

Part I

# Appendix

Table of Contents

---

<b>A</b>	<b>Descriptive Statistics Table</b>	<b>3</b>
<b>B</b>	<b>Emotive Rhetoric in Legislative Speeches</b>	<b>4</b>
B.1	Additional Descriptive Figures and Tables . . . . .	4
B.2	Example Speeches . . . . .	9
B.3	Ekman’s Basic Emotions . . . . .	11
<b>C</b>	<b>Additional Model Specifications</b>	<b>12</b>

---



## A Descriptive Statistics Table

	Observations	Mean	Std. Dev.	Min.	Max.
Emotive rhetoric	490,658	0.4767	0.3305	0.0217	0.9996
Negative emotions	490,658	0.3251	0.3229	0.0026	0.9979
Non-Negative emotions	490,658	0.1516	0.2637	0.0007	0.9959
Anger	490,658	0.0729	0.1321	0.0004	0.9926
Disgust	490,658	0.0845	0.1467	0.0002	0.9910
Fear	490,658	0.0879	0.1993	0.0001	0.9946
Joy	490,658	0.0979	0.2349	0.0001	0.9942
Sadness	490,658	0.0796	0.1697	0.0005	0.9916
Surprise	490,658	0.0536	0.1402	0.0002	0.9861
Electoral safety	519,347	19.1559	12.4408	.0032	74.355
Opposition party	519,347	0.4547	0.4979	0	1
Parliamentary experience	517,550	10.855	8.662	0	56
Ideology: Left-Right	519,347	5.582	1.5388	2.57	7.842
Parliamentary seat share	519,138	40.521	16.738	0.1538	63.581
Number of words (speech)	490,658	66.412	39.945	1	200
Female	519,347	0.185	0.3886	0	1
Age	519,235	49.4319	9.7603	18	86
Distance to the capital (km)	519,347	230.743	157.598	0	641
Constituency size (electorate)	519,347	69591.46	8421.72	21576	109902
Voter turnout	519,347	0.6285	0.06439	0.3408	0.8223
Parliamentary period: 2001-2005	490,658	0.243	0.428	0	1
Parliamentary period: 2005-2010	490,658	0.342	0.474	0	1
Parliamentary period: 2010-2015	490,658	0.414	0.492	0	1
Election period	519,347	0.0116	0.1071	0	1

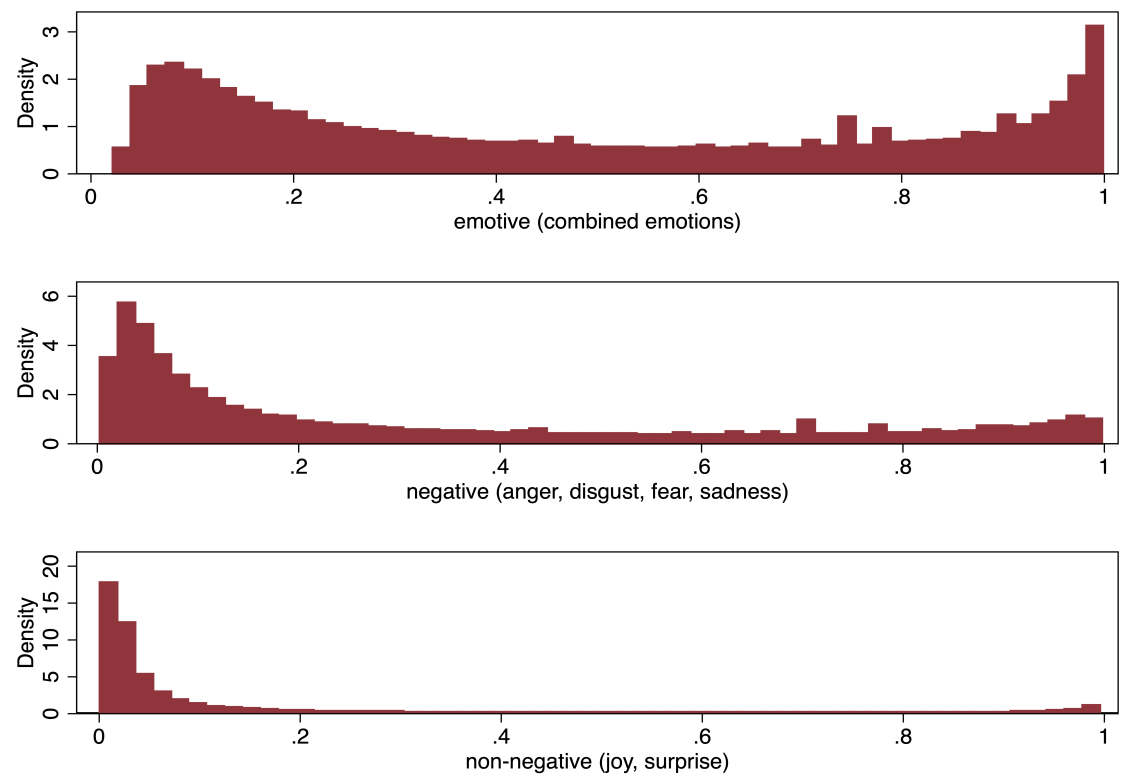
## B Emotive Rhetoric in Legislative Speeches

