Online Appendix

Garz/Maaß: Cartels in the European Union, Antitrust Action, and Public Attention

Table A1: List of cartel cases

Case ID	Sum of fines (million euro)	Firms
37533	66.34	UCB; BASF; Akzo Nobel
37750	2.50	Danone; Heineken
37766	273.78	Heineken; InBev; Grolsch; Bavaria
37773	216.91	Arkema; Akzo Nobel; Elf Aquitaine; Hoechst; Clariant
38069	356.45	Boliden; Halcor; KME; Mueller; HME Nederland; Austria Buntmetall; IMI; Wieland; Trefimeteaux; Outokumpu
38121	312.72	Legris; Tomkins; Fra.bo; Viega; Advanced Fluid Connections; Mueller; Flowflex; Kaimer; Aalberts; IMI; Delta
38238	20.04	WWTE; ASAJA; UPA; Deltafina; COAG; CCAE; Cetarsa; Agroexpansion; Taes
38281	56.05	UNITAB; Deltafina; Transcatab; APTI; Mindo; Romana Tabacchi
38337_a	35.97	Gütermann; Barbour Thread; Zwicky; Coats; Amann; Belgian Sewing Thread; Bieze Stork
38337_b	7.52	Barbour Thread; Hicking Pentecost; Coats; Cousin Filterie; Oxley Threads
38338	47.00	Entaco; Prym; Coats
38344	269.87	Global Steel Wire; Rautaruuki; ArcelorMittal; Italcables; CB Trafilati Acciai; Emme; Proderac; Redaelli Tecno; Westfälische Drahtindustrie; HIT Groep; ArcelorMittal; Saarstahl; Socitrel; Moreda-Riviere Trefileria; Ovako; Siderurgica Latina Martin; Nedri; Italcables; Voestalpine; ITAS; ORI Martin; Fapricela
38354	290.71	Kendrion; Cofira-Sac; Combipac; UPM-Kymmene; Plásticos Españoles; Bernay Film Plastique; Koninklijke Verpakkingsindustrie Stempher; RKW AG; Sachsa; Low & Bonar; Trioplast; Bischof+Klein; Nordenia
38432	74.79	Maxell; Sony; Fuji
38443	75.86	Repsol; Bayer; Crompton; Flexsys
38456	266.72	Klöckner; Ballast Nedam; BAM; Kuwait Petroleum; Wintershall; Total; Shell; BP; Dura Vermeer; Esha; Nynäs; Heijmans; KWS; Hollandsche Beton Groep
38511	331.27	NEC; Infineon; Elpida; Mitsubishi; Toshiba; Hitachi; Nanya; Hynix; Micron; Samsung
38543	32.76	Sirva; Compas; Gosselin/Stichting; Transworld; Exel; Putters; Ziegler; Team Relocations; Allied Arthur Pierre; Mozer; Verhuizingen Coppens; Interdean
38589_a	43.81	Reagens; Akzo Nobel; Baerlocher; AC Treuhand; Elf Aquitaine; Arkema; Chemtura
38589_b	84.52	GEA; Akzo Nobel; Chemson; Faci; Arkema; Chemtura; Elf Aquitaine; AC Treuhand; Chemson
38620	388.13	Akzo Nobel; Kemira; FMC Foret; Solvay; Snia/Caffaro; Edison; Degussa; Total
38628	34.23	Bayer; Zeon
38629	247.63	Dow Chemical; Denki; Bayer; Tosoh; Eni
38638	519.05	Eni; Bayer; Dow; Shell; Unipetrol/Kaucuk; Trade-Stomil

38645	344.56	Quinn Barlo; Total; Degussa; ICI; Lucite
38695	79.07	Elf Aquitaine; Aragonesas/Uralita; Erikem; Arkema; EKA
38710	183.65	Repsol; BP; Cepsa/Proas; Nynäs; Galp
38823_a	185.62	Schindler; Kone; Otis; ThyssenKrupp
38823_b	617.09	Kone; Otis; ThyssenKrupp; Schindler
38823_c	49.36	Otis; ThyssenKrupp; Schindler; Kone
38823_d	140.24	ThyssenKrupp; Schindler; Otis; Kone; Mitsubishi
38866	175.65	Ercros; Yara; Jose de Mello; FMC Foret; Timab; Jose de Mello; Quimitecnica; Tessenderlo
38899	750.71	Hitachi; Schneider Electric; Siemens; Nuova Magrini; Toshiba; ABB; Mitsubishi; Alstom; Fuji; Japan AE Power Systems; Areva
39092	622.03	Duravit; Duscholux; Hansa; Roca; Masco; Kludi; Villeroy & Boch; Ideal Standard; Laufen; Wabco; Sanitec; Koralle; Produits Ceramiques de Touraine; Koninklijke Sphinx; Grohe; Duscholux; Cisal; Sanitec; Mamoli; Duravit; Zucchetti; Teorema; Keramag; Dornbracht; Pozi Ginori; RAF; DPM; Trane; Artweger
39125	1370.90	Pilkington; Asahi; Soliver; Saint-Gobain
39129	67.64	ABB; Alstom; Siemens; Toshiba; Fuji; Hitachi
39165	486.90	Guardian; Saint-Gobain; Asahi; Pilkington
39168_a	89.36	Scovill; Prym; YKK; Berning & Söhne; Fachverband Verbindungs- und Befestigungstechnik; A. Raymond
39168_b	19.50	YKK; Prym
39168_c	81.38	YKK; Prym; Coats
39168_d	119.15	Prym; Coats
39180	4.97	Boliden Odda; Fluorsid; Industrual Quimica de Mexico; Societe des Industries Chimique du Fluor
39181	676.01	Total; ExxonMobil; Tudapetrol; Industrual Quimica de Mexico; Hansen & Rosenthal; RWE; Eni; Sasol; Shell; MOL
39188	60.30	Del Monte; Dole; Chiquita
39258	926.61	SAS; Swiss Air; Singapore Airlines; Cathay; KLM/Air-France; Japan Airlines; Qantas; Lufthansa; British Airways; Cargolux; Air Canada; Martinair; LAN Chile
39309	648.92	LG Display; AU Optronics; Samsung; Chimei InnoLux; HannStar Display; Chunghwa Picture Tubes
39396	61.12	Ecka Granulate; Evonik Degussa; Donau Chemie; Almamet; SKW; HSE; NCHZ; Akzo Nobel
39401	1106.00	GDF Suez; EON
39406	131.51	Bridgestone; Parker Hannifin; Yokohama Rubber; Trelleborg Industrie; Dunlop Oil & Marine; Manuli Rubber Industries
39437_a	298.59	LG Electronics; Philips; Samsung; Chunghwa
39437_b	681.05	LG Electronics; Technicolor; MT Picture Display; Chunghwa; Toshiba; Samsung; Panasonic; Philips
39452	85.88	Carl Fuhr; Hautau; AGB; Winkhaus; Siegenia-Aubi; Heinrich Strenger GmbH; Maco; Gretsch-Unitas; Roto
39462_a	13.35	Kühne + Nagel; CEVA Freight; UPS; Schenker; DHL; Exel
39462_b	92.75	DSV; Agility Logistics; Panalpina; Uti; Schenker; Kühne + Nagel; DHL; UPS; Exel
39462_c	15.82	Yusen Shenda; DHL; Panalpina; Kühne + Nagel; Nippon Express; Schenker; CEVA

