Is Proportional Representation More Favourable to the Left? Electoral Rules and Their Impact on Elections, Parliaments and the Formation of Cabinets

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How do electoral rules affect the composition of governments? It is a robust finding that countries with majoritarian rules more often elect conservative governments than those with proportional representation (PR) electoral systems. There are three explanations for this pattern. The first stresses the impact of voting behaviour: the middle class more often votes for right-wing parties in majoritarian electoral systems, anticipating governments' redistributive consequences. The second explanation is based on electoral geography: the regional distribution of votes may bias the vote-seat translation against the Left in majoritarian systems due to the wide margins by which the Left wins core urban districts. The third explanation refers to party fragmentation: if the Right is more fragmented than the Left in countries with PR, then there is less chance of a right-wing party gaining *formateur* status. This study tests these three hypotheses for established democracies over the entire post-war period. It finds the first two mechanisms at work in the democratic chain of delegation from voting via the vote-seat translation to the formation of cabinets, while party fragmentation does not seem to co-vary as much as expected with electoral rules. These findings confirm that majoritarian systems have a substantive conservative bias, whereas countries with PR show more differentiated patterns.

We know that electoral rules systematically co-vary with government composition. Right-wing governments are more likely to form under majoritarian rules, whereas left-wing governments are more frequent with proportional representation (PR).[1] There are three potential explanations for this finding. The first stresses the impact of voting behaviour: citizens vote more often for a right (left) party in majoritarian electoral systems (with PR), anticipating the redistributive consequences of right or left governments in either system.[2] The second explanation points to the impact of electoral geography: the regional distribution of votes may bias the vote-seat translation in favour of the Right in majoritarian systems due to the wide margins by which the Left wins core urban districts.[3] The third explanation is based on party-system fragmentation: a higher degree of fragmentation on the Right in countries with PR means less chance of a right-wing government forming.[4]

[1] Cf. Iversen and Soskice 2006, 166, Table 1.

[2] Iversen and Soskice 2006.

[3] Gudgin and Taylor 1979; Rodden 2010.

[4] Martin and Stevenson 2001; Rokkan 1970.

All three accounts highlight the importance of electoral rules, but emphasize different stages in the democratic chain of delegation at which the impact of PR or majoritarian rules should be felt, namely at the voting stage (voter-behaviour hypothesis), during the translation of votes into seats (political-geography hypothesis) or in the process of government formation/coalition building (party-fragmentation hypothesis). In this article we use a new dataset on parliamentary and governmental composition for all major Western democracies since 1945[5] to examine the explanatory merits of each of these arguments. We measure and compare countries' average position on the left-right scale at the electoral, parliamentary, and cabinet level in the PR and majoritarian systems – that is, we compare their weighted election, parliament and cabinet means. We do not do this with any intention of entering into the recent debate on whether PR or majoritarian rules lead to a higher 'ideological congruence' between the citizenry and political elites;[6] rather, we are in search of the systematic effects of electoral rules on the ideological composition of governments.

Thereby we contribute to the recent debate on the partisan effects of electoral rules,[7] to our understanding of 'elections as an instrument of democracy'[8] and make a contribution to the literature on comparative political economy, which has long highlighted the important redistributive effects of electoral rules.[9] We also add to the coalition formation literature by underscoring the partisan effects of electoral rules on the composition of cabinets via the fragmentation of party systems.[10]

The article is organized as follows. We briefly summarize the three mechanisms that serve to predict the systematic left/right differences between the two electoral systems in translating votes into parliamentary seats into cabinet posts. Then we derive empirical implications from each of these explanations. Next we describe our data and analyse the political positions at all three stages of the democratic chain of delegation, inquiring into the source of the conservative bias of majoritarian electoral systems or the progressive bias of PR. The article then ends with a brief conclusion.

VOTING BEHAVIOUR, THE VOTE-SEAT TRANSLATION AND THE FORMATION OF COALITIONS

It is an established finding that parties of the Right are more likely to hold governmental power under majoritarian rules. But how exactly do electoral rules impact the ideological composition of government? One explanation recently put forward points to differences in electoral behaviour under the two electoral rules.[11] Iversen and Soskice base their argument on a formal model with three classes – lower, middle and upper – and a non-regressive tax system (which will not redistribute income 'upward' from the lower to the middle or upper class, or from the middle to the upper class). A majoritarian electoral system will give rise to a two-party system with a centre-left and centre-right party.[12] The upper class will vote Right, against income redistribution, and the lower class will vote left, in favour of redistribution.

