the sum of the single-member and party votes for each party in that region.

[Table 1 here]

Table 1

Disproportionality in MMP systems, LH index based on average of district and regional vote

Germany		New Zealand		Scotland		Wales	
Election	*D (LH)*	Election	*D (LH)*	Election	*D (LH)*	Election	*D (LH)*
1990	8.1	1999	6.5	1999	7.2	1999	9.2
1994	3.6	2002	8.4	2003	8.7	2003	11.4
1998	5.9	2005	2.6	2007	9.5	2007	13.9
2002	6.7	2008	5.6	2011	8.7	2011	10.4
2005	3.9	2011	7.2	2016	7.3	2016	14.1
2009	6.0	2014	9.3	2021	8.5	2021	14.3
2013	15.7	2017	4.7	2026	11.8		
2017	5.0	2020	6.6				
2021	8.6	2023	7.8				
Mean	7.1		6.5		8.8		12.2
Standard Deviation	3.7		2.0		1.6		2.2

Sources for Table 1: Germany, Lyubarev 2025
New Zealand: Official Results at www.electionresults.govt.nz; author's calculations
Scotland: 1999-2007, BBC Scotland Election Results; 2011, Scottish Parliament; 2016-26, Electoral Management Board for Scotland; author's calculations.
Wales: BBC Wales Election Results; author's calculations

Table 1 shows that, of the four MMP countries, New Zealand has the most proportional results. This is to be expected given its DM of 120. Germany comes next. Its mean disproportionality is affected by the outlier 2013 result, when two parties, the FDP and AfD, both just failed to cross the 5%

threshold for representation and thus failed to win any seats. Scotland and Wales do not have a threshold for representation and might therefore be expected to do better than Germany. In fact, they do worse on this measure, with Wales (where the proportion of regional seats was too small to achieve overall proportionality) having a higher mean disproportionality than Scotland. Between 2021 and 2026 Wales changed its electoral system to list PR in 6-member districts, therefore its 2026 result is not shown in Table 1.

Descriptive statistics for the Scottish Parliament

The Scottish Parliament is a devolved subnational assembly. There are 129 Members of the Scottish Parliament (MSPs), of whom the Scotland Act 1998 prescribes that 73 are elected in single-member districts by plurality (known in the UK as first-Past-the-Post, FPTP), and the remaining 56 by region (7 in each of 8 regions) using MMP to ensure the overall proportionality of the outcome. Parliaments are elected for a fixed term (originally four years, now five) in a way designed to ensure that election dates do not coincide with elections to the UK Parliament.

As explained in more detail below, the system designers chose MMP for political reasons, and expected it to produce a more proportional result than Single Transferable Vote (STV), the other PR system familiar to anglophone system designers. As proportionality is largely a function of district magnitude DM, and the DM for the Scottish Parliament is between 15 and 17 inclusive, whereas the DM in STV (for instance, in Ireland) is typically between 3 and 5, the electoral system should have achieved a good degree of proportionality.

However, the outcome in each of the seven elections to the Scottish Parliament between 1999 and 2026 has been less proportional than the system designers expected. If the principal cleavage is taken to be that between nationalist and unionists, there have been two election reversals where unionist parties won a majority of votes but nationalist parties won a majority of seats. Nationalist parties want an independent Scotland. They include the Scottish National Party (SNP), the Scottish Socialist Party, and, for the elections in 2007 and from 2016 to 2026, the Scottish Green Party. Unionist parties want Scotland to remain in the United Kingdom. They include the Conservative Party, the Labour Party, the Liberal Democrats, the Green Party in 1999, 2003, and 2011, and Reform UK.

This classification of the Scottish Greens arises from a study of their manifestos, available from https://www.manifestos.org.uk/party/scottishgrn, accessed on 6 August 2026. The manifestos for 1999 and 2003 are ambiguous: each called for ‘greater’ independence for Scotland but not for independence *simpliciter*. That for 2011 was unequivocally unionist.

Tables 2 to 4 give the relevant descriptive statistics.

[Table 2 here]

