

Online Appendix

When does she rebel? How gender affects deviating legislative behavior

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1 Descriptive Statistics

Variable	N	Mean	SD	Min	Max
Deviation	1127393	0.02		0.00	1.00
District mandate	1127393	0.48	0.50	0.00	1.00
Election period	1127393	11.32		1.00	17.00
Electoral safety	953010	0.87	0.22	0.00	1.00
Female	1127393	0.22		0.00	1.00
Female party leader	1110047	0.17		0.00	1.00
Feminine policy area	1127393	0.37		0.00	1.00
Focus area	988274	0.02		0.00	1.00
Free vote	1127393	0.06		0.00	1.00
Government participation	1110047	0.58		0.00	1.00
Ideological extremity	1093350	3.21	3.73	0.00	25.00
Large party	1127393	0.79		0.00	1.00
Office	1127393	0.26		0.00	1.00
Percentage of women	1109863	21.53	14.71	0.00	59.20
Seniority (in months)	1127393	106.37	87.81	0.00	562.00

Table A1: Descriptives

Policy area (pre-coded)	Feminine policy area
Agriculture	0
Banking, finance, and domestic commerce	0
Civil rights, minority issues, and civil liberties	1
Community development and housing issues	0
Constitutional amendments	0
Defense	0
Education	1
Energy	0
Environment	0
Foreign trade	0
Government operations	0
Healthcare	1
International affairs and foreign aid	0
Labor, employment, and immigration	0
Law, crime, and family issues	1
Macroeconomics (including budget)	0
Media	0
Other, miscellaneous, and human interest	0
Public lands and water management	0
Reunification	0
Social welfare	1
Space, science, technology and communications	0
State and local government administration	0
Transportation	0

Table A2: Feminine policy area

Figure A1: Electoral safety

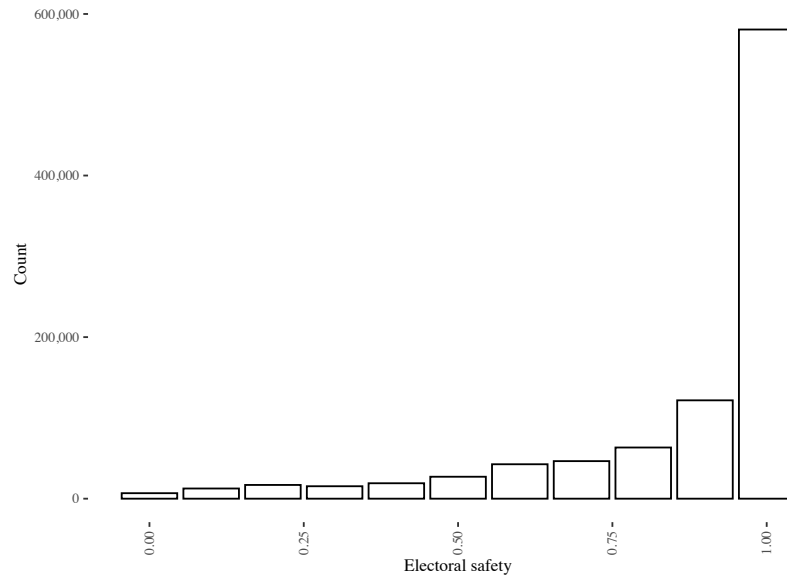
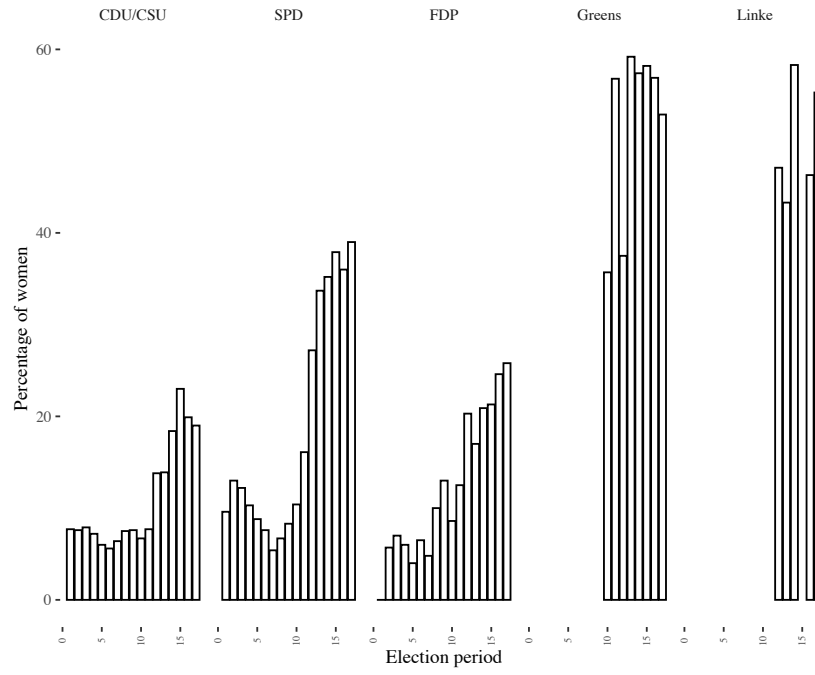