		Freight; UPS; Schenker; Kintetsu World Express
39462_d	47.46	Agility Logistics; Schenker; Kühne + Nagel; Panalpina; DHL; Hellmann; Toll Global Forwarding; Expeditors International
39482	8.92	Chiquita; Pacific Fruit
39563_a	60.43	Coopbox; Vitembal; Linpac; Sirap-Gema; Magic-Pack; Nespak; Poliemme
39563_b	22.27	Coopbox; Ovarpack; Linpac; Vitembal
39563_c	31.39	Silver Plastics; Huhtamaki; Linpac; Vitembal
39563_d	11.12	Sirap-Gema; Huhtamäki; Silver Plastics; Linpac; Vitembal
39563_e	1.61	Coopbox; Sirap-Gema; Linpac; Propack
39574	138.05	Renesas; Samsung; Philips; Infineon
39579	315.20	Unilever; Procter & Gamble; Henkel
39600	161.20	Panasonic; ACC; Embraco; Tecumseh; Danfoss
39605	128.74	Samsung; Asahi Glass; Nippon Electric Glass; Schott
39610	301.64	Silec; Taihan; Mitsubishi; NKT; EXSYM; JPS; Viscas; SWCC Showa; Prysmian; LS Cable; ABB; Nexans; Hitachi; Safran; Brugg; Fujikura; Furukawa; Sumitomo
39611	13.66	Flamco; TA Hydronics; Reflex Winkelmann
39633	28.72	Heiploeg; Kok; Stührk; Klaas Puul
39748_a	97.63	Yazaki; Sumitomo; Furukawa
39748_b	31.34	Yazaki; Sumitomo; Furukawa
39748_c	0.38	Sumitomo; Yazaki
39748_d	10.12	Sumitomo; S-Y Systems
39748_e	2.31	Leoni; Sumitomo; S-Y Systems
39780	19.48	Mayer-Kuvert; Holdham/Hamelin; Tompla/Printeos; Bong; Heritage Envelopes
39792	30.71	Winoa; Würth; Ervin; Metalltechnik Schmidt
39801	114.08	Recitel/Greiner; Carpenter; Eurofoam; Vita
39914	924.85	Barclays; Societe Generale; RBS; Deutsche Bank
39922	953.31	NTN; Wälzlager; JTEKT; Schaeffler; SKF; NSK; NFC
39924_a	32.35	Credit Suisse; JP Morgan; RBS; UBS
39924_b	61.68	RBS; JP Morgan
39952	5.98	EPEX; Nord Pool Spot
39965	32.23	Bonduelle; Lutece; Prochamp
40055	68.17	Eberspächer; Webasto
40098	49.15	ÖBB; Kühne + Nagel; Deutsche Bahn

Table A2: Summary statistics of cartel-level variables

	Mean	SD	Min.	Max.
Number of firms	6.906	6.702	2.000	51.000
EU-only cartel (1 = yes, 0 = no)	0.282	0.453	0.000	1.000
Share of firms with EU headquarters	0.651	0.318	0.000	1.000
Number of firms with EU headquarters	4.706	5.863	0.000	41.000
Average amount of the fine (million euros)	39.942	76.125	0.190	553.000
Sum of fines (million euros)	211.112	283.611	0.380	1370.896
Average reduction due to leniency program (%)	30.543	16.871	0.000	75.000
Sum of reductions due to leniency program (perc. points)	165.035	91.452	0.000	550.000
Average reduction due to settlement (%)	2.498	4.274	0.000	10.000
Sum of reductions due to settlement (perc. points)	10.353	20.842	0.000	100.000
Average firm turnover (billion euros)	15.672	23.601	0.000	156.570
Sum of firm turnovers (billion euros)	100.623	168.305	0.000	939.422
Share of market listed firms	0.507	0.324	0.000	1.000
Number of market listed firms	3.329	3.311	0.000	16.000

Notes: The variables refer to N = 85 cartels.

Table A3: List of news agencies in the sample

Name	Country
Agence France Presse	France
Baltic News Service	Estonia
CTK National News Wire	Czech Republic
Deutsche Presse-Agentur	Germany
Inter Press Service	Italy
M2 PressWIRE	UK
Mondaq Business Briefing	UK
MTI Econews	Hungary
Press Association Mediapoint	UK

Notes: The sample covers all European news agencies that are (a) consistently archived in the Nexis database between 2000 and 2015, (b) not specialized in individual industries or topics, and (c) report in English.

Table A4: List of newspapers in the sample

Newspaper	Country
Aujourd'hui en France	France
Daily Mail	UK
Daily Mirror	UK
Daily Record	UK
Die Welt	Germany
El País	Spain
El Mundo	Spain
La Croix	France
La Stampa	Italy
Le Figaro	France
Le Monde	France
Le Parisien	France
Les Echos	France
Taz	Germany
The Daily Telegraph	UK
The Guardian	UK

Notes: The sample covers all national daily newspapers from France, Germany, Italy, Spain, and the UK that are consistently archived in the Nexis database between 2000 and 2015.

Table A5: Summary statistics of raw attention measures

	Mean	SD	Min.	Max.	Obs.
Commission press releases					
-number	0.028	0.242	0	5	5,844
-words	14.021	126.878	0	2,553	5,844
News agency reports					
-number	0.081	0.353	0	6	5,844
-words	61.533	323.581	0	4,376	5,844
Newspaper reports					
-number	0.142	0.581	0	11	5,844
-words	53.000	245.561	0	3,952	5,844
Google search volume	2.598	6.226	0	100	4,383

Table A6: Actions by the European Commission and predictable news events

	Day of action	Day after action
Sports		
Summer Olympic Games (4)	0	0
Winter Olympic Games (4)	12	12
FIFA World Cup (4)	7	7
UEFA European Champ. (4)	9	9
Elections		
France (3)	0	0
Germany (4)	0	0
UK (4)	0	1
US (4)	0	1
European Parliament (3)	0	0

Notes: The figures denote the amount of actions taken by the European Commission that coincide with predictable news events, between 2000 and 2015. Numbers in parentheses signify the frequency an event is observed in the period under investigation.

Table A7: Cartel composition and timing of actions (accounting for duration of proceedings)

	(1) Statement of objections	(2) Decision	(3) Commission press release
Number of firms with EU headquarters	0.007	0.033**	0.017**
	(0.012)	(0.016)	(0.008)
Number of days since previous action	-0.000	0.000	-0.000
	(0.000)	(0.000)	(0.000)
R-squared	0.670	0.477	0.510
Observations	78	85	162

Notes: OLS estimates, using data at the cartel level. Dependent variable: action coincides with predictable news event (1 if yes, 0 otherwise). The column headers denote the type of action. All models include year and commissioner dummies, a dummy to capture cases subject to the 2006 fine-setting guidelines, the number of firms in the cartel, the average amount of the fine, the sum of fines, the average reduction due to the leniency program, the sum of reductions due to the leniency program, the average reduction due to settlement, the sum of reductions due to settlement, the average firm turnover, the sum of firm turnovers, the share of market listed firms, and the number of market listed firms. Robust standard errors in parentheses.
* p<0.10, ** p<0.05, *** p<0.01

Table A8: Cartel composition and other discretionary behavior

	(1) Fine capped (binary)	(2) Commission press release on raid (binary)	(3) Commission press release on statement of objections (binary)
Number of firms with EU headquarters	0.003	0.010	0.021
	(0.012)	(0.024)	(0.021)
R-squared	0.525	0.618	0.865
Observations	85	78	85

