# Online Appendix for Coalition Policy in Multiparty Governments: Whose Preferences Prevail 

## A. 1 Data Included in the Analysis

The CMP coded all the governments in eleven democracies from postwar years to the early 90 s , with the exception of governments composed of a single majority party, and governments who did not publish policy declarations but only proclaimed to continue the programs of their predecessors (Budge et al., 2001). In addition, Warwick (2011) published 27 observations that the CMP did not release. The CMP explains that they did not publish some data due to minor errors (Budge et al., 2001). However, it is not clear whether they refer to Warwick's data. In fact, the CMP gave Warwick the observations before their publication, but Warwick does not know if the missing release may be due to minor difference in coding categories, or because those cases were lost (Warwick, 2011).

From the two datasets, I exclude the observations regarding France and Israel, in line with the main studies using CMP data (Warwick, 2001; McDonald and Budge, 2005; Warwick, 2011). France is left out because its coding categories are different from the rest of the data, making a comparison problematic. Israel is omitted since the left-right scale is not the main policy dimension (Budge and Laver, 1992).

In addition, I exclude other observations for various reasons: Sweden 1945 and 1946, Belgium 1946 two governments, and Italy 1968 and 1970 two governments, since the parties are not coded in the CMP; Luxembourg 1967 because the government composition is not coded in the Parliament and Government Composition Database (Döring and Manow, 2010); Italy 1982 due to the government having the same left-right position as the previous government which is likely a typo; Norway n. 1989 and Denmark 1945 since they are two consecutive observations with zero left-right government positions. Furthermore, four of Warwick's observations cannot be used since the government position is not coded. Lastly, the number of seats for the CDU in Germany 1994
is corrected from 344 to 294.
Overall, the dataset analyzed consists of 107 coalition governments in 9 Western European countries, from 1945 to 1998, with 64 governments formed right after an election.

## A. 2 Government Policy as the Position of the Median Party of the Coalition

The comparison of the Median Party of the Coalition's role with existing literature may not be fully appropriate because my model nests the hypothesis that the policy is equal to the median policy only at the limit when the coefficient on this variable goes to infinity. Accordingly, the null finding for the Median Party of the Coalition deserves further scrutiny. In detail, my outcome suggests that the position of this party is not a good predictor of the the position of the government, as sometimes proposed in the literature (e.g. Huber and Powell, 1994). However, my model does not exactly permit the possibility that the government position is equal to the position of the Median Party of the Coalition. This would require the estimated coefficient for the Median Party of the Coalition to be infinite, whereas coefficient estimates are by design finite. To see this, consider for simplicity a coalition with two parties, one of which is the Median Party of the Coalition (MPC), and one that is not ( $\neg \mathrm{MPC})$, and with only the dummy for the Median Party of the Coalition as the explanatory variable. The weights for the two parties become:
$W_{M P C}=\frac{e^{1 * \beta_{M P C}}}{e^{0 * \beta_{M P C}}+e^{1 * \beta_{M P C}}}=\frac{e^{\beta_{M P C}}}{1+e^{\beta_{M P C}}} \quad$ and $\quad W_{\neg M P C}=\frac{e^{0 * \beta_{M P C}}}{e^{0 * \beta_{M P C}}+e^{1 * \beta_{M P C}}}=\frac{1}{1+e^{\beta_{M P C}}}$

The specific case in which the Median Party of the Coalition drives the position of the government is represented by the MPC weight to be 1 and the $\neg$ MPC weight to be 0 . The only coefficient $\beta_{M P C}$ that satisfies this is $\infty$ :

$$
W_{M P C}=\frac{e^{\infty}}{1+e^{\infty}}=\frac{\infty}{\infty}=1 \quad \text { and } \quad W_{\neg M P C}=\frac{1}{1+e^{\infty}}=\frac{1}{\infty}=0
$$

While the estimated coefficient in Table 2 is never in any case close to that possibility, a simple additional test can corroborate the result. Namely, under the hypothesis that the position of the government equals the position of the Median Party of the Coalition, in a simple linear model regressing the former on the latter the coefficient estimate is one. I report the results of this regression for the null that the coefficient is one in the case of all governments without fixed effects in the first specification in Table A.1. The model shows how the estimate for the Median Party of the Coalition is constantly different from the unit, thus confirming the results of the main analysis.

## Table A.1: Comparative Effect of the Median Party of the Coalition on Government Policy

|  | Dependent variable: <br> Government Left Right Position <br> (1) <br> (2) |  |
| :---: | :---: | :---: |
| Left Right Position of the Median Party of the Coalition (null $\beta=1$ ) | $\begin{gathered} 0.362^{* * *} \\ (0.089) \end{gathered}$ |  |
| Un-Weighted Left Right Position of the Coalition Parties (null $\beta=1$ ) |  | $\begin{gathered} 0.551^{* * *} \\ (0.114) \end{gathered}$ |
| Constant | $\begin{gathered} 4.120^{* * *} \\ (1.491) \end{gathered}$ | $\begin{gathered} 5.607^{* * *} \\ (1.540) \end{gathered}$ |
| Country Fixed Effects | - | - |
| Observations | 107 | 107 |
| R ${ }^{2}$ | 0.137 | 0.183 |
| Adjusted R ${ }^{2}$ | 0.129 | 0.175 |
| Residual Std. Error (df = 105) | 14.877 | 14.483 |

Still, in order to judge what proxy better represents the policy of the government, it is necessary to confront this coefficient with these possible alternative of the Un-Weighted Left Right Position of the Coalition Parties. I report the regression with this factor as independent variable in the Model 2 in Table A.1. The coefficient for the Un-Weighted Left Right Position of the Coalition Parties is larger than the coefficient for the Left Right Position of the Median Party of the Coalition.

