

Supplementary Materials for

(When) do Electoral Mandates Set the Agenda?

Government capacity and Mandate Responsiveness in Germany

May, 3. 2022

Contents

1	Descriptive Statistics	2
2	Equation of the main models	4
3	Alternative model specifications	5
4	Term-level models	7
5	Alternative operationalization of the dependent variable	8
6	Alternative operationalization of salience	8
7	Alternative specification for government popularity	10
8	Exclusion of laws influenced by the EU	12

1 Descriptive Statistics

Table 1 presents summary statistics for the numeric variables.

Table 1: Descriptive statistics for numeric variables

Variable	Mean	Sd	Min	Max	Level of Variation
Coal. ideological range	16.590	9.377	1.330	27.765	Cabinet
Europeanization	25.618	19.374	0.000	77.778	Cabinet X Topic
Coal. divergence in priorities	2.515	2.357	0.039	15.285	Cabinet X Topic
Gov platform priorities	5.216	3.639	0.115	21.008	Cabinet X Topic
Budget account balance (t-1)	2.468	3.084	-1.738	8.521	Month
Majority in Bundesrat	0.372	0.483	0.000	1.000	Month
Gov popularity (t-1)	-0.073	0.752	-1.763	1.765	Month
Time	187.500	107.972	1.000	374.000	Month
Cumulative law production	9.785	11.553	0.000	88.000	Month X Topic
Number of laws	0.571	1.146	0.000	19.000	Month X Topic

The following table presents summary statistics for the numeric variables at the level of policy issues.

Table 2: Descriptive statistics of numeric variables for each policy issue

Label	Average number of laws/month	Total number of laws	Average salience in government platform (in %)	Average coalition divergence in priorities (in %)	Average Euro- peanization (in %)
1 - Macroeconomics	1.037	388	10.927	4.165	22.617
2 - Civil Rights	0.420	157	9.062	4.379	25.758
3 - Health	0.457	171	4.296	1.259	30.243
4 - Agriculture	0.548	205	2.775	1.384	57.197
5 - Labor	0.529	198	8.440	3.421	24.690
6 - Education	0.190	71	7.004	4.688	11.556
8 - Energy	0.257	96	3.259	1.351	31.129
10 - Transportation	0.898	336	2.891	1.668	30.691
12 - Law and Crime	1.372	513	5.988	2.431	29.642
13 - Social Welfare	0.519	194	8.165	3.588	8.411
14 - Housing	0.201	75	2.892	1.325	11.049
15 - Domestic Commerce	0.955	357	5.080	2.526	59.134
16 - Defense	0.361	135	3.907	2.533	9.950
17 - Technology	0.190	71	2.931	2.057	24.568
18 - Foreign Trade	0.473	177	1.337	0.563	13.253
19 - International Affairs	0.607	227	9.216	2.794	38.640
25 - Reunification	0.182	68	1.740	2.318	0.277
7 - Environment	0.570	213	5.748	3.327	42.565
20 - Government Operations	1.091	408	3.782	2.018	15.364

2 Equation of the main models

Our models relies on a fixed-effect Poisson model.

$$y_{it} \sim \text{Poisson}(\mu_{it})$$

$$\overline{\mu_{it}} = \exp(\alpha + \alpha_t + \alpha_i + \beta \mathbf{X}_{tn})$$

where:

- y_{it} is the number of laws adopted in topic i during month t
- μ_{it} is the mean and variance of the Poisson distribution in the population
- $\overline{\mu_{it}}$ is the estimated mean of the negative binomial distribution
- α_t is the time fixed-effect
- α_n is the topic fixed-effect
- $\mathbf{X}_{it}$ is a vector of covariates

