

Online Appendix:
The Impact of Economic Crises on Political
Representation in Public Communication: Evidence
from the Eurozone

September 26, 2016

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A Details on the Event Data

A.1 BBN ACCENT Machine Coding System

The news reports were machine coded by BBN ACCENT, an automatic information extraction system developed by BBN Technologies. The coder proceeds in several steps. First, it processes the meta-data of the input document (the news report), such as the publication date and its source. Second, it breaks the document into its sentences and proceeds with sentence-level extraction. This entails a number of processes, among others tokenization, name extraction, and classifying the relations between the entities in the sentence. Each of those processes is done by a separate model that has been trained using example data. Third, once the sentence-level processing for the entire document is completed, the document-level extraction takes place. This entails finding the entities that are the main actors in the event, and categorizing the nature of the event. To do so, the categorical coding scheme developed by the Conflict and Mediation Event Observation (CAMEO) project is used (Gerner, Schrodtt and Yilmaz, 2009). CAMEO consists of 20 top-level verb categories (with a total of around 350 subcategories) that classify the nature of the reported events. For example, some verb categories are “make optimistic comment,” “express intent to settle dispute,” or “accuse of aggression.” The full list of CAMEO codes can be found at <http://eventdata.parusanalytics.com/cameo.dir/CAMEO.Manual.1.1b3.pdf>. Finally, filters are applied to remove historical events and duplicates, so each event is only recorded in the data once, even if there are many different news reports about it. For more details, especially of technical nature of the ICEWS and ACCENT event coding, see Ramshaw et al. (2011), Boschee, Natarjan and Weischedel (2013), and Schrodtt and Van Brackle (2013). The final product for each event is four pieces of information: the event date, the event source, the event target, and the event type. The ICEWS data were publicly released to Dataverse in early 2015 and can be found at <http://dx.doi.org/10.7910/DVN/28075>. Under the same address, there are also documents with more a detailed technical description of the event coder including examples and evaluations.

A.2 Sources

Table 1: Top 10 news report sources

Source	Proportion of all Events
Agence France-Presse	0.177
Reuters News	0.138
Associated Press Newswires	0.120
Athens News Agency	0.053
El Pais - English Edition	0.048
Dow Jones International News	0.047
BBC Monitoring European	0.046
Irish Times	0.045
Le Figaro	0.039
Xinhua News Agency	0.034

List of all Sources: Note that a number of the sources originate from countries outside of Europe. However, reports from these sources still cover exclusively domestic events from one of the 11 Eurozone countries. ICEWS uses sources from around the world and employs an algorithm that identifies and deletes duplicate events. Thus, events reported by e.g. Xinhua News Agency likely are also reported by a European outlet such as Agence France-Presse or the BBC, but the de-duplication algorithm at times may only retain the report of a non-European source.

AAP Bulletins, Agence Europe, Agence France-Presse, Agencia Diarios y Noticias, Agencia EFE - Servicio em portugues, AKIpress, Al Arabiya, Al Dia, Al Jazeera English, Al-Bawaba News, All Africa, Americas Review World of Information, Anadolu News Agency, ANSA- Servicio Economia en Latinoamerica, AP Spanish Worldstream, APANEWS, ARKA - News (Armenia), Asia Pulse, Associated Press Newswires, Athens News Agency, Australian Associated Press, Australian Broadcasting Corporation (ABC) News, Baltic Business Weekly, Baltic Daily, Bangkok Post, BBC Monitoring, BBC Monitoring Africa, BBC Monitoring Americas, BBC Monitoring Asia Pacific, BBC Monitoring Caucasus, BBC Monitoring Central Asia, BBC Monitoring Central Europe and Balkans, BBC Monitoring European, BBC Monitoring Former Soviet Union, BBC Monitoring Latin America, BBC Monitoring Media, BBC Monitoring Middle East, BBC Monitoring Newsfile, BBC Monitoring South Asia, BBC Monitoring Ukraine & Baltics, Black Sea Press, BNS Baltic Business News, Bulgarian News Agency, Calgary Herald, Canada NewsWire, Cape Argus, Cape Times, Central News Agency English News, Channel NewsAsia, China Daily, CNN: Breaking News, Corporate Argentina, CTK Daily News, Daily Dispatch, Daily News, Daily Star, Daily Telegraph, Deutsche Welle, DJ em Portugues, Dow Jones Business News, Dow Jones Emerging Markets Report, Dow Jones en Espanol, Dow Jones International News, Dow Jones News Service, EFE News Service, El Clarin, El Comercio, El Cronista, El Economista, El Mercurio, El Nacional, El Norte, El Nuevo Dia, El Observador Economico, El Pais, El Pais - English Edition, El Universal, Esmerk Finnish News, EurActiv.fr, Euronews, Europolitique, FARS