This confirms both that the Left Right Position of the Median Party of the Coalition is not the best predictor of the position of the government. The results are robust to considering fixed effects and limiting the analysis to the governments formed after an election, as reported in Tables A. 2 and A. 3 .

Table A.2: Effect of the Median Party of the Coalition on Government Policy

|  | Dependent variable: |  |  |  |
| :--- | :---: | :---: | :---: | :---: |
|  | Left Right Position of the Government |  |  |  |
|  | $(1)$ | $(2)$ | $(3)$ | $(4)$ |
| Left Right Position of the | $0.362^{* * *}$ | $0.435^{* * *}$ | $0.356^{* * *}$ | $0.363^{* * *}$ |
| Median Party of the Coalition <br> (null $\beta=1)$ | $(0.089)$ | $(0.084)$ | $(0.083)$ | $(0.075)$ |
|  |  |  |  |  |
| Constant | $4.120^{* * *}$ |  | 0.691 |  |
|  | $(1.491)$ |  | $(1.552)$ |  |
| Country Fixed Effects |  |  |  |  |
| Observations | - | $\checkmark$ | - | $\checkmark$ |
| $\mathrm{R}^{2}$ | 107 | 107 | 65 | 65 |
| Adjusted $\mathrm{R}^{2}$ | 0.137 | 0.397 | 0.226 | 0.528 |
| Residual Std. Error | 0.129 | 0.335 | 0.213 | 0.442 |
|  | 14.877 | 13.103 | 11.885 | 9.986 |
|  | $(\mathrm{df}=105)$ | $(\mathrm{df}=97)$ | $(\mathrm{df}=63)$ | $(\mathrm{df}=55)$ |
| OLS model, standard errors in parentheses. ${ }^{*} \mathrm{p}<0.1 ;{ }^{* *} \mathrm{p}<0.05 ;{ }^{* * *} \mathrm{p}<0.01$ |  |  |  |  |

Table A.3: Effect of the Un-Weighted Left Right Position of the Coalition Parties on Government Policy

|  | Dependent variable: |  |  |  |
| :--- | :---: | :---: | :---: | :---: |
|  | Left Right Position of the Government |  |  |  |
|  | $(1)$ | $(2)$ | $(3)$ | $(4)$ |
| Un-Weighted Left Right Position | $0.551^{* * *}$ | $0.506^{* * *}$ | $0.553^{* * *}$ | $0.419^{* * *}$ |
| of the Coalition Parties | $(0.114)$ | $(0.123)$ | $(0.115)$ | $(0.119)$ |
| (null $\beta=1)$ |  |  |  |  |
| Constant | $5.607^{* * *}$ |  | 1.766 |  |
|  | $(1.540)$ |  | $(1.577)$ |  |
| Country Fixed Effects |  |  |  |  |
| Observations | - | $\checkmark$ | - | $\checkmark$ |
| $\mathrm{R}^{2}$ | 107 | 107 | 65 | 65 |
| Adjusted $\mathrm{R}^{2}$ | 0.183 | 0.346 | 0.268 | 0.450 |
| Residual Std. Error | 0.175 | 0.278 | 0.256 | 0.350 |
|  | 14.483 | 13.647 | 11.555 | 10.776 |
|  | $(\mathrm{df}=105)$ | $(\mathrm{df}=97)$ | $(\mathrm{df}=63)$ | $(\mathrm{df}=55)$ |
| OLS model, standard errors in parentheses. ${ }^{*} \mathrm{p}<0.1 ;{ }^{* *} \mathrm{p}<0.05 ;{ }^{* * *} \mathrm{p}<0.01$ |  |  |  |  |

## A. 3 Robustness to Considering Composite Indexes

In the main part of the paper, I analyzed the effect of seat share and of other simple factors on the coalition compromise. The literature on coalition policy has also used some composite factors such as power indexes and minimum integer weights to analyze coalition bargaining. ${ }^{1}$ In this section, I analyze the possible role of these composite factors. First, I show that they do not fit the data better than the main model in the body of the paper. Second, I show that the results in the main body of the paper are robust to include composite indexes as additional explanatory variables.

The two most widely used power indexes, the Shapley-Shubik Index and the Banzhaf Index, and Minimum Integer Weights measure in slightly different ways the proportion of the number of times that a voter (party) is pivotal over all the possible winning coalitions that could form. The intuition is that, in coalition formation bargaining, a party should have more power, and thus weight,

[^0]the more often that party is pivotal. I analyze these composite factors as possible independent variables to test if these indexes could be the true weights that parties have over the coalition compromise. I utilize the Shapley-Shubik Index and the Banzhaf Index from Warwick and Druckman (2006), and the Minimum Integer Weights from Cutler et al (2016). ${ }^{2}$

First, I show that these indexes do not perform better in explaining the coalition compromise than the main model in the body of the paper (Model 4 in Table 2). I report in Table A. 4 the models with the composite factors as the only explanatory variable for the weights that parties have. As it appears, the power indexes significantly affect the coalition compromise, while there is no effect for the minimum integer weights. As suggested by Cameron and Trivedi (2005), I compare the fit of each of these models with the fit of the main model in the paper (Model 4 in Table 2) with a Vuong Likelihood Ratio Test of Nonnested Models. ${ }^{3}$ The Vuong Likelihood Ratio Test allows me to run hypothesis testing to discriminate over the fit of non-nested models while controlling for possible different degrees of freedom between the models. The three models in Table A. 4 have a negative and significant Vuong Test statistic, which means that they fit the data worse than Model 4 in Table 2.

