

Online Appendix to “Ruling Divided: Disagreement, Issue Salience and Portfolio Allocation”

In this Online Appendix, we present a number of supplementary materials for the main manuscript. In particular, we outline much greater detail the operationalization of key independent variables. We also present the results of a number of robustness checks. These checks include an alternate measure of relative salience, multiple analyses meant to evaluate the sensitivity of the models to problems identified in the Comparative Manifestos Project, and a model that includes range of alternate controls.

Measurement

In the main analysis we use three measures derived from the CMP: issue salience, relative salience and issue preferences. These measures are based on the coding scheme proposed by Bäck et al. (2011).¹ In their analysis, they propose a ‘maximalist’ scheme for measuring issue priorities linked to the policy jurisdictions of 13 portfolios common in parliamentary democracies. For the exact list of the portfolios used in each country or the fuller logic behind the classifications, see Bäck et al. (2011).

Table A1 presents the codes used to create the measures of salience for each portfolio. After reviewing their exact coding scheme we found little reason to disagree with their exact issue coding. Following Bäck et al (2011), we summarized each of the categories, regardless of direction, to create our measure of issue salience. For example, equation 1 illustrates the process for the Defence portfolio below. We then found the sum of the positive and negative issue categories, i , (105 and 104 for defence) for each party, p , on each portfolio jurisdiction from the party’s manifesto in the most recent preceding election as our primary independent variable. Since the issue classifications from the CMP are the percentage of manifesto statements on that category, the salience measures represent the percentage of statements related to the portfolio’s jurisdiction.

Equation 1. Issue or Portfolio Salience

	$Portfolio\ salience_p = \sum i_p + i_p$	(1)
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¹ As described in the data and methods section, we also add data from France. In particular, our analysis includes the *Ministre des Affaires étrangères* (Foreign Affairs), *Ministre de l'intérieur* (Interior), *Ministre de la justice* (Justice), *Ministre des finances* (Finance), *Ministre de la defense* (Defense), *Ministre du travail* (Labour), *Ministre de L'éducation nationale* (Education), *Ministre de la santé* (Health), *Ministre de l'agriculture* (Agriculture), *Ministre de l'industrie* (Industry), *Ministre de l'environnement* (Environment), and the *Ministre des affaires sociales* (Social Affairs). We recode the data for France by checking the Minister’s party affiliation from the websites affiliated with each Ministry. For example, we checked and recoded the party affiliation for the Interior ministry (*Ministre de l'intérieur*) by linking the minister’s name from the website for the Interior with the person’s affiliation listed at the time from the online archives of the *Assemblée Nationale* and *Senat*.

	$Defence\ portfolio\ salience_p = \sum per104_p + per105_p$	(2)

We construct our second independent variable as a special case of issue salience. We measure a dummy variable equal to one if the party holds the issue more salient than any other party in the coalition. In particular, we find the maximum value on each portfolio jurisdiction, j , in a coalition. The party or parties that has this value in the coalition is allocated a 1 for our *Most Salient* variable on portfolio, j . If no party finds an issue salient the variable is equal to zero (and is dropped from the analysis based on the fixed effects used in the conditional logit.

Finally, we construct a measure of issue disagreement at the portfolio level. Using the same categories as those used to construct the measure of salience, we then find the positive (conservative or right) and negative (liberal or left) categories based on the CMP coding scheme. Using Lowe et al.'s (2011) transformation we construct issue level scales based on the portfolios' jurisdictions. To create the measure, we find the difference in the logged percentage of statements on right categories, R , and left categories, L . Equation 2 illustrates the process below.

Equation 2. Issue or Portfolio Disagreement.