### B.1 Additional Descriptive Figures and Tables

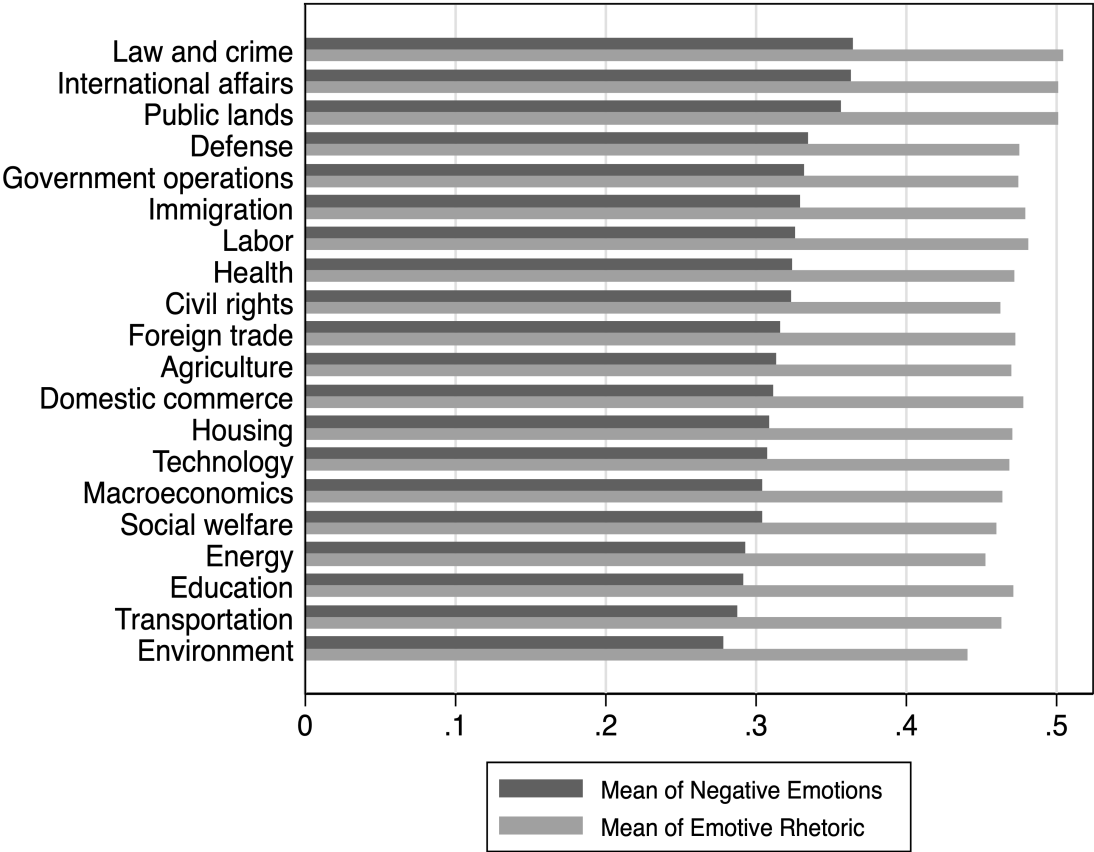
**Table B1:** Pairwise Correlations among Emotion Categories

	Anger	Disgust	Fear	Joy	Sadness	Surprise
Anger	1.000					
Disgust	0.2689*	1.000				
Fear	-0.0399*	-0.0712*	1.000			
Joy	-0.1721*	-0.1913*	-0.1468*	1.000		
Sadness	-0.0212*	-0.0313*	-0.0719*	-0.1345*	1.000	
Surprise	-0.0911*	-0.1012*	-0.0915*	-0.0805*	-0.0770*	1.000