The fact that the power indexes and the Minimum Integer Weights do not perform better than Model 4 in Table 2 is evident also by looking at the Akaike Information Criterion and at the Bayesian Information Criterion. These latter are log-likelihood criteria that penalize model fit by some function of the complexity of the model (e.g. the number of parameters). ${ }^{4}$ The three models with the composite factors have information criteria that are higher than the information criteria of the main model in the paper (Akaike Information Criterion 885.3; Bayesian Information Criterion 898.7). This means that, even looking at possible information criteria, these three models perform worse than Model 4 in Table 2.

Second, I show that the composite factors do not alter the results in the main part of the paper

[^1]
## Table A.4: Effect of Composite Indexes on Coalition Policy

|  | Dependent variable: <br> Left-Right position of the Government |  |  |
| :---: | :---: | :---: | :---: |
| $\beta_{S S I}$ (Shapley-Shubik Index) | $\begin{aligned} & 1.372^{*} \\ & (0.752) \end{aligned}$ |  |  |
| $\beta_{B I}$ (Banzhaf Index) |  | $\begin{aligned} & 1.319^{*} \\ & (0.735) \end{aligned}$ |  |
| $\beta_{M I W}$ (Minimum Integer Weights) |  |  | $\begin{gathered} 0.358 \\ (0.536) \end{gathered}$ |
| $\beta_{0}$ (Constant) | $\begin{gathered} 8.002^{* * *} \\ (1.480) \end{gathered}$ | $\begin{gathered} 7.941^{* * *} \\ (1.482) \end{gathered}$ | $\begin{gathered} 8.041^{* * *} \\ (1.503) \end{gathered}$ |
| Vuong Test | $-1.798^{* *}$ | $-1.850^{* *}$ | $-2.103^{* *}$ |
| Akaike Information Criterion | 891.3 | 891.4 | 893.9 |
| Bayesian Information Criterion | 899.3 | 899.4 | 902.0 |
| Country Fixed Effects | - | - | - |
| Observations | 107 | 107 | 107 |
| Pseudo R ${ }^{2}$ | 0.088 | 0.087 | 0.065 |
| Pseudo Adjusted $\mathrm{R}^{2}$ | 0.079 | 0.078 | 0.056 |
| Residual SE | $\begin{gathered} 15.3 \\ (\mathrm{df}=105) \end{gathered}$ | $\begin{gathered} 15.3 \\ (\mathrm{df}=105) \end{gathered}$ | $\begin{gathered} 15.49 \\ (\mathrm{df}=105) \end{gathered}$ |
| Non-linear least squares mo ${ }^{*} \mathrm{p}<0.1 ;{ }^{* *} \mathrm{p}<0.05 ;{ }^{* * *} \mathrm{p}<0.01$ | standa | errors | arentheses |

when included as possible additional explanatory factors. I replicate the main models from Table 1 and Table 2, by adding each of the composite factors, in Table A. 5 and A. 6 respectively. From these latter two tables it is possible to observe that the composite factors are never significant, indicating that they should not be included in the models as possible explanatory factors. Furthermore, the factors considered in the main analysis remain stable when the composite factors are included. That is, seat share remains significantly different from 1. Also, the absolute distance to the median legislative party and the formateur dummy maintain the same magnitude with only a slight decrease in significance, which is compatible with the addition of a further independent variable in a model with only 107 observations.

Table A.5: Effect of Seat Share with Composite Indexes on Coalition Policy


Table A.6: Effect of Other Variables with Composite Indexes on Coalition Policy

|  | Dependent variable: <br> Left-Right position of the Government |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | (1) | (2) | (3) | (4) |
| $\overline{\beta_{L S S}(\text { Log Seat Share) }}$ | $\begin{gathered} -0.844^{*} \\ (0.444) \end{gathered}$ | $\begin{gathered} -0.950^{* *} \\ (0.470) \end{gathered}$ | $\begin{gathered} -0.930^{* *} \\ (0.469) \end{gathered}$ | $\begin{aligned} & -0.834 \\ & (0.624) \end{aligned}$ |
| $\beta_{4}$ (Abs. Distance to Median Legislative Party) | $\begin{gathered} -2.923^{*} \\ (1.732) \end{gathered}$ | $\begin{aligned} & -3.063 \\ & (1.847) \end{aligned}$ | $\begin{aligned} & -3.023 \\ & (1.845) \end{aligned}$ | $\begin{aligned} & -2.936 \\ & (1.888) \end{aligned}$ |
| $\beta_{5}$ (Formateur) | $\begin{aligned} & 1.590^{* *} \\ & (0.745) \end{aligned}$ | $\begin{aligned} & 1.545^{*} \\ & (0.807) \end{aligned}$ | $\begin{aligned} & 1.541^{*} \\ & (0.810) \end{aligned}$ | $\begin{aligned} & 1.584^{* *} \\ & (0.782) \end{aligned}$ |
| $\beta_{S S I}$ (Shapley-Shubik Index) |  | $\begin{gathered} 1.150 \\ (1.080) \end{gathered}$ |  |  |
| $\beta_{B I}$ (Banzhaf Index) |  |  | $\begin{gathered} 1.037 \\ (1.076) \end{gathered}$ |  |
| $\beta_{M I W}$ (Minimum Integer Weights) |  |  |  | $\begin{aligned} & -0.028 \\ & (1.312) \end{aligned}$ |
| $\beta_{0}$ (Constant) | $\begin{gathered} 7.997^{* * *} \\ (1.440) \end{gathered}$ | $\begin{gathered} 8.036^{* * *} \\ (1.446) \end{gathered}$ | $\begin{gathered} 7.998^{* * *} \\ (1.449) \end{gathered}$ | $\begin{gathered} 7.997^{* * *} \\ (1.447) \end{gathered}$ |
| Log Seat Share: |  |  |  |  |
| p -value for null $\beta=0$ | 0.060* | 0.045** | 0.049** | 0.184 |
| p -value for null $\beta=1$ | $<0.001^{* * *}$ | $<0.001^{* * *}$ | $<0.001^{* * *}$ | 0.004*** |
| Country Fixed Effects | - | - | - | - |
| Observations | 107 | 107 | 107 | 107 |
| Pseudo R ${ }^{2}$ | 0.169 | 0.175 | 0.173 | 0.169 |
| Pseudo Adjusted $\mathrm{R}^{2}$ | 0.145 | 0.142 | 0.140 | 0.136 |
| Residual SE | $\begin{gathered} 14.72 \\ (\mathrm{df}=103) \end{gathered}$ | $\begin{gathered} 14.76 \\ (\mathrm{df}=102) \end{gathered}$ | $\begin{gathered} 14.78 \\ (\mathrm{df}=102) \end{gathered}$ | $\begin{gathered} 14.81 \\ (\mathrm{df}=102) \end{gathered}$ |

