

**APPENDIX FOR *MINORITY PARTY CAPACITY IN CONGRESS***

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*Date:* April 23, 2021.

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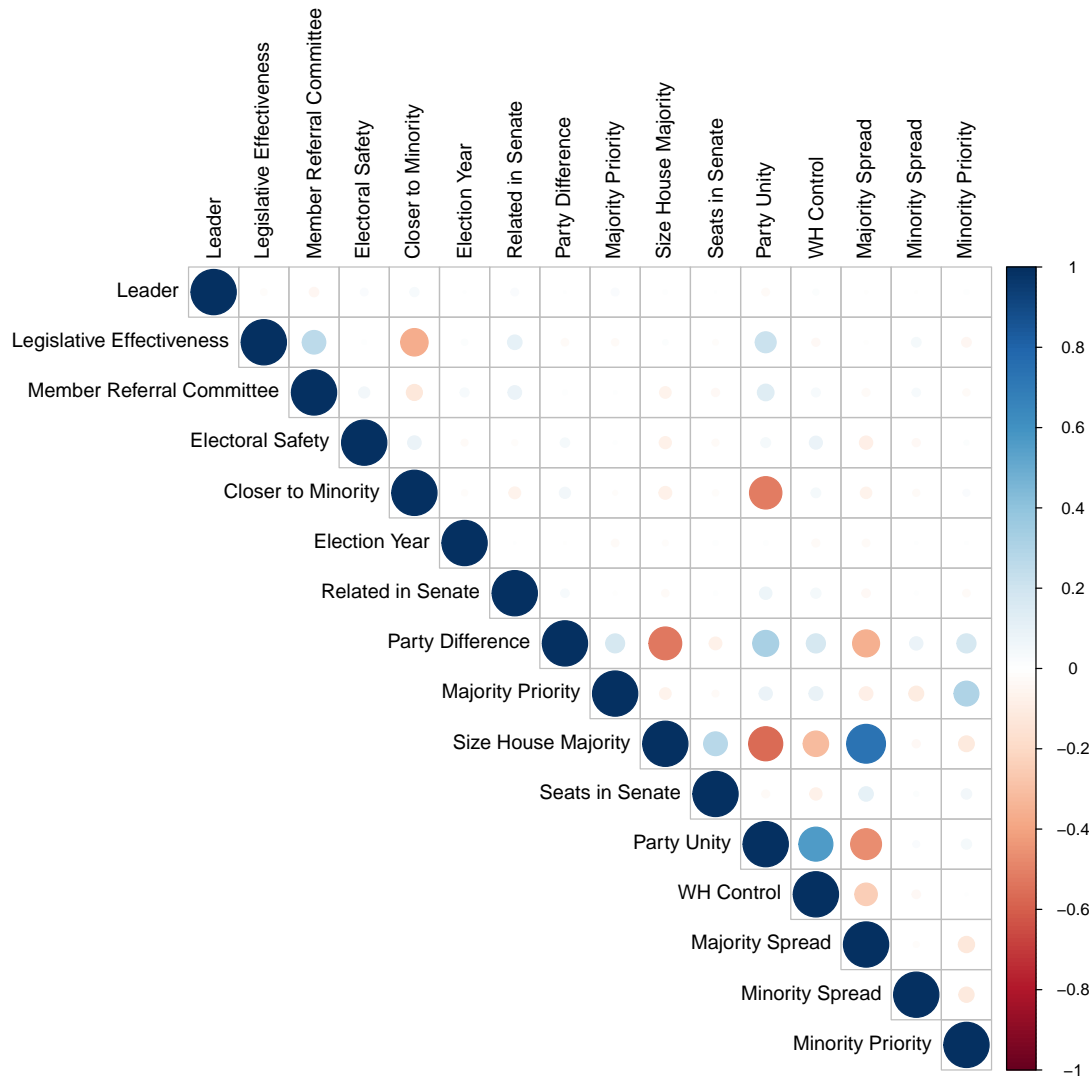
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## THE EFFECTS OF COVARIATES ON RESULTS

We include many variables in our models presented in the main text. As can be seen from Figure A1, the vast majority of variables in our models are not highly correlated. Of the 120 pairwise comparisons presented in Figure A1, only five have a correlation of magnitude  $> 0.5$ : 1) Size House Majority and Party Difference, 2) Party Unity and Closer to Minority, 3) Party Unity and Size House Majority, 4) WH Control and Party Unity, and 5) Majority Spread and Size House Majority. It is thus unlikely that the inclusion of any particular independent variables are introducing bias in our results.

Nevertheless, we also ran regression models building to our full analysis to assuage this potential concern. These results are presented in Table A1. In this table, we sequentially add each set of independent variables (sponsor-level, bill-level, political environment-level) to a bare model including only our main independent variables, until we get to our full model presented in the main text predicting whether bills reached the floor in the House for a vote. As we can see, adding the bill controls substantially changes some of the regression coefficients for the main IVs. This is expected, however, as the bill covariates account for important factors that should affect the probability that a bill reaches the floor.

However, adding additional covariates does not change all of the relationships between the main IVs and the DV, and more importantly does not change the relationships between *other* covariates and the DV.



**Figure A1.** Correlation between the independent variables in the full model

**Table A1.** Logistic regression models predicting whether a bill receives a final passage vote in the House, building from main IVs to the full model.