Notes: OLS estimates, using data at the cartel level. The column headers denote the dependent variable. "Fine capped" takes the value 1 if the fine imposed by the Commission matches the maximum possible amount, 10% of a company's world turnover. All models include year and commissioner dummies, a dummy to capture cases subject to the 2006 fine-setting guidelines, the number of firms in the cartel, the average amount of the fine, the sum of fines, the average reduction due to the leniency program, the sum of reductions due to the leniency program, the average reduction due to settlement, the sum of reductions due to settlement, the average firm turnover, the sum of firm turnovers, the share of market listed firms, and the number of market listed firms. Robust standard errors in parentheses.
* p<0.10, ** p<0.05, *** p<0.01

Table A9: Cartel composition and timing of actions relative to Google searches on predictable news events

	(1) Raid	(2) Statement of objections	(3) Decision	(4) Commission press release
Number of firms with EU headquarters	-0.002	-0.002	0.005*	0.003*
	(0.005)	(0.002)	(0.003)	(0.002)
R-squared	0.741	0.611	0.420	0.405
Observations	51	82	85	155

Notes: OLS estimates, using data at the cartel level. Dependent variable: combined search volume on Google's topics "FIFA World Cup", "UEFA European Championships", "Olympic Games", and "elections" at the day of the action (rescaled to vary between 0 and 1). The column headers denote the type of action. All models include year and commissioner dummies, a dummy to capture cases subject to the 2006 fine-setting guidelines, the number of firms in the cartel, the average amount of the fine, the sum of fines, the average reduction due to the leniency program, the sum of reductions due to the leniency program, the average reduction due to settlement, the sum of reductions due to settlement, the average firm turnover, the sum of firm turnovers, the share of market listed firms, and the number of market listed firms. Robust standard errors in parentheses.
* p<0.10, ** p<0.05, *** p<0.01

Table A10: Cartel composition and timing of actions (alternative set of predictable news events)

	(1) Raid	(2) Statement of objections	(3) Decision	(4) Commission press release
Number of firms with EU headquarters	0.012	-0.002	0.029*	0.015*
	(0.015)	(0.010)	(0.016)	(0.008)
R-squared	0.687	0.628	0.520	0.510
Observations	78	85	85	162

Notes: OLS estimates, using data at the cartel level. Dependent variable: action coincides with predictable news event (1 if yes, 0 otherwise), where the set of events additionally includes national elections in Canada, Italy, Japan, Russia, and Spain, as well as the annual Academy Awards ceremony ("Oscars") and the annual summit of the Group of Eight. The column headers denote the type of action. All models include year and commissioner dummies, a dummy to capture cases subject to the 2006 fine-setting guidelines, the number of firms in the cartel, the average amount of the fine, the sum of fines, the average reduction due to the leniency program, the sum of reductions due to the leniency program, the average reduction due to settlement, the sum of reductions due to settlement, the average firm turnover, the sum of firm turnovers, the share of market listed firms, and the number of market listed firms. Robust standard errors in parentheses.
* p<0.10, ** p<0.05, *** p<0.01

Table A11: Further measures of cartel composition and timing of actions

	(1) Raid	(2) Statement of objections	(3) Decision	(4) Commission press release
Panel A				
Cumulated fraction of shares	0.010	-0.001	0.033**	0.017**
held by EU stockholders	(0.016)	(0.011)	(0.016)	(0.008)
R-squared	0.729	0.628	0.478	0.510
Panel B				
Number of firms with non-EU headquarters	-0.010	0.000	-0.030*	-0.016**
	(0.015)	(0.009)	(0.016)	(0.008)
R-squared	0.728	0.628	0.475	0.509
Observations	78	85	85	162

Notes: OLS estimates, using data at the cartel level. Dependent variable: action coincides with predictable news event (1 if yes, 0 otherwise). The column headers denote the type of action. All models include year and commissioner dummies, a dummy to capture cases subject to the 2006 fine-setting guidelines, the number of firms in the cartel, the average amount of the fine, the sum of fines, the average reduction due to the leniency program, the sum of reductions due to the leniency program, the average reduction due to settlement, the sum of reductions due to settlement, the average firm turnover, the sum of firm turnovers, the share of market listed firms, and the number of market listed firms. Robust standard errors in parentheses.
* p<0.10, ** p<0.05, *** p<0.01

Table A12: Cartel composition and timing of actions (excluding observations before May 2004)

	(1) Raid	(2) Statement of objections	(3) Decision	(4) Commission press release
Number of firms with EU headquarters	-0.009	-0.005	0.032**	0.017**
	(0.029)	(0.011)	(0.016)	(0.008)
R-squared	0.820	0.633	0.477	0.509
Observations	46	75	85	151

Notes: OLS estimates, using data at the cartel level. Dependent variable: action coincides with predictable news event (1 if yes, 0 otherwise). The column headers denote the type of action. All models include year and commissioner dummies, a dummy to capture cases subject to the 2006 fine-setting guidelines, the number of firms in the cartel, the average amount of the fine, the sum of fines, the average reduction due to the leniency program, the sum of reductions due to the leniency program, the average reduction due to settlement, the sum of reductions due to settlement, the average firm turnover, the sum of firm turnovers, the share of market listed firms, and the number of market listed firms. Robust standard errors in parentheses.
* p<0.10, ** p<0.05, *** p<0.01

Table A13: Cartel composition and timing of actions ("Friday hypothesis")

	(1) Raid	(2) Statement of objections	(3) Decision	(4) Commission press release
Number of firms with EU headquarters	0.019	0.022	-0.013	-0.002
	(0.030)	(0.025)	(0.011)	(0.017)
R-squared	0.341	0.508	0.609	0.398
Observations	78	85	85	162

Notes: OLS estimates, using data at the cartel level. Dependent variable: action takes place on a Friday (1 if yes, 0 otherwise). The column headers denote the type of action. All models include year and commissioner dummies, a dummy to capture cases subject to the 2006 fine-setting guidelines, the number of firms in the cartel, the average amount of the fine, the sum of fines, the average reduction due to the leniency program, the sum of reductions due to the leniency program, the average reduction due to settlement, the sum of reductions due to settlement, the average firm turnover, the sum of firm turnovers, the share of market listed firms, and the number of market listed firms. Robust standard errors in parentheses.
* p<0.10, ** p<0.05, *** p<0.01

Table A14: Cartel composition and timing of actions relative to unpredictable news events

	(1) Raid	(2) Statement of objections	(3) Decision	(4) Commission press release
Panel A: Each year's worst incident				
Number of firms with EU headquarters	-0.011	0.000	0.007	0.009
	(0.012)	(0.011)	(0.013)	(0.013)
R-squared	0.516	0.334	0.337	0.210
Panel B: Each year's three worst incidents				
Number of firms with EU headquarters	0.004	0.000	0.017	0.013
	(0.017)	(0.011)	(0.014)	(0.014)
R-squared	0.454	0.460	0.351	0.212
Panel C: Each year's five worst incidents				
Number of firms with EU headquarters	-0.015	0.000	0.025	0.004
	(0.024)	(0.011)	(0.016)	(0.015)
R-squared	0.452	0.460	0.288	0.232
Observations	78	85	85	162

Notes: OLS estimates, using data at the cartel level. Dependent variable: action coincides with disaster or terrorist attack (1 if yes, 0 otherwise). Each year's worst incidents are determined by ranking all incidents according to the number of fatalities within the different event types (i.e., biological, climatological, geophysical, hydrological, meteorological, and technological disaster, or terrorist attack) and locations (i.e., international vs. EU). The column headers denote the type of action. All models include year and commissioner dummies, a dummy to capture cases subject to the 2006 fine-setting guidelines, the number of firms in the cartel, the average amount of the fine, the sum of fines, the average reduction due to the leniency program, the sum of reductions due to the leniency program, the average reduction due to settlement, the sum of reductions due to settlement, the average firm turnover, the sum of firm turnovers, the share of market listed firms, and the number of market listed firms. Robust standard errors in parentheses.

