Political Advertising on the Wikipedia Market Place of Information

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Online Supplementary Tables

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Table A1. Test statistics for model comparison. Cluster-robust SEs by legislator where possible. Superior results are shaded. AIC = Akaike information criterion, BIC = Bayesian information criterion, Vuong compares zero-inflated to standard version, $LR(\alpha = 0)$ compares to Poisson. Significant p-values indicate that specified model is preferred to comparison model.

Model	Test	Specification				
Model	Test	(1)	(2)	(3)	(4)	
Poisson	AIC/BIC	8446/8524	7052/7130	6513/6590	7564/7640	
Poisson inverse Gaussian	AIC/BIC	5272/5355	5099/5183	4948/5031	4753/4835	
	$LR(\alpha = 0)$	p = 0.00	p = 0.00	p = 0.00	p = 0.00	
Negative binomial	AIC/BIC	5273/5357	5066/5149	4911/4994	4750/4832	
	$LR(\alpha = 0)$	p = 0.00	p = 0.00	p = 0.00	p = 0.00	
Zero-inflated Poisson	AIC/BIC	6508/6630	5582/5704	5247/5369	5855/5975	
	Vuong	p = 0.00	p = 0.00	p = 0.00	p = 0.00	
Zero-inflated Poisson	AIC/BIC	5253/5381	5065/5193	4905/5033	4744/4869	
inverse Gaussian	Vuong	p = 0.00	p = 0.00	p = 0.00	p = 0.00	
Zero-inflated negative	AIC/BIC	5268/5396	5057/5185	4898/5026	4739/4853	
binomial	Vuong	p = 0.00	p = 0.00	p = 0.00	p = 0.01	

Table A2. Variable overview.

Variable	Description	Source
Total revisions	Aggregate number of edits to MP's Wikipedia	Revision histories of
	profiles (integer)	MPs' Wikipedia profiles
Insertions	Aggregate number of edits to MPs' Wikipedia	Revision histories of
	profiles that add content (integer)	MPs' Wikipedia profiles
Deletions	Aggregate number of edits to MPs' Wikipedia	Revision histories of
	profiles that delete content (integer)	MPs' Wikipedia profiles
Reverts	Aggregate number of edits to MPs' Wikipedia	Revision histories of
	profiles that undo previous edits (integer)	MPs' Wikipedia profiles
BT revisions	Portion of total revisions coming from the	Revision histories of
	Bundestag IT network (integer)	MPs' Wikipedia profiles
BT insertions	Portion of insertions coming from the	Revision histories of
	Bundestag IT network (integer)	MPs' Wikipedia profiles
BT deletions	Portion of deletions coming from the	Revision histories of
	Bundestag IT network (integer)	MPs' Wikipedia profiles
BT reverts	Portion of reverts coming from the Bundestag	Revision histories of
	IT network (integer)	MPs' Wikipedia profiles
Page growth	Difference in HTML file size between	Revision histories of
	beginning and end of legislative term	MPs' Wikipedia profiles
	(continuous)	
Page views	Average number of views MPs' Wikipedia profiles received daily (continuous)	http://stats.grok.se/
Gender	MPs' sex (categorical, $0 = \text{male}$, $1 = \text{female}$)	MPs' Wikipedia profiles
Age	MPs' age (continuous)	MPs' Wikipedia profiles
Origin	State an MP was elected in (categorical, 0=east, 1= west)	Wikipedia lists of MPs
Party	MPs' party affiliation (categorical, 1 = SPD, 2 = Linke, 3 = Grüne, 4 = FDP, 5 = CDU, 6 = CSU)	Wikipedia lists of MPs
Mandate	Type of MPs' mandate (categorical, 0 = district-elected, 1 = list-elected)	MPs' Bundestag profiles
Legislative term	MPs' membership in legislative period (categorical, $1 = 16^{th}$, $2 = 17^{th}$, $3 = 18^{th}$)	Wikipedia lists of MPs

 Table A3. Summary statistics

Variable	Obs	Mean	SD	Min	Max
Total revisions	1938	56.1	120.9	0	3036
Insertions	1938	35.1	69.5	0	1773
Deletions	1938	18.1	44.8	0	1089
Reverts	1938	7.4	24.8	0	488
BT revisions	1938	1.2	3.1	0	55
BT insertions	1938	0.8	2.2	0	43
BT deletions	1938	0.3	1.1	0	16
BT reverts	1938	0.008	0.1	0	2
Page growth	1938	12.8	28.3	-197	166
Page views (daily avg.)	1938	35.1	137.6	0.3	2485.9
Age	1938	55.9	10.4	26.5	83.3

Table A4. Alternative model specifications.