Non-linear least squares model, standard errors in parentheses. ${ }^{*} \mathrm{p}<0.1 ;{ }^{* *} \mathrm{p}<0.05 ;{ }^{* * *} \mathrm{p}<0.01$

## A. 4 Additional Tables

Table A.7: Effect of Seat Share on Coalition Policy, Without Warwick's data

|  | Dependent variable: |  |  |  |
| :--- | :---: | :---: | :---: | :---: |
|  | Left Right position of the Government |  |  |  |
|  | $(1)$ | $(2)$ | $(3)$ | $(4)$ |
| $\beta_{L S S}$ (Log Seat Share) | 0.105 | 0.233 | 0.110 | 0.182 |
|  | $(0.174)$ | $(0.188)$ | $(0.175)$ | $(0.196)$ |
| $\beta_{0}$ (Constant) | $8.783^{* * *}$ |  |  |  |
|  | $(1.678)$ |  | $5.154^{* * *}$ |  |
|  |  |  | $(1.861)$ |  |

Log Seat Share:

| p-value for null $\beta_{L S S}=0$ | 0.548 | 0.218 | 0.531 | 0.359 |
| :--- | :--- | :--- | :--- | :--- |

p-value for null $\beta_{L S S}=1 \quad<0.001^{* * *} \quad<0.001^{* * *} \quad<0.001^{* * *}<0.001^{* * *}$

| Country Fixed Effects | - | $\checkmark$ | - | $\checkmark$ |
| :--- | :---: | :---: | :---: | :---: |
| Observations | 88 | 88 | 51 | 51 |
| Residual SE | 15.69 | 14.75 | 13.29 | 13.11 |
| Pseudo R $^{2}$ | 0.104 | 0.282 | 0.133 | 0.294 |
| Pseudo Adjusted R |  |  |  |  |
|  | 0.094 | 0.200 | 0.115 | 0.140 |
|  | $(\mathrm{df}=86)$ | $(\mathrm{df}=78)$ | $(\mathrm{df}=49)$ | $(\mathrm{df}=41)$ |

Non-linear least squares model, standard errors in parentheses.
${ }^{*} \mathrm{p}<0.1 ;{ }^{* *} \mathrm{p}<0.05 ;{ }^{* * *} \mathrm{p}<0.01$

Table A.8: Effect of Other Variables on Coalition Policy, With Country Fixed Effects