News Agency, Folha de Sao Paulo, Gazeta do Povo, Guardian Unlimited, HINA, Hindustan Times, Horizons, Il Sole 24 Ore, Indo-Asian News Service, Inter Press Service, Interfax News Service, Irish Times, ISI Emerging Markets Africawire, Israel Faxx, IT Market Statistics, ITAR Tass, Jiji Press English News Service, Joins.com, KBS World News - French Edition, Korea Newswire, Korea Times, Kyodo News, L' Orient-Le Jour, L'Expression, La Nacion, La Republica, Latin America News Digest, Latvian News Agency, Le Figaro, Le Monde, Le Progres Egyptien, Le Quotidien, Le Temps, Lithuanian News Agency - ELTA, London Evening Standard, Mainichi Daily News, Market Wire, Middle East and North Africa Today, Mist News, Mural, New Straits Times, New Zealand Herald, New Zealand Press Association, O Estado de Sao Paulo, O Globo, Organisation de la Presse Africaine, Organisation of Asia-Pacific News Agencies, PACNEWS, the Pacific News Agency Service, Panorama Brasil - Portugues, PARI Daily, Philippine Daily Inquirer, PNA (Philippines News Agency), Polish News Bulletin, Prime-News (Georgia), Reforma, Resource News International, Reuters - Noticias Latinoamericanas, Reuters EU Highlights, Reuters News, RIA Novosti, RIA Vesti, Rompres, Russia & CIS General Newswire, SAINT (South Atlantic Islands News Team), SAPA (South African Press Association), SBS World News Headline Stories, SeeNews, Servicio Universal de Noticias, SITA Slovenska Tlacova Agentura, South China Morning Post, Spiegel Online International, Straits Times, Suddeutsche Zeitung, Taipei Times, TASR - Tlacova Agentura Slovenskej Republiky, Telecompaper Americas, Thai News Service, The Asian Wall Street Journal, The Australian, The Christian Science Monitor, The Courier-Mail, The Economist, The Hindu, The Jakarta Post, The Japan Times, The Jerusalem Post, The Korea Herald, The Mercury, The Moscow News, The Moscow Times, The Nation (Thailand), The New York Times, The Oil Daily, The San Diego Union-Tribune, The Scotsman, The Sydney Morning Herald, The Times of India, The Toronto Star, The Tripoli Post, The Wall Street Journal, The Wall Street Journal Asia, The Wall Street Journal Europe, The Washington Post, Trend News Agency (Azerbaijan), Turan Information Agency (Azerbaijan), Turkish Daily News, Ukrainian National News Agency, United News of Bangladesh Limited, Unknown, UPI Energy Resources, USA Today, UzReport.com, Vietnam News Agency Bulletin, What The Papers Say, WPS: What the Papers Say, Xinhua News Agency, Yemen News Agency (SABA), Yonhap English News

A.3 Cooperative and Conflictual CAMEO Codes

The news stories were classified into cooperative and conflictual events based upon the CAMEO coding scheme available at <http://eventdata.parusanalytics.com/cameo.dir/CAMEO.Manual.1.1b3.pdf>. In this section, I list the CAMEO codes for each category. Note that many CAMEO codes are irrelevant for domestic interactions in Eurozone countries (e.g. “Use unconventional mass violence”, “Engage in ethnic cleansing”) and do not show up in the data. However, I list them for the sake of completeness.