* p<0.10, ** p<0.05, *** p<0.01

Table A15: Timing of actions and newspaper front-page reports

	(1)	(2)	(3)	(4)
	Same day		Next day	
	Number	Words	Number	Words
Predictable event	-0.001	-0.000	-0.002	-0.000
	(0.001)	(0.001)	(0.001)	(0.001)
Action	-0.001	-0.001*	0.011*	0.007
	(0.002)	(0.001)	(0.006)	(0.005)
Predictable event × action	-0.001	0.000	0.011	0.000
	(0.002)	(0.001)	(0.017)	(0.008)
R^2	0.008	0.009	0.015	0.013
Observations	5837	5837	5837	5837

Notes: OLS estimates. The column headers denote the dependent variable. To ease interpretation, all attention measures are rescaled to vary between 0 and 1. All models include weekday, month, year, and commissioner dummies, as well as seven lags of the dependent variable, and an intercept (output omitted). HAC standard errors (in parentheses) are robust to heteroscedasticity and autocorrelation up to order 7.
* p<0.10, ** p<0.05, *** p<0.01

Table A16: Timing of actions (relative to Google searches on predictable events) and public attention to cartel proceedings

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
	Commission press releases		News agency reports		Newspaper reports		Google searches (on EU competition law)
	Number	Words	Number	Words	Number	Words	Index
Panel A: same day							
Google searches on predictable events	-0.002	-0.002	0.012	0.009	0.003	-0.003	0.016
	(0.003)	(0.003)	(0.014)	(0.017)	(0.006)	(0.005)	(0.017)
Action	0.096***	0.120***	0.073***	0.019**	0.004	0.006	-0.004
	(0.012)	(0.016)	(0.014)	(0.008)	(0.005)	(0.007)	(0.005)
Google searches on pred. events × action	-0.108	-0.176	-0.220**	-0.114*	-0.001	0.012	-0.025
	(0.120)	(0.143)	(0.102)	(0.064)	(0.044)	(0.059)	(0.034)
R^2	0.275	0.309	0.094	0.047	0.065	0.042	0.042
Panel B: next day							
Google searches on predictable events	-0.003	-0.003	0.019	0.013	0.008	0.005	0.010
	(0.004)	(0.005)	(0.017)	(0.021)	(0.006)	(0.006)	(0.012)
Action	0.008	0.002	0.018*	0.016	0.058***	0.055***	0.017*
	(0.007)	(0.006)	(0.010)	(0.011)	(0.012)	(0.012)	(0.009)
Google searches on pred. events × action	0.105	0.045	-0.046	-0.055	-0.156*	-0.210**	-0.147**
	(0.115)	(0.054)	(0.113)	(0.086)	(0.091)	(0.085)	(0.066)
R^2	0.030	0.041	0.063	0.047	0.120	0.081	0.042
Observations	4382	4382	4382	4382	4382	4382	4376

Notes: OLS estimates. The column headers denote the dependent variable. To ease interpretation, all attention measures are rescaled to vary between 0 and 1. All models include weekday, month, year, and commissioner dummies, as well as seven lags of the dependent variable, and an intercept (output omitted). HAC standard errors (in parentheses) are robust to heteroscedasticity and autocorrelation up to order 7.
* p<0.10, ** p<0.05, *** p<0.01

Table A17: Timing of actions and (log measures of) public attention to cartel proceedings

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
	Commission press releases		News agency reports		Newspaper reports		Google searches
	Number	Words	Number	Words	Number	Words	Index
Panel A: Same day							
Predictable	-0.001	-0.001	0.000	-0.000	0.001	0.002	0.001
event	(0.001)	(0.001)	(0.003)	(0.003)	(0.002)	(0.002)	(0.003)
Action	0.077***	0.090***	0.052***	0.016***	0.005	0.007	-0.004
	(0.008)	(0.009)	(0.008)	(0.006)	(0.004)	(0.005)	(0.004)
Predictable	-0.017	-0.026	-0.028	-0.025***	-0.008	-0.007	-0.006
event × action	(0.022)	(0.021)	(0.018)	(0.008)	(0.007)	(0.009)	(0.006)
R^2	0.306	0.328	0.096	0.056	0.079	0.045	0.047
Panel B: Next day							
Predictable	-0.001	-0.001	0.000	-0.001	0.003	0.003	0.003
event	(0.001)	(0.002)	(0.003)	(0.003)	(0.002)	(0.003)	(0.003)
Action	0.010**	0.004	0.016**	0.014*	0.040***	0.035***	0.009
	(0.005)	(0.004)	(0.006)	(0.007)	(0.007)	(0.007)	(0.006)
Predictable	0.025	0.014	-0.014	-0.020	-0.022	-0.030***	-0.017**
event × action	(0.023)	(0.009)	(0.018)	(0.013)	(0.014)	(0.011)	(0.008)
R^2	0.032	0.039	0.068	0.055	0.103	0.062	0.047
Observations	5837	5837	5837	5837	5837	5837	4376

Notes: OLS estimates. The column headers denote the dependent variable. All attention measures are defined as log(variable + 1). All models include weekday, month, year, and commissioner dummies, as well as seven lags of the dependent variable, and an intercept (output omitted). HAC standard errors (in parentheses) are robust to heteroscedasticity and autocorrelation up to order 7.
* p<0.10, ** p<0.05, *** p<0.01

Table A18: Timing of actions and (raw measures of) public attention to cartel proceedings

	(1)	(2)	(3)	(4)	(5)	(6)
	Commission press releases		News agency reports		Newspaper reports	
	Number	Words	Number	Words	Number	Words
Panel A: same day						
Predictable	-0.002	-1.398	0.006	-1.194	0.025	9.150
event	(0.007)	(3.067)	(0.018)	(15.539)	(0.028)	(11.661)
Action	0.726***	364.669***	0.364***	70.822**	0.065	37.268
	(0.067)	(36.565)	(0.064)	(30.812)	(0.044)	(26.054)
Predictable	-0.035	-27.183	-0.174	-112.031**	-0.115	-42.985
event × action	(0.225)	(107.935)	(0.132)	(44.095)	(0.083)	(41.901)
R^2	0.339	0.328	0.101	0.051	0.087	0.050
Panel A: same day						
Predictable	0.002	1.930	0.007	-3.065	0.038	17.193
event	(0.011)	(6.720)	(0.019)	(16.059)	(0.025)	(11.792)
Action	0.114**	16.862	0.093**	70.137*	0.528***	185.623***
	(0.048)	(15.658)	(0.042)	(39.361)	(0.099)	(39.775)
Predictable	0.297	75.222	-0.047	-98.411	-0.250	-152.935***
event × action	(0.243)	(48.024)	(0.146)	(70.560)	(0.195)	(58.694)
R^2	0.043	0.047	0.068	0.051	0.114	0.068
Observations	5837	5837	5837	5837	5837	5837