Therefore the voting behaviour of the middle class becomes decisive. Confronted with the choice between a centre-left and a centre-right government, the middle class more often votes right than left, fearing that a government led by a left-wing party will deviate from its median-voter

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[5] Döring and Manow 2013.
[6] Golder and Stramski 2010; Huber and Powell 1994; Powell 2009.
[7] Iversen and Soskice 2006; Rodden 2010.
[8] Powell 2000.
[9] Gourevitch and Shinn 2007; Persson and Tabellini 2000; Rogowski 1987.
[10] Martin and Stevenson 2001; Tavits 2008.
[11] Iversen and Soskice 2006.
[12] Duverger's Law; Neto and Cox 1997.

platform after the election and cater exclusively to the interests of the lower class. The middle-class voter's fear is that a left-wing party will tax the upper and middle classes to the more or less exclusive benefit of the lower class. A right-wing party's deviation from its platform while in power is perceived as less damaging to middle-class voters since this party would still not tax the rich or the middle class. In other words, the worst the middle class could expect under a right-wing government is that it would neither have to finance income redistribution nor benefit from it. This is in contrast to a left-wing government that might force the middle class to finance income redistribution without itself benefiting from it. Hedging against the ever-present (albeit small) possibility of a party's post-electoral opportunism, middle-class voters prefer to vote centre-right.[13] Under PR (that is, in a multiparty system), the middle class's choice is different. Here a genuine middle-class party can form a coalition with a party of the Left and both can credibly commit (via the threat to exit from a coalition) to a programme of taxing the rich and sharing the revenue; in coalitions with middle-class parties, the Left will be in government more often and income redistribution will thus be more extensive.

Iversen and Soskice's main argument is about voting behaviour: voters anticipate the redistributive consequences of parties' eventual post-electoral opportunism. Were we to follow their argument, we should expect to see the major effects of electoral rules as early as the electoral stage itself. Empirically we should then expect to observe in a comparison of countries' election means – that is, their vote-share weighted average left-right positions – an election mean in majoritarian systems that is systematically and significantly to the right of the election mean under PR. This is our Hypothesis 1, the electoral-behaviour hypothesis.

An alternative argument points to differences in the vote-seat translation between majoritarian and PR systems. Jonathan Rodden has reminded us why majoritarian electoral systems – irrespective of voting behaviour – might favour the formation of conservative governments: electoral geography. For various reasons, low-income earners are more likely to live in densely populated areas – this of course has been true since the high tide of industrialization and urbanization, and holds true today in most post-industrial societies owing to the availability of cheap housing and transportation.[14] Since income is a strong predictor of vote choice, this becomes an electoral disadvantage for the Left in majoritarian systems. Under majoritarian rules the Left will win some districts by very wide margins but will lose many districts by small margins; in other words, under majoritarian electoral rules a left-wing party will suffer from a high number of 'wasted votes'. This 'built-in' bias against the Left in majoritarian systems has been observed for quite some time.[15] It is said to be 'an almost inevitable feature resulting from the concentration of Labour votes in industrial areas'[16] – and, we might add, also in today's post-industrial areas.

The subsequent empirical expectation is that the parliament's position on the left/right scale should be to the right of the election outcome in countries with majoritarian electoral systems. By contrast, given that proportionality in the vote-seat translation is the defining feature of PR systems, we must not expect any significant and systematic differences between the electoral and parliamentary positions under these electoral rules. Hence, according to the political-geography argument, differences between the two electoral systems should materialize at the parliamentary level in majoritarian systems when voting shares have been translated into seat shares.

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[13] See Iversen and Soskice 2006.
[14] Rodden 2010.
[15] Gudgin and Taylor (1979, 78) with further literature.
[16] Rydon (1957) as quoted in Gudgin and Taylor (1979, 78).

More specifically, we would expect that the parliament mean under majoritarian rules is to the right of the election mean, whereas in countries with PR neither should differ very much. This then is our Hypothesis 2, the political-geography hypothesis.

The third explanation for the nexus between electoral rules and government composition stresses the importance of party fragmentation. Greater fragmentation of the Right under PR may render the formation of a centre-right coalition cabinet more costly and therefore less likely.[17] This is an argument going back to Lipset and Rokkan's cleavage theory and to early theories of coalition formation.[18] As Rokkan in particular has argued,[19] party fragmentation historically influenced the choice of electoral system; where societal cleavage structures have led to a more fragmented Right, the switch to PR was more likely. According to Rokkan and more recently Boix,[20] PR was used as a safeguard by fragmented parties on the Right to suppress potential landslide victories of the rising and more unified Left under majority-runoff or first-past-the-post electoral rules. One implication of this argument is that PR should positively co-vary with party fragmentation to the right of the political spectrum. In this case, though, it would also be less likely for a right-wing party to become the strongest party, receive *formateur* status and subsequently lead a coalition cabinet.

Studies of coalition building have generated robust predictions about the number of parties a cabinet includes.[21] Theoretical models predict that cabinets tend to be ideologically compact and that they try to limit the absolute number of coalition partners – that is, they are minimum-winning.[22] This is explained by efforts to gain ideological coherence, by attempts to avoid the exponentially increasing transaction costs of managing a greater number of coalition partners, and by parties' interest in dividing 'the spoils of power' among as few coalition partners as possible.[23] It is an established finding that coalitions with a smaller number of parties are more likely to form, and that the largest party in parliament tends to be in the cabinet.[24] A higher fragmentation of the Right under PR would then mean that, more often than not, the cabinet position tends to shift to the Left when parliamentary seats are translated into cabinet posts. By contrast, at the stage of government formation, no independent tendency for a shift to either side must necessarily be expected under majoritarian rules – apart from the fact that a previous conservative bias at the electoral and/or parliamentary stage would render the formation of a conservative government more likely. This then is our Hypothesis 3, the party-fragmentation hypothesis, which lets us expect, first, a higher party fragmentation on the Right in PR countries compared to countries with majoritarian electoral rules and, secondly, a shift of the cabinet mean to the Left of the parliament mean under PR due to this higher fragmentation of the Right.