|  | Dependent variable: <br> Left Right position of the Government |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | (1) | (2) | (3) | (4) | (5) |
| $\beta_{L S S}($ Log Seat Share) | $\begin{gathered} 0.292 \\ (0.189) \end{gathered}$ | $\begin{gathered} 0.249 \\ (0.216) \end{gathered}$ | $\begin{gathered} -0.867^{*} \\ (0.446) \end{gathered}$ | $\begin{gathered} -0.990^{*} \\ (0.505) \end{gathered}$ | $\begin{aligned} & -1.284 \\ & (0.808) \end{aligned}$ |
| $\beta_{2}$ (Delta-t Seat Share) |  |  |  |  | $\begin{aligned} & -1.535 \\ & (5.395) \end{aligned}$ |
| $\beta_{3}$ (Median Legislative Party) |  |  |  |  | $\begin{gathered} 0.715 \\ (0.873) \end{gathered}$ |
| $\beta_{4}$ (Abs. Distance to Median Legislative Party) |  | $\begin{aligned} & -2.245 \\ & (1.823) \end{aligned}$ |  | $\begin{aligned} & -1.162 \\ & (1.841) \end{aligned}$ | $\begin{gathered} 0.850 \\ (4.109) \end{gathered}$ |
| $\beta_{5}$ (Formateur) |  |  | $\begin{gathered} 2.445^{* * *} \\ (0.857) \end{gathered}$ | $\begin{gathered} 2.525^{* * *} \\ (0.916) \end{gathered}$ | $\begin{aligned} & 2.666^{*} \\ & (1.482) \end{aligned}$ |
| $\beta_{6}$ (Biggest Coalition Party) |  |  |  |  | $\begin{gathered} 0.238 \\ (1.625) \end{gathered}$ |
| $\beta_{7}$ (Median Party of the Coalition) |  |  |  |  | $\begin{gathered} 0.159 \\ (1.077) \end{gathered}$ |
| $\beta_{8}$ (Surplus Parties) |  |  |  |  | $\begin{aligned} & -0.343 \\ & (1.448) \end{aligned}$ |
| $\beta_{9}$ (Ideologically Outlier Party) |  |  |  |  | $\begin{gathered} 0.037 \\ (0.815) \end{gathered}$ |
| $\beta_{0}$ (Sweden) | $\begin{gathered} 16.408^{* * *} \\ (6.056) \end{gathered}$ | $\begin{gathered} 16.507^{* * *} \\ (6.069) \end{gathered}$ | $\begin{gathered} 21.018^{* * *} \\ (5.682) \end{gathered}$ | $\begin{gathered} 20.650^{* * *} \\ (5.721) \end{gathered}$ | $\begin{gathered} 20.919^{* * *} \\ (5.941) \end{gathered}$ |
| $\beta_{0}$ (Norway) | $\begin{aligned} & -3.404 \\ & (5.969) \end{aligned}$ | $\begin{aligned} & -2.330 \\ & (6.037) \end{aligned}$ | $\begin{aligned} & -4.806 \\ & (5.535) \end{aligned}$ | $\begin{aligned} & -4.460 \\ & (5.583) \end{aligned}$ | $\begin{aligned} & -4.018 \\ & (5.932) \end{aligned}$ |
| $\beta_{0}$ (Denmark) | $\begin{aligned} & -7.890 \\ & (5.549) \end{aligned}$ | $\begin{aligned} & -7.160 \\ & (5.558) \end{aligned}$ | $\begin{aligned} & -4.352 \\ & (5.150) \end{aligned}$ | $\begin{aligned} & -4.112 \\ & (5.181) \end{aligned}$ | $\begin{aligned} & -4.718 \\ & (5.743) \end{aligned}$ |
| $\beta_{0}$ (Belgium) | $\begin{gathered} 14.173^{* * *} \\ (3.399) \end{gathered}$ | $\begin{gathered} 13.845^{* * *} \\ (3.421) \end{gathered}$ | $\begin{gathered} 14.984^{* * *} \\ (3.143) \end{gathered}$ | $\begin{gathered} 14.807^{* * *} \\ (3.167) \end{gathered}$ | $\begin{gathered} 15.175^{* * *} \\ (3.326) \end{gathered}$ |
| $\beta_{0}$ (Netherlands) | $\begin{gathered} 11.204^{* * *} \\ (3.580) \end{gathered}$ | $\begin{gathered} 11.156^{* * *} \\ (3.579) \end{gathered}$ | $\begin{gathered} 13.435^{* * *} \\ (3.431) \end{gathered}$ | $\begin{gathered} 13.279^{* * *} \\ (3.456) \end{gathered}$ | $\begin{gathered} 14.132^{* * *} \\ (3.820) \end{gathered}$ |
| $\beta_{0}$ (Luxembourg) | $\begin{gathered} 6.853 \\ (4.419) \end{gathered}$ | $\begin{gathered} 4.867 \\ (4.642) \end{gathered}$ | $\begin{gathered} 0.866 \\ (4.266) \end{gathered}$ | $\begin{gathered} 0.215 \\ (4.379) \end{gathered}$ | $\begin{gathered} 0.509 \\ (4.584) \end{gathered}$ |
| $\beta_{0}$ (Italy) | $\begin{aligned} & 7.043^{* *} \\ & (3.308) \end{aligned}$ | $\begin{aligned} & 6.449^{*} \\ & (3.332) \end{aligned}$ | $\begin{aligned} & 6.893^{* *} \\ & (3.082) \end{aligned}$ | $\begin{aligned} & 7.090^{* *} \\ & (3.089) \end{aligned}$ | $\begin{aligned} & 6.809^{* *} \\ & (3.250) \end{aligned}$ |
| $\beta_{0}$ (Germany) | $\begin{gathered} 9.893^{* * *} \\ (3.461) \end{gathered}$ | $\begin{gathered} 9.729^{* * *} \\ (3.445) \end{gathered}$ | $\begin{gathered} 10.523^{* * *} \\ (3.213) \end{gathered}$ | $\begin{gathered} 10.542^{* * *} \\ (3.226) \end{gathered}$ | $\begin{gathered} 10.788^{* * *} \\ (3.406) \end{gathered}$ |
| $\beta_{0}$ (Ireland) | $\begin{aligned} & -11.838 \\ & (10.582) \end{aligned}$ | $\begin{gathered} -8.405 \\ (11.134) \end{gathered}$ | $\begin{gathered} -17.500^{*} \\ (9.802) \end{gathered}$ | $\begin{aligned} & -15.613 \\ & (10.280) \end{aligned}$ | $\begin{array}{r} -17.445 \\ (11.506) \end{array}$ |
| Log Seat Share: |  |  |  |  |  |
| p -value for null $\beta_{L S S}=0$ | 0.125 | 0.251 | 0.054* | 0.052* |  |
| p -value for null $\beta_{L S S}=1$ | $<0.001^{* * *}$ | $<0.001^{* * *}$ | $<0.001^{* * *}$ | $<0.001^{* * *}$ |  |
| Country Fixed Effects <br> Observations <br> $\mathrm{R}^{2}$ <br> Adjusted $\mathrm{R}^{2}$ <br> Residual Std. Error | $\begin{gathered} \checkmark \\ 107 \\ 0.235 \\ 0.164 \\ 14.58(\mathrm{df}=97) \end{gathered}$ | $\begin{gathered} \checkmark \\ 107 \\ 0.246 \\ 0.167 \\ 14.55(\mathrm{df}=96) \end{gathered}$ | $\begin{gathered} \checkmark \\ 107 \\ 0.353 \\ 0.286 \\ 13.47(\mathrm{df}=96) \end{gathered}$ | $\begin{gathered} \checkmark \\ 107 \\ 0.356 \\ 0.281 \\ 13.51(\mathrm{df}=95) \end{gathered}$ | $\begin{gathered} \checkmark \\ 107 \\ 0.361 \\ 0.240 \\ 13.90(\mathrm{df}=89) \end{gathered}$ |
| Non-linear least squares model, standard errors in parentheses. ${ }^{*} \mathrm{p}<0.1 ;{ }^{* *} \mathrm{p}<0.05$ ${ }^{* * *} \mathrm{p}<0.01$ |  |  |  |  |  |

