Supplementary Materials

The Gender Gap in Elite-Voter Responsiveness Online

Perspectives on Politics

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Contents

A Public Opinion Data

Although all surveys used throughout the analysis were conducted by YouGov, the wording, date, and surveys differ in subtle ways. First, surveys conducted in the US require that respondents select only one issue that they identify as the most important issue facing the country. Surveys in the UK allow respondents to select up to three of the most important issues identified by the respondent. For this reason, I do not combine the two styles of surveys in the analysis and cross-country comparisons (i.e between Figures 1 and 2) should be made with caution.

The wording of the surveys was as follows:

1. UK: *"Which of the following do you think are the most important issues facing the country at this time? Please tick up to three."*
2. US: *"Which of these is the most important issue for you? Please note the following answer options were recorded:"*

There were several issues that were available at certain points in time for each of the countries that were combined with higher level issues. For example, "The War in Afghanistan" is a sub-issue of defense. An exhaustive list of the combinations that were made can be found below. All other issues that were options in the surveys reflect the issues used in the main text.

A..1 UK Survey Data

1. "Britain leaving the EU" → "International Affairs"
2. "Defense and security" → "Defense"
3. "Defense and terrorism" → "Defense"
4. "Afghanistan" → "Defense"

US Survey Data

1. "National Security and Foreign Policy" → "Defense"
2. "The war in Afganistan" → "Defense"
3. "Terrorism" → "Defense"
4. "Gun control" → "Crime"
5. "Crime and criminal justice reform" → "Crime"
6. "Medicare" → "Health"
7. "Health care" → "Health"
8. "Jobs and the economy" → "Economy"
9. "Inflation and prices" → "Economy"
10. "Inflation" → "Economy"
11. "Climate change and the environment" → "Environment"
12. "Taxes and government spending" → "Tax"

B Descriptive Statistics for Survey Data

Table 1: Descriptive Statistics for Public Opinion Survey Data

Country	Issue	Gender	Count	Mean	Std.	Min.	25%	50%	75%	Max.
UK	Crime	Men	182	0.19	0.06	0.09	0.14	0.19	0.23	0.38
UK	Crime	Women	182	0.19	0.07	0.07	0.14	0.20	0.24	0.39
UK	Defense	Men	182	0.11	0.04	0.05	0.08	0.10	0.13	0.25
UK	Defense	Women	182	0.09	0.04	0.03	0.06	0.08	0.12	0.29
UK	Economy	Men	182	0.42	0.12	0.27	0.31	0.40	0.54	0.65
UK	Economy	Women	182	0.36	0.15	0.18	0.22	0.32	0.53	0.61
UK	Education	Men	182	0.12	0.03	0.06	0.10	0.11	0.13	0.24
UK	Education	Women	182	0.16	0.04	0.10	0.13	0.15	0.17	0.32
UK	Environment	Men	182	0.23	0.07	0.08	0.18	0.24	0.28	0.38
UK	Environment	Women	182	0.24	0.08	0.10	0.18	0.25	0.30	0.42
UK	Health	Men	182	0.43	0.11	0.24	0.34	0.44	0.50	0.70
UK	Health	Women	182	0.53	0.11	0.32	0.44	0.55	0.61	0.81
UK	Immigration	Men	182	0.26	0.05	0.13	0.22	0.25	0.29	0.37
UK	Immigration	Women	182	0.24	0.06	0.09	0.20	0.23	0.29	0.41
UK	International Affairs (Brexit)	Men	182	0.51	0.17	0.24	0.32	0.53	0.66	0.77
UK	International Affairs (Brexit)	Women	182	0.46	0.17	0.19	0.26	0.46	0.62	0.73
UK	Tax	Men	182	0.06	0.02	0.02	0.04	0.05	0.06	0.13
UK	Tax	Women	182	0.03	0.02	0.01	0.03	0.03	0.04	0.11
US	Crime	Men	204	0.06	0.02	0.02	0.04	0.05	0.07	0.15
US	Crime	Women	204	0.06	0.02	0.02	0.05	0.06	0.08	0.14
US	Defense	Men	204	0.03	0.03	0.00	0.00	0.03	0.05	0.09
US	Defense	Women	204	0.04	0.04	0.00	0.00	0.04	0.06	0.12
US	Economy	Men	204	0.19	0.04	0.09	0.16	0.18	0.21	0.30
US	Economy	Women	204	0.14	0.04	0.08	0.11	0.13	0.16	0.25
US	Education	Men	204	0.05	0.01	0.02	0.04	0.05	0.05	0.09
US	Education	Women	204	0.06	0.01	0.03	0.05	0.06	0.07	0.10
US	Environment	Men	204	0.11	0.03	0.06	0.09	0.11	0.13	0.16
US	Environment	Women	204	0.11	0.03	0.05	0.09	0.11	0.13	0.21
US	Health	Men	204	0.18	0.03	0.11	0.16	0.18	0.20	0.29
US	Health	Women	204	0.24	0.04	0.13	0.22	0.24	0.26	0.34
US	Immigration	Men	204	0.12	0.04	0.03	0.09	0.12	0.15	0.22
US	Immigration	Women	204	0.09	0.03	0.03	0.06	0.09	0.12	0.16
US	Tax	Men	204	0.06	0.04	0.01	0.03	0.04	0.09	0.13
US	Tax	Women	204	0.04	0.02	0.01	0.02	0.04	0.06	0.11

C Descriptive Statistics for Twitter Data

The following table presents descriptive statistics for the Twitter data. The unit of analysis is legislator i for issue j at time t. Descriptive statistics only include tweets that address an issue.