Let us briefly summarize where exactly in the democratic chain of delegation the three different explanations would expect the impact of electoral rules to materialize (see Table 1).

Hypothesis 1 (electoral behaviour) predicts that the electoral position in countries with majoritarian rules will be to the right of the electoral position in countries with PR (Hypothesis 1). Hypothesis 2 (political geography) leads us to expect a shift to the right in the translation of votes into seats under majoritarian rules – that is, a parliamentary position to the right of the electoral position in these electoral systems – whereas no such shift is expected under PR

[17] Martin and Stevenson 2001.
[18] Lipset and Rokkan 1967; Riker 1962.
[19] Rokkan 1970.
[20] Boix 1999.
[21] Tavits 2008; Warwick 1996.
[22] de Swaan 1973.
[23] Mershon 2002; Riker 1962.
[24] Martin and Stevenson 2001, 42.

TABLE 1   *Electoral Rules and Their Impact on Government Composition: Three Causal Mechanisms*

Democratic delegation chain	Elections	(Vote-seat translation)	Parliaments	(Cabinet formation)	Governments
Explanation	Voting behaviour[a]	Electoral geography[b]		Party fragmentation[c]	
Mechanism	Voters vote more conservative under majoritarian rules	Majoritarian systems put (left) parties with a regionally concentrated electorate at disadvantage		Higher party fragmentation of the Right under PR makes *formateur* status of a conservative party less likely	
Hypotheses	Hypothesis 1: the electoral position under majoritarian rules is to the right of the electoral position in PR countries	Hypothesis 2: majoritarian electoral rules shift the parliamentary position to the right of the electoral position		Hypothesis 3a (descriptive): the effective number of parties (ENP) on the Right is higher than the ENP on the Left in PR countries Hypothesis 3b (analytical): the higher ENP on the Right shifts the cabinet position to the Left of the parliamentary position in PR countries	
Measurement	Election mean	Distance election/ parliament mean	Parliament mean	Distance parliament/ cabinet mean	Cabinet mean

[a]Iversen and Soskice (2006).
[b]Rodden (2010).
[c]Martin and Stevenson (2001); Rokkan (1970).

(Hypothesis 2). Finally, Hypothesis 3 (party fragmentation) first predicts a higher degree of party fragmentation of the Right in PR countries (Hypothesis 3a) and subsequently predicts the impact of party fragmentation on government formation under these electoral rules, independent of any possible bias at previous stages of the democratic chain of delegation (Hypothesis 3b). More specifically, we would expect to observe that the cabinet position shifts to the Left of the parliamentary position in PR countries, but we would not expect to find a fragmentation effect to either side, the Left or the Right, in countries with majoritarian electoral rules.

Before testing the relative explanatory power of the three hypotheses, we need to address one methodological problem that derives from the fact that of course our three stages in the democratic chain of delegation are mutually interdependent. For instance, if majoritarian electoral rules reveal a conservative bias at the electoral and/or parliamentary level, a right-wing government is more likely to form as a simple consequence of the prior bias(es). Slightly more complicated is an effect in the reverse direction: if voters anticipate that further down in the delegation chain the mechanics of the vote/seat translation or the logic of government formation lead to a right (left) bias in majoritarian (PR) systems, they might adjust their voting behaviour accordingly in order to counterbalance this bias.[25] Outcome-interested voters would then be less likely to vote for the Right (Left) under majoritarian rules (under PR).

It is relatively easy to deal with the first interaction effect in our analysis by controlling for the ideological position of the preceding stage in the democratic chain of delegation when analysing the effects of electoral rules on the following stage – that is, we control for the election mean when analysing the impact of electoral rules on the composition of parliament, and control for the parliament mean when analysing the impact of electoral rules on the cabinet's position. In this way we can identify additional effects at later stages in the democratic chain of delegation whenever they are present. An alternative methodological approach we employ is to estimate parliamentary and cabinet positions together in a simultaneous-equation framework. Given our study's design, the problem of anticipatory voting cannot be solved empirically; fortunately it is also less relevant for our analysis because it causes us to err against our own hypotheses. The average voter who anticipates, say, the right-wing bias of majoritarian rules further along the chain of delegation and seeks to counterbalance it will be less likely to vote for the Right. Similarly, should the average voter who aims at a particular government anticipate that a left-wing party is more likely to enjoy *formateur* status under PR, (s)he will on average be less likely to vote for the Left. Should we then – in accordance with Hypothesis 1 – still observe an election mean in majoritarian systems that is to the right of the election mean under PR, which we do observe (see below), we do so despite the fact that some outcome-oriented voters might have adjusted their vote to counterbalance the inherent bias of electoral rules. In other words, absent anticipatory voting, our results could only have been more emphatic. We can therefore afford to ignore voters' potential anticipations in the following analysis, to which we now turn.