	$portfolio\ position_{j,p} = \log(R_{j,p} + C_p) - \log(L_{j,p} + C_p)$	(3)
	$C = 100 \frac{.5}{N}$	(4)
	$portfolio\ position_{defenc,p} = \log(per105_{defence,p} + C_p) - \log(per104_{defence,p} + C_p)$	(5)

We updated Lowe et al.'s scales based on their online materials using their updated means for transferring percentages to their logged scale.² The main difference is in how C , the offset, is calculated given the usage of percentages rather than raw counts of statements. Following their online materials we calculated C as the fraction of 0.5 and the total number of statements in the manifesto, N , multiplied by 100. As with salience, we use the defence portfolio to illustrate the process. The exact codes linked to the left and right for each portfolio are presented in Table A1. To convert this to a measure of disagreement, we then find the mean position of disagreement across coalition parties and find the absolute value of the difference from the party and mean position. In robustness checks below, we show that the exact choice of measurement for disagreement has few consequences for our substantive analysis.

² See the discussion in the Appendix at the following link (Accessed September 19, 2016): https://dataverse.harvard.edu/dataset.xhtml?persistentId=hdl:1902.1/17073&studyListingIndex=0_5770dea2e7a7c2ac7d8938933f90

Robustness Checks and Sensitivity Analyses

We include a number of robustness checks to insure that our results are not spurious or driven by our measurement choices. In particular, we focus our sensitivity analyses on the measurement of the key independent variable, relative salience, the measurement of disagreement from the CMP (logged versus non-logged RILE and accounting for the Standard Errors – Benoit et al. 2009), and we offer a model that accounts for a number of additional controls.

Relative Salience – Ratio versus dummy

In the main analysis we measure relative salience using a dummy variable for the party that holds an issue more salient in their platforms than any other cabinet party. The measurement follows the logic that there is something special about holding an issue most important. An alternate measure that captures more information parties' relative salience, yet introduces substantially more multicollinearity would produce a ratio of how much less salient other coalition parties hold a portfolio. We construct this measure by dividing each party's salience score by the value of salience that the party with the highest salience in that coalition. The value therefore equals 1 for the party with the highest value and decreases to zero for those that do not discuss the portfolio.

We present these results in Table A2. Although not all coefficients are significant the substantive interpretation of the coefficients is largely similar to that in the main analysis. The full set of interactions are jointly significant at the 90% level from zero based on a Wald test. Consistent with the first hypothesis, the constitutive term for issues salience is clearly positive and significant. Yet, the interaction of salience with the relative ratio is negative, and the three way interaction is positive. The combined effect of issue salience and the ratio of salience do not quite reach statistically different effects from issue salience alone with p-values at the 84% level. However the moderating effect of issue disagreement remains significant at the 95% level in joint tests of the coefficients' significance. Broadly, although the alternate operationalization of relative salience increases the multicollinearity in the model and leads to a small increase in the standard errors, the substantive interpretation of the results is similar to that presented in the main analysis.

Measuring Ideological Disagreement –RAW CMP scores

In our main analysis we use a logged version of the CMP RILE scale based on Lowe et al.'s (2011) approach. In Table A3 and Table A4, we present results with two alternate operationalizations to show they are not sensitive to the approach. In particular, we present models similar to those in the main analysis in Table A3, but use the raw categories from the CMP. Rather than logging the issue categories and finding the difference, we instead find the simple difference in left-right categories to create the issue level positions. The coefficients and patterns of significance are extremely similar to those presented in the main analysis. Importantly, a joint test of the of the interaction components is significant at the 95% level.

Measuring Ideological Disagreement –CMP scores with varying error

Given that the simulation commands (SIMEX) proposed by Benoit et al. (2009) are not compatible with a conditional logit analysis, Bäck et al. (2011) proposed an analysis at upper and lower bounds of the CMP. We take a similar approach adding or subtracting one standard deviation of each issue category based on the observed “standard error” of each code from Benoit et al. (2011). We then run this analysis with the lower and upper bounds in Table A4. Intriguingly, varying the results at the upper bound leads to strong significant results for each of the components, like the primary analysis, but the lower bound leads many variables to drop just below significance. This likely occurs as a reduction by the standard error marks a difficult test; it systematically reduces values to zero (we replace any value as zero that would be less than zero) that would otherwise be positive. The main result for issue salience and disagreement holds and remains strong in both models. Disagreement moderates the effect of issue salience, although the effect of holding the issue most salient disappears.