Table 2. Scottish Parliament: election results 1999 - 2026

Party	Seats	Constituency votes	Constituency votes, of total (%)	Regional votes	Regional votes, of total (%)	Total votes	Total votes, (%)	Total Seats (%)
1999								
Labour	56	908346	38.8	786818	33.6	1695164	36.2	43.4
SNP	35	672768	28.7	638644	27.3	1311412	28.0	27.1
Conservative	18	364425	15.6	359109	15.4	723534	15.5	14.0
Liberal Democrat	17	333179	14.2	290760	12.4	623939	13.3	13.2
Green	1	-	-	84023	3.6	84023	1.8	0.8
Other	2	63770	2.7	179481	7.5	243251	5.2	1.6
	129	2342488	100.0	2338835	100.0	4681323	100.0	100.0
2003								
Labour	50	663585	34.6	561375	29.3	1224960	32.0	38.8
SNP	27	455722	23.8	399659	20.9	855381	22.3	20.9
Conservative	18	318279	16.6	296929	15.5	615208	16.1	14.0
Liberal Democrat	17	294347	15.4	225774	11.8	520121	13.6	13.2
Green	7	-	-	132138	6.9	132138	3.4	5.4
Other	10	184641	9.6	299946	14.6	484587	12.6	7.9
	129	1916574	100.0	1915821	100.0	3832395	100.0	100.0
2007								
SNP	47	664227	32.9	633611	31.0	1297838	32.0	36.4
Labour	46	648374	32.1	595415	29.1	1243789	30.6	35.7
Conservative	17	334743	16.6	284035	13.9	614778	15.1	13.2
Liberal Democrat	16	326232	16.2	230651	11.3	556883	13.7	12.4
Green	2	2971	0.1	82577	4.0	85584	2.1	1.6
Other	1	40431	2.0	216577	10.6	257008	6.3	0.8
	129	2016978	100.0	2042866	100.0	4059844	100.0	100.0
2011								
SNP	69	902915	45.5	876421	44.0	1779336	44.7	53.5
Labour	37	630461	31.7	523469	26.3	1153930	29.0	28.7
Conservative	15	276652	13.9	245967	12.4	522619	13.1	11.6
Liberal Democrat	5	157714	7.9	103472	5.2	261186	6.6	3.9
Green	2	0	0.0	86939	4.4	86939	2.2	1.6
Other	1	21534	1.1	149809	7.5	171343	4.3	0.8
	129	1989276	100.0	1990836	100.0	3980112	100.0	
2016								
SNP	63	1059897	46.5	953587	41.7	2013484	44.1	48.8
Conservative	31	501844	22.0	524222	22.9	1026066	22.5	24.0
Labour	24	514261	22.6	435919	19.1	950180	20.8	18.6
Green	6	13172	0.6	150426	6.6	163598	3.6	4.7
Liberal Democrat	5	178238	7.8	119284	5.2	297522	6.5	3.9
Other	0	11741	0.5	102314	4.5	114055	2.5	0.0
	129	2279154	100.0	2285752	100.0	4564906	100.0	100.0
2021								
SNP	64	1291204	47.7	1094374	40.3	2385578	43.9	49.6
Conservative	31	592518	21.9	637131	23.5	1229649	22.6	24.0
Labour	22	584392	21.6	488819	18.0	1073211	19.7	17.1
Green	8	34990	1.3	220324	8.1	255314	4.7	6.2
Liberal Democrat	4	187746	6.9	137152	5.1	324898	6.0	3.1
Other	0	15833	0.6	137984	5.1	153817	2.8	0.0
	129	2706761	100.0	2712784	100.0	5434851	100.0	100.0
2026								
SNP	58	877077	38.2	625949	27.1	1503026	32.6	45.0
Labour	17	440708	19.2	368785	16.0	809493	17.6	13.2
Reform UK	17	361994	15.8	383425	16.6	745419	16.2	13.2
Green	15	52528	2.3	321964	13.9	374492	8.1	11.6
Conservative	12	271740	11.8	271550	11.8	543290	11.8	9.3
Liberal Democrat	10	261458	11.4	215624	9.3	477082	10.4	7.8
Other	0	31704	1.4	121734	5.3	153438	3.3	0.0
	129	2297209	100.0	2309031	100.0	4606240	100.0	100.0

Sources for Table 2. 1999-2007, BBC. 2011: Scottish Parliament. 2016-26: Electoral Management Board for Scotland

Table 2 gives basic seat and vote shares for each of the main parties. Smaller parties are classed as 'Other', and there are some more details about those that won seats in the narrative below. Note that not all parties contested both constituency and regional seats. In particular, the Scottish Green Party has always run mainly (in early elections wholly) in the regional vote contest.

Table 3 shows two standard descriptive statistics for each election.

[Table 3 here]

Table 3

Elections to the Scottish Parliament 1999-2026: descriptive statistics

Col. 2 Disproportionality index *D* (Loosemore-Hanby) for Parliament
Col. 3 *D* (Loosemore-Hanby) for Parliament, regional seats only
Col 4. Effective number of parties in the electorate (Laakso-Taagepera)
Col 5. Effective number of parties in the legislature (Laakso-Taagepera)

Election	*D*	*D (regional votes)*	$EffN_v$	$EffN_s$
1999	7.20	11.26	3.93	3.34
2003	8.69	10.30	4.69	4.16
2007	9.46	13.05	4.13	3.41
2011	8.74	11.80	3.25	2.61
2016	7.34	8.26	3.40	2.99
2021	8.50	9.88	3.46	2.96
2026	11.83	13.63	5.13	3.77
Mean	8.32	10.76	3.81	3.25
s.d.	0.80	1.52	0.50	0.49

Sources for Table 3: 1999-2007 BBC; 2011: Scottish Parliament; 2016-26: Electoral Management Board for Scotland; author's calculations.

In the Scottish Parliament, where the MMP system is supposed to achieve proportionality by using regional seats and votes to compensate for the disproportionality of constituency seats and votes, it is best to measure the LH index over the total vote for each party (Table 1; Table 3, col. 2). This introduces a potential distortion when a party contests only one category of seats. For comparison,

therefore, col. 3 shows the LH-index over the regional vote only, although this measure is also not ideal. It is systematically higher than the previous column as that is a design feature of MMP.

The column headed $EffN_v$ denotes the effective number of parties in the electorate, and the column headed $EffN_s$ denotes the effective number of parties in the Scottish Parliament, both calculated using the standard measure of Laakso and Taagepera (1979).

Table 3 shows that the most disproportional election was that of 2026; the least disproportional was that of 1999. The mean value for the effective number of parties in the electorate was 3.81. It was highest in 2026, next highest in 2003, and lowest in 2011. The mean value for the effective number of parties in the Scottish Parliament was 3.25. It was highest in 2003 and lowest in 2011.