ELECTIONS, PARLIAMENTS AND THE COMPOSITION OF GOVERNMENT

Data

For our investigation into the impact of electoral rules on the composition of governments, we include parliamentary democracies (and exclude presidential systems) in the Organisation for Economic Co-operation and Development (OECD) with at least thirty years of stable democratic rule. Our units of observation are the left/right position of the electorate as well as the parliament and cabinet at each instance of cabinet formation. For twenty-two countries we cover all elections

[25] Cf. Kedar 2005a, 2005b.

and cabinets over the entire post-war period (from 1945–49 to 2013), and starting from the 1970s for Greece, Spain and Portugal. For France and New Zealand we include separate electoral classifications for their time under PR and majoritarian rules. None of the other countries completely transitioned from a majoritarian to a PR system or vice versa, although many countries enacted minor electoral reforms.[26] The data cover 421 elections and 675 cabinets. Our findings therefore have a much larger empirical basis than the study by Iversen and Soskice.[27]

The dataset combines information regarding election results and parliamentary and governmental composition with data about parties' political positions.[28] The left/right measure is a composite index based on four established party-expert surveys.[29] When locating elections, parliaments and governments on the left-right continuum, we provide measures for the weighted mean (that is, the political centre of gravity)[30] at all three levels. To calculate these measures we weight parties' left/right positions by vote share at the electoral level and by seat share for all parties in parliament and all cabinet parties, respectively. We rescale the original 0 to 10 interval of our data source to a −5 to 5 interval. Caretaker cabinets are excluded from the analysis.

We also replicate our analyses with data from the Comparative Manifesto Project (CMP).[31] The CMP data provide time-varying information, in contrast to the static expert-survey based measures used in ParlGov. Relevant for our purpose is the CMP's right/left-score ('rile'). Yet its validity and reliability is contested, and there is doubt as to whether the CMP measure provides valid information across countries and over time (see the Appendix for a more detailed discussion).[32] We therefore interpret the replication results with some degree of caution.

With respect to the classification of electoral systems, we rely on Lijphart[33] along with Bormann and Golder.[34] For two potentially controversial cases we follow Bormann and Golder and classify the Japanese electoral systems as majoritarian and the Irish single transferable vote (STV) system as PR (for a more detailed discussion of these two cases, see the Appendix) – but our results hold independent of those classifications. Finally, France underwent electoral reform in 1958, as did New Zealand in 1994. New Zealand used a first-past-the-post system until 1994 and has employed a mixed-member proportional system since 1996. France used PR electoral rules under the Fourth Republic (before 1958) and a majority-runoff system during the Fifth Republic, except for the 1986 election to the Assemblée Nationale, when PR was employed. We therefore classify the respective periods as majoritarian and PR for the two countries.

Empirical Findings

We begin the presentation of our empirical findings with some descriptive statistics about government composition. The mean party-political position of all cabinets in our dataset is 0.6 on the −5 to 5 left/right interval. Once we split our countries into the two groups, we see that all six majoritarian countries are located to the right of this mean (see Figure 1).

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[26] Renwick 2011.
[27] Iversen and Soskice 2006.
[28] Döring and Manow 2013.
[29] Benoit and Laver 2006; Castles and Mair 1984; Hooghe et al. 2010; Huber and Inglehart 1995; Steenbergen and Marks 2007; for more information, see the Appendix.
[30] Gross and Sigelman 1984.
[31] Budge et al. 2001; Klingemann et al. 2006; Volkens et al. 2013.
[32] Cf. Gemenis (2013) for a balanced review.
[33] Lijphart 1996.
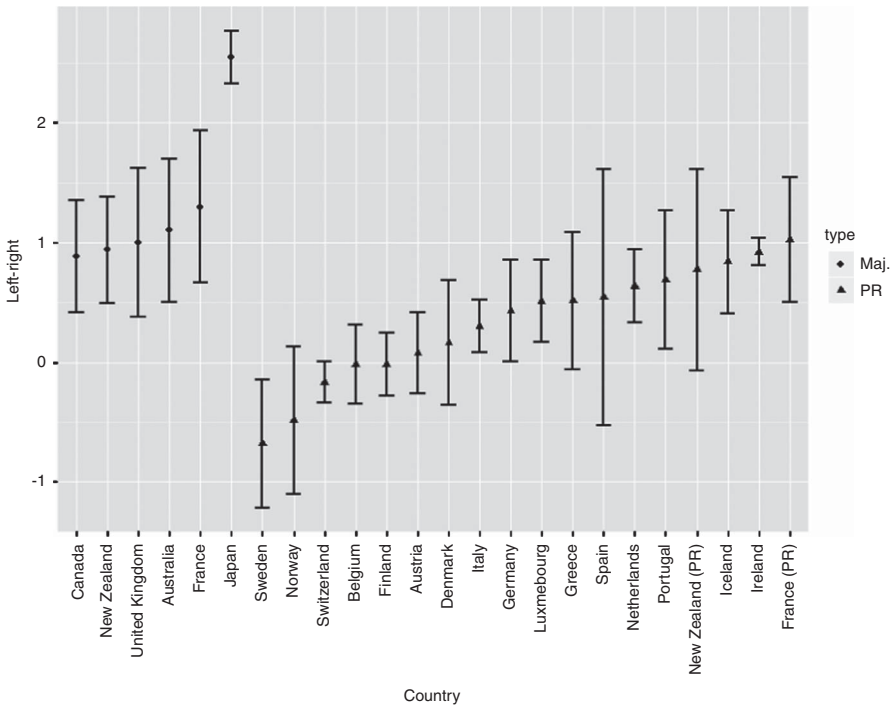[34] Bormann and Golder 2013.