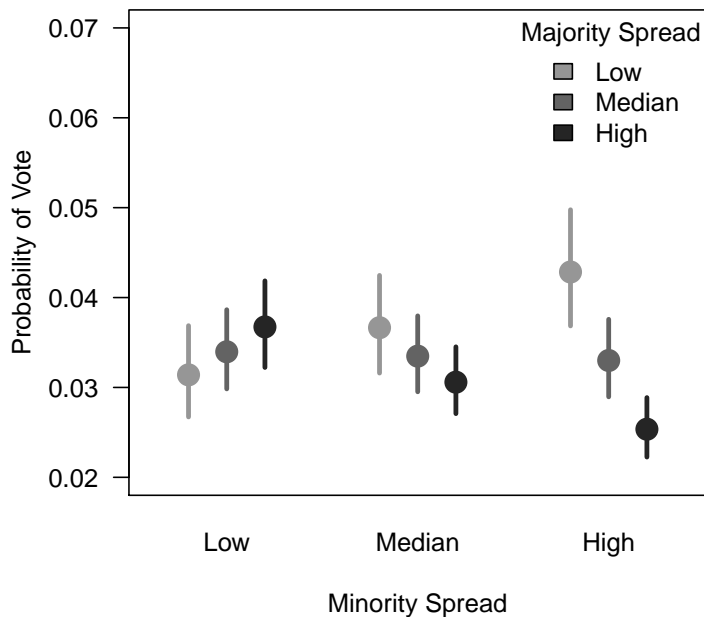
	Main IVs	Sponsor Controls	Bill Controls	Full Model
Majority Spread	0.596 (2.302)	2.851 (2.514)	-10.560*** (2.929)	-10.192*** (2.932)
Minority Spread	-1.966 (2.682)	-2.890 (2.897)	-15.890*** (3.444)	-15.694*** (3.443)
Minority Priority	-0.757 (1.254)	-1.370 (1.344)	-1.593 (1.390)	-1.214 (1.393)
Majority		0.907*** (0.076)	0.366** (0.160)	0.368** (0.160)
Leadership		0.287* (0.158)	0.223 (0.166)	0.245 (0.166)
Legislative Effectiveness		0.211*** (0.009)	0.215*** (0.010)	0.217*** (0.010)
Member Referral Committee		1.077*** (0.056)	0.977*** (0.059)	0.978*** (0.059)
Electoral Safety		-0.004 (0.003)	-0.001 (0.003)	-0.001 (0.003)
Closer to Minority			-0.594*** (0.149)	-0.588*** (0.150)
Election Year			0.327*** (0.052)	0.322*** (0.052)
Related in Senate			1.822*** (0.053)	1.817*** (0.053)
Party Difference			2.348*** (0.291)	2.312*** (0.291)
Majority Priority			-0.190** (0.090)	-0.203** (0.090)
Seats in Senate				0.037*** (0.012)
House Majority Size				-0.005 (0.004)
Majority Spread * Minority Spread	-1.244 (8.617)	-3.767 (9.301)	35.520*** (10.630)	34.614*** (10.631)
Majority Spread * Minority Priority	1.136 (4.232)	3.841 (4.539)	5.659 (4.637)	4.242 (4.652)
Minority Spread * Minority Priority	1.745 (4.815)	5.057 (5.157)	1.648 (5.351)	0.615 (5.361)
Majority Spread * Minority Spread * Minority Priority	-3.999 (15.971)	-16.140 (17.127)	-10.046 (17.472)	-5.931 (17.515)
Constant	-1.766** (0.701)	-3.864*** (0.772)	-0.907 (0.861)	-2.512** (0.976)
Nagelkerke Pseudo R2	0.006	0.192	0.299	0.3
Observations	23,274	22,785	22,785	22,785

Note:

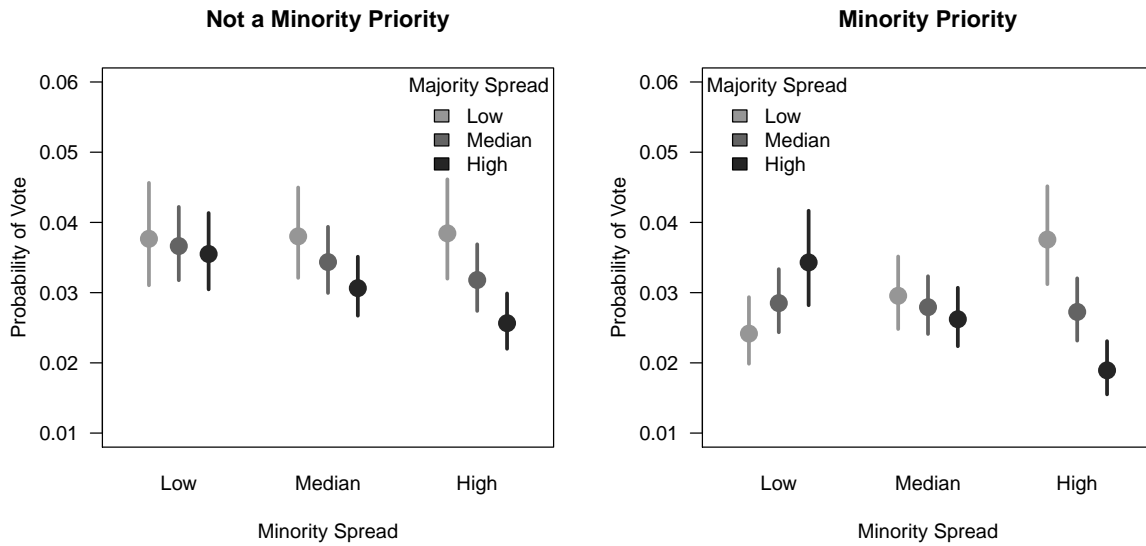
\*p<0.1; \*\*p<0.05; \*\*\*p<0.01

THE EFFECTS OF OVER-TIME VARIATION

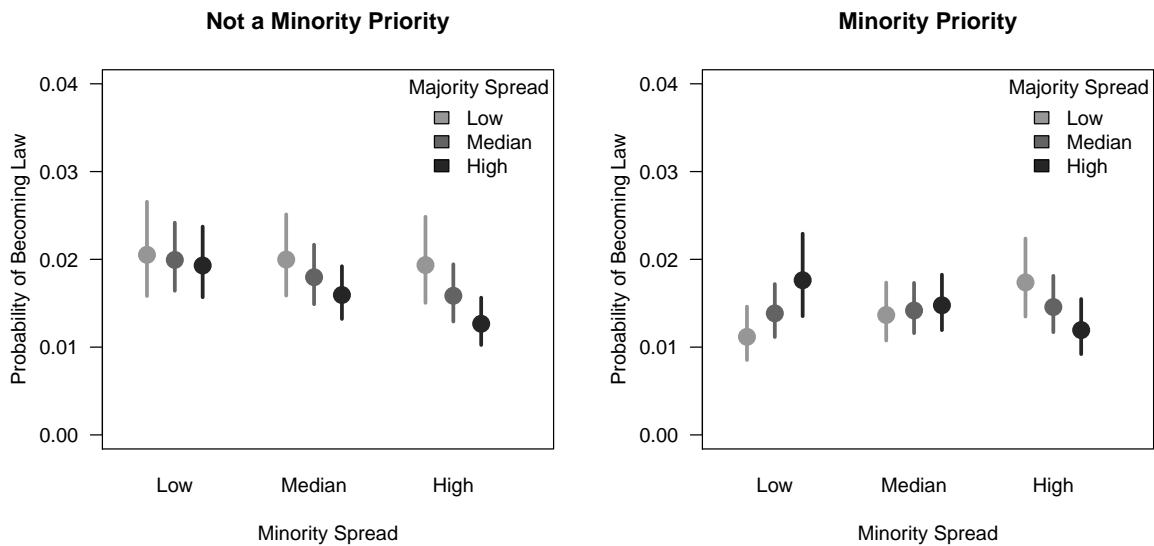
As we mention in the main text, while our Congress-level variables provide a proxy to controlling for over-time variation, they do not do so explicitly. In this section, we present recreations of our figures from the main text, but with our Congress-level variables replaced by fixed effects for Congress, explicitly accounting for variation over time. These results are presented in Figures A2, A3, and A4. These results closely mirror those in the main text.



**Figure A2.** Majority party constraint, minority party cohesion, and the predicted probability that a bill reached a vote, estimated from models including fixed effects by Congress. High and low values are one standard deviation above and below the median value of spread in each party, respectively. Lines are 95% uncertainty estimates.



**Figure A3.** Majority party constraint, and minority party cohesion and motivation, and the predicted probability that a bill reached a vote, estimated from models including fixed effects by Congress. High and low values are one standard deviation above and below the median value of spread in each party, respectively. Lines are 95% uncertainty estimates.