Table 2: Descriptive Statistics for UK

Country	Gender	Party	Legislator	Tweets				Observations
			N	mean	std	min	max	N
UK	Female	Conservative	75	1.704769	5.591907	0.0	288.0	182
UK	Female	Democratic Unionist Party	1	1.920330	4.197400	0.0	57.0	182
UK	Female	Green Party	1	3.385714	6.941174	0.0	70.0	182
UK	Female	Independent	2	3.046703	13.828674	0.0	554.0	182
UK	Female	Labour	99	2.525125	7.425026	0.0	267.0	182
UK	Female	Liberal Democrat	8	2.505838	7.004927	0.0	135.0	182
UK	Female	Plaid Cymru	1	2.658242	7.826648	0.0	104.0	182
UK	Female	Scottish National Party	14	2.567425	8.824853	0.0	236.0	182
UK	Female	Sinn Féin	2	2.185440	6.509676	0.0	97.0	182
UK	Female	Social Democratic and Labour Party	1	3.225275	8.573186	0.0	95.0	182
UK	Male	Alliance Party of Northern Ireland	1	3.099451	5.796484	0.0	43.0	182
UK	Male	Conservative	238	1.627844	5.439029	0.0	310.0	182
UK	Male	Democratic Unionist Party	5	0.980659	2.955705	0.0	61.0	182
UK	Male	Independent	1	3.445055	13.352939	0.0	442.0	182
UK	Male	Labour	93	2.273189	6.725655	0.0	213.0	182
UK	Male	Liberal Democrat	4	2.916896	10.687796	0.0	291.0	182
UK	Male	Plaid Cymru	2	2.430220	7.525870	0.0	140.0	182
UK	Male	Scottish National Party	31	2.336813	8.790870	0.0	366.0	182
UK	Male	Sinn Féin	5	1.869231	6.001908	0.0	209.0	182
UK	Male	Social Democratic and Labour Party	1	2.551648	6.750324	0.0	78.0	182
UK	Male	Speaker	1	1.582967	5.151176	0.0	48.0	182

Table 3: Descriptive Statistics for US

Country	Gender	Party	Legislator	Tweets				Observations
			N	mean	std	min	max	N
US	Female	Democratic	88	2.159670	5.539469	0.0	229.0	204
US	Female	Republican	26	1.369400	4.995089	0.0	173.0	204
US	Male	Democratic	169	1.896325	5.339492	0.0	337.0	204
US	Male	Republican	225	1.516296	4.555784	0.0	261.0	204

D Validation of Language Model

To fine-tune the language model, I annotated 7,000 messages according to 9 issues: ('Economy', 'Tax', 'Environment', 'Immigration', 'Defense', 'International Affairs/Brexit', 'Education', 'Health', 'Crime', 'NA'). I then trained the model on these annotated messages, while holding out a test set for validation. Once the optimal hyperparameters for the model were selected using a grid search for weight decay, train/test size, learning rate and epochs, I validated the model's accuracy on the held out test set. Validation included using the fine-tuned model to predict the labels of the annotated messages that had not yet been used as training data. These predicted labels were compared to the labels that were originally annotated.

For validation metrics, I relied on the standard metrics of precision, recall and F1-score. Precision and recall are calculated as follows:

$$\text{Precision} = \frac{\text{True Positives}}{\text{True Positives} + \text{False Positives}}$$

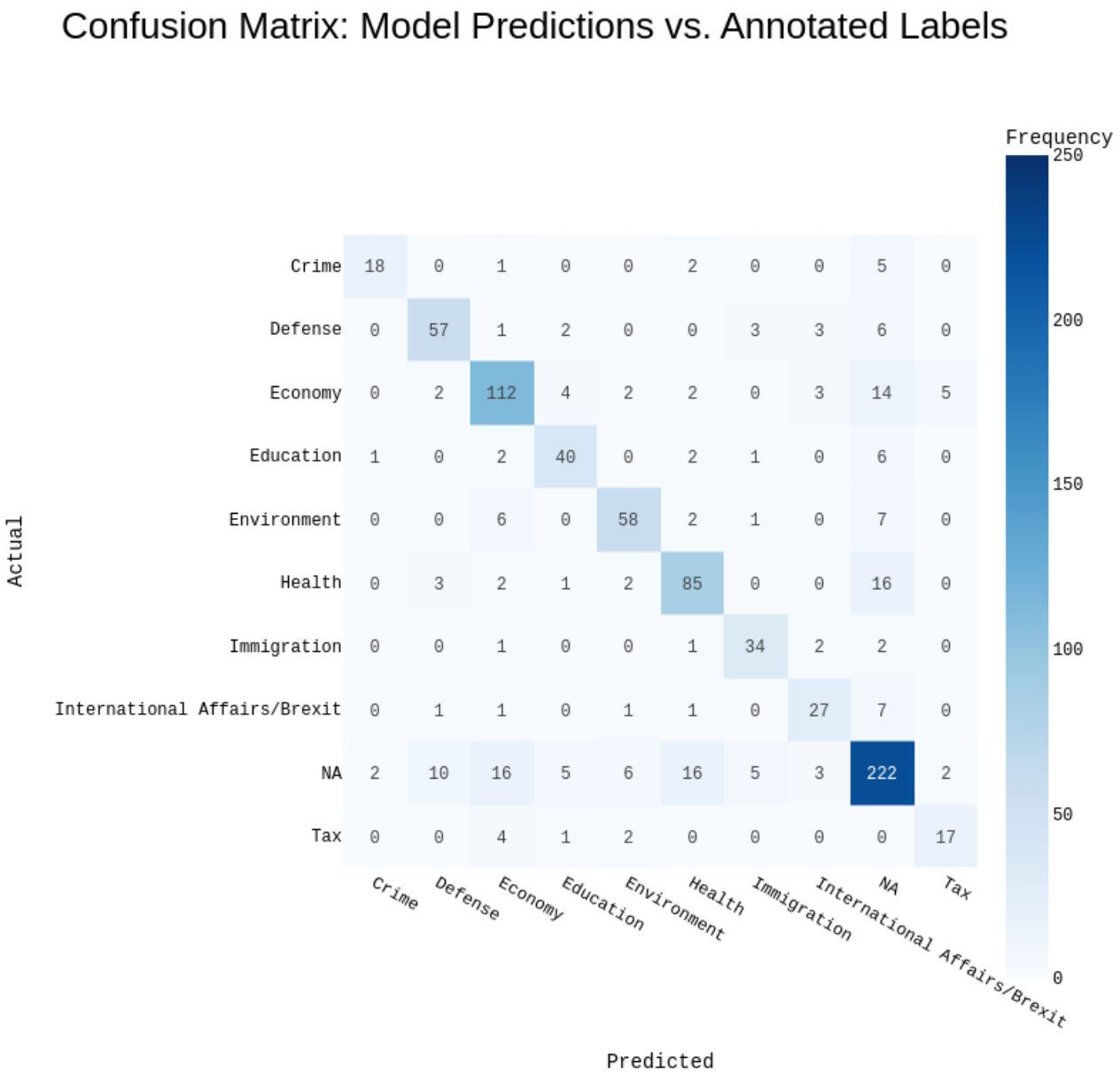
$$\text{Recall} = \frac{\text{True Positives}}{\text{True Positives} + \text{False Negatives}}$$

F1-score, which is a standard metric for quantifying classification accuracy, is the harmonic mean of precision and recall. In addition to the F1 score, in multi-label classification settings, we can also calculate the precision and recall scores for each individual issue. Validation metrics, included multi-label F1 scores and a confusion matrix, are presented below in Table 4 and in Figure 1.