Fig. 1. Cabinet positions in majoritarian and PR countries
Note: mean left/right cabinet position with 95 per cent confidence interval. Cabinet positions are seats weighted left/right positions for all parties in cabinet and are calculated for each instance of cabinet formation. Left/right party position interval from −5 to 5 (left to right). Source: Döring and Manow (2013).

Figure 1 shows that all countries with majoritarian systems display a significant shift to the right at the cabinet level. Within that general rightward trend, Japan appears to be a particularly strong case. In combination with the controversial classification of the Japanese electoral system we decided to make prudent estimates and therefore exclude Japan from the following analysis. For PR countries we find that cabinets in Norway and Sweden are located clearly to the left of the centre, whereas all other PR countries are at the centre or somewhat to the right. However, comparing our two groups of countries we observe that almost all PR cabinets are to the left of cabinets in countries with majoritarian electoral rules. As a first observation we can therefore confirm the literature's general finding that majoritarian electoral rules reveal a conservative bias.

What do we observe once we compare election, parliament, and government means for majoritarian and proportional systems (see Figure 2)? We find that majoritarian systems have a substantial right-wing bias at all three levels: (1) voters tend to vote more to the right than those in PR countries. Subsequently, on both the parliamentary and cabinet levels, the political mean moves even further to the right and we thus observe in countries with majoritarian rules, on top of the more conservative voting behaviour (2) a 'mechanical effect' when vote shares are translated into seat shares, plus (3) a further shift to the right when it comes to the formation of governments. Figure 2 does not tell us, though, whether this last effect is an additional or aggregate effect due to the preceding bias(es). In proportional systems, by contrast, the mean positions at all three levels do not differ greatly.
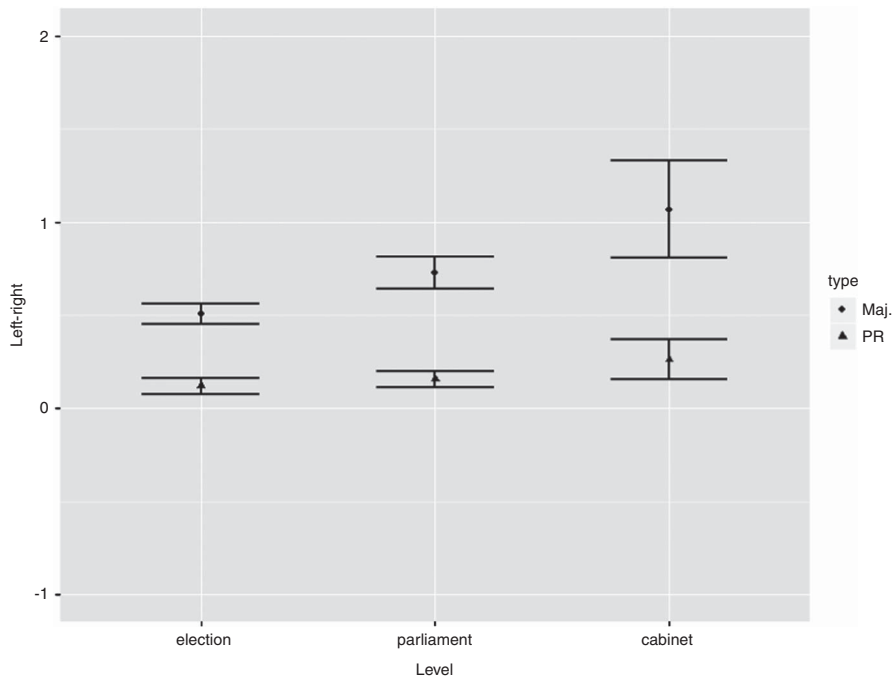
Fig. 2. Electoral, parliament and cabinet positions in majoritarian and PR countries
Note: mean left/right position of electorate (vote share of parties), parliaments (seat share of parties) and cabinets (seat share of cabinet parties) with 95 per cent confidence interval. Electoral and parliamentary positions are calculated for each election (396 observations) and cabinet positions for each instance of cabinet formation (622 observations). Japan is excluded from majoritarian countries. Left/right party position interval from −5 to 5 (left to right). Source: Döring and Manow (2013).

A simple regression model estimating the electoral position with a PR variable as well as estimating the parliamentary position with the electoral position and a PR variable shows the expected effects of electoral rules (see Table 2, Models 1a and 2a). The election mean in PR systems is to the left of majoritarian systems and the parliamentary mean shows an additional shift to the left.

These results therefore support both the voting-behaviour (Hypothesis 1) and the political-geography hypothesis (Hypothesis 2). Whether or not we also observe an additional fragmentation effect (Hypothesis 3b) can only be answered when analysing the impact of fragmentation on government composition while controlling for parliamentary composition (see below).