[Table 4 here]

Table 4

Scottish Parliament: votes and seats for unionist and nationalist parties

Election	Vote percentage for:			Seat percentage for:		
	Unionist parties	Nationalist parties	Unclassified	Unionist parties	Nationalist parties	Unclassified
1999	66.8	33.2		71.3	28.7	
2003	65.0	22.3	12.6	71.4	20.9	7.9
2007	59.5	34.1	6.3	61.2	38.0	0.8
2011	50.9	44.7	4.3	45.7	53.5	0.8
2016	49.8	47.7	2.5	46.5	53.5	0.0
2021	48.3	48.6	2.8	44.2	55.8	0.0
2026	56.0	40.7	3.3	43.5	56.6	0.0

Election reversals highlighted

Sources for Table 4: As Table 2

Table 4 is an (admittedly noisy) attempt to capture the concept of electoral reversals. Where possible, the parties are classified as 'unionist' and 'nationalist' on the basis of their manifestoes and public statements. As noted above, the Scottish Greens have changed their position on the constitutional question. The Conservatives, Labour, Liberal Democrat, and Reform parties have always been unionist; the SNP, Alba, and Scottish Socialist Party have always been nationalist. Some parties remain unclassified for lack of clear information. *Prima facie*, therefore, the election results of 2011 and 2026 are reversals, with 2026 being more clear-cut. In both cases, unionist parties won more votes than nationalist parties, but nationalist parties won more seats.

The data in Table 4 are not conclusive, because not all voters choose their party on the basis of its constitutional position, and some voters may not even know it (though the positions of the main parties are well established). The table nevertheless shows that an election reversal is possible under MMP.

Why PR? Why MMP?

Since the end of World War I, no leader of either of the two main UK political parties (Conservative and Labour) has supported proportional representation. The reason is simple. These two parties, in turn, have benefited most from the exaggerated lead in seats offered to the plurality vote winner in single-member-district plurality (First Past the Post/FPTP, in UK parlance). Equally, the third UK-wide party, now called the Liberal Democrats, has always supported PR for the converse reason – that its seat share under FPTP is generically below, often far below, its vote share: and its vote share is itself depressed by voters' knowledge that a vote for the party may be wasted.

However, UK politicians have been willing to accept, or even to impose, PR in colonial or subnational parliaments. In Ireland, they did this in order to protect minorities from the tyranny of the majority. These groups were Protestants in the Irish Free State (now the Republic of Ireland), and Roman Catholics in Northern Ireland. UK legislation imposed Single Transferable Vote, usually with a district magnitude (DM) of between 3 and 5, on both parts of Ireland (Government of Ireland Act 1920 s.14; Northern Ireland Assembly Act 1973 s.2; Northern Ireland Act 1998 s.34). The Act of 1920 created two parliaments in Ireland: the Parliament of Northern Ireland (which came into existence) and the Parliament of Southern Ireland (which did not). The radical nationalist party Sinn Féin won 124 of the 128 seats in the proposed Parliament of Southern Ireland, and constituted itself instead as the Second Dáil of an independent Ireland. The united Sinn Féin then split. Every subsequent election in the Irish Free State (which became the Irish Republic in 1949) has featured its two successor parties (Fianna Fail and Fine Gael) in 3-to 5-member STV districts. (A party called Sinn Fein has also continued to exist, and is now one of the largest parties in the Republic). An electoral system devised by the British to protect the Protestant minority thus became, by odd path dependency, the proportional electoral system of the Irish Republic. The larger of the two successor parties, Fianna Fail, twice tried to abolish STV, but was twice (1959 and 1968) defeated in referendums (Government of Ireland 2020).

Provided that DM is sufficiently large, STV achieves reasonable proportionality (for Ireland see, e.g., Kestelman 2005, Tables 4.6 and 4.7). By 1998 its properties were well understood by UK parliamentarians. Why then, did the Scotland and Wales Acts 1998 mandate MMP instead? We propose four answers.

First, those introducing the legislation were not concerned with tyranny of the majority – at least, not in the sense that had motivated lawmakers in 1920. The naïve expectation of Labour politicians was that Labour would win both assemblies very easily under FPTP, and naïve politicians had no reason to grieve for the minority status of Conservatives or nationalists.

Secondly, the shape of the Scotland Act 1998 was largely determined by the Scottish Constitutional Convention which sat between 1989 and 1995. It was a voluntary, not a public body. It included representatives of the Labour, Liberal Democrat, and Green parties, and three churches (Episcopal.,

Church of Scotland, and Roman Catholic) among others. The governing Conservative Party refused to take part. The SNP initially did, but withdrew because the Convention refused to discuss independence (McLean 2005).

It was the Convention that recommended the MMP system for the Scottish Parliament, in exactly the form that it would take in the Scotland Act 1998:

> Each elector will be entitled to cast two votes, the first for a constituency MSP. There will be 73 constituency Members of the Scottish parliament elected from constituencies corresponding to the existing constituencies of the Westminster Parliament, except that Orkney and Shetland will become two separate constituencies. These MSPs will be elected on the present "first-past-the-post" system. The second vote will be for a local party or group list of additional members. There will be 56 additional Members in all: seven from each of eight constituencies, corresponding with the present eight European Parliament Constituencies. (SCC 1995: 11-12)

The report continued:

> The electoral system we have adopted will be new and unique in its application and will require review in order to establish its success in fulfilling the objectives of the Convention, especially in achieving equality of representation between men and women and a more proportional result. It is the view of the partners to the Convention that the parliament should conduct such an enquiry after the first elections and periodically thereafter. However the system which the Convention has devised is the outcome of long and detailed discussions, and is underpinned by fundamental principles including proportionality and the opportunity for equal representation. It should not be easily challenged or changed without careful and democratic scrutiny (SCC 1995: 12).

This paragraph is puzzling because in 1993 New Zealanders had already voted in a referendum to introduce MMP, which had been recommended by a Royal Commission in 1986 (Report of the Royal Commission 1986). But there is no mention of New Zealand in the SCC report. Nor is there of the admittedly more arcane example of Bolivia, which introduced MMP in 1994 (Centellas 2005). The Scottish Parliament did not conduct an enquiry into the working of MMP. However, research based on the Scottish Social Attitudes surveys of 1999 and 2003 shows that the respondents who had voted preferred MMP to FPTP on the grounds that it was fairer and produced multi-party government (which the median respondent evidently regarded as a good thing). By party affiliation, Labour, Conservative, and SNP supports were less keen on MMP than were Liberal Democrat supporters (Curtice and Seyd 2011 Table 4). There is some irony in this, in that in these two elections the Liberal Democrats did not benefit from MMP (having won most of their seats in constituencies), whereas both the Conservatives and the SNP did, as will be shown below.