A.3.1 CAMEO Codes for Cooperative Events

- 013: Make optimistic comment
- 017: Engage in symbolic act
- 018: Make empathetic comment
- 019: Express accord
- 020: Make an appeal or request, not specified below
- 021: Appeal for material cooperation, not specified below
- 0211: Appeal for economic cooperation
- 0212: Appeal for military cooperation
- 0213: Appeal for judicial cooperation
- 0214: Appeal for intelligence
- 022: Appeal for diplomatic cooperation (such as policy support)
- 023: Appeal for aid, not specified below
- 0231: Appeal for economic aid
- 0232: Appeal for military aid
- 0233: Appeal for humanitarian aid
- 0234: Appeal for military protection or peacekeeping
- 026: Appeal to others to meet or negotiate
- 027: Appeal to others to settle dispute
- 028: Appeal to engage in or accept mediation
- 030: Express intent to cooperate, not specified below
- 031: Express intent to engage in material cooperation, not specified below
- 0311: Express intent to cooperate economically
- 0312: Express intent to cooperate militarily
- 0313: Express intent to cooperate on judicial matters
- 0314: Express intent to cooperate on intelligence

- 032: Express intent to engage in diplomatic cooperation (such as policy support)
- 033: Express intent to provide material aid, not specified below
- 0331: Express intent to provide economic aid
- 0332: Express intent to provide military aid
- 0333: Express intent to provide humanitarian aid
- 0334: Express intent to provide military protection or peacekeeping
- 034: Express intent to institute political reform, not specified below
- 0341: Express intent to change leadership
- 0342: Express intent to change policy
- 0343: Express intent to provide rights
- 0344: Express intent to change institutions, regime
- 035: Express intent to yield, not specified below
- 0351: Express intent to ease administrative sanctions
- 0352: Express intent to ease popular dissent
- 0353: Express intent to release persons or property
- 0354: Express intent to ease economic sanctions, boycott, or embargo
- 0355: Express intent to allow international involvement (non-mediation)
- 0356: Express intent to de-escalate military engagement
- 036: Express intent to meet or negotiate
- 037: Express intent to settle dispute
- 038: Express intent to accept mediation
- 039: Express intent to mediate
- 040: Consult, not specified below
- 041: Discuss by telephone
- 042: Make a visit
- 043: Host a visit
- 044: Meet at a “third” location
- 045: Mediate
- 046: Engage in negotiation
- 050: Engage in diplomatic cooperation, not specified below
- 051: Praise or endorse
- 052: Defend verbally
- 053: Rally support on behalf of
- 054: Grant diplomatic recognition

- 055: Apologize
- 056: Forgive
- 057: Sign formal agreement
- 060: Engage in material cooperation, not specified below
- 061: Cooperate economically
- 062: Cooperate militarily
- 063: Engage in judicial cooperation
- 064: Share intelligence or information
- 070: Provide aid, not specified below
- 071: Provide economic aid
- 072: Provide military aid
- 073: Provide humanitarian aid
- 074: Provide military protection or peacekeeping
- 075: Grant asylum
- 080: Yield, not specified below
- 081: Ease administrative sanctions, not specified below
- 0811: Ease restrictions on political freedoms
- 0812: Ease ban on political parties or politicians
- 0813: Ease curfew
- 0814: Ease state of emergency or martial law
- 082: Ease political dissent
- 083: Accede to requests or demands for political reform, not specified below
- 0831: Accede to demands for change in leadership
- 0832: Accede to demands for change in policy
- 0833: Accede to demands for rights
- 0834: Accede to demands for change in institutions, regime
- 084: Return, release, not specified below
- 0841: Return, release person(s)
- 0842: Return, release property
- 085: Ease economic sanctions, boycott, embargo
- 086: Allow international involvement, not specified below
- 0861: Receive deployment of peacekeepers
- 0862: Receive inspectors
- 0863: Allow humanitarian access

- 087: De-escalate military engagement
- 0871: Declare truce, ceasefire
- 0872: Ease military blockade
- 0873: Demobilize armed forces
- 0874: Retreat or surrender militarily

A.3.2 CAMEO Codes for Conflictual Events

- 011: Decline comment
- 012: Make pessimistic comment
- 016: Deny responsibility
- 024: Appeal for political reform, not specified below
- 0241: Appeal for change in leadership
- 0242: Appeal for policy change
- 0243: Appeal for rights
- 0244: Appeal for change in institutions, regime
- 025: Appeal to yield, not specified below
- 0251: Appeal for easing of administrative sanctions
- 0252: Appeal for easing of political dissent
- 0253: Appeal for release of persons or property
- 0254: Appeal for easing of economic sanctions, boycott, or embargo
- 0255: Appeal for target to allow international involvement (non-mediation)
- 0256: Appeal for de-escalation of military engagement
- 090: Investigate, not specified below
- 091: Investigate crime, corruption
- 092: Investigate human rights abuses
- 093: Investigate military action
- 094: Investigate war crimes
- 100: Demand, not specified below
- 101: Demand material cooperation, not specified below
- 1011: Demand economic cooperation
- 1012: Demand military cooperation
- 1013: Demand judicial cooperation
- 1014: Demand intelligence cooperation
- 102: Demand diplomatic cooperation (such as policy support)