Yet we want to emphasize that – contrary to what Hypothesis H3b would lead us to expect – Figure 2 does not show a leftward shift of the cabinet mean in PR countries. When we compare the electoral outcome with the parliament mean, there is almost no difference between the two positions in PR systems, whereas there is a statistically significant 'mechanical effect' in majoritarian systems, shifting the mean to the right when translating votes into seats. In addition, the mean is further moved to the right under both electoral rules at the level of cabinet formation – and not to the left under PR only, as Hypothesis 3b predicted. The effect is even stronger under majoritarian rules than in PR systems.

Replicating our analysis with CMP data basically confirms these patterns (see Models 1b and 2b, Table 2; see also Figure A1). In majoritarian systems the parliamentary mean is to the right of

TABLE 2   *Impact of Electoral Rules on Election and Parliament Mean, ParlGov and CMP Data*

	Election mean ParlGov Model 1a	Election mean CMP Model 1b	Parliament mean ParlGov Model 2a	Parliament mean CMP Model 2b
Election mean			0.95***	1.01***
			(0.05)	(0.01)
PR	−0.39***	−0.18	−0.20***	−1.58***
	(0.09)	(3.63)	(0.05)	(0.30)
Constant	0.51***	−2.98	0.24***	1.69***
	(0.06)	(3.28)	(0.05)	(0.26)
N	396	382	396	382
R^2	0.191	0.000	0.779	0.974

Note: country-clustered robust standard errors in parentheses. Japan excluded (twenty-five elections); ParlGov-based left/right scale (−5 to 5); CMP left/right ('rile') scale (−100 to 100). *$p < 0.10$, **$p < 0.05$, ***$p < 0.01$

the election mean, and we observe a further rightward shift at the stage of cabinet formation. By contrast, almost no differences can be noted for the three levels under PR; however, the high variance of the CMP-based left/right positions leads to greater uncertainty and therefore the differences between the two electoral systems appear less clear-cut.

Table 3 provides additional information on differences in cabinet composition between majoritarian and proportional electoral systems, on the distribution of Left, Centre and Right governments under the two electoral systems and on the extent of party fragmentation in both electoral systems.

Similar to Iversen and Soskice,[35] we distinguish Left, Centre and Right cabinets; but whereas Iversen and Soskice exclude centrist governments from their analysis, we classify cabinets with more than one-third of their parliamentary seats to the left and right of the parliamentary mean as Centre cabinets. The majority of these cases are grand coalitions including the major party from the Left and the Right, as for example in Austria where a grand coalition of Social Democrats and the People's Party ruled for most of the post-war period. All other cabinets with two-thirds of the (coalition) parties' seats on one side of the parliamentary mean fall either into our left or right category. Table 3 supports previous findings that majoritarian electoral systems lead to either Right or Left (but not Centre) cabinets with a higher number of cabinets to the right of the political spectrum: two-thirds of all cabinets are to the right under majoritarian rules. In contrast to Iversen and Soskice,[36] however, our data show that PR countries have an almost equal share of Left, Centre and Right cabinets.

With respect to party-system fragmentation, Table 3 provides evidence of different patterns among the two types of electoral systems as expected by Hypothesis 3a. Columns 5 and 6 report the effective number of parties (ENP) to the right and the left of the parliamentary mean. In accordance with Hypothesis 3a, we do observe a higher ENP on the right in PR systems (ENP: 2.2 vs. 1.8), and a simple regression of right-ENP on an electoral system dummy (controlling for country effects) confirms the result (not reported).

[35] Iversen and Soskice 2006, 166.
[36] Iversen and Soskice 2006, Table 1.

TABLE 3   *Parameters for All Countries (1945–2013)*

				ENP		Cabinet share		
Electoral system	Country	First	Disprop.	Left	Right	Left	Centre	Right
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Majoritarian	AUS	1946	9.6	1.0	1.6	0.38	0.00	0.62
	CAN	1945	12.6	1.6	1.2	0.66	0.00	0.34
	FRA-II	1958	16.7	1.7	1.8	0.29	0.08	0.63
	GBR	1945	10.9	1.2	1.1	0.44	0.00	0.56
	JPN	1946	9.2	2.1	1.3	0.05	0.03	0.92
	NZL-I	1946	11.2	1.0	1.0	0.31	0.00	0.69
				1.4	*1.3*	*0.36*	*0.02*	*0.63*
Proportional	AUT	1945	2.4	1.2	1.5	0.25	0.59	0.16
	BEL	1946	3.3	2.1	3.7	0.08	0.59	0.33
	CHE	1947	2.7	2.2	3.0	0.02	0.50	0.48
	DEU	1949	2.6	1.3	1.5	0.31	0.11	0.58
	DNK	1945	1.5	2.0	2.8	0.56	0.00	0.44
	ESP	1977	7.1	1.3	1.5	0.58	0.00	0.42
	FIN	1945	3.0	2.1	3.1	0.07	0.66	0.27
	FRA-I	1946	5.0	2.9	2.6	0.19	0.35	0.46
	GRC	1974	9.2	1.4	1.1	0.59	0.00	0.41
	IRL	1948	4.3	1.6	1.9	0.04	0.09	0.88
	ISL	1946	3.4	2.9	1.2	0.21	0.49	0.30
	ITA	1946	3.2	2.1	2.2	0.08	0.05	0.87
	LUX	1945	4.6	1.6	1.9	0.00	0.53	0.47
	NLD	1946	1.3	1.9	2.8	0.00	0.56	0.44
	NOR	1945	4.6	1.7	2.6	0.74	0.04	0.23
	NZL-II	1996	2.9	1.5	1.9	0.52	0.00	0.48
	PRT	1976	5.4	1.7	1.4	0.40	0.08	0.52
	SWE	1948	2.0	1.3	2.9	0.75	0.00	0.25
				1.8	*2.2*	*0.30*	*0.26*	*0.44*

Note: weighted mean (duration) of all observations presented. Disprop. – disproportionality (least squares index) of the vote-seat translation; ENP – effective number of parties (seats) to the left (right) of the parliamentary position (weighted mean). Source: Döring and Manow (2013).