# Table A.9: Effect of Other Variables on Coalition Policy, Only After Election Governments 

|  | Dependent variable: <br> Left Right position of the Government |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | (1) | (2) | (3) | (4) | (5) |
| $\overline{\beta_{L S S}(\text { Log Seat Share) }}$ | $\begin{gathered} 0.151 \\ (0.167) \end{gathered}$ | $\begin{gathered} 0.037 \\ (0.193) \end{gathered}$ | $\begin{gathered} -0.662^{*} \\ (0.369) \end{gathered}$ | $\begin{gathered} -0.814^{* *} \\ (0.411) \end{gathered}$ | $\begin{aligned} & -0.523 \\ & (0.557) \end{aligned}$ |
| $\beta_{2}$ (Delta-t Seat Share) |  |  |  |  | $\begin{aligned} & -7.143 \\ & (5.613) \end{aligned}$ |
| $\beta_{3}$ (Median Legislative Party) |  |  |  |  | $\begin{gathered} 0.819 \\ (0.722) \end{gathered}$ |
| $\beta_{4}$ (Abs. Distance to Median Legislative Party) |  | $\begin{gathered} -3.588^{* *} \\ (1.577) \end{gathered}$ |  | $\begin{gathered} -2.718^{*} \\ (1.481) \end{gathered}$ | $\begin{aligned} & -1.827 \\ & (3.300) \end{aligned}$ |
| $\beta_{5}$ (Formateur) |  |  | $\begin{aligned} & 1.585^{* *} \\ & (0.623) \end{aligned}$ | $\begin{aligned} & 1.557^{* *} \\ & (0.679) \end{aligned}$ | $\begin{gathered} 4.048 \\ (3.148) \end{gathered}$ |
| $\beta_{6}$ (Biggest Coalition Party) |  |  |  |  | $\begin{aligned} & -1.709 \\ & (3.121) \end{aligned}$ |
| $\beta_{7}$ (Median Party of the Coalition) |  |  |  |  | $\begin{aligned} & -1.216 \\ & (1.129) \end{aligned}$ |
| $\beta_{8}$ (Surplus Parties) |  |  |  |  | $\begin{gathered} 0.643 \\ (1.487) \end{gathered}$ |
| $\beta_{9}$ (Ideologically Outlier Party) |  |  |  |  | $\begin{gathered} 0.052 \\ (0.756) \end{gathered}$ |
| $\beta_{0}($ Constant $)$ | $\begin{gathered} 4.373^{* * *} \\ (1.587) \end{gathered}$ | $\begin{aligned} & 3.842^{* *} \\ & (1.549) \end{aligned}$ | $\begin{gathered} 4.758^{* * *} \\ (1.503) \end{gathered}$ | $\begin{gathered} 4.335^{* * *} \\ (1.491) \end{gathered}$ | $\begin{gathered} 5.196^{* * *} \\ (1.532) \end{gathered}$ |

Log Seat Share:

| p-value for null $\beta_{L S S}=0$ | 0.370 | 0.850 | $0.078^{*}$ | $0.052^{*}$ |  |
| :--- | :---: | :---: | :---: | :---: | :---: |
| p-value for null $\beta_{L S S}=1$ | $<0.001^{* * *}$ | $<0.001^{* * *}$ | $<0.001^{* * *}$ | $<0.001^{* * *}$ |  |
| Country Fixed Effects | - |  |  |  |  |
| Observations | 65 | - | - | - | - |
| Residual SE | 12.78 | 12.36 | 11.97 | 11.75 | 11.85 |
| $\mathrm{R}^{2}$ | 0.104 | 0.175 | 0.226 | 0.267 | 0.328 |
| Adjusted $\mathrm{R}^{2}$ | 0.090 | 0.148 | 0.201 | 0.231 | 0.218 |
|  | $(\mathrm{df}=63)$ | $(\mathrm{df}=62)$ | $(\mathrm{df}=62)$ | $(\mathrm{df}=61)$ | $(\mathrm{df}=55)$ |

Non-linear least squares model, standard errors in parentheses. ${ }^{*} \mathrm{p}<0.1 ;{ }^{* *} \mathrm{p}<0.05$; ${ }^{* * *} \mathrm{p}<0.01$

Table A.10: Effect of Other Variables on Coalition Policy, Only After Election Governments With Country Fixed Effects