Notes: OLS estimates. The column headers denote the dependent variable. All models include weekday, month, year, and commissioner dummies, as well as seven lags of the dependent variable, and an intercept (output omitted). HAC standard errors (in parentheses) are robust to heteroscedasticity and autocorrelation up to order 7.
* p<0.10, ** p<0.05, *** p<0.01

Table A19: Timing of actions and public attention to cartel proceedings (without lagged dependent variable)

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
	Commission press releases		News agency reports		Newspaper reports		Google searches
	Number	Words	Number	Words	Number	Words	Index
Panel A: same day							
Predictable event	-0.001	-0.001	0.000	-0.001	0.002	0.002	0.002
	(0.001)	(0.001)	(0.003)	(0.004)	(0.003)	(0.003)	(0.005)
Action	0.087***	0.105***	0.061***	0.017**	0.005	0.008	-0.005
	(0.010)	(0.012)	(0.011)	(0.007)	(0.004)	(0.006)	(0.004)
Predictable event × action	-0.019	-0.034	-0.036*	-0.029***	-0.011	-0.009	-0.009
	(0.029)	(0.024)	(0.020)	(0.009)	(0.008)	(0.010)	(0.006)
R^2	0.262	0.288	0.087	0.047	0.048	0.031	0.032
Panel B: next day							
Predictable event	-0.001	-0.001	0.000	-0.002	0.004	0.004	0.004
	(0.002)	(0.002)	(0.003)	(0.004)	(0.003)	(0.003)	(0.005)
Action	0.006	0.001	0.019**	0.017*	0.047***	0.042***	0.010
	(0.004)	(0.003)	(0.008)	(0.010)	(0.009)	(0.009)	(0.007)
Predictable event × action	0.033	0.015*	-0.018	-0.027*	-0.030*	-0.037***	-0.022**
	(0.029)	(0.009)	(0.021)	(0.015)	(0.016)	(0.013)	(0.009)
R^2	0.026	0.034	0.060	0.047	0.072	0.048	0.032
Observations	5843	5843	5843	5843	5843	5843	4383

Notes: OLS estimates. The column headers denote the dependent variable. To ease interpretation, all attention measures are rescaled to vary between 0 and 1. All models include weekday, month, year, and commissioner dummies, as well as an intercept (output omitted). HAC standard errors (in parentheses) are robust to heteroscedasticity and autocorrelation up to order 7.
* p<0.10, ** p<0.05, *** p<0.01

Table A20: Timing of actions and public attention to cartel proceedings (including 7 lags of the action dummy)

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
	Commission press releases		News agency reports		Newspaper reports		Google searches
	Number	Words	Number	Words	Number	Words	Index
Panel A: same day							
Predictable event	-0.001	-0.001	-0.000	-0.002	0.001	0.001	0.001
	(0.001)	(0.001)	(0.003)	(0.004)	(0.003)	(0.003)	(0.004)
Action	0.087***	0.087***	0.061***	0.016**	0.004	0.007	-0.005
	(0.010)	(0.010)	(0.011)	(0.008)	(0.004)	(0.006)	(0.004)
Predictable event × action	-0.022	-0.020	-0.039*	-0.033***	-0.015	-0.014	-0.008
	(0.029)	(0.029)	(0.020)	(0.009)	(0.009)	(0.011)	(0.006)
R^2	0.269	0.269	0.094	0.055	0.101	0.059	0.044
Panel B: next day							
Predictable event	-0.001	-0.001	0.000	-0.001	0.003	0.004	0.003
	(0.002)	(0.002)	(0.003)	(0.004)	(0.002)	(0.003)	(0.004)
Action	0.010*	0.003	0.018**	0.017*	0.047***	0.042***	0.011
	(0.005)	(0.004)	(0.008)	(0.009)	(0.009)	(0.009)	(0.007)
Predictable event × action	0.030	0.013	-0.019	-0.028*	-0.028*	-0.037***	-0.019**
	(0.030)	(0.009)	(0.021)	(0.015)	(0.016)	(0.013)	(0.009)
R^2	0.035	0.037	0.066	0.054	0.102	0.060	0.044
Observations	5836	5836	5836	5836	5836	5836	4376

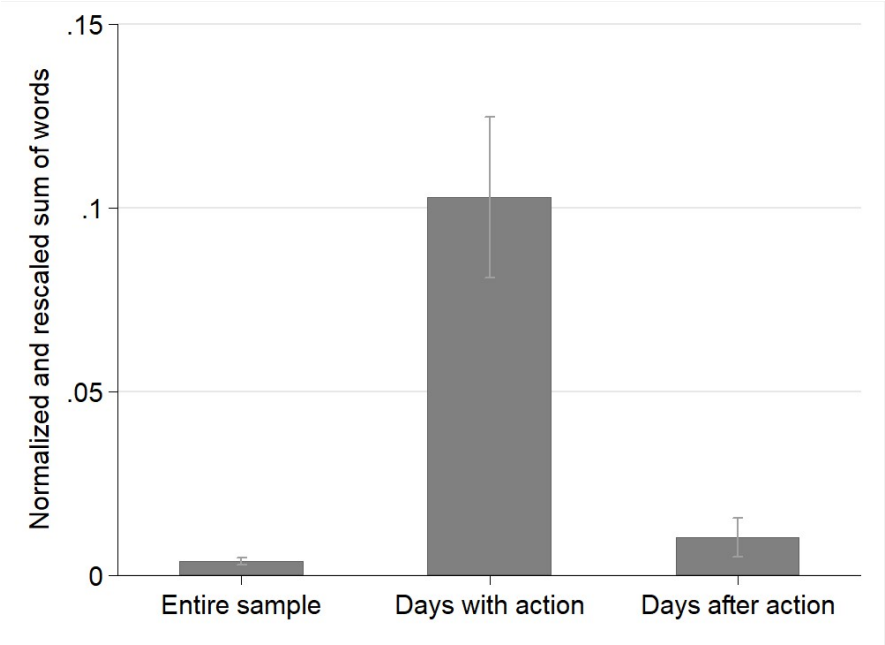
Notes: OLS estimates. The column headers denote the dependent variable. To ease interpretation, all attention measures are rescaled to vary between 0 and 1. All models include weekday, month, year, and commissioner dummies, as well as seven lags of the dependent variable, seven lags of the action dummy, and an intercept (output omitted). HAC standard errors (in parentheses) are robust to heteroscedasticity and autocorrelation up to order 7.
* p<0.10, ** p<0.05, *** p<0.01

Table A21: Timing of actions, unpredictable events, and public attention to cartel proceedings