Measuring Ideological Disagreement – overview

Each of the sensitivity analyses for measurement suggests strong evidence for the effect of issue salience and disagreement. However, evidence for holding the issue most salient is less consistent. Future analysis should consider in greater detail the nuances of issue salience and disagreement in this context.

Additional Controls

In Table A5 and Table A6 we include varying control variables related to the broader parliament’s characteristics. In particular, we include measures of the effective number of cabinet parties, effective number of parliamentary parties, the parliamentary ideological range for each portfolio, the mean parliamentary position for each portfolio, the mean parliamentary salience for each portfolio and the maximum parliamentary salience for each portfolio. The results are not only robust to the inclusion of these variables, but also the level of significance for joint tests of the interactions remains significant at the 95% level in both cases.

Previously controlling the Minister

Based on Martin and Stevenson’s (2010) work, there is some potential that controlling a minister in the past increases the likelihood that they will control it in the future. To account for this, we create a count variable equal to the number of times the party has controlled the portfolio in previous coalitions within the sample. As they might predict, the variable is positive and strongly significant. However, the variable has little effect on the results of the primary variables. The full interaction is statistically significant at the 90% level and the effect of issue level disagreement for parties that hold the issue most salient is different than the effect for issue level disagreement for other parties.

Listwise presentation of results with full controls

In Table A8, we include the same models as those presented in the main analysis, but including the full set of controls used in Model 5 of the main analysis. The results closely mirror those of the primary analysis. Given the similar baseline for comparison from the controls, we can show more realistically the difference between model performance based on Table A8. Therefore, we include the percent correctly predicted for each model in Figure A1. Similar to the improvement shown by the main models, the overall performance increases by nearly 0.5 percent once the full interaction is included. This is a somewhat small increase, but not inconsequential as this helps place approximately 21 additional ministers over those predicted by the Bäck et al. (2011) models.

Conclusions

This Online Appendix has outlined the exact measurement strategy and a large number of robustness checks. Although the exact levels of significance for the full interaction vary across models, the trend occurs repeatedly, regardless of the model specification. These results lead us to conclude that the data largely support the hypotheses.

Table A1.

Portfolio Jurisdiction	Left Issue Categories	Right Issue Categories
Foreign	101: Foreign Special Relationships: Positive 103: Anti-imperialism 106: Peace + 107: Internationalism: Positive 108: European Community: Positive	102: Foreign Special Relationships: Negative 109: Internationalism: Negative 110: European Community: Negative
Defence	105: Military: Negative	104: Military: Positive
Interior	201: Freedom and Human Rights 202: Democracy 203: Constitutionalism: Positive 301: Decentralisation 607: Multiculturalism: Positive	204: Constitutionalism: Negative 302: Centralisation 303: Governmental and Administrative Efficiency 304: Political Corruption 605: Law and Order 608: Multiculturalism: Negative
Justice	201: Freedom and Human Rights 202: Democracy 203: Constitutionalism: Positive	204: Constitutionalism: Negative 303: Governmental and Administrative Efficiency 304: Political Corruption 605: Law and Order
Finance	402: Incentives	414: Economic Orthodoxy
Economy (“408: Economic Goals” used in salience measure, but not position)	403: Market Regulation 404: Economic Planning 405: Corporatism 406: Protectionism: Positive 412: Controlled Economy 413: Nationalisation 415: Marxist Analysis	401: Free Enterprise 407: Protectionism: Negative 409: Keynesian Demand Management 410: Productivity
Labour	504: Welfare State Expansion 701: Labour Groups: Positive	505: Welfare State Limitation 702: Labour Groups: Negative
Education	506: Education Expansion	507: Education Limitation
Health	504: Welfare State Expansion 706: Non-economic Demographic Groups	505: Welfare State Limitation
Agriculture	501: Environmental Protection	703: Agriculture and Farmers
Industry (“408: Economic Goals” used in salience measure, but not position)	402: Incentives 403: Market Regulation 404: Economic Planning 405: Corporatism 406: Protectionism: Positive 412: Controlled Economy 413: Nationalisation	401: Free Enterprise 407: Protectionism: Negative 409: Keynesian Demand Management 410: Productivity 414: Economic Orthodoxy
Environment	501: Environmental Protection 416: Anti-growth Economy	410: Productivity
Social Affairs	503: Social Justice 604: Traditional Morality: Negative 606: Social Harmony 705: Underprivileged Minority Groups 706: Non-economic Demographic Groups	603: Traditional Morality: Positive