- 103: Demand material aid, not specified below
- 1031: Demand economic aid
- 1032: Demand military aid
- 1033: Demand humanitarian aid
- 1034: Demand military protection or peacekeeping
- 104: Demand political reform, not specified below
- 1041: Demand change in leadership
- 1042: Demand policy change
- 1043: Demand rights
- 1044: Demand change in institutions, regime
- 105: Demand that target yields, not specified below
- 1051: Demand easing of administrative sanctions
- 1052: Demand easing of political dissent
- 1053: Demand release of persons or property
- 1054: Demand easing of economic sanctions, boycott, or embargo
- 1055: Demand that target allows international involvement (non-mediation)
- 1056: Demand de-escalation of military engagement
- 106: Demand meeting, negotiation
- 107: Demand settling of dispute
- 108: Demand mediation
- 110: Disapprove, not specified below
- 111: Criticize or denounce
- 112: Accuse, not specified below
- 1121: Accuse of crime, corruption
- 1122: Accuse of human rights abuses
- 1123: Accuse of aggression
- 1124: Accuse of war crimes
- 1125: Accuse of espionage, treason
- 113: Rally opposition against
- 114: Complain officially
- 115: Bring lawsuit against
- 116: Find guilty or liable (legally)
- 120: Reject, not specified below
- 121: Reject material cooperation

- 1211: Reject economic cooperation
- 1212: Reject military cooperation
- 122: Reject request or demand for material aid, not specified below
- 1221: Reject request for economic aid
- 1222: Reject request for military aid
- 1223: Reject request for humanitarian aid
- 1224: Reject request for military protection or peacekeeping
- 123: Reject request or demand for political reform, not specified below
- 1231: Reject request for change in leadership
- 1232: Reject request for policy change
- 1233: Reject request for rights
- 1234: Reject request for change in institutions, regime
- 124: Refuse to yield, not specified below
- 1241: Refuse to ease administrative sanctions
- 1242: Refuse to ease popular dissent
- 1243: Refuse to release persons or property
- 1244: Refuse to ease economic sanctions, boycott, or embargo
- 1245: Refuse to allow international involvement (non mediation)
- 1246: Refuse to de-escalate military engagement
- 125: Reject proposal to meet, discuss, or negotiate
- 126: Reject mediation
- 127: Reject plan, agreement to settle dispute
- 128: Defy norms, law
- 129: Veto
- 130: Threaten, not specified below
- 131: Threaten non-force, not specified below
- 1311: Threaten to reduce or stop aid
- 1312: Threaten with sanctions, boycott, embargo
- 1313: Threaten to reduce or break relations
- 132: Threaten with administrative sanctions, not specified below
- 1321: Threaten with restrictions on political freedoms
- 1322: Threaten to ban political parties or politicians
- 1323: Threaten to impose curfew
- 1324: Threaten to impose state of emergency or martial law

- 133: Threaten with political dissent, protest
- 134: Threaten to halt negotiations
- 135: Threaten to halt mediation
- 136: Threaten to halt international involvement (non-mediation)
- 137: Threaten with repression
- 138: Threaten with military force, not specified below
- 1381: Threaten blockade
- 1382: Threaten occupation
- 1383: Threaten unconventional violence
- 1384: Threaten conventional attack
- 1385: Threaten attack with WMD
- 139: Give ultimatum
- 140: Engage in political dissent, not specified below
- 141: Demonstrate or rally, not specified below
- 1411: Demonstrate for leadership change
- 1412: Demonstrate for policy change
- 1413: Demonstrate for rights
- 1414: Demonstrate for change in institutions, regime
- 142: Conduct hunger strike, not specified below
- 1421: Conduct hunger strike for leadership change
- 1422: Conduct hunger strike for policy change
- 1423: Conduct hunger strike for rights
- 1424: Conduct hunger strike for change in institutions, regime
- 143: Conduct strike or boycott, not specified below
- 1431: Conduct strike or boycott for leadership change
- 1432: Conduct strike or boycott for policy change
- 1433: Conduct strike or boycott for rights
- 1434: Conduct strike or boycott for change in institutions, regime
- 144: Obstruct passage, block, not specified below
- 1441: Obstruct passage to demand leadership change
- 1442: Obstruct passage to demand policy change
- 1443: Obstruct passage to demand rights
- 1444: Obstruct passage to demand change in institutions, regime
- 145: Protest violently, riot, not specified below