Table 4: Classification Report for Fine-Tuned Language Model

	Precision	Recall	F1-score	Support
Crime	0.86	0.64	0.73	28
Defense	0.76	0.79	0.78	72
Economy	0.77	0.78	0.77	144
Education	0.75	0.77	0.76	52
Environment	0.82	0.78	0.80	74
Health	0.77	0.78	0.77	109
Immigration	0.77	0.85	0.81	40
Brexit/International Affairs	0.71	0.71	0.71	38
NA	0.78	0.77	0.78	287
Tax	0.71	0.71	0.71	24
Accuracy			0.77	868
Macro Avg	0.77	0.76	0.76	868
Weighted Avg	0.77	0.77	0.77	868

Figure 1: Confusion Matrix for Model Predictions



E Granger Causality Tests

The following results are the output from the Granger Causality tests that were conducted to test the direction of the relationship between legislators' tweets and public opinion. Table 5 and Table 6 presents the results of the Granger Causality tests for the US and UK using the pooled data and time series for men and women's priorities and representatives' attention.

Table 5: Granger Causality Test Results – US

Coefficient	Test statistic	p-value	Critical value	df
Men Reps' Attention → Men Reps' Attention	16.2500	0	1.832	(10, 6228)
Men Reps' Attention → Women Reps' Attention	3.1590	0	1.832	(10, 6228)
Men Reps' Attention → Women's Salience	2.784	0.002	1.832	(10, 6228)
Men Reps' Attention → Men's Salience	2.131	0.019	1.832	(10, 6228)
Women Reps' Attention → Men Reps' Attention	6.776	0	1.832	(10, 6228)
Women Reps' Attention → Women Reps' Attention	7.810	0	1.832	(10, 6228)
Women Reps' Attention → Women's Salience	2.336	0.010	1.832	(10, 6228)
Women Reps' Attention → Men's Salience	4.125	0	1.832	(10, 6228)
Women's Salience → Men Reps' Attention	5.066	0	1.832	(10, 6228)
Women's Salience → Women Reps' Attention	4.245	0	1.832	(10, 6228)
Women's Salience → Women's Salience	10.870	0	1.832	(10, 6228)
Women's Salience → Men's Salience	7.622	0	1.832	(10, 6228)
Men's Salience → Men Reps' Attention	5.889	0	1.832	(10, 6228)
Men's Salience → Women Reps' Attention	4.328	0	1.832	(10, 6228)
Men's Salience → Women's Salience	4.089	0	1.832	(10, 6228)
Men's Salience → Men's Salience	10.340	0	1.832	(10, 6228)

Table 6: Granger Causality Test Results – UK

Coefficient	Test statistic	p-value	Critical value	df
Men Reps' Attention → Men Reps' Attention	4.360	0	1.881	(9, 6020)
Men Reps' Attention → Women Reps' Attention	3.328	0	1.881	(9, 6020)
Men Reps' Attention → Women's Salience	4.414	0	1.881	(9, 6020)
Men Reps' Attention → Men's Salience	4.152	0	1.881	(9, 6020)
Women Reps' Attention → Men Reps' Attention	2.996	0.001	1.881	(9, 6020)
Women Reps' Attention → Women Reps' Attention	2.459	0.009	1.881	(9, 6020)
Women Reps' Attention → Women's Salience	1.189	0.297	1.881	(9, 6020)
Women Reps' Attention → Men's Salience	3.304	0	1.881	(9, 6020)
Women's Salience → Men Reps' Attention	5.471	0	1.881	(9, 6020)
Women's Salience → Women Reps' Attention	6.408	0	1.881	(9, 6020)
Women's Salience → Women's Salience	4.731	0	1.881	(9, 6020)
Women's Salience → Men's Salience	10.760	0	1.881	(9, 6020)
Men's Salience → Men Reps' Attention	7.996	0	1.881	(9, 6020)
Men's Salience → Women Reps' Attention	5.381	0	1.881	(9, 6020)
Men's Salience → Women's Salience	4.137	0	1.881	(9, 6020)
Men's Salience → Men's Salience	10.530	0	1.881	(9, 6020)

F VAR Results for US and UK

Pooled estimates and summary statistics for VAR models with three variables (Reps' attention, men's salience and women's salience).

US results for pooled estimates for each of the three variables are presented in Table 7a, Table 7b, Table 8a and Table 8b.

UK results for pooled estimates for each of the three variables are presented in Table 9a, Table 9b, Table 10a and Table 10b.