By contrast, in all six of the majoritarian countries except Australia, the Left is either more fragmented or shows a degree of fragmentation that is at least equal to that of the Right. Australia is the only country with majoritarian rules in which fragmentation of the Right exceeds that of the Left – that is, the Liberal Party and the National (Country) Party vis-à-vis Labour.

The preceding analysis confirmed our hypotheses regarding voting behaviour (Hypothesis 1) and electoral geography (Hypothesis 2) and lent initial support to the fragmentation hypothesis (Hypothesis 3a); but it also raised certain doubts as to whether party fragmentation indeed translates into a progressive bias at the stage of cabinet formation in PR countries (Hypothesis 3b; cf. Figure 2).

We now wish to test whether the process of cabinet formation comes with an additional progressive bias under PR (Hypothesis 3b). Let us briefly discuss the logic of such an analysis for a case of perfect congruence between election, parliament and cabinet positions (a) and let us also add a word about the structure of our data and the design of our analysis (b).

(a) In a highly proportional electoral system, the composition of parliament would truly represent the outcome of an election. In other words, the parliament mean would not – at least

TABLE 4   *Determinants of Parliament-Cabinet Distances*

	All (Model 1)	All (Model 2)	Majoritarian (Model 3)	PR (Model 4)	Sub-sample (Model 5)	Fixed effects (Model 6)
Left-ENP	0.54***	0.55***	0.36	0.53**	0.59***	0.42**
	(0.19)	(0.17)	(0.29)	(0.19)	(0.21)	(0.16)
Right-ENP	−0.30***	−0.31***	−0.36	−0.31***	−0.31***	−0.37***
	(0.09)	(0.09)	(0.22)	(0.10)	(0.09)	(0.12)
Elect.-Parl.	0.95***		1.32	0.40	0.94***	1.37***
Distance	(0.32)		(0.62)	(0.59)	(0.32)	(0.42)
PR	0.02	−0.21			0.01	
	(0.15)	(0.16)			(0.16)	
Constant	−0.19	0.06	0.05	−0.11	−0.23	0.16
	(0.18)	(0.19)	(0.58)	(0.29)	(0.20)	(0.27)
N	621	621	145	476	578	621
R^2	0.148	0.109	0.220	0.127	0.155	0.132

Note: country-clustered robust standard errors in parentheses. Dependent variable: distance of weighted mean left/right position between parliament and cabinet (Japan excluded). Independent variables: PR – proportional electoral system; Left (Right); ENP – effective number of parties to the left (right) of the parliamentary position (weighted mean); Elect.-Parl. distance – distance between (weighted mean) Left/Right position of electorate (vote share) and parliament (seat share). Model 5: sub-sample without Ireland (STV) and Switzerland (cabinet status) (see Appendix). Source: Döring and Manow (2013). *p < 0.10, **p < 0.05, ***p < 0.01

not in any systematic or significant way – deviate from the election mean. Electoral rules would be neutral, favouring neither the Left nor the Right. But cabinets, a subset of parties in parliament, would still typically be located either to the left or right of the parliamentary position. Yet due to regular alternation in office we would again expect no aggregate (mean) difference in the political positions of parliaments and cabinets over time. Therefore, under perfect proportionality along with regular alternation in office, we would not expect any impact exerted by the variables we present.

(b) A discussion of the particular structure of our data is also warranted. The data in our analysis are grouped at the country level, and we measure the positions of parliaments and cabinets and the ENP at the country level as well. The variables show a higher between-country than within-country variance; however, cabinet positions may vary substantially within countries due to alternation in office. Given this structure we use a linear-regression model with country-clustered robust standard errors. We study the impact of our explanatory variables, particularly party fragmentation, on the positions of cabinets while controlling for the parliamentary position (see Table 4). To be more specific: our linear multivariate model predicts the distance of the cabinet mean from the parliament mean (weighted means) in order to detect any additional influence of electoral rules on government composition in our two groups of electoral systems. And now we restrict our analysis to an inquiry into whether this finding is exclusively due to the conservative bias of majoritarian rules at the electoral and parliamentary levels or whether there is an additional bias at the cabinet-formation stage due to systematic differences in party fragmentation between the Right and the Left.

Models 1 and 2 in Table 4 include all countries (except Japan, see above) in our sample, and the first model tests the complete specification. We split our sample for each of the two types of electoral systems that we discuss (Models 3 and 4), further clarifying the disparate impact of our explanatory variables. To check for robustness we remove two potentially controversial cases in

Model 5: Ireland, since the classification of its electoral system is open to debate (see above), and Switzerland due to its particular type of cabinet formation (see the Appendix for a more detailed discussion). We add a re-estimation of Model 1 with country-fixed effects in Model 6, and estimate our main models using CMP data (Table A5).