Table A2. Salience Ratio³

	(1) Salience Ratio
Min	
% Issue Salience	12.237** (3.919)
Salience Ratio	-0.088 (0.338)
Disagreement	2.868** (1.095)
% Issue Salience X Disagreement	-25.360* (12.332)
Salience Ratio X % Issue Salience	-7.081* (3.419)
Salience Ratio X Disagreement	0.440 (1.290)
Salience Ratio X % Issue Salience X Disagreement	13.909 (13.521)
% Cabinet Seats	2.371*** (0.564)
% Cabinet Seats X Portfolio Importance	-0.105 (0.456)
Comprehensive Agreement X Salience	0.608 (1.649)
Minority Coalition X Salience	7.115*** (2.120)
Median Party	0.064 (0.095)
PM Party	-0.005 (0.070)
X	378.985
Log-Likelihood	-1249.991
AIC	2525.983
Observations	4116

³ Instead of a dummy variable for holding the issue most salient, the variable is a ratio of the salience to the party, relative to the party that holds it most salient in the coalition. Therefore, the value equal 1 for the party that holds it most salient.

Table A3. Positions from raw CMP scores

	(1) Simple	(2) Ideology	(3) Salience	(4) Full
Min				
% Issue Salience	2.147 [*] (0.941)	1.375 (1.407)	3.485 [*] (1.574)	3.215 ⁺ (1.808)
Most Salient	0.044 (0.073)	0.062 (0.081)	0.470 ^{**} (0.149)	0.371 [*] (0.171)
Disagreement	0.043 (1.498)	-1.891 (3.108)	0.444 (3.220)	5.423 ⁺ (3.252)
% Issue Salience X Disagreement		11.715 (15.764)	-10.417 (17.600)	-31.751 (19.473)
Most Salient X % Issue Salience			-4.412 ^{***} (1.178)	-3.289 [*] (1.303)
Most Salient X Disagreement			-5.450 (4.340)	-10.025 [*] (4.709)
Most Salient X % Issue Salience X Disagreement			53.687 [*] (22.901)	77.129 ^{**} (25.304)
% Cabinet Seats				2.267 ^{***} (0.556)
% Cabinet Seats X Portfolio Importance				-0.088 (0.449)
Comprehensive Agreement X Salience				0.297 (1.538)
Minority Coalition X Salience				7.164 ^{***} (1.996)
Median Party				0.029 (0.094)
PM Party				0.079 (0.074)
X	12.901	13.036	24.709	323.552
Log-Likelihood	-1493.377	-1493.088	-1486.213	-1309.888
AIC	2992.754	2994.177	2986.426	2645.775
Observations	4279	4279	4279	4279

Table A4. Positions with positions +/- Standard Deviation of CMP codes from Benoit, Laver and Mikheylov (2009)

	(1) Lower Bound	(2) Upper Bound
Min		
% Issue Salience	4.594** (1.651)	5.113** (1.606)
Most Salient	0.073 (0.184)	0.253 (0.185)
Disagreement	3.215*** (0.766)	3.384*** (0.761)
% Issue Salience X Disagreement	-17.547** (5.703)	-18.593*** (5.594)
Most Salient X % Issue Salience	-1.519 (1.472)	-2.857+ (1.476)
Most Salient X Disagreement	-0.678 (0.893)	-1.422 (0.912)
Most Salient X % Issue Salience X Disagreement	10.522 (6.797)	15.023* (6.933)
% Cabinet Seats	2.167*** (0.552)	2.178*** (0.553)
% Cabinet Seats X Portfolio Importance	-0.021 (0.450)	-0.033 (0.450)
Comprehensive Agreement X Salience	0.469 (1.569)	0.349 (1.566)
Minority Coalition X Salience	7.021*** (1.996)	6.908*** (1.988)
Median Party	-0.025 (0.093)	-0.028 (0.093)
PM Party	0.075 (0.072)	0.067 (0.070)
X	353.545	350.365
Log-Likelihood	-1303.575	-1302.279
AIC	2633.151	2630.557
Observations	4281	4280

Table A5. Controls for number of parliamentary and cabinet parties.