More precisely, the term $\beta \mathbf{X}_{it}$ depends on the specification of the model. For instance, for model 4, we have:

$$\begin{aligned} & \beta_1 \text{Gov platform priorities}_{it} + \beta_2 \text{Cumulative law production}_{it} + \beta_3 \text{Time}_{it} + \\ & \beta_4 \text{Electoral cycle}_{it} + \beta_5 \text{Gov popularity (t-1)}_{it} + \\ & \beta_7 \text{Majority in Bundesrat}_{it} + \beta_8 \text{Coal. ideological range}_{it} + \beta_9 \text{Coal. divergence in priorities}_{it} + \\ & \beta_{10} \text{Europeanization}_{it} + \beta_{11} \text{Budget account balance (t-1)}_{it} \end{aligned}$$

In model 5 to 10, we then add a simple interaction term. For instance, for model 5, we have:

$$\begin{aligned} & \beta_1 \text{Gov platform priorities}_{it} + \beta_2 \text{Cumulative law production}_{it} + \beta_3 \text{Time}_{it} + \\ & \beta_4 \text{Electoral cycle}_{it} + \beta_5 \text{Gov popularity (t-1)}_{it} + \\ & \beta_7 \text{Majority in Bundesrat}_{it} + \beta_8 \text{Coal. ideological range}_{it} + \beta_9 \text{Coal. divergence in priorities}_{it} + \\ & \beta_{10} \text{Europeanization}_{it} + \\ & \beta_{11} \text{Budget account balance (t-1)}_{it} + \beta_{12} \text{Gov platform priorities}_{it} * \text{Majority in Bundesrat}_{it} \end{aligned}$$

3 Alternative model specifications

The panel structure of our data, as well as the count nature of our dependent variable explained the use of a fixed-effect Poisson regression. Count data can also be modelled using negative binomial and zero-inflated (ZI) regression. Negative binomial regression parametrize separately the variance of the distribution and, hence, fit more accurately over or underdispersed variables. As explained in the paper, fixed-effect Negative Binomial models do not produce estimate consistent. Plain negative binomial with fixed effects can still be used. Zero-inflated (ZI) regressions are meant to model count data, where a large proportion of the observations are 0. It iteratively combines a logistic regression with a negative binomial to better fit the data. In fact, it is very common to have 0 laws adopted in a given topic in a given month (only 33% of the observation differ from 0).

When estimating non-panel models, we might overlook some heterogeneity related to the topic. It is conceivable, that some topic-level confounders influence both the independent and dependent variables. To account for this possibility, we estimate each non-panel model twice: without and with fixed effects for the topics. Thus, when adding fixed-effects, we estimate the association between the electoral priorities and the number of adopted laws **within** each topic.

Consequently, we estimate six additional models:

- Poisson (Model 11)
- Poisson with topic fixed effects (Model 12)
- Negative Binomial (Model 13)
- Negative Binomial with topic fixed effects (Model 14)
- Zero-inflated regressions (Model 15)
- Zero-inflated regressions with topic fixed effects. (Model 16)

Table 3 presents the results for these six models. For comparison purposes, we also included the result of model (4) from the main paper. Results remain stable across all model specifications. In each case, government platform priorities have a significant effect on the number of adopted laws.

Table 3: Alternative model specifications

	Outcome: Number of laws						
	(4)	(11)	(12)	(13)	(14)	(15)	(16)
Gov platform priorities (A)	0.028**	0.031**	0.028**	0.041**	0.034**	0.023**	0.026**
Cumulative law production	0.006	0.027**	0.006**	0.031**	0.006*	0.023**	0.004
Time	0.001	-0.0004	0.001*	-0.001	0.001	0.0001	0.002**
Electoral cycle (ref. routine)							
First 12 months	-0.627**	-0.549**	-0.627**	-0.482**	-0.621**	-0.523**	-0.564**
Last 12 months	0.366**	0.083*	0.366**	0.043	0.362**	0.065	0.367**
Gov popularity (t-1)	-0.060*	-0.065**	-0.060*	-0.060°	-0.057°	-0.069*	-0.042
Majority in Bundesrat (B)	-0.172*	-0.174**	-0.172**	-0.174*	-0.173*	-0.152°	-0.182*
Coal. ideological range (C)	0.005°	0.005**	0.005**	0.006*	0.005*	0.007*	0.006*
Coal. divergence of priorities (D)	-0.005	-1.989*	-0.481	-2.200*	-0.359	-1.517	-1.095
Europeanization (E)	0.001	0.766**	0.115	0.834**	0.265	0.128	-0.638*
Budget account balance (t-1) (F)	-0.008	0.0005	-0.008	0.007	-0.003	0.016	0.0002
Model	Panel Poisson	Poisson	Poisson	NegBin	NegBin	ZI	ZI
Topic Fixed effects	No	No	Yes	No	Yes	No	Yes
Log-likelihood	-6625.93	-7433.2	-7108.79	-6871.81	-6683.24	-6811.63	-6618.63
Observations	7,106	7,106	7,106	7,106	7,106	7,106	7,106