Table A.11: Effect of Supporting and Opposition Parties on Government Policy - Including Undeclared Allies

|  | Dependent variable: Government Left Right Position |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | All Governments |  |  |  | Only After-Election Governments |  |  |  |
|  | (1a) | (1b) | (2a) | (2b) | (3a) | (3b) | (4a) | (4b) |
| $\beta^{S}$ (Supporting Parties) | $\begin{gathered} 0.851 \\ (1.119) \end{gathered}$ | $\begin{gathered} 2.388 \\ (2.711) \end{gathered}$ | $\begin{gathered} 0.830 \\ (1.055) \end{gathered}$ | $\begin{gathered} 1.531 \\ (1.829) \end{gathered}$ | $\begin{aligned} & -0.409 \\ & (0.862) \end{aligned}$ | $\begin{aligned} & -0.590 \\ & (2.256) \end{aligned}$ | $\begin{aligned} & -0.531 \\ & (0.867) \end{aligned}$ | $\begin{aligned} & -0.427 \\ & (3.145) \end{aligned}$ |
| $\beta^{O}$ (Opposition Parties) |  | $\begin{gathered} 0.223 \\ (0.153) \end{gathered}$ |  | $\begin{gathered} 0.246 \\ (0.176) \end{gathered}$ |  | $\begin{gathered} 0.243 \\ (0.158) \end{gathered}$ |  | $\begin{gathered} 0.220 \\ (0.146) \end{gathered}$ |
| $\beta_{L S S}($ Log Seat Share $)$ | $\begin{gathered} 0.123 \\ (0.173) \end{gathered}$ | $\begin{gathered} 0.697^{* * *} \\ (0.250) \end{gathered}$ | $\begin{gathered} 0.067 \\ (0.182) \end{gathered}$ | $\begin{aligned} & 0.540^{* *} \\ & (0.238) \end{aligned}$ | $\begin{gathered} 0.134 \\ (0.166) \end{gathered}$ | $\begin{aligned} & 0.472^{* *} \\ & (0.234) \end{aligned}$ | $\begin{gathered} 0.161 \\ (0.187) \end{gathered}$ | $\begin{aligned} & 0.582^{* *} \\ & (0.274) \end{aligned}$ |
| $\beta_{0}$ (Constant | $\begin{gathered} 8.038^{* * *} \\ (1.493) \end{gathered}$ | $\begin{gathered} 8.979^{* * *} \\ (1.421) \end{gathered}$ |  |  | $\begin{gathered} 4.314^{* * *} \\ (1.599) \end{gathered}$ | $\begin{gathered} 5.567^{* * *} \\ (1.520) \end{gathered}$ |  |  |
| Country Fixed Effects | - | - | $\checkmark$ | $\checkmark$ | - | - | $\checkmark$ | $\checkmark$ |
| Observations | 107 | 107 | 107 | 107 | 65 | 65 | 65 | 65 |
| Pseudo $\mathrm{R}^{2}$ | 0.080 | 0.204 | 0.184 | 0.288 | 0.103 | 0.255 | 0.192 | 0.334 |
| Pseudo Adjusted $\mathrm{R}^{2}$ | 0.062 | 0.181 | 0.108 | 0.214 | 0.074 | 0.219 | 0.060 | 0.211 |
| Residual SE | $\begin{gathered} 15.43 \\ (\mathrm{df}=104) \\ \hline \end{gathered}$ | $\begin{gathered} 14.43 \\ (\mathrm{df}=103) \end{gathered}$ | $\begin{gathered} 15.05 \\ (\mathrm{df}=97) \end{gathered}$ | $\begin{gathered} 14.13 \\ (\mathrm{df}=96) \end{gathered}$ | $\begin{gathered} 12.89 \\ (\mathrm{df}=62) \end{gathered}$ | $\begin{gathered} 11.84 \\ (\mathrm{df}=61) \end{gathered}$ | $\begin{gathered} 12.99 \\ (\mathrm{df}=55) \end{gathered}$ | $\begin{gathered} 11.90 \\ (\mathrm{df}=54) \end{gathered}$ |

Table A.12: Variables Affecting Parties' Implemented Pledges, With Country Fixed Effects