- 1451: Engage in violent protest for leadership change
- 1452: Engage in violent protest for policy change
- 1453: Engage in violent protest for rights
- 1454: Engage in violent protest for change in institutions, regime
- 150: Demonstrate military or police power, not specified below
- 151: Increase police alert status
- 152: Increase military alert status
- 153: Mobilize or increase police power
- 154: Mobilize or increase armed forces
- 155: Mobilize or increase cyber-forces
- 160: Reduce relations, not specified below
- 161: Reduce or break diplomatic relations
- 162: Reduce or stop material aid, not specified below
- 1621: Reduce or stop economic assistance
- 1622: Reduce or stop military assistance
- 1623: Reduce or stop humanitarian assistance
- 163: Impose embargo, boycott, or sanctions
- 164: Halt negotiations
- 165: Halt mediation
- 166: Expel or withdraw, not specified below
- 1661: Expel or withdraw peacekeepers
- 1662: Expel or withdraw inspectors, observers
- 1663: Expel or withdraw aid agencies
- 170: Coerce, not specified below
- 171: Seize or damage property, not specified below
- 1711: Confiscate property
- 1712: Destroy property
- 172: Impose administrative sanctions, not specified below
- 1721: Impose restrictions on political freedoms
- 1722: Ban political parties or politicians
- 1723: Impose curfew
- 1724: Impose state of emergency or martial law
- 173: Arrest, detain, or charge with legal action
- 174: Expel or deport individuals

- 175: Use tactics of violent repression
- 176: Attack cybernetically
- 180: Use unconventional violence, not specified below
- 181: Abduct, hijack, or take hostage
- 182: Physically assault, not specified below
- 1821: Sexually assault
- 1822: Torture
- 1823: Kill by physical assault
- 183: Conduct suicide, car, or other non-military bombing, not specified below
- 1831: Carry out suicide bombing
- 1832: Carry out vehicular bombing
- 1833: Carry out roadside bombing
- 1834: Carry out location bombing
- 184: Use as human shield
- 185: Attempt to assassinate
- 186: Assassinate
- 190: Use conventional military force, not specified below
- 191: Impose blockade, restrict movement
- 192: Occupy territory
- 193: Fight with small arms and light weapons
- 194: Fight with artillery and tanks
- 195: Employ aerial weapons, not specified below
- 1951: Employ precision-guided aerial munitions
- 1952: Employ remotely piloted aerial munitions
- 196: Violate ceasefire
- 200: Use unconventional mass violence, not specified below
- 201: Engage in mass expulsion
- 202: Engage in mass killings
- 203: Engage in ethnic cleansing
- 204: Use weapons of mass destruction, not specified below
- 2041: Use chemical, biological, or radiological weapons
- 2042: Detonate nuclear weapons

A.4 List of Actors

A.4.1 Political Parties

- **Austria:** SPO, FPÖ, ÖVP, Greens, BZÖ
- **Belgium:** CD&V, CDH, Ecolo, Groen, MR, N-VA, PS, SP.A, SPIRIT, VB, VLD
- **Finland:** Centre, Green League, Left Alliance, NCP, PS, SDP, SFP
- **France:** EELV, FN, MoDem, PCF, PS, RPR, UMP
- **Germany:** CDU/CSU, FDP, Grüne, PDS/Linke, SPD
- **Greece:** KKE, ND, PASOK
- **Ireland:** Fianna Fail, Fine Gael, Labour, Sinn Féin
- **Italy:** AN, DL, DS, FI, LN, PD, PdL, PRC, UdC
- **Netherlands:** CDA, D66, GL, LPF, PvdA, PVV, VVD
- **Portugal:** CDS-PP, CDU, PS, PSD
- **Spain:** PP, PSOE