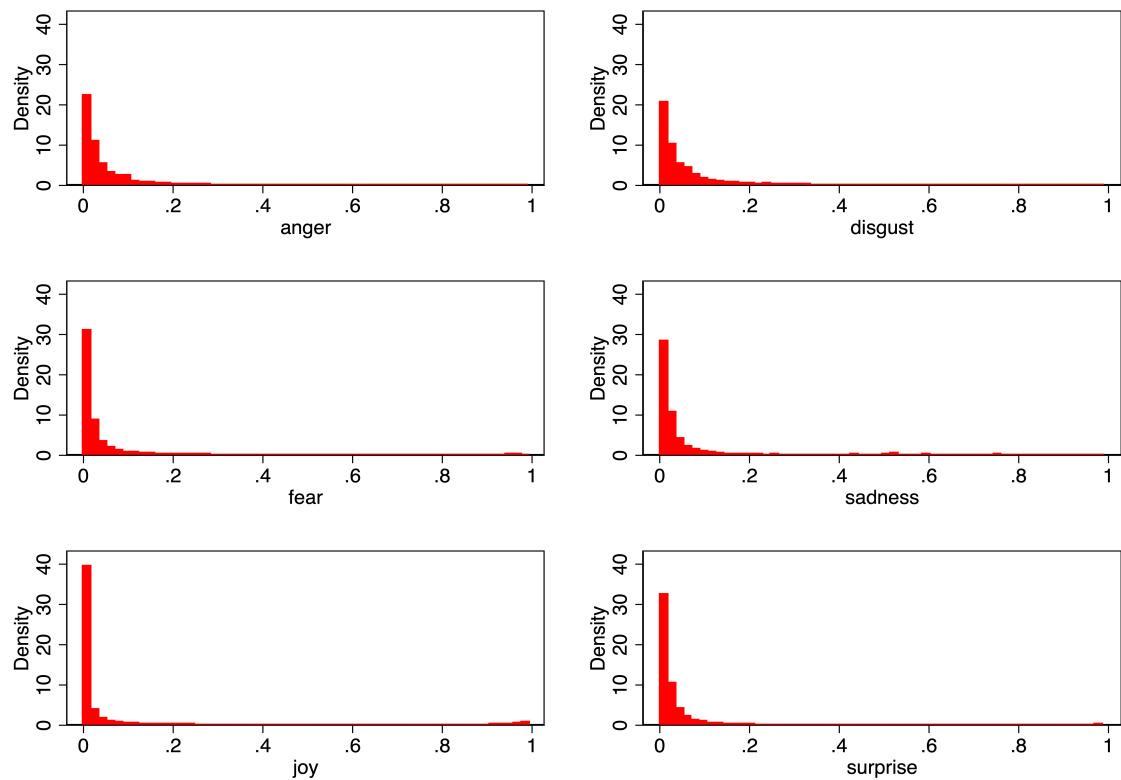
**Figure B1:** The Distribution of Emotive Rhetoric in Legislative Speeches