**Figure A4.** Majority party constraint, and minority party cohesion and motivation, and the predicted probability that a bill became law, estimated from models including fixed effects by Congress. High and low values are one standard deviation above and below the median value of spread in each party, respectively. Lines are 95% uncertainty estimates.

## MODELS BY PARTY OF SPONSOR

Results from our regression models presented in the text, alongside a model using bills sponsored by members of the majority or minority party separately, can be found in Table A2. As we can see, the direction, level of significance, and magnitude of our main predictors is similar across all models. The marginal effect of the interaction of our three main independent variables on the probability that bills reached a vote from each of the models in Table A2 can be found in Figure A5; these results are consistent with our theory.

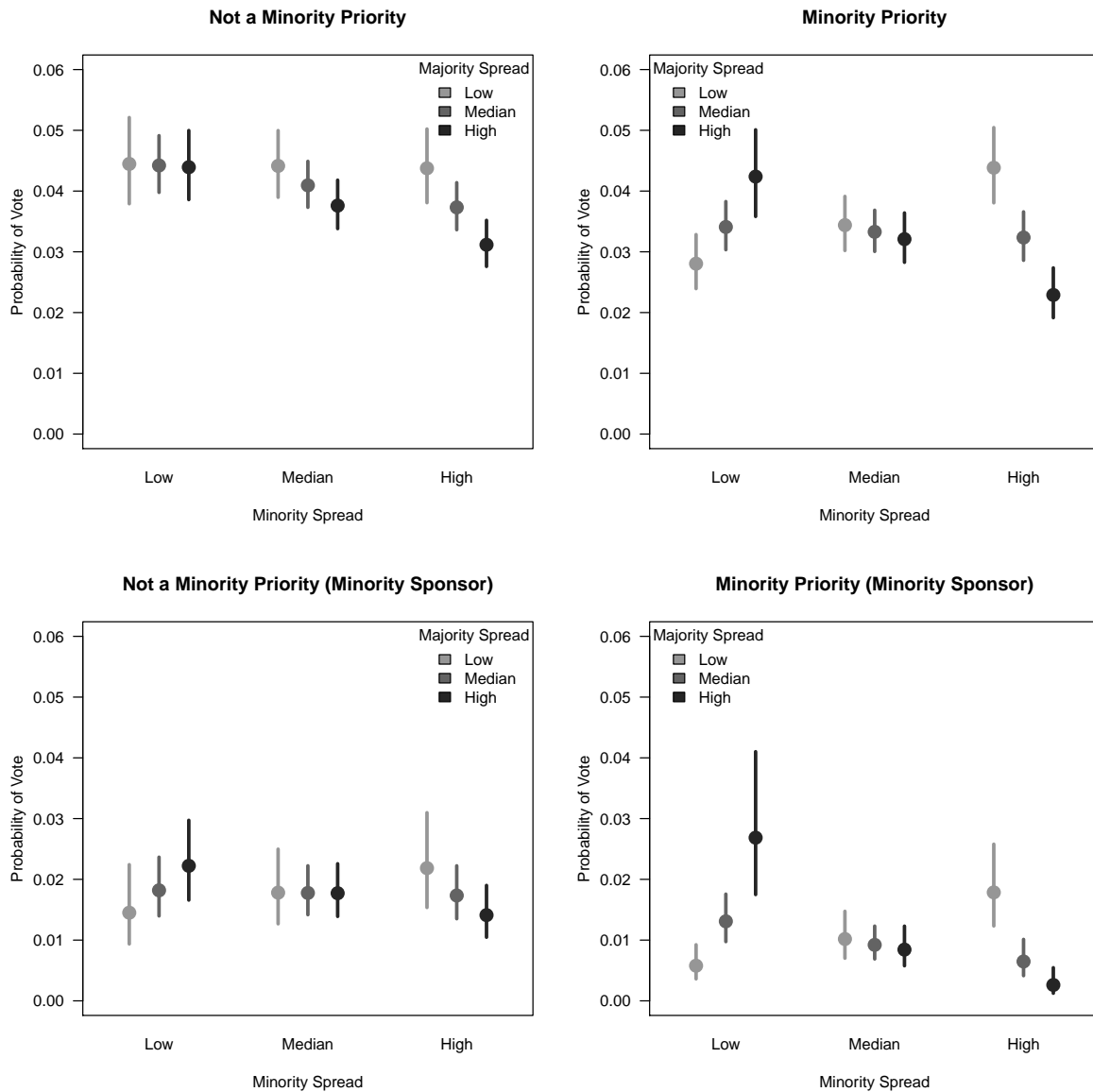


**Table A2.** Logistic regression models predicting whether a bill receives a final passage vote in the House by party of the introducing member.

	All Bills	Minority Sponsor	Majority Sponsor
Majority Spread	3.737* (1.945)	13.411*** (4.847)	1.485 (2.140)
Minority Spread	3.112 (1.955)	12.954*** (4.807)	0.899 (2.152)
Minority Priority	-3.396*** (0.816)	-9.060*** (2.367)	-3.160*** (0.890)
Majority	0.481*** (0.139)		
Leadership	0.238* (0.125)	-0.128 (0.267)	0.321** (0.145)
Legislative Effectiveness	0.193*** (0.007)	1.137*** (0.069)	0.180*** (0.007)
Member Referral Committee	0.926*** (0.043)	0.285*** (0.110)	1.040*** (0.048)
Electoral Safety	0.003 (0.002)	-0.002 (0.007)	0.004* (0.003)
Closer to Minority	-0.675*** (0.132)	0.225 (0.285)	-0.503*** (0.147)
Election Year	0.246*** (0.039)	0.188* (0.107)	0.268*** (0.043)
Related in Senate	1.901*** (0.040)	1.318*** (0.112)	1.989*** (0.043)
Party Difference	0.254* (0.143)	0.488 (0.392)	0.233 (0.156)
Majority Priority	-0.146** (0.064)	-1.039*** (0.263)	-0.067 (0.067)
Seats in Senate	0.024*** (0.007)	0.003 (0.021)	0.024*** (0.008)
House Majority Size	0.0004 (0.001)	0.003 (0.003)	-0.00003 (0.001)
Majority Spread * Minority Spread	-18.153*** (6.785)	-51.701*** (17.217)	-10.617 (7.437)
Majority Spread * Minority Priority	11.119*** (3.074)	38.904*** (9.892)	9.830*** (3.321)
Minority Spread * Minority Priority	11.674*** (2.892)	33.375*** (8.599)	10.735*** (3.146)
Majority Spread * Minority Spread * Minority Priority	-40.608*** (11.007)	-153.809*** (37.760)	-34.954*** (11.817)
Constant	-6.084*** (0.703)	-8.941*** (1.798)	-5.001*** (0.756)
Observations	38,984	14,824	24,160

Note:

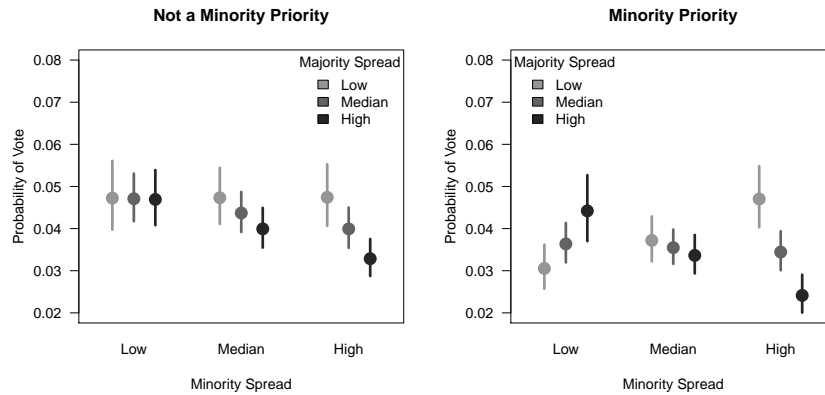
\* p<0.1; \*\* p<0.05; \*\*\* p<0.01



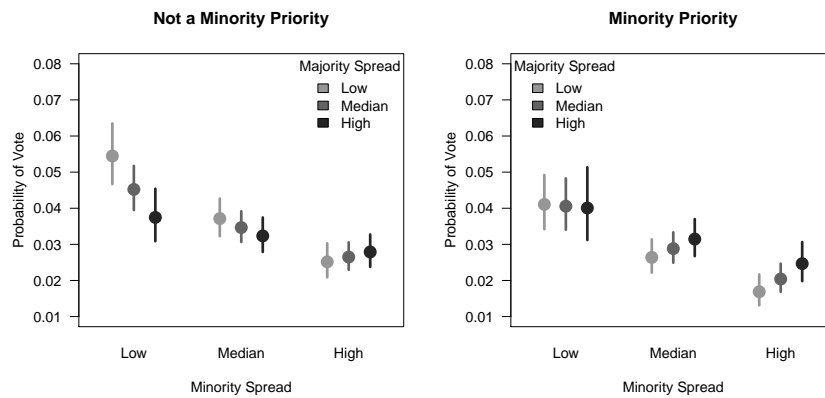
**Figure A5.** Majority party constraint, and minority party cohesion and motivation, and the predicted probability that a bill reached a vote, among all bills and those introduced by members of the minority party. High and low values are one standard deviation above and below the median value of spread in each party, respectively. Lines are 95% uncertainty estimates.

## MODELS BY PERIOD

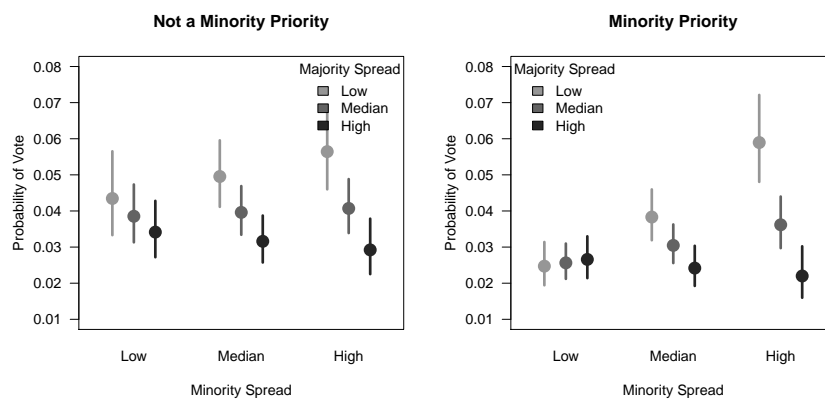
Since the agenda is not invariant across time, we may want to explicitly compare our results between the two periods we study (Democratic control during the 99th-103rd congresses and Republican control during the 104th-109th congresses). As such, we present predicted probabilities plots of the same format as those presented in the text for our three full models predicting the probability a bill reaches a vote and the probability a bill becomes law (among all bills and those already having passed the House) separately for each period (Democratic majority in the 99th-103rd congresses and Republican majority in the 104th-109th congresses). These results are presented alongside those from the main text and are in Figures A6, A7, and A8.



(a) All Bills

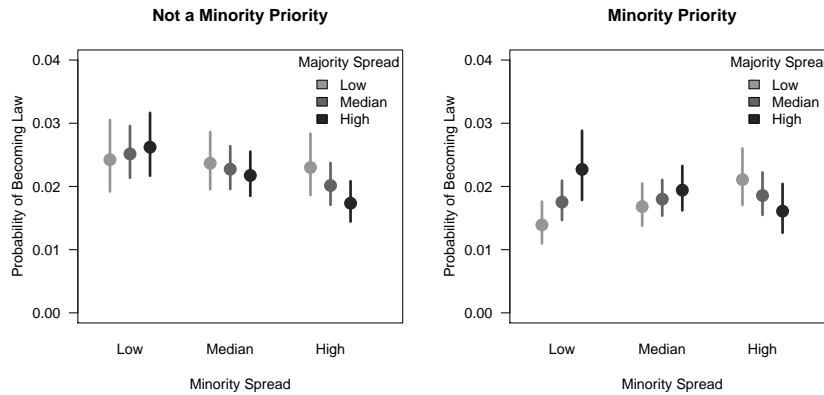


(b) Democratic Majority (99th-103rd)

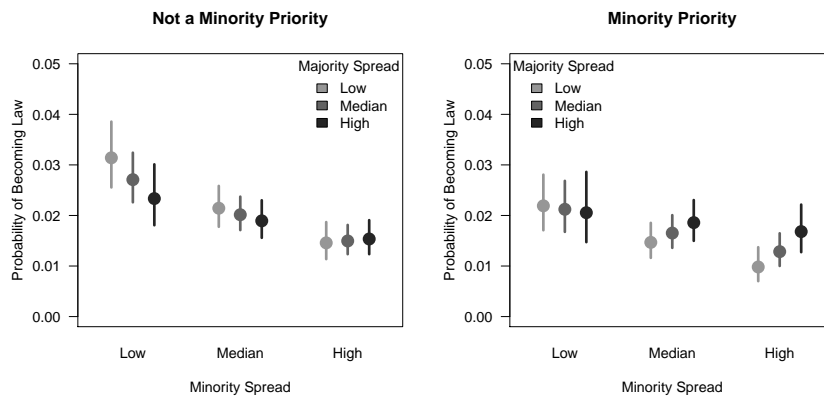


(c) Republican Majority (104th-109th)

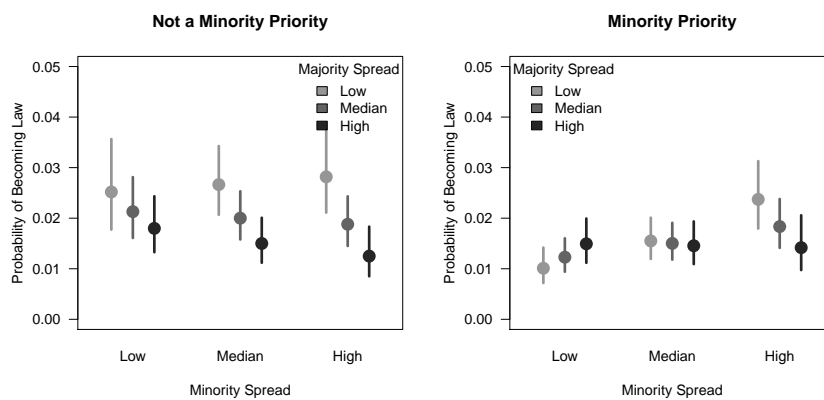
**Figure A6.** Majority party constraint, and minority party cohesion and motivation, and the predicted probability that a bill reaches a final passage vote, for all bills and those in the period controlled by each party. High and low values are one standard deviation above and below the median value of spread in each party, respectively. Lines are 95% uncertainty estimates.