Thirdly, the Constitutional Convention was dominated by two parties – Labour and Liberal Democrat – with divergent interests. The Labour Party was traditionally hostile to any form of PR as it usually benefited from the exaggerative properties of FPTP. But the leading Labour politician in the process was Labour's leader in Scotland Donald Dewar (McLean 2004). Dewar perceived that the Scottish Parliament was likely to have less legitimacy if controlled by Labour on a minority of the vote. More

importantly, he foresaw that if the SNP were to supplant Labour as the largest party, it was important to prevent the *SNP* from winning a majority of seats on a minority of the vote, and using a seat majority as a signal to start negotiations for independence – which was the SNP's announced policy. McLean (2005: 112) dates Dewar's support for PR to an SNP victory in a UK Parliament byelection in Glasgow in 1988.

The participant-observer history of the Constitutional Convention (McLean 2005) throws no light on the Convention's choice of MMP. Like the convention report itself, McLean's history contains no mention of New Zealand. The fourth and final reason for the adoption of MMP, therefore, lies with an internal Labour Party report: the Plant report on electoral systems for the then-proposed Scottish and Welsh Parliaments, the European Parliament, regional assemblies in England, and an elected replacement for the House of Lords (Plant 1991). The committee included two Scots: Alistair Darling MP and Murray Elder, a figure very close to the Labour leader John Smith, and also to the later Labour Prime Minister Gordon Brown. It reported that the Labour Party in Scotland endorsed either Alternative Vote (AV, a.k.a instant runoff) or MMP for the Scottish Parliament. The report made some (rather weak) arguments against STV, and endorsed the Scottish Labour Party's support for either AV or MMP. (Plant 1991: 11, 58, 71-2, 91-2).

The two systems would have had very different effects. From Dewar's strategic viewpoint, AV would have been even worse than FPTP because it may exaggerate the lead in seats of the modal party even more than FPTP does: thereby increasing the *ex ante* probability of an SNP majority. Dewar's reasoning was sound, but not quite sound enough.

The Government of Wales Act 1998 c.38 also endorses MMP, simply for reasons of path-dependency. Its s.7 copies and pastes the equivalent provision in the Scotland Act. There had been much less discussion of constitutional matters in Wales than in Scotland, and indeed the Yes vote for a Welsh Assembly in the 1997 referendum had won by only 50.3% to 49.7%. However, once present, MMP became embedded in both countries. The Scottish Constitutional Convention recommended that the system be reviewed in the first Scottish Parliament (1999-2003), but it never has been, then or later. In Wales, the list numbers were too small to ensure proportionality, and MMP was replaced by list PR after the 2021 election.

The elections

1999

The Labour Party was widely expected to win the plurality of both votes and seats in the first Scottish Parliament election. It had won a comfortable victory in the preceding UK General election in 1997 and was still in its post-1997 honeymoon. Well-informed people could see that in most of Scotland there would be little point in voting Labour in the regional vote, as Labour was likely to win the large majority of constituency seats in its target areas. It is no surprise therefore that the Labour regional vote share, at 33.6%, ran below its constituency vote share of 38.8%. Scottish public opinion was less exclusively defined by the constitutional question than it has since become, but in all Scottish Parliament elections to date, traditional left-right cleavage patterns have crosscut constitutional (nationalist-unionist) cleavages.

With a new parliament, it was impossible to predict which challenger parties people should support in their regional votes if, for instance, they realised that there was no point in casting a regional vote for Labour. Several left-wing challengers stood; however the challenger party which won the highest vote share (Socialist Labour, with 2.4% of the regional vote) won no seats, whereas the smaller Scottish Socialist Party (SSP), with 2.0% of the regional vote, won one regional seat in the Glasgow region. This region had 10 constituency seats, all won by Labour, and seven regional seats. As proportionality was to be secured over the combined regional and constituency vote total, the effective DM was 17, and therefore the Droop quota was the upper integer bound of 1/18th (5.6%) of the regional votes cast. The SNP, with 25.5% of the regional vote, took four of the seven regional seats, and there was then a very near tie between three small parties: Conservatives on 7.9%, and Scottish Socialists and Liberal Democrats both on 7.2%. As all were above the Droop quota, they won one seat each.

This result established the SSP as the focal left-challenger party. Its elected MSP, Tommy Sheridan, was a colourful politician who scored a legislative success in the first parliament with his sponsorship of the *Abolition of Poindings and Warrant Sales Ac*t 2001 (2001 asp 1). Although repealed the following year, this further raised the profile of Sheridan and his party. In most of the other regions the rival left challenger party, the Socialist Labour Party founded by the mining trade union leader Arthur Scargill, polled ahead of Sheridan's party, but in no region did either party secure another Droop quota. The Scargill party faded away after this election.

The other challenger party to win a seat was the Scottish Green Party, which won a regional seat in the Lothian region with 6.9% of the regional vote. This established the party as a second focal-point challenger. The SSP identified itself as a nationalist party. The Green Party did not, at this stage. When during the independence referendum campaign of 2013-14 the party declared itself in favour of Scottish independence, the MSP elected in 1999 (who had by then retired) said he 'would "absolutely" vote No and would be "happy" to help the anti-independence Better Together campaign' ('Scottish Independence: Robin Harper to vote No', *Edinburgh Evening News* 3 December 2013).