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
	Commission press releases		News agency reports		Newspaper reports		Google searches
	Number	Words	Number	Words	Number	Words	Index
Panel A: each year's worst incident, same day							
Unpredictable	0.051	-0.039	-0.040	-0.025	-0.016**	-0.026***	0.026
event × action	(0.057)	(0.026)	(0.038)	(0.019)	(0.008)	(0.008)	(0.020)
R^2	0.267	0.289	0.091	0.051	0.078	0.044	0.042
Panel B: each year's worst incident, next day							
Unpredictable	-0.001	0.002	0.047	-0.005	-0.046***	-0.047***	-0.022*
event × action	(0.011)	(0.011)	(0.051)	(0.022)	(0.013)	(0.009)	(0.012)
R^2	0.026	0.035	0.065	0.051	0.102	0.060	0.042
Panel C: each year's three worst incidents, same day							
Unpredictable	0.015	-0.026	-0.055**	-0.029**	-0.015**	-0.025***	0.018
event × action	(0.041)	(0.031)	(0.026)	(0.014)	(0.007)	(0.008)	(0.016)
R^2	0.263	0.288	0.092	0.051	0.078	0.044	0.042
Panel D: each year's three worst incidents, next day							
Unpredictable	0.004	0.004	0.022	-0.014	-0.054***	-0.052***	-0.020*
event × action	(0.013)	(0.010)	(0.035)	(0.017)	(0.011)	(0.009)	(0.011)
R^2	0.026	0.035	0.064	0.051	0.103	0.061	0.042
Panel E: each year's five worst incidents, same day							
Unpredictable	0.034	-0.029	-0.046**	-0.027**	-0.007	0.009	0.009
event × action	(0.037)	(0.024)	(0.022)	(0.012)	(0.010)	(0.029)	(0.012)
R^2	0.267	0.289	0.092	0.051	0.077	0.044	0.042
Panel D: each year's five worst incidents, next day							
Unpredictable	0.004	0.003	0.017	-0.014	-0.023	-0.007	-0.015
event × action	(0.010)	(0.007)	(0.029)	(0.018)	(0.019)	(0.029)	(0.011)
R^2	0.026	0.035	0.064	0.051	0.101	0.059	0.042
Observations	5837	5837	5837	5837	5837	5837	4376

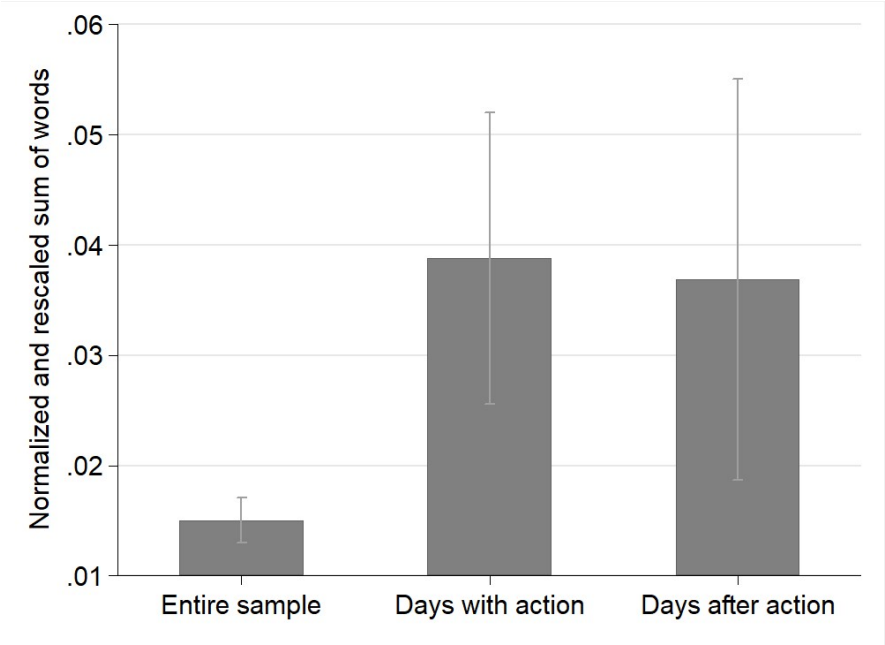
Notes: OLS estimates. The column headers denote the dependent variable. To ease interpretation, all attention measures are rescaled to vary between 0 and 1. Each year's worst incidents are determined by ranking all incidents according to the number of fatalities within the different event types (i.e., biological, climatological, geophysical, hydrological, meteorological, and technological disaster, or terrorist attack) and locations (i.e., international vs. EU). All models include the constituent terms of the interaction effect, weekday, month, year, and commissioner dummies, as well as seven lags of the dependent variable, and an intercept (output omitted). HAC standard errors (in parentheses) are robust to heteroscedasticity and autocorrelation up to order 7.
* p<0.10, ** p<0.05, *** p<0.01

Figure A1: Press releases by the European Commission on cartel proceedings



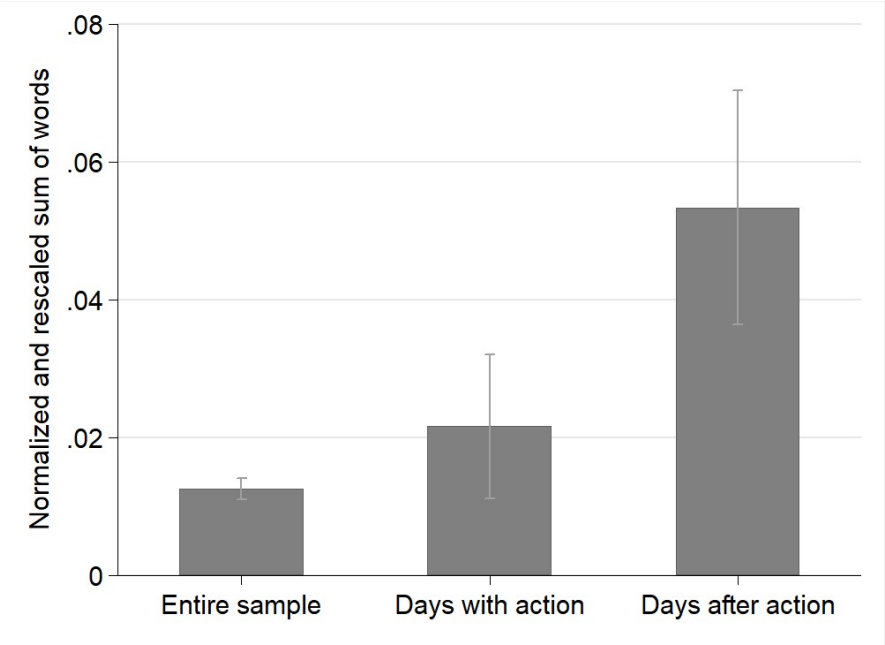
Notes: Based on 5,844 daily observations between 2000–2015.

Figure A2: Reports by news agencies on cartel proceedings



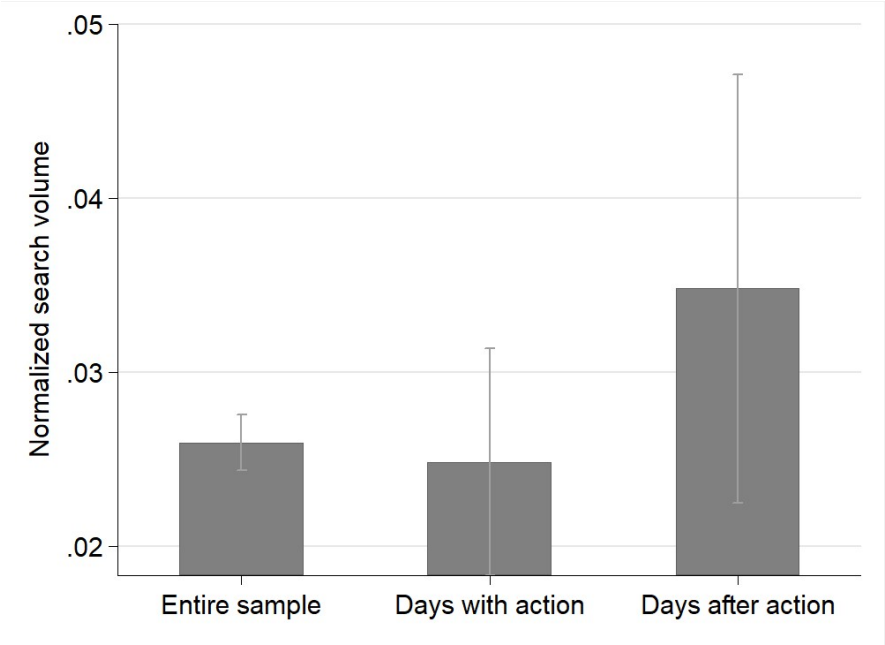
Notes: Based on 5,844 daily observations between 2000–2015.