Table 7: VAR Results for US

(a) US Male Representatives' Attention

Coefficient	Estimate	Std. error	T-stat	P-value
const	0.011933	0.529853	0.023	0.982
L1. Men Rep's Attention	-0.001314	0.035002	-0.038	0.970
L1. Women Rep's Attention	0.044174	0.034708	1.273	0.203
L1.Women's Salience	-0.072309	0.053906	-1.341	0.180
L1.Men's Salience	0.221441	0.061149	3.621	0.000
L2. Men Rep's Attention	-0.025446	0.034871	-0.730	0.466
L2. Women Rep's Attention	0.051832	0.034565	1.500	0.134
L2.Women's Salience	0.068393	0.053962	1.267	0.205
L2.Men's Salience	0.001659	0.061458	0.027	0.978
L3. Men Rep's Attention	-0.017255	0.032825	-0.526	0.599
L3. Women Rep's Attention	-0.075929	0.033650	-2.256	0.024
L3.Women's Salience	-0.054109	0.052226	-1.036	0.300
L3.Men's Salience	-0.018555	0.060384	-0.307	0.759
L4. Men Rep's Attention	-0.165565	0.032861	-5.038	0.000
L4. Women Rep's Attention	0.031227	0.033682	0.927	0.354
L4.Women's Salience	-0.062904	0.052596	-1.196	0.232
L4.Men's Salience	-0.190631	0.060269	-3.163	0.002
L5. Men Rep's Attention	0.003964	0.033120	0.120	0.905
L5. Women Rep's Attention	0.037376	0.033660	1.110	0.267
L5.Women's Salience	-0.172318	0.052339	-3.292	0.001
L5.Men's Salience	0.243893	0.060281	4.046	0.000
L6. Men Rep's Attention	0.083403	0.033166	2.515	0.012
L6. Women Rep's Attention	-0.005351	0.033666	-0.159	0.874
L6.Women's Salience	0.027140	0.052720	0.515	0.607
L6.Men's Salience	-0.058992	0.060468	-0.976	0.329
L7. Men Rep's Attention	0.011974	0.033065	0.362	0.717
L7. Women Rep's Attention	0.057195	0.033589	1.703	0.089
L7.Women's Salience	0.133614	0.052621	2.539	0.011
L7.Men's Salience	-0.161914	0.060576	-2.673	0.008
L8. Men Rep's Attention	0.331137	0.033012	10.031	0.000
L8. Women Rep's Attention	0.232239	0.033529	6.926	0.000
L8.Women's Salience	0.226387	0.052234	4.334	0.000
L8.Men's Salience	0.141124	0.060810	2.321	0.020
L9. Men Rep's Attention	0.073662	0.035002	2.105	0.035
L9. Women Rep's Attention	0.040280	0.034507	1.167	0.243
L9.Women's Salience	0.047669	0.053158	0.897	0.370
L9.Men's Salience	-0.087707	0.061690	-1.422	0.155

(b) US Female Representatives' Attention

Coefficient	Estimate	Std. error	T-stat	P-value
const	-1.146898	0.531444	-2.158	0.031
L1. Men Rep's Attention	0.017345	0.035107	0.494	0.621
L1. Women Rep's Attention	0.040714	0.034812	1.170	0.242
L1.Women's Salience	-0.030797	0.054068	-0.570	0.569
L1.Men's Salience	0.244728	0.061332	3.990	0.000
L2. Men Rep's Attention	-0.012104	0.034976	-0.346	0.729
L2. Women Rep's Attention	0.023082	0.034669	0.666	0.506
L2.Women's Salience	0.167355	0.054124	3.092	0.002
L2.Men's Salience	-0.073043	0.061642	-1.185	0.236
L3. Men Rep's Attention	0.032797	0.032924	0.996	0.319
L3. Women Rep's Attention	-0.026441	0.033751	-0.783	0.433
L3.Women's Salience	-0.087153	0.052382	-1.664	0.096
L3.Men's Salience	0.101117	0.060565	1.670	0.095
L4. Men Rep's Attention	-0.029599	0.032960	-0.898	0.369
L4. Women Rep's Attention	-0.057210	0.033783	-1.693	0.090
L4.Women's Salience	-0.060695	0.052754	-1.151	0.250
L4.Men's Salience	-0.092587	0.060450	-1.532	0.126
L5. Men Rep's Attention	-0.048242	0.033220	-1.452	0.146
L5. Women Rep's Attention	-0.025780	0.033761	-0.764	0.445
L5.Women's Salience	-0.108104	0.052496	-2.059	0.039
L5.Men's Salience	0.009568	0.060462	0.158	0.874
L6. Men Rep's Attention	-0.007216	0.033265	-0.217	0.828
L6. Women Rep's Attention	0.004667	0.033767	0.138	0.890
L6.Women's Salience	-0.034788	0.052878	-0.658	0.511
L6.Men's Salience	-0.072303	0.060649	-1.192	0.233
L7. Men Rep's Attention	0.094228	0.033164	2.841	0.004
L7. Women Rep's Attention	0.104697	0.033690	3.108	0.002
L7.Women's Salience	0.162580	0.052779	3.080	0.002
L7.Men's Salience	-0.070983	0.060758	-1.168	0.243
L8. Men Rep's Attention	0.139324	0.033111	4.208	0.000
L8. Women Rep's Attention	0.245288	0.033630	7.294	0.000
L8.Women's Salience	0.157138	0.052391	2.999	0.003
L8.Men's Salience	-0.163335	0.060993	-2.678	0.007
L9. Men Rep's Attention	-0.014315	0.035107	-0.408	0.683
L9. Women Rep's Attention	0.023243	0.034610	0.672	0.502
L9.Women's Salience	-0.014384	0.053318	-0.270	0.787
L9.Men's Salience	-0.208087	0.061875	-3.363	0.001

(a) US Women's Salience

Coefficient	Estimate	Std. error	T-stat	P-value
const	-1.478567	0.333401	-4.435	0.000
L1. Men Rep's Attention	-0.011623	0.022024	-0.528	0.598
L1. Women Rep's Attention	-0.031565	0.021840	-1.445	0.148
L1.Women's Salience	-0.079769	0.033920	-2.352	0.019
L1.Men's Salience	-0.087106	0.038477	-2.264	0.024
L2. Men Rep's Attention	0.018984	0.021942	0.865	0.387
L2. Women Rep's Attention	-0.040322	0.021750	-1.854	0.064
L2.Women's Salience	-0.187852	0.033955	-5.532	0.000
L2.Men's Salience	0.020435	0.038671	0.528	0.597
L3. Men Rep's Attention	-0.004005	0.020655	-0.194	0.846
L3. Women Rep's Attention	-0.004664	0.021174	-0.220	0.826
L3.Women's Salience	-0.086820	0.032862	-2.642	0.008
L3.Men's Salience	0.104020	0.037995	2.738	0.006
L4. Men Rep's Attention	0.043564	0.020677	2.107	0.035
L4. Women Rep's Attention	-0.006584	0.021194	-0.311	0.756
L4.Women's Salience	0.090321	0.033095	2.729	0.006
L4.Men's Salience	0.090390	0.037923	2.383	0.017
L5. Men Rep's Attention	-0.029453	0.020840	-1.413	0.158
L5. Women Rep's Attention	-0.044292	0.021180	-2.091	0.037
L5.Women's Salience	0.043974	0.032934	1.335	0.182
L5.Men's Salience	-0.094321	0.037931	-2.487	0.013
L6. Men Rep's Attention	-0.051194	0.020869	-2.453	0.014
L6. Women Rep's Attention	0.001385	0.021184	0.065	0.948
L6.Women's Salience	-0.075102	0.033173	-2.264	0.024
L6.Men's Salience	0.113952	0.038048	2.995	0.003
L7. Men Rep's Attention	-0.027312	0.020805	-1.313	0.189
L7. Women Rep's Attention	-0.064187	0.021136	-3.037	0.002
L7.Women's Salience	-0.097148	0.033111	-2.934	0.003
L7.Men's Salience	0.031961	0.038117	0.839	0.402
L8. Men Rep's Attention	-0.000354	0.020772	-0.017	0.986
L8. Women Rep's Attention	-0.047469	0.021098	-2.250	0.024
L8.Women's Salience	0.129183	0.032868	3.930	0.000
L8.Men's Salience	0.054930	0.038264	1.436	0.151
L9. Men Rep's Attention	0.014929	0.022025	0.678	0.498
L9. Women Rep's Attention	0.011239	0.021713	0.518	0.605
L9.Women's Salience	0.082579	0.033449	2.469	0.014
L9.Men's Salience	0.089856	0.038818	2.315	0.021