We start by discussing the effect of party-system fragmentation on the position of cabinets. Hypothesis 3b leads us to expect that a higher fragmentation of the Right under PR makes the formation of a conservative cabinet less likely under these electoral rules. Party system fragmentation is measured as the ENP on the right and left of the parliamentary mean. Most of our models confirm the impact of party-system fragmentation on the formation of governments. The greater the fragmentation among right-wing parties, the more the cabinet position moves to the Left. The evidence for an analogous effect of left fragmentation is even more pronounced. We find that higher fragmentation of either side makes the formation of coalitions more difficult and leads to a higher share of cabinets at the opposite pole. The party-fragmentation effect cannot therefore be ascribed to a sole electoral system – it does not clearly discriminate between majoritarian and PR rules. Yet we had only predicted a shift to the left under PR (Hypothesis 3b). With respect to our third explanation, we cannot therefore assign the impact of party fragmentation to a sole electoral system.

In the models we control for the impact of vote-seat share differences (that is, the distance between the election and the parliament position) on the position of the cabinet (the distance to the weighted parliamentary mean). Models 1, 5 and 6 confirm a weak impact – if the parliament is to the right (left) of the electorate then this extends to the formation of a cabinet. Hence we find an effect of electoral systems transmitted to the last element in the chain of delegation: government formation. A further and independent effect of the electoral system on the cabinet position cannot be detected (see Table 4, Model 1).

We test the robustness of our estimates using three alternative specifications of our main models (1–4). First we check whether our results also hold once we remove two potentially controversial cases: Ireland and Switzerland (Model 5, Tables 4 and A3). We obtain almost identical results for the smaller set of countries. We also estimate the main models (1–4) with country-fixed effects (Model 6, Tables 4 and A4) without our results changing much.

Finally we replicate our models using CMP data (Table A5). When interpreting the results, one has to bear in mind the divergent scale for our dependent variable, namely the distance between cabinet and parliament mean, as the CMP left/right estimates run from −100 to 100. The replication confirms the fragmentation effects – fragmentation of the Right (Left) leads to cabinets that are further to the left (right) (see Table A5). Yet again this effect is not confined to PR countries and goes in both directions, left and right. It therefore does not support our third hypothesis with its exclusive focus on fragmentation of the Right under PR. The same picture emerges if we replicate the specifications of Table 4 in a simultaneous equation model (see Table A2).

We can now summarize our findings. We find clear evidence for the first two explanations concerning the impact of electoral rules on government composition, namely the voter-behaviour and electoral-geography hypotheses. The election position in majoritarian countries is significantly different and to the right of the election position in PR countries. In the process of translating votes into seats, the parliament mean shifts further to the right in majoritarian systems. We can also confirm that party fragmentation affects the government composition, but it does so under both electoral rules and in both directions: the higher the fragmentation of either the Left or the Right, the less likely these parties are to be in government. Although the fragmentation of parties correlates as expected with electoral rules (Hypothesis 3a) – with a more fragmented Right in countries with PR electoral rules – the effects on the formation of governments are not confined to the Right and PR electoral rules. Hypothesis 3b therefore cannot be confirmed. Finally, we find that the disproportionality in the

vote-seat translations, measured as the distance between electoral and parliamentary positions, extends further to the cabinet level (gap between weighted parliament and cabinet mean). A bias in the vote-seat translation leads to an additional shift of the cabinet position in the same direction.

CONCLUSION

One of the most often used explanatory variables in comparative politics and comparative political economy is 'Left cabinet share'. With government consumption at 40 to 50 per cent of GDP in most Western countries, it is of central importance who runs the government. When asking why the Left is in government more often in some countries than in others, we have learned that electoral rules systematically affect governments' ideological composition. But how exactly are electoral rules and the composition of governments connected?

In this study we have tested three mechanisms pertaining to the impact of electoral rules on the party-political makeup of governments – the voting-behaviour, political-geography and party-fragmentation hypotheses. We found the first two mechanisms at work in the democratic chain of delegation extending from voting up to the formation of governments. Our findings confirm that majoritarian systems have a substantially conservative bias, but that PR systems present a more nuanced picture.

In light of our results, the overall bias of electoral systems, however, seems to be less pronounced than previously claimed.[37] In comparing the post-war democratic governments (1945–2013) that formed under different electoral systems we can confirm the pattern described by Iversen and Soskice for majoritarian electoral systems only. Almost two-thirds of all governments are Right or centre-Right under majoritarian rules, whereas the distribution under PR shows a much more balanced share of left-wing, centrist and right-wing cabinets (see Table 3). In majoritarian systems the spatial distribution of votes explains a rightward bias of the parliamentary mean. This bias is then further enlarged at the cabinet level. The ideological bent of governments under PR, however, is determined mainly by party fragmentation. Systematic differences in the fragmentation of the Right or Left help us to better understand the composition of cabinets, but these differences do not seem to be inevitably linked to electoral rules.

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[37] Cf. Iversen and Soskice 2006.

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