The MMP system performed as expected for the second and third parties, the SNP and the Conservatives. Each had a fairly even level of support in the constituencies, therefore under FPTP (plurality) they would have won few seats, as they did in the constituency section of the 1999 election – the SNP won 7 of the 73 constituencies, the Conservatives zero. For both of them, the compensatory feature of MMP worked as planned and intended: their final seat proportion mapped to their mean vote share, and most (for the Conservatives, all) of their members were additional members.

The fourth party, the Liberal Democrats, had a much lumpier vote distribution. Their constituency votes were concentrated into certain rural areas and in urban seats with a highly educated electorate (in Edinburgh and surrounding St Andrews and Aberdeen universities). The algorithm for assigning additional seats in each region is prescribed in the Scotland Act 1998, ss. 7-8. The relevant part of s.7 reads:

For each registered political party which has submitted a regional list, the regional figure for the purposes of section 8 is—

(a)the total number of regional votes given for the party in all the constituencies included in the region,

divided by

(b)the aggregate of one plus the number of candidates of the party returned as constituency members for any of those constituencies.

(3) Each time a seat is allocated to the party under section 8, that figure shall be recalculated by increasing (or further increasing) the aggregate in subsection (2)(b) by one.

This section is an unacknowledged masterpiece of parliamentary drafting. It adapts the Jefferson (d'Hondt) algorithm to the particular circumstances of MMP. It bases each party's total seat entitlement in a region to its share of the regional vote, and assigns seats by d'Hondt *after subtracting seats won in the constituencies of the regions* (House of Commons 1999). In the Lothians region, the regional votes and seats awarded were as in Table 5.

[Table 5 here]

Table 5								
Operation of d'Hondt divisor in Scottish Parliament: Lothians region, 1999 Scottish Parliament Election								
Party	Regional votes	% share of regional votes	Consituency MSPs elected	regional MSPs	Total MSPs	Proportional entitlement	Droop quotas	
Labour	99098	30.1	8	0	8	4.81	5.11	
SNP	85085	25.8	0	3	3	4.13	4.39	
Conservative	52067	15.8	0	2	2	2.53	2.69	
Liberal Democrat	47565	14.4	1	1	2	2.31	2.45	
Green	22848	6.9	0	1	1	1.11	1.18	
Others	22730	6.9	0	0	0	1.10	1.17	
	329393					16.00	17.00	
Droop quota	19376							

Sources for Table 5: BBC Scotland; author's calculations

Table 5 shows how, after constituency seats have been allocated, the compensatory properties of MMP may be inadequate to achieve overall proportionality. The Labour Party held 8 seats against a quota of 4.81, while the SNP won only 3 despite a quota of 4.13. It also shows how, despite getting

fewer than half as many regional votes as the Liberal Democrats, the Green Party secured their seat, because the Liberal Democrats had won one constituency seat.

As is well known in the social choice literature (Balinski and Young 2001: 33-35), the d'Hondt formula is biased in favour of large units. Perhaps for this reason, the German parliament uses the unbiased Ste-Laguë formula to allocate regional seats. This property did not matter in the 1999 election but came to matter later.

2003

The second Scottish Parliament election saw a further increase in the effective number of parties. This matches results found in other new democracies, such as the Polish parliamentary elections of 1989 and 1991 (Kaminski 2002). This can be put down to greater strategizing by both parties and voters. The regional votes for the three parties that had won constituency seats in 1999 (Labour, SNP, and Liberal Democrat) were all down, as voters came to realise that casting a regional vote for a party that was likely to win in their constituency was un-strategic. The Greens did not run in the constituency contests. The Scottish Socialist Party did, but all their victories were in the regional seats. These two challenger parties won six seats each. The Scottish Senior Citizens Party won a regional seat in Central Scotland, where all bar one of the constituencies had gone to Labour, and the remaining constituency to an ex-Labour independent. Two other independents won constituency seats – one of them ex-SNP, and the other a retired doctor campaigning against health cuts, who was a focal candidate because she had come a respectable second in a prior constituency by-election.

In this election Scotland repeated the experience of Poland (e.g., Kaminski 2002, Taagepera and Kaminski 2025) and Bolivia (Centellas 2005): viz., that the effective number of parties grew in the second election under a broadly proportional system, before contracting again in later elections. The effective number of parties in the Scottish Parliament peaked (Table 3).

2007

In the third Scottish Parliament election, the SNP became the largest party, both in seats and votes, for the first time. It won one more seat than Labour, and an independent nationalist (a former leading SNP figure) won one more. The SNP was far short of a parliamentary majority. It approached, first, the Liberal Democrats, who declined to offer their support. It then formed a minority administration supported by the two Green MSPs. Its ebullient leader Alex Salmond became First Minister. All the former small parties lost their seats, and the effective number of parties declined.

2011

This is the key election in our series. It features both a majority government under MMP (the only one in the series), and a possible election reversal as shown by Table 4. As Table 2 shows, the SNP won 53.5 per cent of the seats on an average of 44.7 per cent of the votes cast. And, as Table 4 shows, unionist parties won more than half of the votes cast. The first finding is more robust than the second. However, the Scottish Greens have been coded as unionist from the statements of their manifesto and leader.

The SNP manifesto for this election included a promise to hold a referendum on independence. As nobody, including the leadership of the SNP, had expected them to win a majority of seats, the promise appeared to be cheap talk when it was made. Once the party won its majority, it could not renege on its promise, and it therefore had to prepare for a referendum it was not expected to win. The UK Prime Minister, David Cameron, shared this perception, and therefore agreed with Salmond to set up the legal framework for a referendum, which required the consent of the UK government.

The referendum took place on 18 September 2014. The outcome was that independence was rejected by 55.3 per cent to 44.7 per cent. But the 'Yes' voting intention had been steadily gaining during the campaign, and the unionist parties made a last-minute 'Vow' to offer Scotland more favourable tax treatment under devolution, a promise later enacted in the Scotland Act 2016.