	(1) Simple
Min	
% Issue Salience	4.608** (1.633)
Most Salient	0.234 (0.170)
Disagreement	3.506*** (0.800)
% Issue Salience X Disagreement	-19.160** (6.008)
Most Salient X % Issue Salience	-2.420+ (1.358)
Most Salient X Disagreement	-1.234 (0.899)
Most Salient X % Issue Salience X Disagreement	13.517* (6.873)
% Cabinet Seats	-0.887 (0.640)
% Cabinet Seats X Portfolio Importance	0.312 (0.399)
Comprehensive Agreement X Salience	0.697 (1.614)
Minority Coalition X Salience	7.088*** (2.107)
Median Party	0.055 (0.084)
PM Party	-0.002 (0.076)
ENPP X % Cab Seats	0.290+ (0.149)
EN Cab Parties X % Cab Seats	0.721*** (0.207)
Parliamentary Issue Range X % Cab Seats	0.746* (0.335)
X	584.123
Log-Likelihood	-1285.414
AIC	2602.828
Observations	4281

Table A6. Controls for wider parliamentary preferences and Salience

	(1) Simple
Min	
% Issue Salience	3.119 ⁺ (1.780)
Most Salient	0.386 [*] (0.169)
Disagreement	6.497 [*] (3.299)
% Issue Salience X Disagreement	-35.545 ⁺ (20.121)
Most Salient X % Issue Salience	-3.502 ^{**} (1.274)
Most Salient X Disagreement	-9.986 [*] (4.712)
Most Salient X % Issue Salience X Disagreement	79.390 ^{**} (25.474)
% Cabinet Seats	-0.562 (0.670)
% Cabinet Seats X Portfolio Importance	0.172 (0.408)
Comprehensive Agreement X Salience	0.704 (1.573)
Minority Coalition X Salience	7.041 ^{***} (2.033)
Median Party	0.076 (0.084)
PM Party	0.024 (0.080)
ENPP X % Cab Seats	0.402 ^{**} (0.148)
EN Cab Parties X % Cab Seats	0.668 ^{**} (0.219)
Mean Parliamentary Issue Position	-3.385 ^{***} (0.528)
Parliamentary Issue Range	71.637 ^{***} (6.223)
Average Parliamentary Salience	159.819 ^{***} (20.503)
Maximum Parliamentary Salience	-150.466 ^{***} (14.621)
X	.
Log-Likelihood	-1291.266
AIC	2614.532
Observations	4279

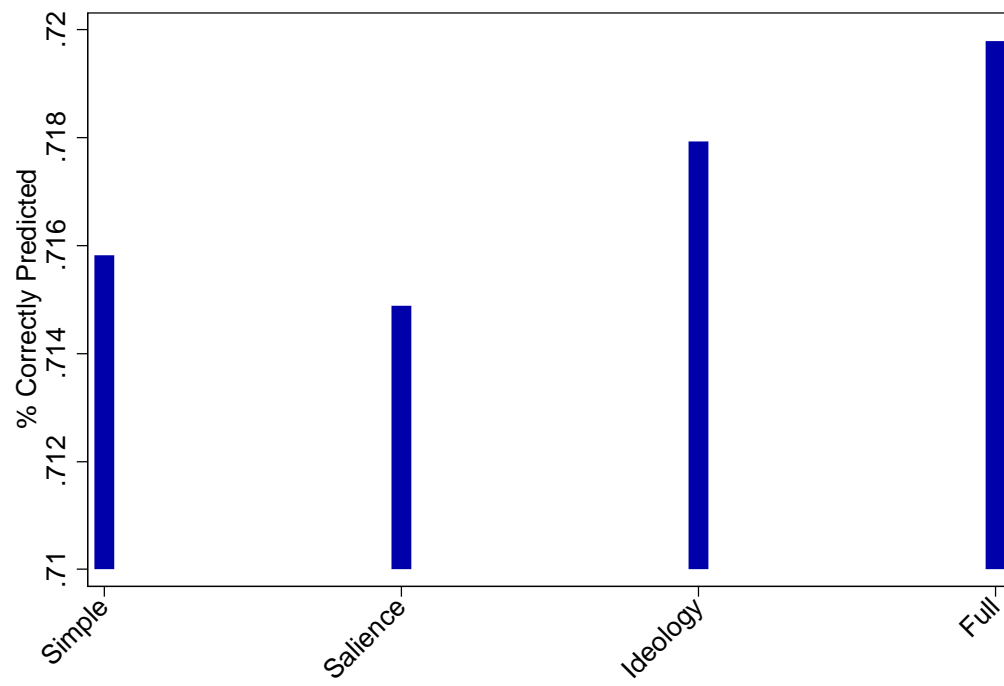
Table A7. Number of times previously controlling the portfolio