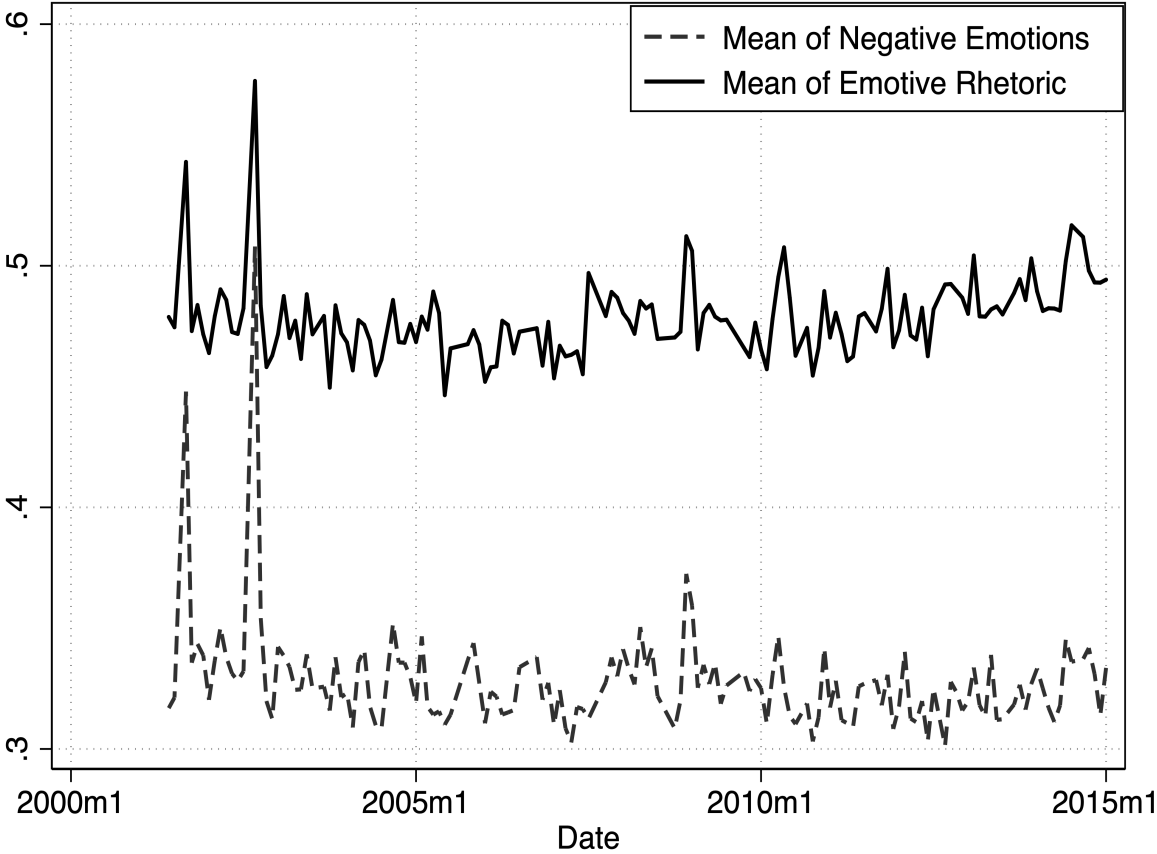
**Figure B2:** Mean of Emotive Rhetoric and Negative Emotions (anger, disgust, fear, and sadness) across CAP Policy Categories



**Figure B3:** The Distribution of Individual Emotion Categories



**Figure B4:** Mean of Emotive Rhetoric and Negative Emotions across Time





## B.2 Example Speeches

In this section, I provide examples of legislative speeches made in the British House of Commons. For example, the following speech from Ellie Reeves scores 0.94 on anger:

In the week before Christmas, my local food bank in Penge gave out 300 parcels to some of the most vulnerable. It is an outrage that at a time of year when most people are out celebrating, Tory austerity has meant that far too many rely on food banks for essential supplies. Can we please have a debate on the impact of Tory austerity on food bank usage and food poverty across the country?

The model likely picks up on the frustration and anger Reeves expresses while blaming the Conservative Party’s austerity measures for increasing reliance on food banks. The next highest score the model assigns is disgust, at approximately 0.03.

The model differentiates well between anger and fear, which can at times manifest in similar ways. For example, Roger Casale questioned the government about recent terrorist attacks in Madrid back in 2004. In this instance, fear is the primary emotion, and the model appropriately scores the speech as 0.99 on fear.

All hon. Members will surely feel an abiding sense of horror at the sheer destructive force of the recent terrorist atrocities in Madrid. What lessons have been learned in this country from that attack, and what further steps have been taken to prepare London for a similar scale attack?

In a third example, Philip Davies expresses shock in a 2013 speech about the Offshore Gambling Bill.

I am struck by how much faith my hon. Friend has in the Gambling Commission over and above any other regulator in any part of the world that has been assessed as having as good a regulatory standard as ours. On what basis does he have such complete and utter faith in the Gambling Commission and know for a fact that it is so much better than any other regulator in any other jurisdiction?

Davies appears to express shock in a rather sarcastic way, likely as an attempt to indicate to the government that the Gambling Commission is not a qualified regulator. The speech is assigned the emotion ‘surprise’ at a value of 0.92.

### B.3 Ekman's Basic Emotions

In his article, Paul Ekman makes the case for the existence of “basic emotions”, which he argues are universal across all human cultures. Ekman also argues that “Each of the basic emotions is not a single affective state but a *family* of related states” (Ekman 1992, 172; emphasis in original). Based on his past research, Ekman argues that, for instance, there are around around 60 anger expressions, and that each basic emotion (i.e., anger, fear, disgust, sadness, surprise, joy) can manifest itself in numerous different ways. Importantly, he notes, “Each of the anger expressions share certain configurational (muscular patterns) features, by which they recognisably differ from the family of fear expressions, disgust expressions, etc.” (p.172).