Figure A3: Newspaper coverage about cartel proceedings



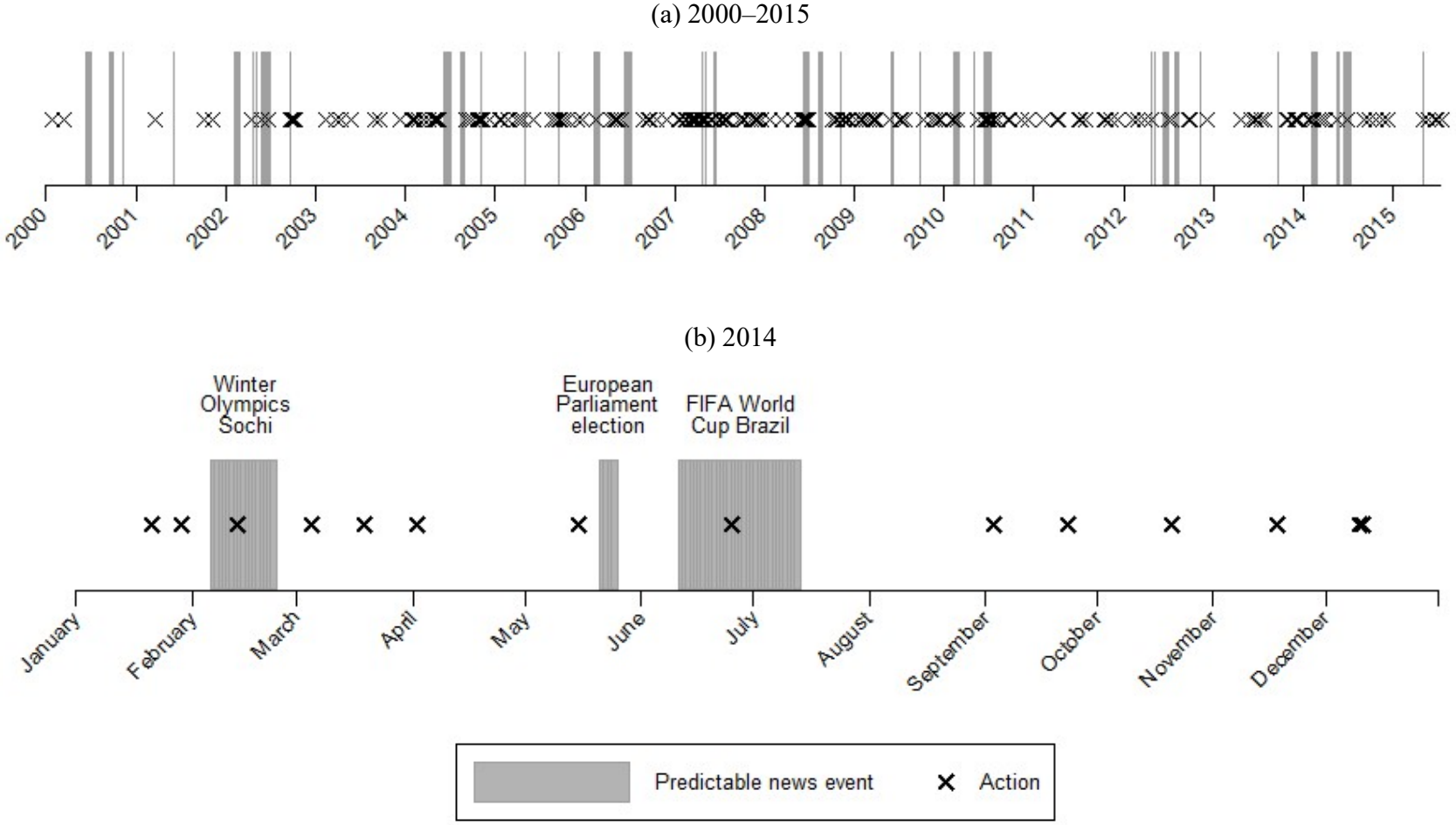
Notes: Based on 5,844 daily observations between 2000–2015.

Figure A4: Google searches on EU competition law



Notes: Based on 4,383 daily observations between 2004–2015.

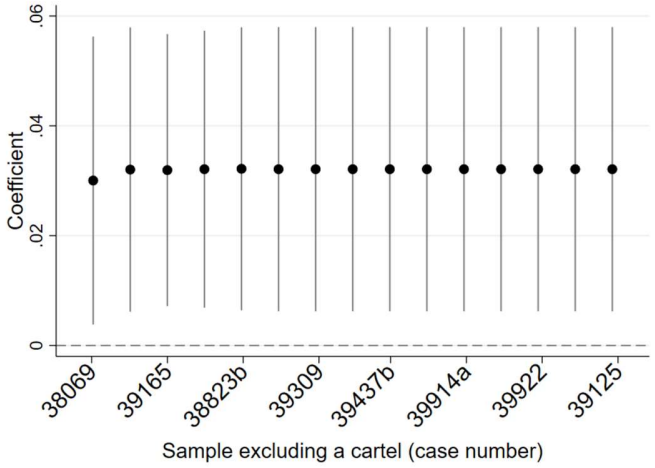
Figure A5: Timeline of actions by the European Commission



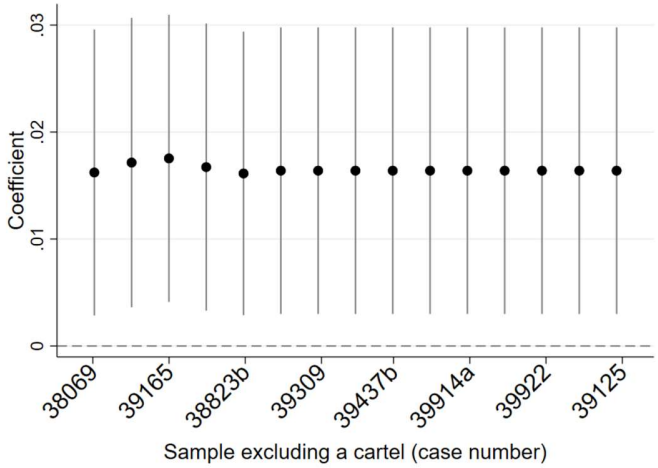
Notes: Actions include all procedural steps (raids, statements of objections, decisions) and corresponding press releases. Panel (b) "zooms" in 2014, to provide an example of a segment that is easier to read than entire timeline in Panel (a).