Figure A2: Percentage of women in parliament within party, per election period



2 Robustness Checks

Table A3: Robustness checks, based on Model 1

	Model 1	Model A1	Model A2	Model A3	Model A4	Model A5
Female	0.04* (0.02)	0.04* (0.02)	0.04* (0.02)	0.05* (0.02)	0.19*** (0.04)	0.09*** (0.02)
Electoral safety	-0.40*** (0.04)	-0.40*** (0.04)	-0.40*** (0.04)	-0.40*** (0.04)	-0.40*** (0.04)	-0.39*** (0.04)
Feminine policy area	0.32*** (0.02)	0.32*** (0.02)	0.32*** (0.02)	0.32*** (0.02)	0.32*** (0.02)	0.32*** (0.02)
CDU/CSU	0.03 (0.03)	0.02 (0.03)	0.03 (0.03)	0.02 (0.03)	0.03 (0.03)	0.05 (0.03)
FDP	0.28*** (0.04)	0.28*** (0.04)	0.28*** (0.04)	0.28*** (0.04)	0.28*** (0.04)	0.27*** (0.04)
Greens	0.00 (0.06)	0.00 (0.06)	0.00 (0.06)	0.00 (0.06)	0.03 (0.06)	0.25*** (0.07)
Left	-0.33*** (0.05)	-0.33*** (0.05)	-0.33*** (0.05)	-0.33*** (0.05)	-0.31*** (0.05)	-0.33*** (0.05)
Government participation	-0.49*** (0.02)	-0.49*** (0.02)	-0.49*** (0.02)	-0.49*** (0.02)	-0.49*** (0.02)	-0.49*** (0.02)
Percentage of women in party	0.01*** (0.00)	0.01*** (0.00)	0.01*** (0.00)	0.01*** (0.00)	0.01*** (0.00)	0.01*** (0.00)
Free vote	1.73*** (0.02)	1.73*** (0.02)	1.73*** (0.02)	1.73*** (0.02)	1.73*** (0.02)	1.73*** (0.02)
Seniority (in years)	0.01*** (0.00)	0.01*** (0.00)	0.01*** (0.00)	0.01*** (0.00)	0.01*** (0.00)	0.01*** (0.00)
Office	-0.40*** (0.02)	-0.40*** (0.02)	-0.40*** (0.02)	-0.40*** (0.02)	-0.40*** (0.02)	-0.40*** (0.02)
District mandate	0.05** (0.02)	0.05** (0.02)	0.05** (0.02)	0.05** (0.02)	0.06** (0.02)	0.05** (0.02)
Focus area	0.40*** (0.05)	0.40*** (0.05)	0.40*** (0.05)	0.40*** (0.05)	0.40*** (0.05)	0.40*** (0.05)
Ideological extremity	-0.01*** (0.00)	-0.01*** (0.00)	-0.01*** (0.00)	-0.01*** (0.00)	-0.01*** (0.00)	-0.01*** (0.00)
Female party leader						-0.11** (0.04)
Female x Government participation				-0.02 (0.04)		
Female x Percentage of women in party					-0.00*** (0.00)	
Female x Female party leader						-0.22*** (0.04)
Constant	-4.44*** (0.07)	-4.14*** (0.17)	-4.44*** (0.07)	-4.44*** (0.07)	-4.48*** (0.07)	-4.46*** (0.07)
AIC	171792.11	171865.79	171792.11	171793.92	171778.12	171754.13
BIC	172144.38	172065.41	172144.38	172157.94	172142.13	172129.89
Log Likelihood	-85866.06	-85915.89	-85866.06	-85865.96	-85858.06	-85845.06
Deviance	171732.11		171732.11	171731.92	171716.12	171690.13
Num. obs.	929460	929460	929460	929460	929460	929460
Num. groups: elecper		15				
Var: elecper (Intercept)		0.42				

***p < 0.001; **p < 0.01; *p < 0.05; †p < 0.1. Entries are standardized coefficients from a logit model. Standard errors in parentheses. Dependent variable is binary: deviation is coded 1. Election period fixed effects are omitted.