Notes: ° p < .1 ; * p < .05 ; ** p < .01

4 Term-level models

This study is primarily about the influence of government platforms on legislative agendas. Although it happens at the level of the term, we chose to estimate a model at the month level. Out of robustness, we computed the model at the term level and obtained the same results.

To do so, we had to slightly adapt the data structure: the dependent variable is now the number of laws adopted in each topic during each term, the electoral cycle cannot be controlled for and, finally, the budget account balance were averaged at the term-level. We have data for 9 terms, which provide 171 observations (9 terms * 19 topics).

Table 4 present the result of three government-level additional models:

- Panel Poisson (Model 17)
- Negative Binomial (Model 18)
- Negative Binomial with topic fixed effects (Model 19)

In each of these models, the main effect remains significant.

Table 4: Term-level models

	Outcome: Number of laws		
	(17)	(18)	(19)
Gov platform priorities (A)	0.033**	0.064**	0.041**
Time	0.043*	0.015	0.031 [°]
Europeanization (E)	0.009*	1.539**	1.121**
Average Budget account balance	-0.051**	-0.057**	-0.057**
Coal. ideological range (C)	-0.002	-0.001	-0.002
Coal. divergence of priorities (D)	0.001	-2.767	-0.243
Model	Panel	NegBin	NegBin
Topic Fixed effects	No	No	Yes
Log-likelihood	-504.09	-679.92	-585.26
Observations	171	171	171

Notes: [°] p < .1 ; * p < .05 ; ** p < .01

5 Alternative operationalization of the dependent variable

We measure the legislative agenda using the number of laws adopted monthly in each topic. This allows modeling dynamically the legislative agenda and control for variation of the agenda driven by time-varying factors. The percentage of laws adopted within a given topic is an alternative way to measure the legislative agenda. This percentage has to be computed over a sufficient period. Monthly percentages would not make any sense, because not enough laws are adopted each month for this percentage to be meaningful. In the main paper, we chose to measure legislative attention with the absolute number of laws, as it does not require any further transformation. However, we show in table 5, that the main results hold when we use the proportion of law adopted in a given topic in a given term (modeled with OLS without (20) and with (21) fixed effects for topics).

Table 5: Alternative Specifications

	Outcome: Proportion of adopted laws	
	(20)	(21)
Gov platform priorities (A)	0.318**	0.184**
Time	-0.198	-0.045
Europeanization (E)	5.689**	1.392
Average Budget account balance	0.043	0.008
Coal. ideological range (C)	0.007	0.001
Coal. divergence of priorities (D)	-14.576	-2.181
Model	OLS	OLS
Topic Fixed effects	No	Yes
Log-likelihood	-436.27	-308.14
Observations	171	171

6 Alternative operationalization of salience

The measurement strategy with regard to the government salience can be questioned. Indeed, it is unclear how the overall salience of a coalitional body should be measured. We expect coalition partners with larger parliamentary fractions to have more influence on the salience of a topic for a given government. Therefore we use an average of the partners' position weighted according to their number of parliamentary seats. Here is the formula, we used:

$$Salienc_{gov}^i = \frac{share_A * salienc_A^i - share_B * salienc_B^i}{share_A + share_B}$$

where

- $Salienc_{gov}^i$ is the government salience for the topic i for a government coalition between parties A and B
- $share_A$ is the share of parliamentary seats obtained by Party A
- $salienc_A^i$ is the salience of topic i in the manifesto of party A