A.4.2 Societal Actors

Table 2: Top 5 societal actors: Austria

Source	Proportion of all Country Events
Citizen (Austria)	0.294
Men (Austria)	0.060
Criminal (Austria)	0.038
Josef Fritzl	0.036
Lawyer/Attorney (Austria)	0.034

Table 3: Top 5 societal actors: Belgium

Source	Proportion of all Country Events
Citizen (Belgium)	0.344
Criminal (Belgium)	0.049
Men (Belgium)	0.036
Protester (Belgium)	0.030
Lawyer/Attorney (Belgium)	0.029

Table 4: Top 5 societal actors: Finland

Source	Proportion of all Country Events
Citizen (Finland)	0.290
Armed Gang (Finland)	0.092
Men (Finland)	0.048
Business (Finland)	0.036
Criminal (Finland)	0.024

Table 5: Top 5 societal actors: France

Source	Proportion of all Country Events
Citizen (France)	0.292
Lawyer/Attorney (France)	0.029
Men (France)	0.029
Criminal (France)	0.023
Labor Union (France)	0.022

Table 6: Top 5 societal actors: Germany

Source	Proportion of all Country Events
Citizen (Germany)	0.260
Men (Germany)	0.044
Lawyer/Attorney (Germany)	0.040
Business (Germany)	0.032
Criminal (Germany)	0.027

Table 7: Top 5 societal actors: Greece

Source	Proportion of all Country Events
Citizen (Greece)	0.226
Protester (Greece)	0.062
Men (Greece)	0.047
Children (Greece)	0.039
Criminal (Greece)	0.037

Table 8: Top 5 societal actors: Ireland

Source	Proportion of all Country Events
Citizen (Ireland)	0.342
Men (Ireland)	0.083
Irish Republican Army	0.034
Business (Ireland)	0.029
Criminal (Ireland)	0.023

Table 9: Top 5 societal actors: Italy

Source	Proportion of all Country Events
Citizen (Italy)	0.292
Lawyer/Attorney (Italy)	0.066
Protester (Italy)	0.046
Men (Italy)	0.030
Criminal (Italy)	0.022

Table 10: Top 5 societal actors: Netherlands

Source	Proportion of all Country Events
Citizen (Netherlands)	0.303
Men (Netherlands)	0.091
Criminal (Netherlands)	0.073
Lawyer/Attorney (Netherlands)	0.043
Party Member (Netherlands)	0.035

Table 11: Top 5 societal actors: Portugal

Source	Proportion of all Country Events
Citizen (Portugal)	0.276
Men (Portugal)	0.035
Criminal (Portugal)	0.034
Party Member (Portugal)	0.016
Lawyer/Attorney (Portugal)	0.013

Table 12: Top 5 societal actors: Spain

Source	Proportion of all Country Events
Citizen (Spain)	0.304
ETA	0.156
Criminal (Spain)	0.045
Men (Spain)	0.037
Lawyer/Attorney (Spain)	0.018

A.5 Summary Statistics

A.5.1 Event Data by Country and Year

Table 13: Summary statistics of events by country

Country	Number of Events	Proportion Conflictual	Number of Actors
Austria	5612	0.522	160
Belgium	3057	0.496	181
Finland	1157	0.481	117
France	29142	0.507	381
Germany	19457	0.515	259
Greece	13892	0.554	222
Ireland	8264	0.582	244
Italy	15078	0.591	300
Netherlands	3612	0.629	167
Portugal	2395	0.469	132
Spain	39568	0.651	311
	141234	0.569	2474

Table 14: Summary statistics of events by year

Year	Number of Events	Proportion Conflictual	Number of Actors
2001	11156	0.544	996
2002	10326	0.508	953
2003	8511	0.498	900
2004	16557	0.587	1072
2005	16552	0.57	1111
2006	16108	0.55	1128
2007	16136	0.568	1111
2008	14811	0.58	1052
2009	11626	0.619	995
2010	10587	0.632	980
2011	8864	0.585	847
	141234	0.569	2474