	(1) Previous Experience
Min	
% Issue Salience	4.362 [*] (1.824)
Most Salient	0.268 (0.180)
Disagreement	6.640 [*] (3.215)
% Issue Salience X Disagreement	-37.813 ⁺ (19.542)
Most Salient X % Issue Salience	-3.450 ^{**} (1.298)
Most Salient X Disagreement	-7.768 (5.582)
Most Salient X % Issue Salience X Disagreement	71.259 [*] (27.842)
% Cabinet Seats	1.657 ^{**} (0.562)
% Cabinet Seats X Portfolio Importance	-0.184 (0.425)
Comprehensive Agreement X Salience	-0.003 (1.619)
Minority Coalition X Salience	6.096 ^{**} (2.026)
Median Party	-0.096 (0.104)
PM Party	0.025 (0.086)
Minister in past	0.160 ^{***} (0.021)
X	352.704
Log-Likelihood	-1233.771
AIC	2495.542
Observations	4279

Table A8. Basic Models with full Controls.

	(1) Simple	(2) Salience	(3) Ideology	(4) Full
Minister				
% Issue Salience	1.720 (1.205)	2.171 (1.367)	3.472* (1.403)	4.820** (1.668)
Most Salient	0.032 (0.081)	0.100 (0.130)	0.008 (0.083)	0.195 (0.180)
Disagreement	1.198*** (0.325)	1.201*** (0.324)	2.557*** (0.625)	3.299*** (0.768)
Most Salient X % Issue Salience		-0.695 (1.009)		-2.290 (1.448)
% Issue Salience X Disagreement			-9.817* (3.874)	-17.981** (5.740)
Most Salient X Disagreement				-1.090 (0.880)
Most Salient X % Issue Salience X Disagreement				12.770+ (6.767)
% Cabinet Seats	2.218*** (0.548)	2.206*** (0.547)	2.207*** (0.550)	2.190*** (0.551)
% Cabinet Seats X Portfolio Importance	-0.042 (0.441)	-0.041 (0.442)	-0.028 (0.447)	-0.031 (0.449)
Comprehensive Agreement X Salience	-0.062 (1.528)	-0.029 (1.529)	0.586 (1.584)	0.411 (1.572)
Minority Coalition X Salience	7.051*** (1.986)	7.025*** (2.000)	6.959*** (2.015)	6.960*** (1.987)
Median Party	0.054 (0.093)	0.050 (0.094)	0.043 (0.094)	0.036 (0.094)
PM Party	0.060 (0.072)	0.060 (0.072)	0.059 (0.072)	0.065 (0.072)
X	353.106	354.087	355.698	355.003
Log-Likelihood	-1308.603	-1308.338	-1305.211	-1302.598
AIC	2635.206	2636.675	2630.421	2631.196
Percentage Correctly Predicted	71.582	71.489	71.792	71.979
Observations	4279	4279	4279	4279

Figure A1. Percent Correctly Predicted.⁴



⁴ The percent correctly predicted are based on the results in Table 2 in the primary analysis. Basic controls are added for each level to allow for more comparable predictions across models.