Because, government salience could also be modelled as a weighted average, we test alternative specifications using no weights (Model 22), vote percentages as weights (Model 23), only the salience of the Chancellor party (Model 24) and only the salience of the junior coalition partner (Model 25). In each case, we estimate again model (4) and consistently observe the same results: manifesto salience exerts a significant influence on the number of adopted laws. Surprisingly, the junior partner appears to have a larger effect on the priorities than the senior partner.

Table 6: Alternative operationalization of salience

	Outcome: Number of laws				
	(4)	(22)	(23)	(24)	(25)
Gov platform priorities (A)	0.028**	0.033**	0.028**	0.021**	0.023°
Cumulative law production	0.006	0.006	0.006	0.006	0.006
Time	0.001	0.001	0.001	0.001	0.001
Electoral cycle (ref. routine)					
First 12 months	-0.627**	-0.627**	-0.627**	-0.627**	-0.625**
Last 12 months	0.366**	0.367**	0.366**	0.366**	0.361**
Gov popularity (t-1)	-0.060*	-0.059*	-0.060*	-0.059*	-0.057*
Majority in Bundesrat (B)	-0.172*	-0.171*	-0.172*	-0.173*	-0.167°
Coal. ideological range (C)	0.005°	0.005°	0.005°	0.005°	0.005*
Coal. divergence of priorities (D)	-0.005	-0.007	-0.005	-0.003	0.000
Europeanization (E)	0.001	0.002	0.001	0.001	0.002
Budget account balance (t-1) (F)	-0.008	-0.008	-0.008	-0.008	-0.007
Weights	Seats	X	Votes	Chanc	Junior
Log-likelihood	-7042.08	-7041.69	-7042.03	-7043.33	-7045.56
Observations	7,106	7,106	7,106	7,106	7,106

Notes: ° $p < .1$; * $p < .05$; ** $p < .01$

7 Alternative specification for government popularity

Single studies on agenda-setting argued that it can be change in government popularity that affect policy-making. Their measures rely on first-differences, defined as the difference between t and $t - 1$. We deliberately chose to measure government popularity not as first-differences but as absolute level. This is motivated by the observation of a remarkable stability in government popularity in Germany over the period under study, resulting in very limited variance when we focus on changes between t and $t - 1$, as the distribution of the different variables in Figure 1 underlines.

For the sake of robustness, we nonetheless replicate our main results with differentiated measures government popularity in Models 26 and 27 (Table 7).

Model 26 shows that controlling for government approval in terms of variations instead of level changes somewhat the picture with regard to its direct impact on legislative productivity, with a positive direct effect of changes in popularity on the number of laws, which could suggest that governments pass more laws when boosted in terms of popularity but once popular, they seem to adopt less laws. In any case, this does not change anything about the coefficient for the main variable of interest, government platform priorities. Our findings therefore seem robust to this alternative specification.

The interaction between change in government popularity and the relationship between electoral and legislative priorities is displayed in Models 27 and can be interpreted based on the marginal effects depicted in Figure Figure 2. For almost all empirical given levels of change in popularity, the relationship between electoral and legislative priorities does not seem to significantly change. We interpret the very broad confidence interval and the tiny negative coefficient as evidence that short-term changes in popularity do not moderate the effect of manifestos on legislative attention. This might be related to the above-mentioned incremental character of executive popularity in the German context, which makes it relevant to focus on level instead of monthly change.

As a whole, these additional results do not contradict the results from the main article. Due to the highly skewed distribution of differentiated government popularity, these additional models add little value to the analysis and were therefore added as robustness check in this appendix rather than in the main paper.