(a) All Bills

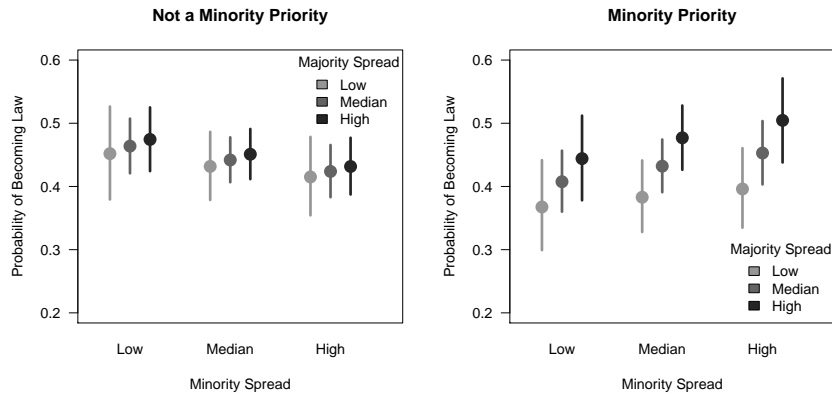


(b) Democratic Majority (99th-103rd)

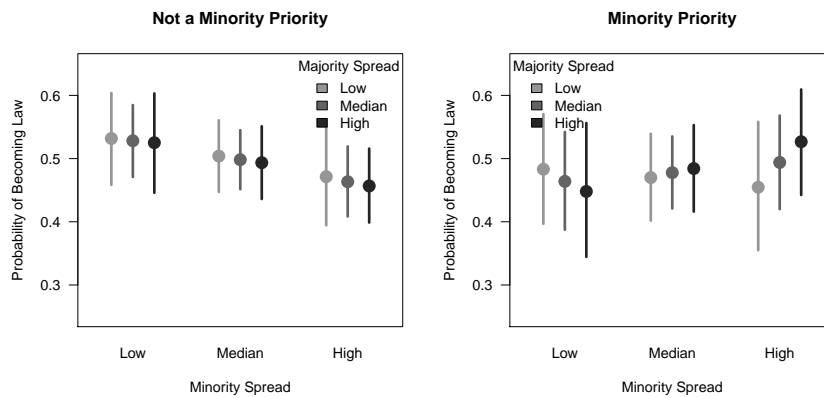


(c) Republican Majority (104th-109th)

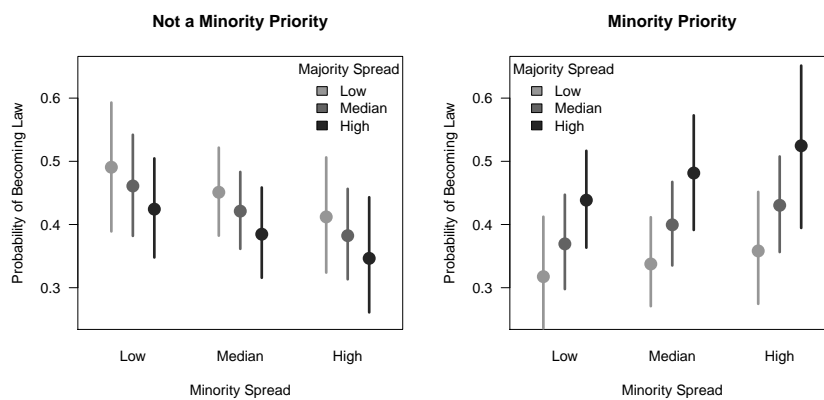
**Figure A7.** Majority party constraint, and minority party cohesion and motivation, and the predicted probability that a bill became law, for all bills and those in the period controlled by each party. High and low values are one standard deviation above and below the median value of spread in each party, respectively. Lines are 95% uncertainty estimates.



(a) All Bills



(b) Democratic Majority (99th-103rd)



(c) Republican Majority (104th-109th)

**Figure A8.** Majority party constraint, and minority party cohesion and motivation, and the predicted probability that a bill became law, among those already passing the House, by the period controlled by each party. High and low values are one standard deviation above and below the median value of spread in each party, respectively. Lines are 95% uncertainty estimates.