The 2011 election and subsequent referendum have ensured that the constitutional issue has become the main cleavage in Scottish politics, overriding traditional 'position' issues such as left-right politics, and traditional 'valence' issues such as the performance of the Scottish Government. Support both for independence and for the SNP has been almost invariant since 2014. Figure 1 shows that support for independence overtook opposition for the first time in 2016.

[Figure 1 here]

Source for Figure 1. *What Scotland Thinks,* accessed on 27 August 2026. Reused with permission.

Why in 2016? This is discussed in the next subsection.

2016

The election was delayed by a year in order to remain out of step with the UK Parliament, which held a general election in 2015. The SNP remained by far the largest party, making a clean sweep of constituency seats in the Central Belt and Glasgow. The Conservatives supplanted Labour in second place. The Liberal Democrats held their traditional regional strongholds. The Greens won six regional seats. However, the SNP formed a minority administration, not repeating the 2007 coalition with the Scottish Greens.

A month after the Scottish Parliament election, in June 2016, the referendum on EU membership took place. This resulted in a majority in favour of leaving the EU (51.9 per cent to 48.1 per cent). In Scotland, the majority was in favour of Remain (by 62 to 38 per cent). In the prior Scottish referendum, the 'No' [to independence] campaign had laid much stress on what they alleged would be the difficulty of an independent Scotland joining the EU, and urged those who cared about remaining in the EU to vote No. In June 2016 that argument was abruptly flipped – with the UK voting to leave the EU against the majority of votes in Scotland. This event probably had more impact than the previous Scottish Parliament election in leading to support for independence becoming the plurality preference of the Scottish electorate (Figure 1).

2021

An Act of the Scottish Parliament had changed the interval between elections from four to five years. The 2021 election showed less churn than any previous one, with the relative positions of the parties unchanged. The effective number of parties in the legislature (though not in the electorate) reached its lowest point in the series (Table 3). The SNP formed another minority government, later rejoined by the Greens, but resumed minority government status in 2024. As the principal cleavage remained the nationalist-unionist one, the results were broadly a fair reflection of a 50-50 nation. The nationalist parties won a small majority in the legislature; the unionist parties held a small majority in the electorate.

2026

A new unionist party, Reform UK, had emerged since the 2021 election, and the governing SNP had some notable personal and policy disasters. The Labour Party had soared in the polls up to 2024, when it won a large majority of seats in the UK general election, but then rapidly declined again (as in the rest of the UK).

The unionist vote was more split, and more ideologically diverse, than the nationalist vote. Talk of an agreement between the two strongest unionist parties, Labour and Reform, always seemed fanciful as their policies on matters other than the constitution were poles apart. Consequently, the SNP won another plurality of votes and seats and continued in minority government. While the SNP had their worst performance since coming to power, the other nationalist party, the Greens, had their best. The overall result was a more clear-cut election reversal than that of 2011: the nationalist parties won 57% of the seats on 41% of the vote. The outcome was the most disproportional of the series (Table 1).

Discussion

Evidently, Donald Dewar was wrong to believe that MMP would prevent nationalists from controlling the parliament without a majority of the vote. The two crucial failures were the elections of 2011 and 2026. The first of these was not certainly an example of an election reversal. But it forced the SNP to honour its promise of a referendum. Although that referendum failed to achieve independence, it led to a step change in public opinion: both in bringing the constitutional issue to the forefront, and in stabilising opinion to within a few points of 50-50 between nationalism and unionism. The latter outcome, as explained above, was crystallised by the Brexit vote of 2016, in which one of the main arguments against Scottish independence – viz., that union was necessary for Scotland to remain in the European Union - flipped on its head. And the 2026 result was a more clear cut election reversal.

For reasons of path-dependency, the rest of this paper therefore focuses on the crucial election of 2011. If the SNP had not won its completely unexpected majority, it would not have had to honour its cheap-talk promise of a referendum. Its unexpected victory was therefore the foundation stone of Scottish politics from that date forward, How did MMP come to deliver a majority of seats to a party with a minority of votes?

In principle there are three plausible explanations: the large-party bias of d'Hondt apportionment; the effect of small parties that failed to gain a Droop quota; and strategic voting. We consider these in turn.

D'Hondt large-party bias

Table 6 shows the actual seat distribution in 2011, and the hypothetical seat distribution if the Sainte-Laguë (Webster) formula had been used instead. Sainte-Laguë is the only divisor formula that is unbiased as between large and small units (Balinski and Young 2001: 74-6). In this counterfactual it is reasonable to assume that voting patterns would have been the same, as the choice of apportionment formula is so arcane that few politicians, let alone voters, are aware of it.

[Table 6 here]

Table 6

Scottish Parliament election 2011: actual result and result using Ste-Lague (Webster) apportionment

Party	Constituency	List (actual)	List (Ste-Lague)	Total (actual)	Total (Ste-Lague)
SNP	53	16	11	69	64
Lab	15	22	19	37	34
Cons	3	12	12	15	15
Lib Dem	2	3	5	5	7
Green	0	2	7	2	7
Respect	0	0	1	0	1
Ind (Macdonald)	0	1	1	1	1
Total	73	56	56	129	129

Data source for Table 6: Almanac of Scotland, at http://www.almanacofscotland.co.uk/scparleleclist.htm, accessed Sep 11 2026
Ste-Laguë calculations (Table x.2) using Excel Webster/Sainte-Laguë Calculator (S. Kellow), at https://blog.stevenkellow.com/excel-webster-sainte-lague-calculator/
Accessed Sep 11, 2026
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Detailed calculation in Appendix Tables x.1 and x.2

Table 6 shows that the SNP would have just failed to get an overall majority (64 seats out of 129). It would have been able to rely on the support of the independent nationalist Margo MacDonald (who died in 2014 and was not replaced for the remainder of the parliament). It would have been vulnerable to any defection (in the event, two SNP MSPs elected in 2011 did leave the party during

the Parliament). In negotiations with UK Prime Minister Cameron on the right to hold a referendum, the Scottish Government's position would have been weaker and Cameron might have been emboldened to refuse permission.