Table 7: Models with first-differences

	Outcome: Number of laws		
	Model 4	Model 26	Model 27
Gov platform priorities (A)	.028**	.027**	.027**
Cumulative law production	.006	.006	.006
Time	.001	.001	.001
Electoral cycle (ref. routine)			
First 12 months	−.627**	−.63**	−.63**
Last 12 months	.366**	.363**	.362**
Majority in Bundesrat (B)	−.172*	−.162*	−.162*
Coal. ideological range (C)	.005	.005	.005
Coal. divergence of priorities (D)	−.005	−.004	−.004
Europeanization (E)	.001	.002	.002
Budget account balance (t-1) (F)	−.008	−.017	−.017
Gov popularity (t-1)	−.06*		
Delta Popularity		.216**	.252
(A) x Delta Popularity			−.006
Log-likelihood	-7042.08	-7037.66	-7037.56
Observations	7106	7106	7106

Figure 1: Distribution of First differences of Government Popularity

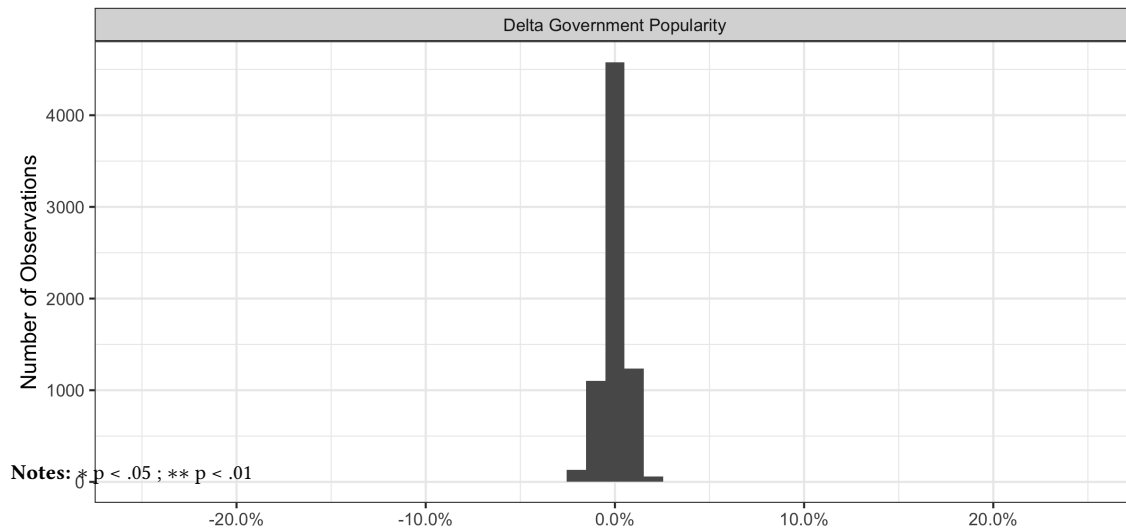
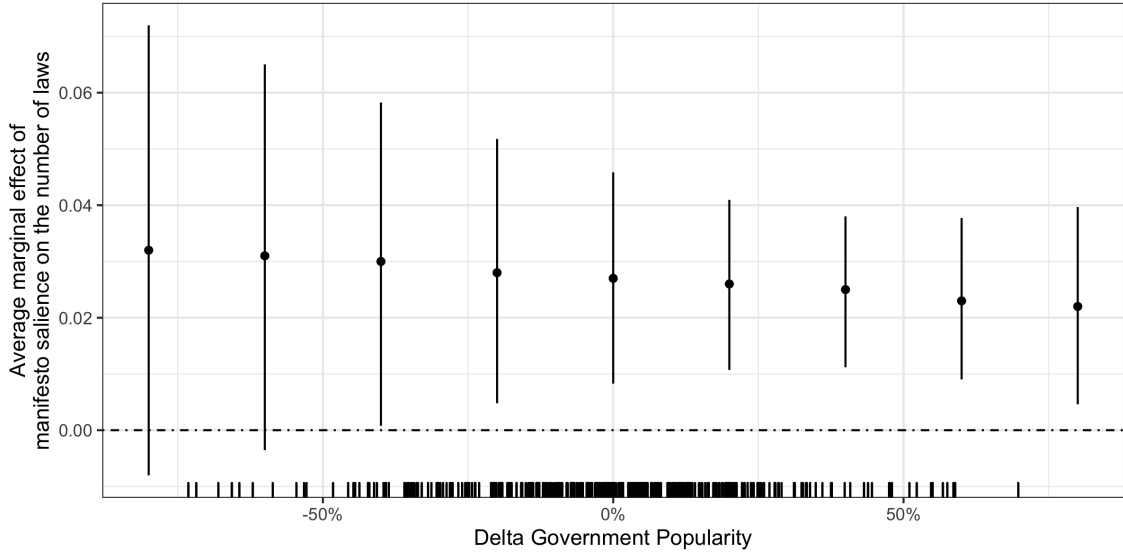