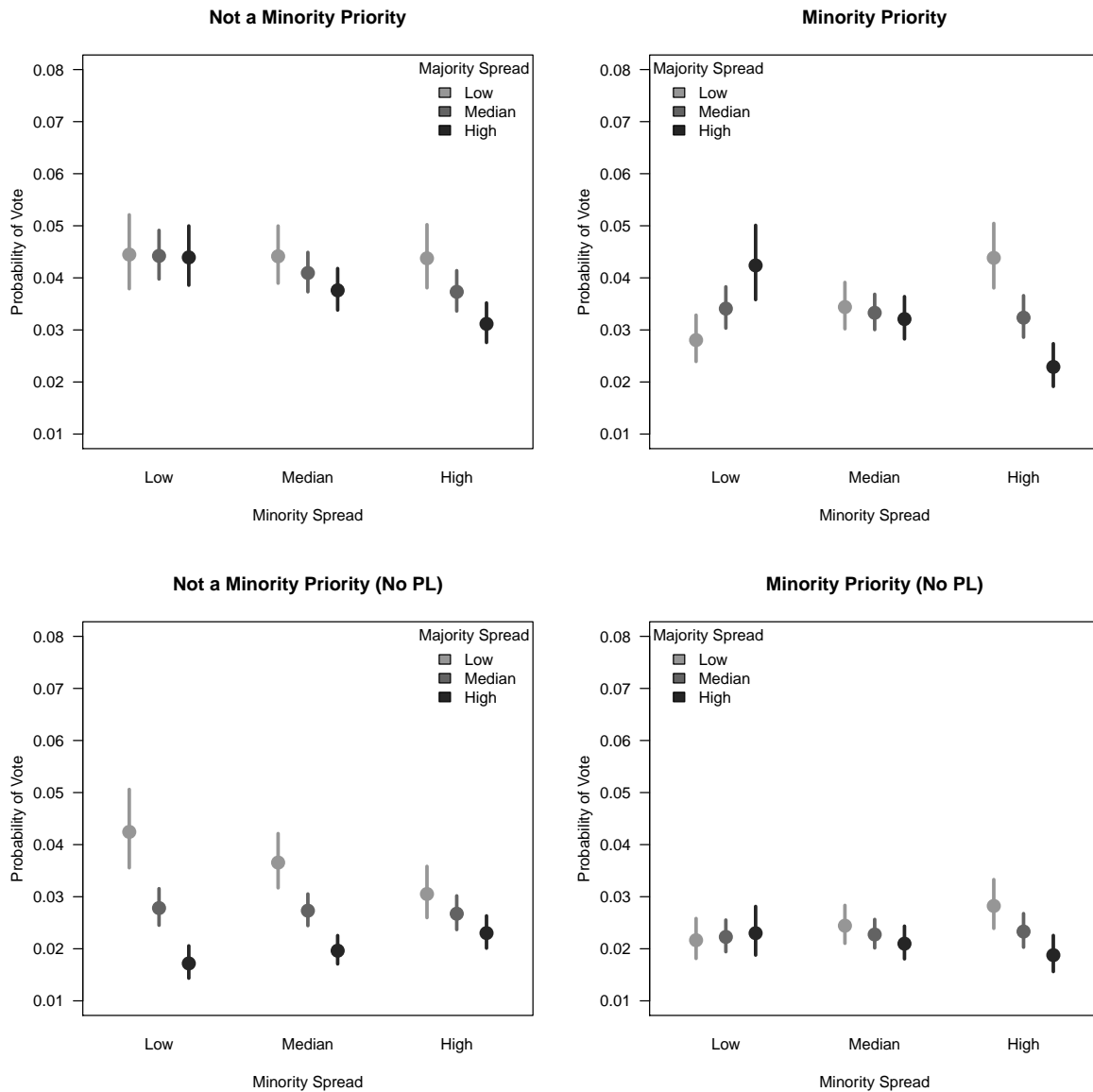
## CUTTING PUBLIC LANDS BILLS

While we remove private bills and those without substantive content—using the Congressional Bills Project data—from our analysis, readers may disagree that public lands bills contain substantive content. Further, such bills are the most common bills to reach the floor in the House. In order to demonstrate this is not a problem for our analysis, we present the full model alongside a model that is estimated on all bills *except* those dealing with public lands in Table A3. As we can see, the regression coefficients for our main IVs (and the interactions between them) largely have both the same direction and *greater* magnitude in our model cutting out public lands bills compared to the full model. As the full model provides evidence in favor of our theory, the models in Table A3 show that removing public lands bills does not change our conclusions. We also show predicted probabilities of a bill reaching a vote in these models in Figure A9. While slightly different than the full model, the results when removing public lands bills fit with our theory.

**Table A3.** Logistic regression models predicting whether a bill receives a final passage vote in the House.

	Full Model	No Public Lands
Majority Spread	3.737* (1.945)	-12.663*** (2.303)
Minority Spread	3.112 (1.955)	-9.275*** (2.199)
Minority Priority	-3.396*** (0.816)	-5.181*** (0.906)
Majority	0.481*** (0.139)	0.647*** (0.157)
Leadership	0.238* (0.125)	0.348** (0.140)
Legislative Effectiveness	0.193*** (0.007)	0.202*** (0.008)
Member Referral Committee	0.926*** (0.043)	1.177*** (0.051)
Electoral Safety	0.003 (0.002)	0.004 (0.003)
Closer to Minority	-0.675*** (0.132)	-0.814*** (0.145)
Election Year	0.246*** (0.039)	0.294*** (0.044)
Related in Senate	1.901*** (0.040)	2.038*** (0.045)
Party Difference	0.254* (0.143)	-0.332** (0.159)
Majority Priority	-0.146** (0.064)	0.043 (0.067)
Seats in Senate	0.024*** (0.007)	0.027*** (0.008)
House Majority Size	0.0004 (0.001)	0.0005 (0.001)
Majority Spread * Minority Spread	-18.153*** (6.785)	34.242*** (7.787)
Majority Spread * SOTU Mention	11.119*** (3.074)	18.408*** (3.441)
Minority Spread * SOTU Mention	11.674*** (2.892)	16.360*** (3.179)
Majority Spread * Minority Spread * SOTU Mention	-40.608*** (11.007)	-59.865*** (12.038)
Constant	-6.084*** (0.703)	-2.494*** (0.802)
Nagelkerke Pseudo R2	0.313	0.355
Observations	38,984	36,107
Note:	* p<0.1; ** p<0.05; *** p<0.01	