	Inflation part (logit) Pr of zero edits		Count part (neg.bin) Number of edits		
	(5)	(6)	(5)	(6)	
Gender					
Male	(baseline)				
Female	-0.01	-0.03	-0.10	-0.18	
	(0.06)	(0.07)	(0.19)	(0.20)	
Age	0.001	0.004	-0.03***	-0.02**	
	(0.03)	(0.007)	(0.01)	(0.01)	
Origin					
East	(baseline)				
West	-0.04	-0.20**	0.48***	0.39**	
	(0.04)	(0.09)	(0.15)	(0.19)	
Party					
SPD	(baseline)				
Linke	0.03		-0.22		
	(0.03)		(0.19)		
Grüne	-0.05**		-0.19		
	(0.02)		(0.20)		
FDP	0.29***		0.64		
	(0.02)		(0.42)		
CDU	0.06		0.18		
	(0.04)		(0.19)		
CSU	-0.05**		0.10		
	(0.02)		(0.38)		
Mandate					
District	(baseline)				
List	0.13***	0.09*	0.24	0.21	
	(0.04)	(0.05)	(0.18)	(0.17)	
Term					
16^{th}	(baseline)				
$17^{\rm th}$	-0.01***	0.04	-0.58***	-0.41	
	(0.00)	(0.06)	(0.19)	(0.26)	
18^{th}	0.26***	0.23*	-0.96***	-0.91***	
	(0.04)	(0.13)	(0.19)	(0.22)	
Page					
growth	-0.005	0.00	0.01*	0.01	
	(0.002)	(0.00)	(0.00)	(0.00)	
views	0.002*	0.00	0.00	0.00	
	(0.001)	(0.00)	(0.00)	(0.00)	
Obs.	1938	1938	1938	1938	
LL	-2594	-2617	-2594	-2617	

Note: Two-tailed test statistics. Cluster-robust SEs in parentheses. *** = p < 0.01, ** = p < 0.05, * = p < 0.1.

Table A5. Comparison of page view frequencies of a subset of German MPs' Wikipedia entries to other Wikipedia entries from 2008 to 2016.

Wikipedia entry	Total	Daily average	Daily peak
All MPs (mean)	80,057	28	2681
Top-5 MPs			
Angela Merkel	7,010,139	2,486	489,202
Karl-Theodor zu Guttenberg	4,561,880	1,618	2,675,673
Ursula von der Leyen	2,620,467	929	508,924
Gerhard Schröder	2,535,193	899	109,665
Wolfgang Schäuble	2,271,760	806	12,213
Bottom-5 MPs			
Mark André Helfrich	1,584	0.6	141,097
Birgit Menz	1,456	0.5	1,461,098
Weigel	975	0.3	111,099
Heinz Schmitt	927	0.3	111,100
Petra Rode-Bosse	35	0.0	3
Other pages			
Deutscher Bundestag	3,360,729	1,192	223,502
Christlich Demokratische Union Deutschlands	2,192,253	777	141,833
Christlich Soziale Union Bayern	1,062,524	377	111,004
Sozialdemokratische Partei Deutschlands	2,695,599	956	132,675
Freie Demokratische Partei	2,878,384	1,021	377,496
Die Linke	2,763,335	980	201,637
Bundestagswahl 2013	1,504,327	533	1,055,728
Bundestagswahl 2009	2,174,870	771	147,268

Table A6. Comparison of edit frequencies of a subset of German MPs' Wikipedia entries to other Wikipedia entries from 2009 to 2013 (17th Bundestag).

Wikipedia entry	Total	Monthly average
All MPs (mean)	70	1.2
Top-5 MPs		
Karl-Theodor zu Guttenberg	3,459	58
Angela Merkel	1,303	22
Christian Lindner	1,035	17
Peer Steinbrück	991	17
Kristina Schröder	768	13
Bottom-5 MPs		
Susanne Kieckbusch	15	0.3
Annette Sawade	12	0.2
Markus Kurth	10	0.2
Undine Kurth	10	0.2
Hagen Reinhold	4	0.1
Other pages		
Deutscher Bundestag	1,254	20.9
Christlich Demokratische Union Deutschlands	1,231	20.5
Christlich Soziale Union Bayern	1,023	17
Sozialdemokratische Partei Deutschlands	1,474	24.6
Freie Demokratische Partei	1,523	25.4
Die Linke	2,270	37.8
Bundestagswahl 2013	2,196	36.6
Bundestagswahl 2009	1,016	16.9