The other notable effect of the counterfactual is that the Green Party would have been much stronger. It is unknowable who might have led it during any referendum campaign, and whether it would have reversed its 2011 stance on the constitution.

Small parties

Of the parties which failed to gain a quota or a constituency seat, only one, the continuing Scottish Socialist Party, can be clearly identified as nationalist. Some had no known position on the constitutional question, including the largest, the Pensioners' Party (the successor to the Senior Citizens' Party that had won a seat in 2003). It is therefore likely, but cannot be proved, that unionists suffered more than nationalists from the dispersal of their vote among small parties.

Strategic voting

At an aggregate level, the best evidence for strategic voting is that the list vote shares for the two leading parties (Labour and SNP) ran well below their constituency vote shares in 1999 and 2003, implying that sophisticated voters realised that it was strategic to case their list vote for a different party. This effect fades from 2007 onwards. If there was strategic voting in 2011, the aggregates in Table 2 imply that it netted to approximately zero. Individual-level data might throw more light on this but it is scanty. Therefore, we provisionally conclude that strategic voting had little or no effect in 2011.

Conclusion

We draw two conclusions.

1 Contrary to intuition, MMP generally delivers less proportionality than does STV. This appears to be mostly due to the proliferation of small parties which fail to gain a Droop quota (or to cross a mandatory threshold, in the case of Germany). A mature STV system, as in both parts of Ireland, appears to discourage parties that have no realistic hope of winning a quota.

2 Path dependency matters in the choice and effects of an electoral system. The Scottish Parliament uses MMP (not STV) because Labour politicians knew that they disliked STV but knew nothing about MMP – apparently not even being aware that it was already in effect in Germany and New Zealand. The use of d'Hondt apportionment contributed to a secure SNP majority in the Parliament of 2011-16, an event which successively led to the independence referendum of 2014, the Brexit referendum of 2016, and the step change in support for Scottish independence after Brexit (Figure 1). Small details can have large consequences.

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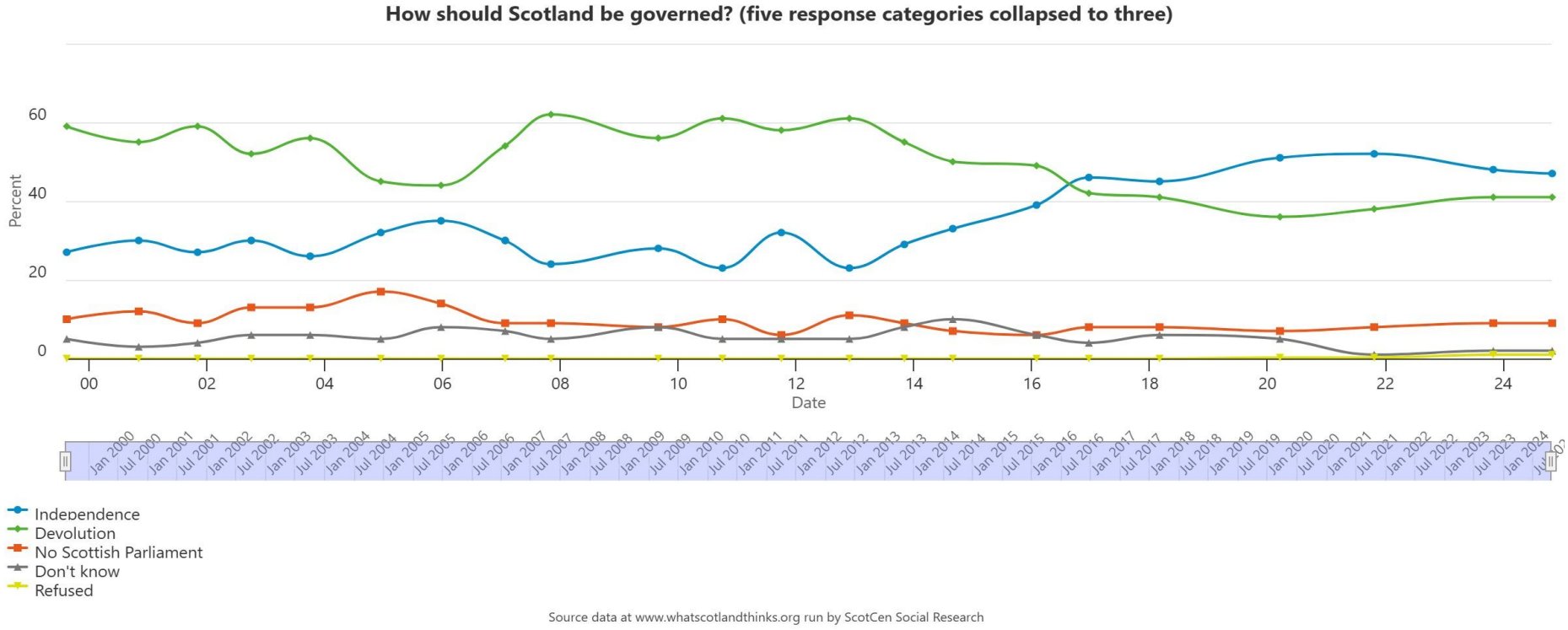
Figure 1. Constitutional preferences, Scotland, 1999-2024



Appendix

Data used to calculate numbers in Table 6.