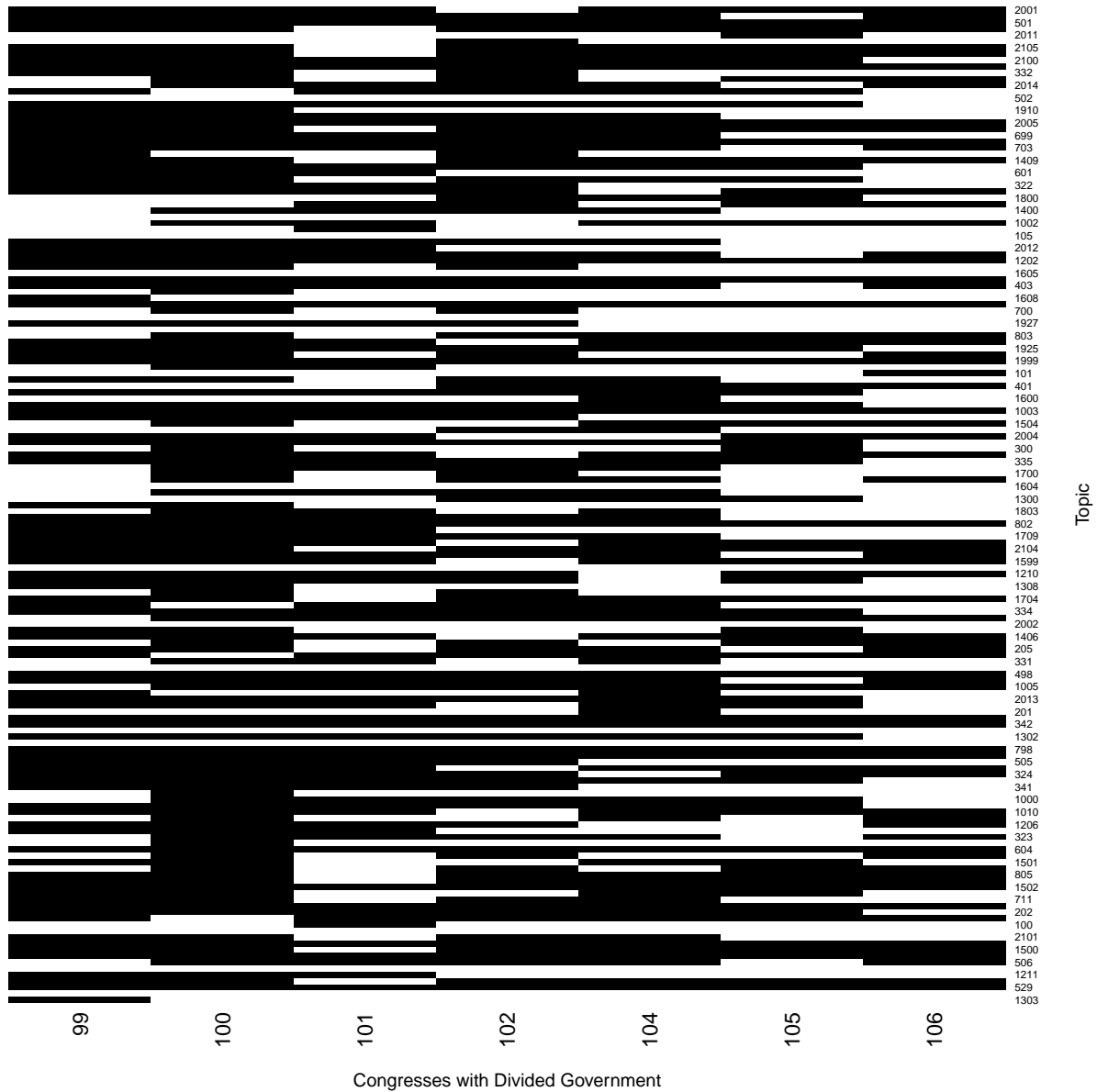




**Figure A9.** Majority party constraint, and minority party cohesion and motivation, and the predictive probability that a bill reached a vote, among all bills and all bills except those dealing with public lands. High and low values are one standard deviation above and below the median value of spread in each party, respectively. Lines are 95% uncertainty estimates.

## MINORITY PRIORITIES OVER TIME

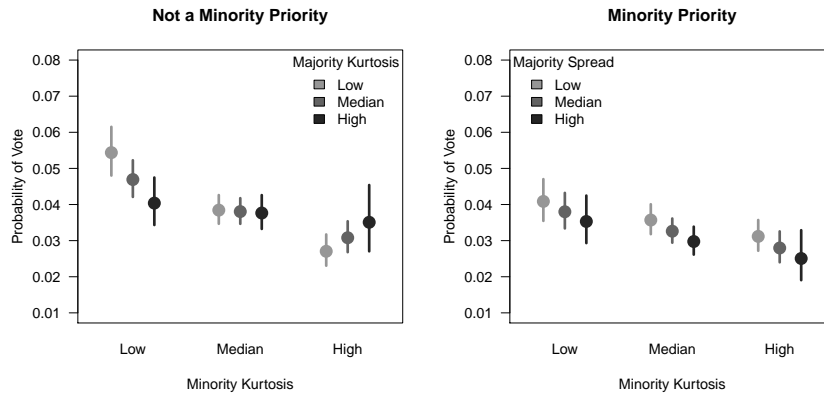
Readers may be interested in the stability (or potential lack thereof) of minority party priorities over time—in terms of which issues are mentioned in the State of the Union Address in congresses with divided government. We present these in Figure A10. As we can see, there are many topics that are consistently mentioned over time. The mean number of congresses in which a topic was mentioned was 2.74 (median, 2), and 10% of issues were mentioned in *each* of the congresses.



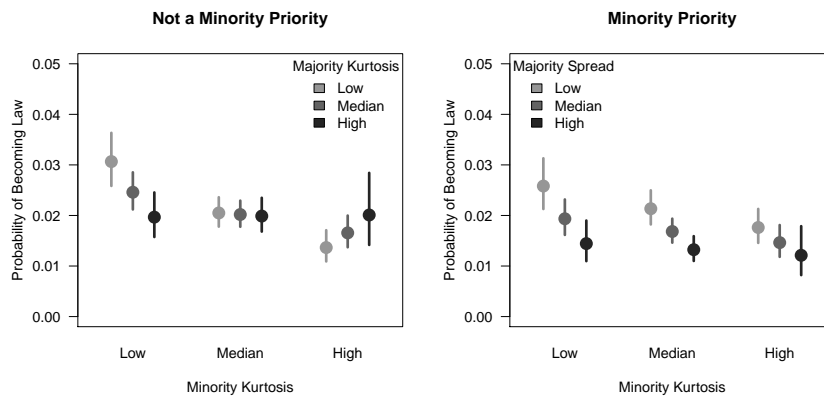
**Figure A10.** Heatmap of minority party priorities in each Congress with divided control of the House and the White House. Black rectangles indicate that an issue was mentioned in a specific Congress.

## AN ALTERNATE MEASURE OF ISSUE PREFERENCES BY PARTY

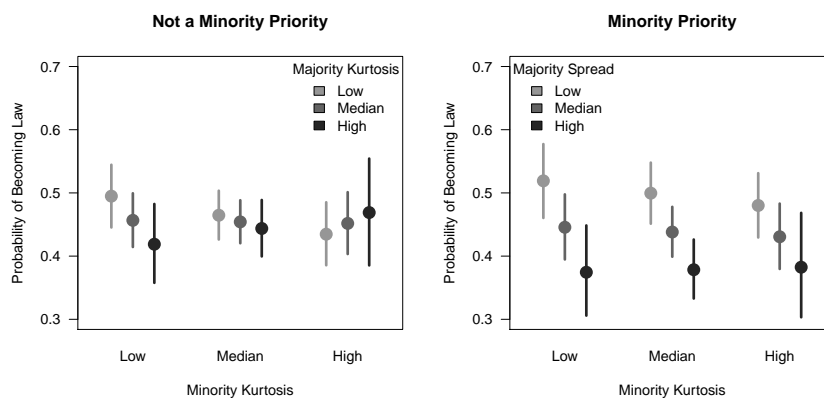
Because parties are sometimes heavily influenced by the more ideological extreme members of their parties, we also estimated models using the kurtosis of the distribution of preferences in each party over each issue in each period, rather than the standard deviation (our measure of spread in the main text). We present the predicted probability that bills reached a vote (or became law) as a function of changes in the interaction between majority and minority party kurtosis and whether each issue was a minority party priority in Figure A11.



(a) Probability of Vote



(b) Probability of Becoming Law



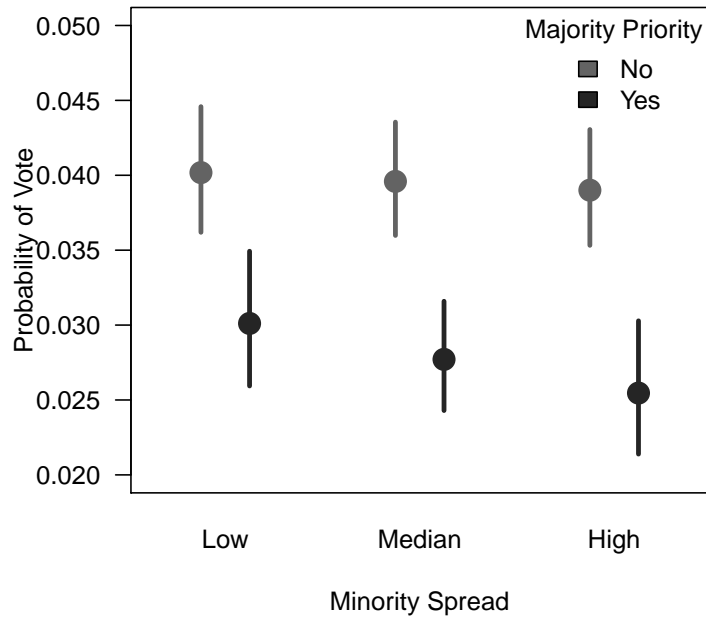
(c) Probability of Becoming Law (Bills that Passed the House)

**Figure A11.** Predicted likelihoods that a bill reached a vote or became law, as a function of the kurtosis of the distributions of preferences in each party on each issue and whether each issue was a priority for the minority party. High and low values are one standard deviation above and below the median value of kurtosis in each party, respectively. Lines are 95% uncertainty estimates.