Figure 2: Marginal effect of electoral priorities on legislative attention, for increasing changes in government popularity



8 Exclusion of laws influenced by the EU

The European policy-making process is peculiar in providing the EU with a direct access to domestic legislative agendas. European laws are indeed often directives that need to be translated in domestic law. Accordingly, a certain segment of the domestic legislative agenda is essentially determined by EU-level decisions. It is debatable whether laws implementing EU directives should be included into our analysis: a lack of congruence between electoral and legislative matters may then reflect the fact that parties might take into account the distribution of EU and national competences and refrain from pledging policy in areas partially or fully delegated to EU institutions. To sort out this mechanism from the EU constraints effect we are primarily interested in, we run the analysis excluding the laws transposing EU law. In doing so, we isolate the segment of the legislative agenda institutionally controlled by the national government.

We replicated the results of the main specification using panel negative-binomial (Model 28), as well as the alternative specifications presented earlier in this appendix (Model 29-34). Our findings show that excluding Europeanized laws from the analysis does not affect the strong and significant relationship between electoral and legislative priorities. This confirms that the findings in the main article are not driven by parties' consideration of EU prerogatives.

Table 8: Removing laws influenced by the EU

	Outcome: Number of laws						
	(28)	(29)	(30)	(31)	(32)	(33)	(34)
Gov platform priorities (A)	0.028**	0.032**	0.026**	0.040**	0.029**	0.025**	0.026*
Cumulative law production	0.006	0.040**	0.007**	0.045**	0.008*	0.034**	0.007°
Time	0.001	-0.0002	0.002**	-0.0003	0.001*	0.0001	0.002**
Electoral cycle (ref. routine)							
First 12 months	-0.627**	-0.448**	-0.547**	-0.402**	-0.548**	-0.430**	-0.568**
Last 12 months	0.366**	0.008	0.289**	-0.030	0.278**	-0.003	0.270**
Gov popularity (t-1)	-0.060*	-0.044	-0.057*	-0.040	-0.054	-0.055	-0.051
Majority in Bundesrat (B)	-0.172*	-0.133*	-0.080	-0.152*	-0.108	-0.175*	-0.123
Coal. ideological range (C)	0.005°	0.004*	0.003	0.005°	0.003	0.006°	0.007*
Coal. divergence of priorities (D)	-0.005	-1.982*	-0.174	-1.900	0.184	-1.072	0.584
Europeanization (E)	0.001	-0.148	-1.214**	-0.125	-1.139**	-0.874**	-1.686**
Budget account balance (t-1) (F)	-0.008	0.001	-0.018	0.009	-0.010	0.023	0.015
Model	FE Poisson	Poisson	Poisson	NegBin	NegBin	ZI	ZI
Topic Fixed effects	No	No	Yes	No	Yes	No	Yes
Log-likelihood	-5741.61	-6356.36	-6092.1	-5961.46	-5797.47	-5905.49	-5724.99
Observations	7,467	7,467	7,467	7,467	7,467	7,467	7,467

Notes: ° p < .1 ; * p < .05 ; ** p < .01