Figure A6: Cartel composition and timing of actions, excluding cartels with the largest fines

Panel (a): Decisions

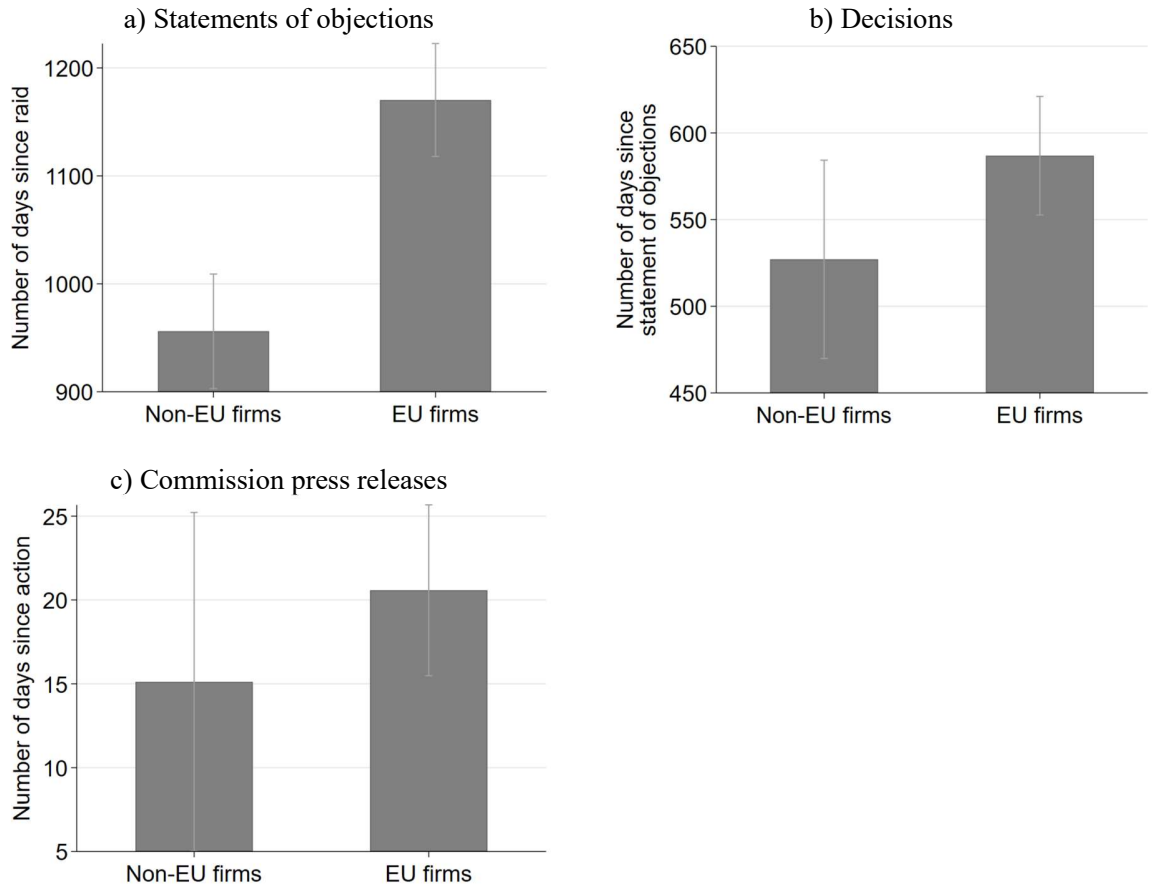


Panel (b): Commission press releases



Notes: The graphs show coefficients of the *Number of firms with EU headquarters* obtained by estimating versions of Equation (3). In contrast to the baseline specification, the coefficients are obtained after removing the 15 largest cartels, each at a time, according to their sum of fines. The underlying models include year and commissioner dummies, a dummy to capture cases subject to the 2006 fine-setting guidelines, the number of firms in the cartel, the average amount of the fine, the sum of fines, the average reduction due to the leniency program, the sum of reductions due to the leniency program, the average reduction due to settlement, the sum of reductions due to settlement, the average firm turnover, the sum of firm turnovers, the share of market listed firms, and the number of market listed firms. The vertical spikes represent the 90% confidence interval.

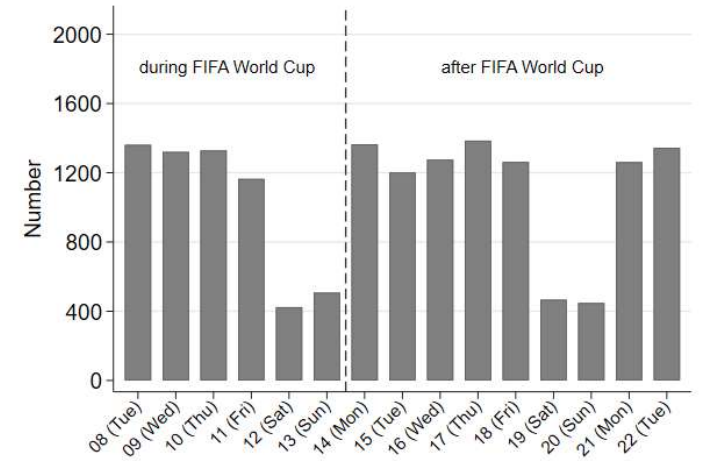
Figure A7: Firm nationality and duration of proceedings



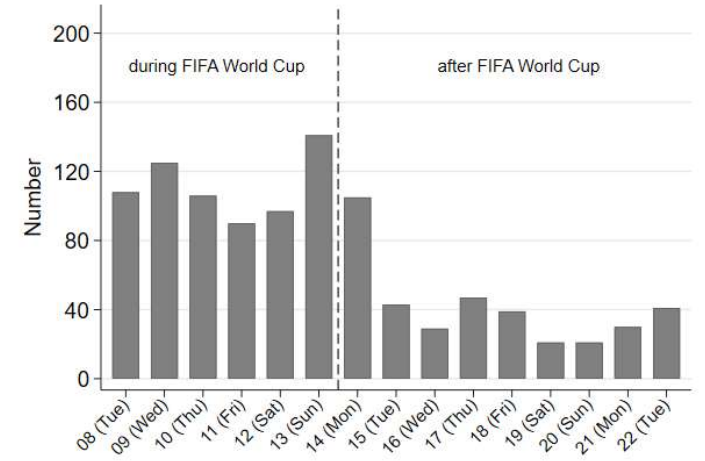
Notes: Firm nationality is determined by the location of company headquarters. The error bars represent the 95% confidence interval.

Figure A8: Daily number of press releases by European news agencies, July 8–22, 2014

Panel (a): All press releases



Panel (b): Press releases containing the term "World Cup"



Notes: Based on Nexis data for the 9 news agencies listed in Table A2. The semi-finals of the 2014 FIFA World Cup took place on July 8 and 9, the play-off for third place on July 12, and final on July 13, 2014. The charts illustrate that coverage of extraordinary news events, such as the FIFA World Cup, may crowd out coverage of unrelated news because of news agencies' resource restrictions. As shown in Panel (a), the overall amount of press releases was fairly constant over time (around 1,300 releases per day), independent of the occurrence of the FIFA World Cup. An exception were the weekends, where the daily number of releases dropped to about 400. This pattern suggests that news agencies' output is strongly affected by staff size, but hardly by the occurrence of extraordinary news events.