|  | Dependent variable: |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Share of Share of Pledges $\left(Y_{i}^{P}\right)$ |  |  | Share of Number of Pledges $\left(Y_{i}^{N}\right)$ |  |  |
|  | (1) | (2) | (3) | (4) | (5) | (6) |
| Seat Share | $\begin{gathered} 0.263^{* * *} \\ (0.066) \end{gathered}$ | $\begin{gathered} 0.086 \\ (0.104) \end{gathered}$ | $\begin{gathered} 0.068 \\ (0.109) \end{gathered}$ | $\begin{gathered} 0.472^{* * *} \\ (0.108) \end{gathered}$ | $\begin{gathered} 0.136 \\ (0.168) \end{gathered}$ | $\begin{gathered} 0.054 \\ (0.166) \end{gathered}$ |
| Formateur |  | $\begin{aligned} & 0.109^{*} \\ & (0.057) \end{aligned}$ | $\begin{aligned} & 0.107^{*} \\ & (0.057) \end{aligned}$ |  | $\begin{aligned} & 0.218^{* *} \\ & (0.092) \end{aligned}$ | $\begin{aligned} & 0.210^{* *} \\ & (0.088) \end{aligned}$ |
| Abs. Distance to Median Legislative Party |  | $\begin{aligned} & -0.082 \\ & (0.049) \end{aligned}$ | $\begin{aligned} & -0.081 \\ & (0.049) \end{aligned}$ |  | $\begin{aligned} & -0.088 \\ & (0.079) \end{aligned}$ | $\begin{aligned} & -0.085 \\ & (0.075) \end{aligned}$ |
| Finance Minister |  |  | $\begin{gathered} 0.025 \\ (0.040) \end{gathered}$ |  |  | $\begin{aligned} & 0.115^{*} \\ & (0.062) \end{aligned}$ |
| Netherlands | $\begin{gathered} 0.246^{* * *} \\ (0.063) \end{gathered}$ | $\begin{gathered} 0.294^{* * *} \\ (0.062) \end{gathered}$ | $\begin{gathered} 0.292^{* * *} \\ (0.063) \end{gathered}$ | $\begin{aligned} & 0.176^{*} \\ & (0.103) \end{aligned}$ | $\begin{aligned} & 0.243^{* *} \\ & (0.101) \end{aligned}$ | $\begin{aligned} & 0.233^{* *} \\ & (0.096) \end{aligned}$ |
| Ireland | $\begin{gathered} 0.340^{* * *} \\ (0.042) \end{gathered}$ | $\begin{gathered} 0.400^{* * *} \\ (0.046) \end{gathered}$ | $\begin{gathered} 0.391^{* * *} \\ (0.049) \end{gathered}$ | $\begin{gathered} 0.244^{* * *} \\ (0.068) \end{gathered}$ | $\begin{gathered} 0.329^{* * *} \\ (0.075) \end{gathered}$ | $\begin{gathered} 0.290^{* * *} \\ (0.075) \end{gathered}$ |
| Germany | $\begin{gathered} 0.369^{* * *} \\ (0.053) \end{gathered}$ | $\begin{gathered} 0.435^{* * *} \\ (0.057) \end{gathered}$ | $\begin{gathered} 0.427^{* * *} \\ (0.059) \end{gathered}$ | $\begin{gathered} 0.264^{* * *} \\ (0.087) \end{gathered}$ | $\begin{gathered} 0.358^{* * *} \\ (0.093) \end{gathered}$ | $\begin{gathered} 0.324^{* * *} \\ (0.090) \end{gathered}$ |
| Bulgaria | $\begin{gathered} 0.369^{* * *} \\ (0.080) \end{gathered}$ | $\begin{gathered} 0.432^{* * *} \\ (0.079) \end{gathered}$ | $\begin{gathered} 0.429^{* * *} \\ (0.080) \end{gathered}$ | $\begin{aligned} & 0.264^{*} \\ & (0.130) \end{aligned}$ | $\begin{aligned} & 0.356^{* *} \\ & (0.128) \end{aligned}$ | $\begin{aligned} & 0.341^{* *} \\ & (0.122) \end{aligned}$ |
| Austria | $\begin{gathered} 0.369^{* * *} \\ (0.049) \end{gathered}$ | $\begin{gathered} 0.428^{* * *} \\ (0.052) \end{gathered}$ | $\begin{gathered} 0.425^{* * *} \\ (0.053) \end{gathered}$ | $\begin{gathered} 0.264^{* * *} \\ (0.080) \end{gathered}$ | $\begin{gathered} 0.351^{* * *} \\ (0.084) \end{gathered}$ | $\begin{gathered} 0.337^{* * *} \\ (0.081) \end{gathered}$ |
| Seat Share: |  |  |  |  |  |  |
| p-value for null Seat Share=0 | $<0.001^{* * *}$ | 0.417 | 0.538 | $<0.001^{* * *}$ | 0.429 | 0.748 |
| p-value for null Seat Share=1 | $<0.001^{* * *}$ | $<0.001^{* * *}$ | $<0.001^{* * *}$ | $<0.001^{* * *}$ | $<0.001^{* * *}$ | $<0.001^{* * *}$ |
| Observations | 32 | 32 | 32 | 32 | 32 | 32 |
| $\mathrm{R}^{2}$ | 0.964 | 0.971 | 0.972 | 0.913 | 0.932 | 0.941 |
| Adjusted $\mathrm{R}^{2}$ | 0.956 | 0.962 | 0.961 | 0.893 | 0.909 | 0.917 |
| Residual Std. Error | $\begin{gathered} 0.102 \\ (\mathrm{df}=26) \end{gathered}$ | $\begin{gathered} 0.095 \\ (\mathrm{df}=24) \end{gathered}$ | $\begin{gathered} 0.096 \\ (\mathrm{df}=23) \end{gathered}$ | $\begin{gathered} 0.167 \\ (\mathrm{df}=26) \end{gathered}$ | $\begin{gathered} 0.154 \\ (\mathrm{df}=24) \end{gathered}$ | $\begin{gathered} 0.147 \\ (\mathrm{df}=23) \end{gathered}$ |
| F Statistic | $\begin{gathered} 115.680^{* * *} \\ (\mathrm{df}=6 ; 26) \\ \hline \end{gathered}$ | $\begin{gathered} 101.334^{* * *} \\ (\mathrm{df}=8 ; 24) \\ \hline \end{gathered}$ | $\begin{gathered} 87.769^{* * *} \\ (\mathrm{df}=9 ; 23) \\ \hline \end{gathered}$ | $\begin{gathered} 45.430^{* * *} \\ (\mathrm{df}=6 ; 26) \\ \hline \end{gathered}$ | $\begin{gathered} 40.842^{* * *} \\ (\mathrm{df}=8 ; 24) \\ \hline \end{gathered}$ | $\begin{gathered} 40.415^{* * *} \\ (\mathrm{df}=9 ; 23) \\ \hline \end{gathered}$ |

OLS model, standard errors in parentheses. ${ }^{*} \mathrm{p}<0.1 ;{ }^{* *} \mathrm{p}<0.05 ;{ }^{* * *} \mathrm{p}<0.01$

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