Multilevel Model (Model A1). To account for potential variation between electoral periods (13.86 percent), we conducted a multilevel model with observations grouped by election period using R’s lme-4 package (Bates et al. 2015). Introducing a second layer, grouping observations by MPs, to guarantee independence of observations, does not substantially change results.

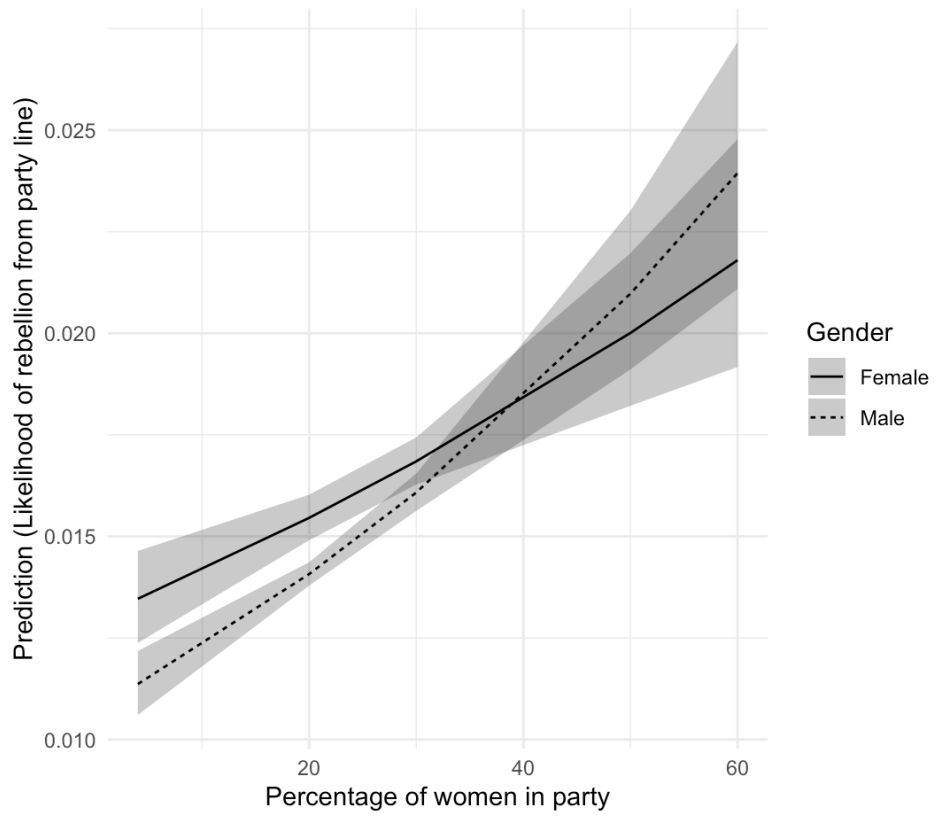
Rare Events Model (Model A2). To address a potential small sample bias, we conduct a rare events model using R’s Zelig package (Choirat et al. 2020). Results remain unchanged.

Interaction Female x Government participation (Model A3). To control for a gendered disciplining effect of government participation, we include an interaction between female and government participation. Results do not suggest significant gender differences in this regard.

Interaction Female x Percentage of women in party (Model A4). Critical mass theory (Kanter 1977; Dahlerup 1998) suggests that members of minority groups are more likely to emancipate themselves from conformity pressures when their group grows in size (i.e., above 30 percent). By contrast, the idea of token women proposes, that in skewed legislatures, women may actually be encouraged to develop legislative agendas that are distinct from those of their male colleagues (Bratton 2005). Testing for the differential effect of women’s share in parliament per party on men and women, we introduce an introduction effect in Model A4. Figure A3 reveals that the interaction effect is significant at lower levels of women’s representation, only. Hence, according to these results, female MPs are more likely to rebel against the party line once they are in a minority status.

Interaction Female x Percentage of women in party (Model A5). Based on literature from organizational studies, women in leadership positions focus on participatory, non-hierarchical and group-oriented practices (see e.g., Due Billing et al. 2000). As a result, we expect parties with a female leader to be more open to multiple viewpoints and thus penalties for MPs associated with deviation should be lower. Female party leader is coded 1 if a woman holds party leadership in the respective election period and 0 otherwise. Expectations are not confirmed, however.

Figure A3: Average marginal effect of female on vote defection at different levels of percentage of women in parties



References

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