(b) US Mens's Salience

Coefficient	Estimate	Std. error	T-stat	P-value
const	-1.307553	0.331435	-3.945	0.000
L1. Men Rep's Attention	0.021917	0.021895	1.001	0.317
L1. Women Rep's Attention	-0.024057	0.021711	-1.108	0.268
L1.Women's Salience	0.101889	0.033720	3.022	0.003
L1.Men's Salience	-0.225872	0.038250	-5.905	0.000
L2. Men Rep's Attention	0.024494	0.021813	1.123	0.261
L2. Women Rep's Attention	-0.019251	0.021621	-0.890	0.373
L2.Women's Salience	-0.067698	0.033755	-2.006	0.045
L2.Men's Salience	0.096016	0.038443	2.498	0.013
L3. Men Rep's Attention	0.021738	0.020533	1.059	0.290
L3. Women Rep's Attention	0.023295	0.021049	1.107	0.268
L3.Women's Salience	0.050428	0.032668	1.544	0.123
L3.Men's Salience	-0.012514	0.037771	-0.331	0.740
L4. Men Rep's Attention	0.043947	0.020555	2.138	0.033
L4. Women Rep's Attention	-0.001102	0.021069	-0.052	0.958
L4.Women's Salience	-0.004148	0.032900	-0.126	0.900
L4.Men's Salience	0.052905	0.037700	1.403	0.161
L5. Men Rep's Attention	0.021007	0.020717	1.014	0.311
L5. Women Rep's Attention	-0.015358	0.021055	-0.729	0.466
L5.Women's Salience	0.163192	0.032739	4.985	0.000
L5.Men's Salience	-0.155760	0.037707	-4.131	0.000
L6. Men Rep's Attention	-0.032510	0.020746	-1.567	0.117
L6. Women Rep's Attention	-0.005538	0.021059	-0.263	0.793
L6.Women's Salience	0.024283	0.032977	0.736	0.462
L6.Men's Salience	0.038936	0.037824	1.029	0.303
L7. Men Rep's Attention	-0.028480	0.020683	-1.377	0.169
L7. Women Rep's Attention	-0.047155	0.021011	-2.244	0.025
L7.Women's Salience	-0.128979	0.032916	-3.918	0.000
L7.Men's Salience	0.147024	0.037892	3.880	0.000
L8. Men Rep's Attention	-0.041262	0.020649	-1.998	0.046
L8. Women Rep's Attention	-0.112074	0.020973	-5.344	0.000
L8.Women's Salience	-0.067364	0.032674	-2.062	0.039
L8.Men's Salience	0.179647	0.038038	4.723	0.000
L9. Men Rep's Attention	-0.012559	0.021895	-0.574	0.566
L9. Women Rep's Attention	-0.016621	0.021585	-0.770	0.441
L9.Women's Salience	-0.026157	0.033252	-0.787	0.431
L9.Men's Salience	0.108340	0.038589	2.808	0.005

Table 9: VAR Results for UK

(a) UK Male Representatives' Attention

Coefficient	Estimate	Std. error	T-stat	P-value
const	-1.665926	0.993931	-1.676	0.094
L1. Men Rep's Attention	0.048350	0.035301	1.370	0.171
L1. Women Rep's Attention	0.036162	0.035646	1.014	0.310
L1.Women's Salience	0.189436	0.124836	1.517	0.129
L1.Men's Salience	0.223509	0.141655	1.578	0.115
L2. Men Rep's Attention	-0.002358	0.035302	-0.067	0.947
L2. Women Rep's Attention	0.035267	0.035697	0.988	0.323
L2.Women's Salience	-0.055258	0.123631	-0.447	0.655
L2.Men's Salience	-0.197076	0.141922	-1.389	0.165
L3. Men Rep's Attention	-0.030547	0.035024	-0.872	0.383
L3. Women Rep's Attention	0.085615	0.035543	2.409	0.016
L3.Women's Salience	0.147595	0.123184	1.198	0.231
L3.Men's Salience	0.793375	0.142210	5.579	0.000
L4. Men Rep's Attention	-0.060816	0.035015	-1.737	0.082
L4. Women Rep's Attention	-0.083294	0.035697	-2.333	0.020
L4.Women's Salience	-0.350632	0.123880	-2.830	0.005
L4.Men's Salience	-0.099957	0.143977	-0.694	0.488
L5. Men Rep's Attention	-0.091720	0.034955	-2.624	0.009
L5. Women Rep's Attention	0.039196	0.035796	1.095	0.274
L5.Women's Salience	-0.268693	0.124855	-2.152	0.031
L5.Men's Salience	0.208915	0.144092	1.450	0.147
L6. Men Rep's Attention	-0.038194	0.034783	-1.098	0.272
L6. Women Rep's Attention	-0.042051	0.035794	-1.175	0.240
L6.Women's Salience	-0.086816	0.124203	-0.699	0.485
L6.Men's Salience	-0.334680	0.142131	-2.355	0.019
L7. Men Rep's Attention	-0.059698	0.034281	-1.741	0.082
L7. Women Rep's Attention	0.089973	0.035812	2.512	0.012
L7.Women's Salience	0.657974	0.123379	5.333	0.000
L7.Men's Salience	-0.589387	0.142067	-4.149	0.000
L8. Men Rep's Attention	0.081338	0.033932	2.397	0.017
L8. Women Rep's Attention	0.061193	0.035754	1.712	0.087
L8.Women's Salience	-0.211429	0.121373	-1.742	0.082
L8.Men's Salience	0.125470	0.142260	0.882	0.378
L9. Men Rep's Attention	0.136650	0.033889	4.032	0.000
L9. Women Rep's Attention	0.053359	0.035871	1.488	0.137
L9.Women's Salience	-0.065217	0.121412	-0.537	0.591
L9.Men's Salience	0.288540	0.143292	2.014	0.044