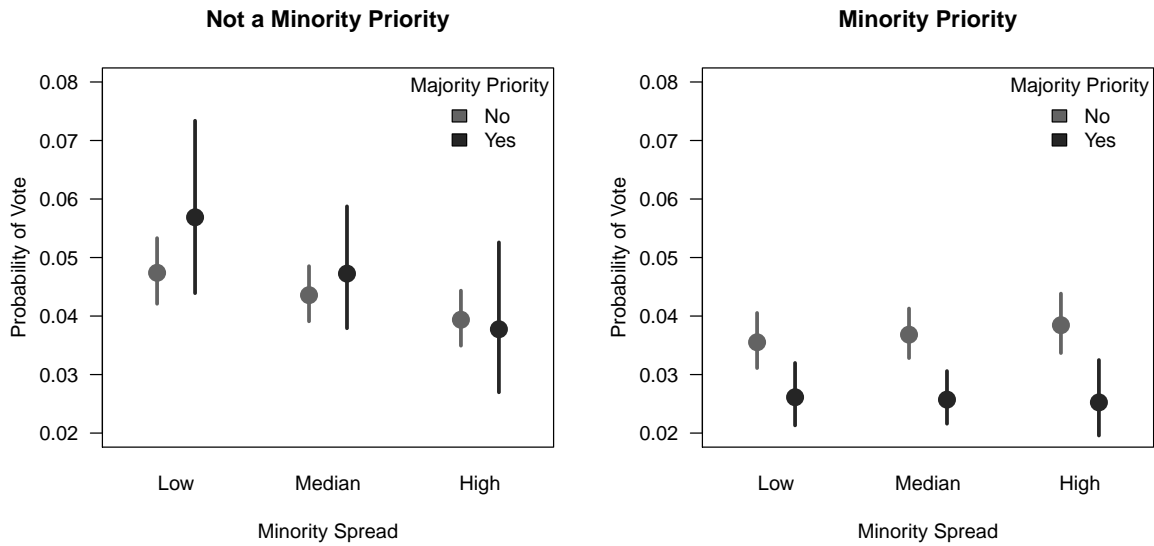
## USING MAJORITY PARTY PRIORITIES INSTEAD OF MAJORITY PARTY SPREAD

As we mention in the main text, there are many possible ways to measure the *constraints* imposed on the majority that create *opportunities* for the minority. In the main text, we use our measure of *Majority Spread* to operationalize this concept. Here, we use an alternate measure: *Majority Priority*, a dummy variable we use in our main text models for when an issue topic is a priority for the majority party. According to our theory, issues that are *not* a priority for the majority mean the majority is relatively more constrained, thus presenting an opportunity for the minority to exert influence on legislation. We present recreations of figures from the main text using this measure in Figures A12-A14.

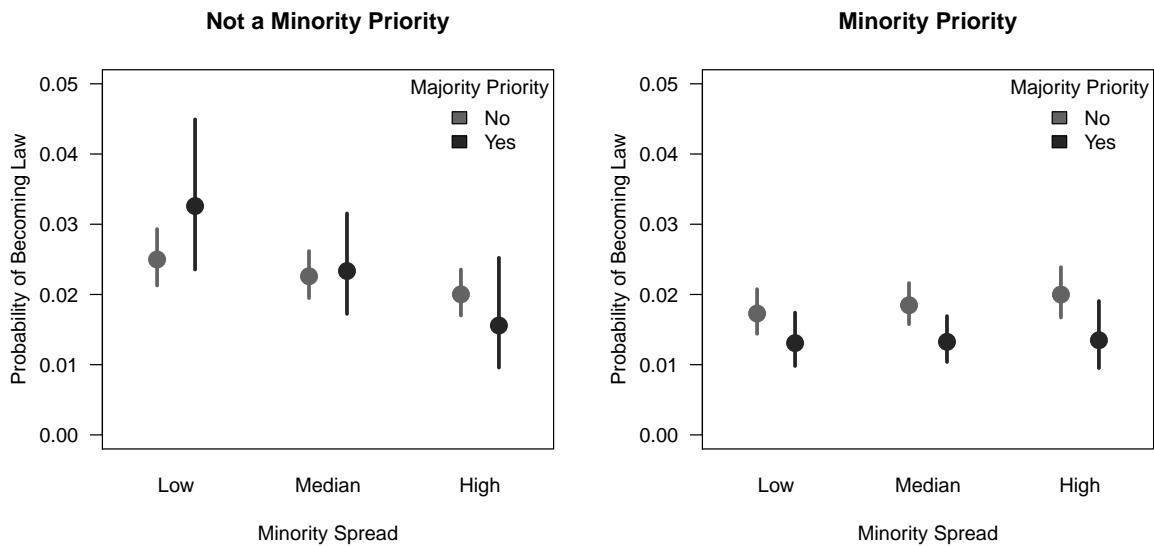
The results largely match those in the main text. In Figure A12, we can see when we interact *Minority Spread* and *Majority Priority*, issues that are priorities for the majority are less likely to receive a vote, fitting with our theory. The results also fit our theory when we add *Minority Priority* to the three-way interaction shown in Figure A13. As expected, we only see that majority party constraint increases the probability of reaching a vote on issues that are a priority for the minority party. The results of our three-way interaction also hold when predicting which bills become law in Figure A14.



**Figure A12.** Majority party constraint, minority party cohesion, and the predicted probability that a bill reached a vote, among all bills. High and low values are one standard deviation above and below the median value of spread in each party, respectively. Lines are 95% uncertainty estimates. Here, the dummy variable for majority priority is used as our measure of majority party constraint.



**Figure A13.** Majority party constraint, and minority party cohesion and motivation, and the predicted probability that a bill reached a vote, among all bills. High and low values are one standard deviation above and below the median value of spread in each party, respectively. Lines are 95% uncertainty estimates. Here, the dummy variable for majority priority is used as our measure of majority party constraint.



**Figure A14.** Majority party constraint, and minority party cohesion and motivation, and the predicted probability that a bill became law, among all bills. High and low values are one standard deviation above and below the median value of spread in each party, respectively. Lines are 95% uncertainty estimates. Here, the dummy variable for majority priority is used as our measure of majority party constraint.