[Table x.1 here]

Table x.1

Scottish Parliament 2011: seat allocations, under actual method (d'Hondt) and Ste-Lague

Region	Party	List votes	Constituency seats	List seats (actual)	List seats (Ste-Lague)	Total seats (actual)	Total seats (Ste-Lague)
Central							
	SNP	108,261	6	3	3	9	9
	Lab	82,459	3	3	3	6	6
	C	14,870	0	1	1	1	1
	Other	27,966	0	0	0	0	0
Glasgow							
	SNP	83,109	5	2	2	7	7
	Lab	72,941	4	3	2	7	6
	C	12,749	0	1	1	1	1
	Green	12,454	0	1	1	1	1
	Respect	6,972	0	0	1	0	1
	Other	20,397	0	0	0	0	0
Highland							
	SNP	85,082	6	3	2	9	8
	Lab	25,884	0	2	2	2	2
	LD	21,729	2	0	0	2	2
	C	20,843	0	2	1	2	1
	Green	9,076	0	0	1	0	1
	Other	16,396	0	0	0	0	0
Lothian							
	SNP	110,953	8	0	0	8	8
	Lab	70,544	1	3	2	4	3
	C	33,019	0	2	2	2	2
	Green	21,505	0	1	1	1	1
	Ind (M MacDonald)	18,732	0	1	1	1	1
	LD	15,588	0	0	1	0	1
	Other	12,862	0	0	0	0	0
Mid Scotland & Fife							
	SNP	116,691	8	1	0	9	8
	Lab	64,623	1	3	3	4	4
	C	36,458	0	2	2	2	2
	LD	15,103	0	1	1	1	1
	Green	10,914	0	0	1	0	1
	Other	14,374	0	0	0	0	0
NE Scotland							
	SNP	140,749	10	1	0	11	10
	Lab	43,893	0	3	3	3	3
	C	37,681	0	2	2	2	2
	LD	18,178	0	1	1	1	1
	Green	10,407	0	0	1	0	1
	Other	16,137	0	0	0	0	0
South							
	SNP	114,270	4	4	3	8	7
	Lab	70,595	2	2	2	4	4
	C	54,352	3	0	0	3	3
	LD	15,096	0	1	1	1	1
	Green	8,535	0	0	1	0	1
	Other	16,018	0	0	0	0	0
West							
	SNP	117,306	6	2	1	8	7
	Lab	92,530	4	3	2	7	6
	C	35,995	0	2	2	2	2
	LD	9,148	0	0	1	0	1
	Green	8,414	0	0	1	0	1
	Other	18,978	0	0	0	0	0
	Total seats		Constituency	List (actual)	List (Ste-Lague)	Total (actual)	Total (Ste-Lague)
	SNP		53	16	11	69	64
	Lab		15	22	19	37	34
	C		3	12	12	15	15
	LD		2	3	5	5	7
	Green		0	2	7	2	7
	Respect		0	0	1	0	1
	Ind (Macdonald)		0	1	1	1	1
	Total		**73**	**56**	**56**	**129**	**129**

[Table x.2 here]

Table x.2

Scottish Parliament election 2011: list votes by region and Ste-Lague calculations

Votes earned

	SNP	Lab	Con	Green	LD	Pensioner	other	other	other	other	other	other
Central	108,261	82,459	14,870	5,634	3,318	5,793	3173	2,483	2,214	1,555	1,263	3,796
Glasgow	83,109	72,941	12,749	12,454	5,312	3,750	6,972	2,424	2,276	1,501	1,447	3,687
Highland	85,082	25,884	20,843	9,076	21,729	2,770	3,541	3,372	1,764	1,696	1,406	1,134
Lothian	110,953	70,544	33,019	21,505	15,588	3,218	18,732	1,978	1,822	1,681	914	2066
Mid&Fife	116,691	64,623	36,458	10,914	15,103	4,113	2,838	1,771	1,726	1,466	786	638
NE Scotland	140,749	43,893	37,681	10,407	18,178	4,420	2,477	2,159	1,925	1,459	1,115	2582
South	114,270	70,595	54,352	8,535	15,096	4,418	3,243	2,906	2,017	1,924	813	697
West	117,306	92,530	35,995	8,414	9,148	4,771	2,865	2,468	2,162	2,000	1,752	2,960
Total	876421	523469	245967	86939	103472	33253	43841	19561	15906	13282	9496	17560

Seats to award

Central	7
Glasgow	7
Highland	7
Lothian	7
Mid&Fife	7
NE Scotland	7
South	7
West	7

Configure Here

Regions	8
Seats per Region	7
Threshold	0%
Total Votes	**1,989,167**

Constituency seats earned

	SNP	Lab	Con	Green	LD	Pensioner	other	other	other	other	other	other
Central	6	3										
Glasgow	5	4										
Highland	6				2							
Lothian	8	1										
Mid&Fife	8	1										
NE Scotland	10											
South	4	2	3									
West	6	4										
Const.	53	15	3	0	2	0	0	0	0	0	0	0

	SNP	Lab	Con	Green	LD	Pensioner	other
Central	3	3	1	0	0	0	0
Glasgow	2	2	1	1	0	0	1
Highland	2	2	2	1	0	0	0
Lothian	0	2	2	1	1	0	1
Mid&Fife	0	3	2	1	1	0	0
NE Scotlar	0	3	2	1	1	0	0
South	3	2	0	1	1	0	0
West	1	2	2	1	1	0	0
Prop.	11	19	12	7	5	0	2
TOTAL	64	34	15	7	7	0	2

Sources for Tables x.1 and x.2:

Data source: Almanac of Scotland, at http://www.almanacofscotland.co.uk/scparleleclist.htm
Calculations using Excel Webster/Sainte-Laguë Calculator (S. Kellow),
at https://blog.stevenkellow.com/excel-webster-sainte-lague-calculator/
Accessed Sep 11, 2026

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