(b) UK Female Representatives' Attention

Coefficient	Estimate	Std. error	T-stat	P-value
const	-1.198233	1.094677	-1.095	0.274
L1. Men Rep's Attention	0.146764	0.038880	3.775	0.000
L1. Women Rep's Attention	0.061908	0.039259	1.577	0.115
L1.Women's Salience	0.038758	0.137490	0.282	0.778
L1.Men's Salience	0.681461	0.156013	4.368	0.000
L2. Men Rep's Attention	0.046252	0.038880	1.190	0.234
L2. Women Rep's Attention	0.017520	0.039316	0.446	0.656
L2.Women's Salience	-0.001352	0.136162	-0.010	0.992
L2.Men's Salience	-0.257188	0.156308	-1.645	0.100
L3. Men Rep's Attention	-0.033003	0.038574	-0.856	0.392
L3. Women Rep's Attention	0.123718	0.039146	3.160	0.002
L3.Women's Salience	0.384230	0.135669	2.832	0.005
L3.Men's Salience	0.551685	0.156624	3.522	0.000
L4. Men Rep's Attention	-0.007896	0.038565	-0.205	0.838
L4. Women Rep's Attention	-0.052796	0.039316	-1.343	0.179
L4.Women's Salience	-0.288124	0.136436	-2.112	0.035
L4.Men's Salience	0.223803	0.158571	1.411	0.158
L5. Men Rep's Attention	-0.096378	0.038498	-2.503	0.012
L5. Women Rep's Attention	0.020970	0.039424	0.532	0.595
L5.Women's Salience	-0.373016	0.137510	-2.713	0.007
L5.Men's Salience	0.077839	0.158697	0.490	0.624
L6. Men Rep's Attention	-0.036795	0.038309	-0.960	0.337
L6. Women Rep's Attention	-0.045782	0.039422	-1.161	0.246
L6.Women's Salience	-0.255214	0.136792	-1.866	0.062
L6.Men's Salience	-0.367381	0.156538	-2.347	0.019
L7. Men Rep's Attention	0.038863	0.037756	1.029	0.303
L7. Women Rep's Attention	0.061082	0.039442	1.549	0.121
L7.Women's Salience	0.763527	0.135885	5.619	0.000
L7.Men's Salience	-0.300229	0.156467	-1.919	0.055
L8. Men Rep's Attention	0.051895	0.037371	1.389	0.165
L8. Women Rep's Attention	0.061628	0.039378	1.565	0.118
L8.Women's Salience	-0.015130	0.133675	-0.113	0.910
L8.Men's Salience	-0.204207	0.156679	-1.303	0.192
L9. Men Rep's Attention	0.062710	0.037324	1.680	0.093
L9. Women Rep's Attention	0.044656	0.039507	1.130	0.258
L9.Women's Salience	-0.187422	0.133718	-1.402	0.161
L9.Men's Salience	-0.131912	0.157816	-0.836	0.403

(a) UK Women's Salience

Coefficient	Estimate	Std. error	T-stat	P-value
const	-1.496981	0.272160	-5.500	0.000
L1. Men Rep's Attention	-0.032481	0.009666	-3.360	0.001
L1. Women Rep's Attention	-0.014076	0.009761	-1.442	0.149
L1.Women's Salience	-0.136430	0.034183	-3.991	0.000
L1.Men's Salience	-0.043784	0.038788	-1.129	0.259
L2. Men Rep's Attention	0.021132	0.009666	2.186	0.029
L2. Women Rep's Attention	0.012161	0.009775	1.244	0.213
L2.Women's Salience	-0.010216	0.033853	-0.302	0.763
L2.Men's Salience	-0.048276	0.038861	-1.242	0.214
L3. Men Rep's Attention	0.015756	0.009590	1.643	0.100
L3. Women Rep's Attention	0.005246	0.009732	0.539	0.590
L3.Women's Salience	-0.023093	0.033730	-0.685	0.494
L3.Men's Salience	0.003497	0.038940	0.090	0.928
L4. Men Rep's Attention	0.001646	0.009588	0.172	0.864
L4. Women Rep's Attention	-0.015224	0.009775	-1.558	0.119
L4.Women's Salience	-0.060792	0.033921	-1.792	0.073
L4.Men's Salience	-0.035403	0.039424	-0.898	0.369
L5. Men Rep's Attention	0.000644	0.009571	0.067	0.946
L5. Women Rep's Attention	0.004595	0.009802	0.469	0.639
L5.Women's Salience	0.031344	0.034188	0.917	0.359
L5.Men's Salience	0.066806	0.039455	1.693	0.090
L6. Men Rep's Attention	-0.014328	0.009524	-1.504	0.132
L6. Women Rep's Attention	-0.015079	0.009801	-1.538	0.124
L6.Women's Salience	-0.060231	0.034009	-1.771	0.077
L6.Men's Salience	-0.033811	0.038919	-0.869	0.385
L7. Men Rep's Attention	-0.002914	0.009387	-0.310	0.756
L7. Women Rep's Attention	-0.006971	0.009806	-0.711	0.477
L7.Women's Salience	-0.056516	0.033784	-1.673	0.094
L7.Men's Salience	0.098755	0.038901	2.539	0.011
L8. Men Rep's Attention	-0.028839	0.009291	-3.104	0.002
L8. Women Rep's Attention	-0.003104	0.009790	-0.317	0.751
L8.Women's Salience	0.072428	0.033235	2.179	0.029
L8.Men's Salience	-0.077028	0.038954	-1.977	0.048
L9. Men Rep's Attention	-0.028261	0.009279	-3.046	0.002
L9. Women Rep's Attention	-0.005179	0.009822	-0.527	0.598
L9.Women's Salience	0.129995	0.033245	3.910	0.000
L9.Men's Salience	-0.162965	0.039237	-4.153	0.000