I believe that there are at least three important advantages in using these six emotion categories. First, Ekman's influential theory of universal basic emotions provides a robust theoretical framework, as these six ‘basic’ emotions cover a wide range of emotional expressions occurring in human interactions. Second, Ekman's identification of these six emotions is supported by extensive empirical research involving cross-cultural studies, even though the question of whether there are additional ‘basic’ emotions is still open to debate. Third, using these six emotions allows for methodological consistency, for a vast body of empirical work outside political science utilizes Ekman's emotion framework. Three of these emotion categories, anger, fear and disgust, have been increasingly used also in political science research.

## C Additional Model Specifications

**Table C1:** Correlates of Individual Emotion Categories in Legislative Debates – Multilevel Poisson Regressions with Robust Standard Errors

	Anger (4)	Disgust (5)	Fear (6)	Sadness (7)	Joy (8)	Surprise (9)
Electoral Safety	-0.00125* (-1.83)	-0.00158* (-1.93)	-0.00343*** (-4.39)	-0.00141** (-2.17)	0.00177 (1.55)	-0.00166* (-1.82)
Parliamentary Experience	-0.000965 (-0.79)	-0.000376 (-0.29)	-0.00270* (-1.84)	-0.00480*** (-4.17)	-0.00224 (-1.25)	-0.00634*** (-3.72)
Opposition MP	0.317*** (15.58)	0.392*** (17.49)	0.239*** (10.91)	0.194*** (11.25)	-0.648*** (-21.36)	0.321*** (13.59)
Ideology: Left-Right	0.00471 (0.76)	0.00594 (0.83)	0.0103 (1.53)	-0.00100 (-0.16)	0.0249** (2.49)	0.0208*** (2.76)
Parliamentary Seat Share	0.00318*** (4.55)	0.00239*** (2.92)	0.00346*** (4.36)	0.00241*** (3.80)	-0.00156 (-1.39)	0.00157* (1.90)
Number of Words	0.00141*** (14.85)	0.00170*** (18.19)	0.00461*** (39.06)	-0.00702*** (-23.12)	0.00283*** (16.44)	-0.00104*** (-7.33)
Female	-0.0958*** (-4.82)	-0.0856*** (-3.50)	0.0863*** (3.62)	0.0290 (1.55)	0.102*** (3.23)	-0.0306 (-1.19)
Age	0.00375*** (3.72)	0.00452*** (3.96)	0.000316 (0.26)	0.00314*** (3.09)	-0.00612*** (-3.60)	0.00662*** (4.67)
Distance to the Capital	-0.0000244 (-0.42)	-0.0000278 (-0.44)	0.0000280 (0.46)	0.0000936* (1.86)	0.0000110 (0.12)	0.000109* (1.66)
Constituency Size	-0.000000275 (-0.28)	-0.000000573 (-0.45)	-0.00000139 (-1.24)	-0.000000438 (-0.49)	0.00000140 (0.67)	0.00000127 (0.88)
Voter Turnout	-0.452** (-2.42)	-0.507** (-2.43)	-0.535*** (-2.70)	-0.313* (-1.93)	0.386 (1.34)	0.0536 (0.24)
Election Period	-0.0534 (-1.57)	-0.0368 (-1.06)	-0.0862* (-1.84)	0.0406 (0.96)	0.200*** (4.82)	0.0513 (1.01)
Period: 2005-2010	-0.0196 (-1.43)	-0.0119 (-0.82)	-0.00389 (-0.25)	-0.0377*** (-2.91)	0.0730*** (3.42)	0.00308 (0.19)
Period: 2010-2015	0.0111 (0.64)	0.0302 (1.54)	0.0861*** (4.26)	-0.0849*** (-5.02)	0.135*** (4.92)	0.0259 (1.12)
Constant	-2.944*** (-20.45)	-2.694*** (-15.76)	-2.689*** (-17.11)	-2.129*** (-15.74)	-2.495*** (-10.09)	-3.580*** (-19.88)
CAP Topic Fixed-effects	✓	✓	✓	✓	✓	✓
<i>AIC</i>	191,833.2	213,011.6	234,792	201,897.9	258,203.9	154,164.9
<i>BIC</i>	192,215.1	213,393.6	235,173.9	202,279.9	258,585.8	154,546.8
<i>N</i>	405,461	405,461	405,461	405,461	405,461	405,461

*t* statistics in parentheses

\* p<0.1, \*\* p<0.05, \*\*\* p<0.01