(b) UK Mens's Salience

Coefficient	Estimate	Std. error	T-stat	P-value
const	-0.701104	0.270256	-2.594	0.009
L1. Men Rep's Attention	-0.010648	0.009599	-1.109	0.267
L1. Women Rep's Attention	-0.023674	0.009692	-2.442	0.015
L1.Women's Salience	0.035978	0.033944	1.060	0.289
L1.Men's Salience	-0.173055	0.038517	-4.493	0.000
L2. Men Rep's Attention	-0.038112	0.009599	-3.970	0.000
L2. Women Rep's Attention	-0.002602	0.009706	-0.268	0.789
L2.Women's Salience	0.027703	0.033616	0.824	0.410
L2.Men's Salience	0.082801	0.038589	2.146	0.032
L3. Men Rep's Attention	-0.003036	0.009523	-0.319	0.750
L3. Women Rep's Attention	-0.029033	0.009664	-3.004	0.003
L3.Women's Salience	-0.162909	0.033494	-4.864	0.000
L3.Men's Salience	-0.135350	0.038668	-3.500	0.000
L4. Men Rep's Attention	0.008068	0.009521	0.847	0.397
L4. Women Rep's Attention	0.024666	0.009706	2.541	0.011
L4.Women's Salience	0.188659	0.033684	5.601	0.000
L4.Men's Salience	-0.081773	0.039148	-2.089	0.037
L5. Men Rep's Attention	0.035648	0.009504	3.751	0.000
L5. Women Rep's Attention	-0.005858	0.009733	-0.602	0.547
L5.Women's Salience	0.064900	0.033949	1.912	0.056
L5.Men's Salience	-0.057348	0.039179	-1.464	0.143
L6. Men Rep's Attention	0.021288	0.009458	2.251	0.024
L6. Women Rep's Attention	0.025910	0.009733	2.662	0.008
L6.Women's Salience	0.079735	0.033771	2.361	0.018
L6.Men's Salience	0.146365	0.038646	3.787	0.000
L7. Men Rep's Attention	-0.000215	0.009321	-0.023	0.982
L7. Women Rep's Attention	-0.013565	0.009738	-1.393	0.164
L7.Women's Salience	-0.162841	0.033547	-4.854	0.000
L7.Men's Salience	0.043510	0.038629	1.126	0.260
L8. Men Rep's Attention	0.001957	0.009226	0.212	0.832
L8. Women Rep's Attention	-0.001646	0.009722	-0.169	0.866
L8.Women's Salience	0.007483	0.033002	0.227	0.821
L8.Men's Salience	0.152652	0.038681	3.946	0.000
L9. Men Rep's Attention	-0.001416	0.009215	-0.154	0.878
L9. Women Rep's Attention	-0.001928	0.009754	-0.198	0.843
L9.Women's Salience	-0.010614	0.033013	-0.322	0.748
L9.Men's Salience	0.184360	0.038962	4.732	0.000

G Fixed Effects Estimates – Women's Salience

Table 11: Responsiveness to Women's Issue Salience – Fixed Effects Results

Model:	US (1)	US (log attention) (2)	US (IVHS) (3)	UK (4)	UK (log attention) (5)	UK (IVHS) (6)
Variables						
Women's Salience	0.254***	0.117***	0.08***	0.641***	0.308***	0.206***
	(0.072)	(0.024)	(0.019)	(0.068)	(0.027)	(0.018)
Woman Rep. × Women's Salience	0.37***	0.082***	0.082***	0.169***	0.094***	0.065***
	(0.097)	(0.022)	(0.021)	(0.042)	(0.016)	(0.012)
Total Tweets	✓		✓	✓		✓
Vote Share	✓	✓	✓	✓	✓	✓
Issue	✓	✓	✓	✓	✓	✓
Legislator	✓	✓	✓	✓	✓	✓
Party	✓	✓	✓	✓	✓	✓
Fit statistics						
R2	0.305	0.182	0.349	0.266	0.206	0.349
S.E. type	Time+Rep.	Time+Rep.	Time+Rep.	Time+Rep.	Time+Rep.	Time+Rep.
Observations	545,848	545,848	545,848	744,425	744,425	744,425

*Signif. Codes: ***: 0.01, **: 0.05, *: 0.1*

Note: Standard errors clustered by legislator and survey date and are presented in parentheses. Models 1-3 include estimates for the US and Models 4-6 include estimates for the UK. The dependent variable is labeled above and includes different transformations. In Models 1 and 4, the number of issue tweets that correspond with the salience of the issue is used in natural form. In models 2 and 5, the logged value of attention (e.g. issue tweets/total tweets) is used. In Models 3 and 6, the DV is the inverse hyperbolic sine value of tweets (about the corresponding issue). All models include fixed effects for each legislator, survey period, party and issue and the legislator's vote share in the previous election as a covariate.

H Fixed Effects Estimates – Men's Issue Salience

Table 12: Responsiveness to Men's Issue Salience – Fixed Effects Results

Model:	US (1)	US (log attention) (2)	US (IVHS) (3)	UK (4)	UK (log attention) (5)	UK (IVHS) (6)
Variables						
Men's Salience	0.075	0.057*	0.032	0.817***	0.395***	0.26***
	(0.063)	(0.023)	(0.017)	(0.089)	(0.035)	(0.024)
Woman Rep. × Men's Salience	0.282**	0.053*	0.054**	0.158**	0.085***	0.061***
	(0.086)	(0.021)	(0.019)	(0.052)	(0.02)	(0.014)
Total Tweets	✓		✓	✓		✓
Vote Share	✓	✓	✓	✓	✓	✓
Issue	✓	✓	✓	✓	✓	✓
Legislator	✓	✓	✓	✓	✓	✓
Party	✓	✓	✓	✓	✓	✓
Fit statistics						
R2	0.304	0.181	0.347	0.266	0.206	0.349
S.E. type	Time+Rep.	Time+Rep.	Time+Rep.	Time+Rep.	Time+Rep.	Time+Rep.
Observations	545,848	545,848	545,848	744,425	744,425	744,425

*Signif. Codes: ***: 0.01, **: 0.05, *: 0.1*

Note: Standard errors clustered by legislator and survey date and are presented in parentheses. Models 1-3 include estimates for the US and Models 4-6 include estimates for the UK. The dependent variable is labeled above and includes different transformations. In Models 1 and 4, the number of issue tweets that correspond with the salience of the issue is used in natural form. In models 2 and 5, the logged value of attention (e.g. issue tweets/total tweets) is used. In Models 3 and 6, the DV is the inverse hyperbolic sine value of tweets (about the corresponding issue). All models include fixed effects for each legislator, survey period, and issue and the legislator's vote share in the previous election as a covariate.

I Robustness Check - UK Labour and US Republicans

The following results are robustness checks for the main findings in the paper. The first three models include estimates for the US (Republicans) and the last three models include estimates for the UK (Labour). The dependent variable is labeled above and includes different transformations. In Models 1 and 4, the number of issue tweets that correspond with the salience of the issue is used in natural form. In models 2 and 5, the logged value of attention (e.g. issue tweets/total tweets) is used. In Models 3 and 6, the DV is the inverse hyperbolic sine value of tweets (about the corresponding issue). All models include fixed effects for each legislator, survey period, and issue and the legislator's vote share in the previous election as a covariate.

Table 13: Responsiveness to **Women's** Issue Salience – UK Labour and US Republicans

Model:	US (1)	US (log attention) (2)	US (IVHS) (3)	UK (4)	UK (log attention) (5)	UK (IVHS) (6)
Variables						
Women's Salience	0.245***	0.108***	0.074***	0.881***	0.365***	0.272***
	(0.063)	(0.024)	(0.018)	(0.071)	(0.026)	(0.019)
Women Rep. × Women's Salience	0.265***	0.055***	0.047***	0.127***	0.058***	0.045***
	(0.04)	(0.011)	(0.008)	(0.015)	(0.007)	(0.005)
Total Tweets	✓		✓	✓		✓
Vote Share	✓	✓	✓	✓	✓	✓
Issue	✓	✓	✓	✓	✓	✓
Legislator	✓	✓	✓	✓	✓	✓
Party	✓	✓	✓	✓	✓	✓
Fit statistics						
R2	0.275	0.159	0.307	0.302	0.251	0.39
S.E. type	by: Time	by: Time	by: Time	by: Time	by: Time	by: Time
Observations	257178	257178	257178	233996	233996	233996

*Signif. Codes: ***: 0.01, **: 0.05, *: 0.1*

Note: Standard errors presented in parentheses. Models 1-3 include estimates for the US (Republicans) and Models 4-6 include estimates for the UK (Labour). The dependent variable is labeled above and includes different transformations. In Models 1 and 4, the number of issue tweets that correspond with the salience of the issue is used in natural form. In models 2 and 5, the logged value of attention (e.g. issue tweets/total tweets) is used. In Models 3 and 6, the DV is the inverse hyperbolic sine value of tweets (about the corresponding issue). All models include fixed effects for each legislator, survey period, and issue and the legislator's vote share in the previous election as a covariate.

Table 14: Responsiveness to **Men's** Issue Salience – UK Labour and US Republicans

Model:	US (1)	US (log attention) (2)	US (IVHS) (3)	UK (4)	UK (log attention) (5)	UK (IVHS) (6)
Variables						
Men's Salience	0.075	0.057**	0.032	0.817***	0.395***	0.26***
	(0.057)	(0.022)	(0.016)	(0.079)	(0.032)	(0.021)
Women Rep. × Men's Salience	0.282***	0.053***	0.054***	0.158***	0.085***	0.061***
	(0.026)	(0.006)	(0.005)	(0.013)	(0.005)	(0.004)
Total Tweets	✓		✓	✓		✓
Vote Share	✓	✓	✓	✓	✓	✓
Issue	✓	✓	✓	✓	✓	✓
Legislator	✓	✓	✓	✓	✓	✓
Fit statistics						
R2	0.304	0.181	0.347	0.266	0.206	0.349
S.E. type	by: Time	by: Time	by: Time	by: Time	by: Time	by: Time
Observations	257178	257178	257178	233996	233996	233996

*Signif. Codes: ***: 0.01, **: 0.05, *: 0.1*

Note: Standard errors presented in parentheses. Models 1-3 include estimates for the US (Republicans) and Models 4-6 include estimates for the UK (Labour). The dependent variable is labeled above and includes different transformations. In Models 1 and 4, the number of issue tweets that correspond with the salience of the issue is used in natural form. In models 2 and 5, the logged value of attention (e.g. issue tweets/total tweets) is used. In Models 3 and 6, the DV is the inverse hyperbolic sine value of tweets (about the corresponding issue). All models include fixed effects for each legislator, survey period, and issue and the legislator's vote share in the previous election as a covariate.

J Poisson Fixed Effects Estimates

The following tables present the results of the Poisson fixed effects models for the US and UK. The dependent variable is the number of tweets about an issue.

Dependent Variable:	Tweets			
Model:	US	UK	US	UK
Variables				
Men's Salience	0.322***		0.590***	
	(0.060)		(0.063)	
Men's Salience × Women Rep.	0.068*		0.015	
	(0.038)		(0.039)	
Women's Salience		0.382***		0.368***
		(0.057)		(0.053)
Women's Salience × Women Rep.		0.111**		0.079**
		(0.044)		(0.038)
Vote share	-0.897	-0.889	0.139	0.167
	(0.619)	(0.618)	(0.744)	(0.743)
Fixed-effects				
Rep.	Yes	Yes	Yes	Yes
Time	Yes	Yes	Yes	Yes
Issue	Yes	Yes	Yes	Yes
Party	Yes	Yes	Yes	Yes
Fit statistics				
Observations	545,848	545,848	744,425	744,425
Squared Correlation	0.29751	0.29927	0.24097	0.23696
Pseudo R^2	0.28421	0.28527	0.28147	0.28002
BIC	1,904,711.6	1,901,906.2	2,061,330.9	2,065,467.1

Clustered (Time & Rep.) standard-errors in parentheses
*Signif. Codes: ***: 0.01, **: 0.05, *: 0.1*