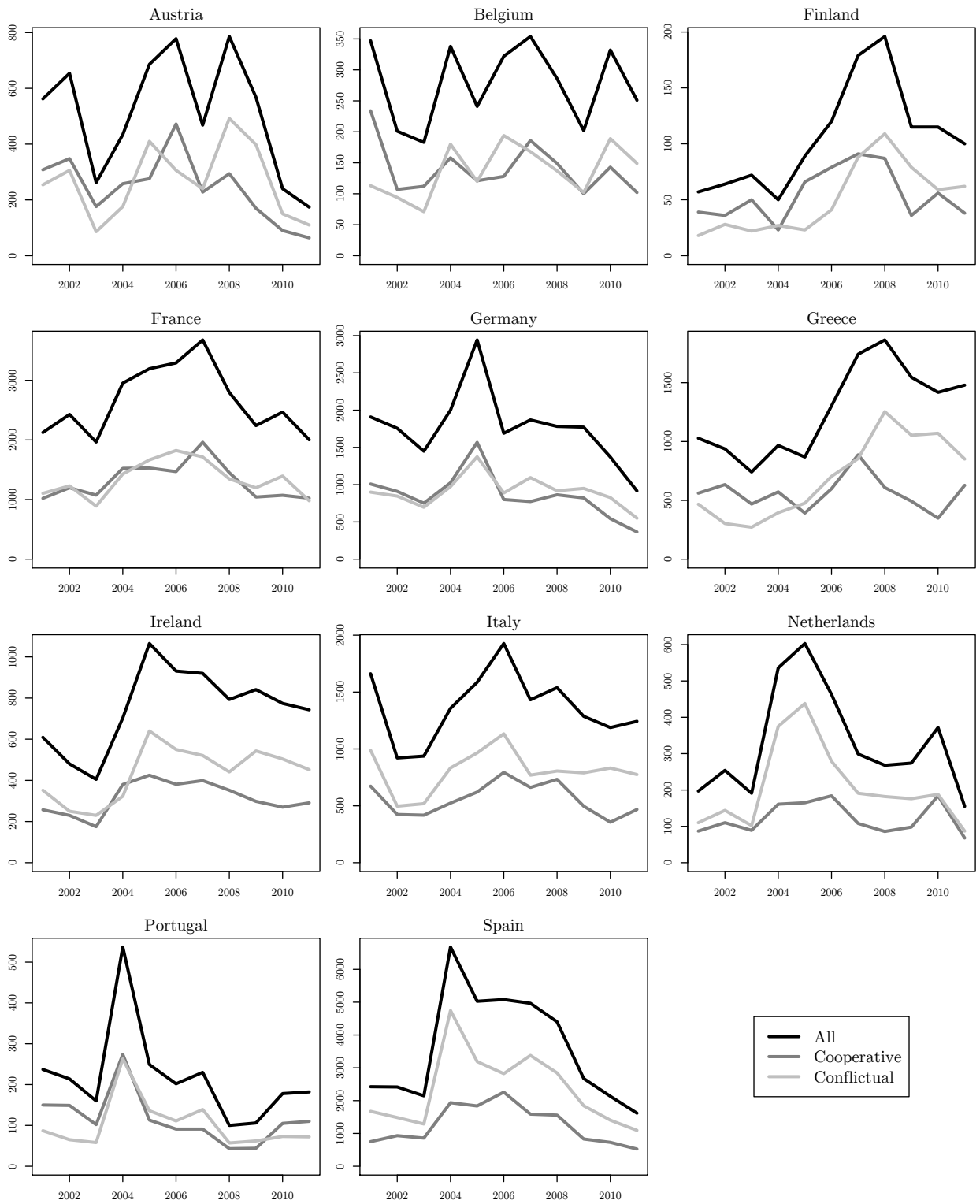


Figure 1: Number of events by country-year.

A.5.2 Cooperative and Conflictual Events

Table 15: Top 5 CAMEO categories for cooperative events, all interactions.

Event Type	Proportion of Events
Consult	0.100
Make an appeal or request	0.068
Express intent to meet or negotiate	0.061
Praise or endorse	0.040
Engage in negotiation	0.016

Table 16: Top 5 CAMEO categories for conflictual events, all interactions.

Event Type	Proportion of Events
Arrest, detain, or charge with legal action	0.154
Criticize or denounce	0.062
Accuse	0.053
Investigate	0.042
Use conventional military force	0.028

Table 17: Top 5 CAMEO categories for cooperative events, interactions between two political parties only

Event Type	Proportion of Party/Party Events
Consult	0.275
Praise or endorse	0.079
Express intent to meet or negotiate	0.072
Make an appeal or request	0.068
Engage in negotiation	0.038

Table 18: Top 5 CAMEO categories for conflictual events, interactions between two political parties only

Event Type	Proportion of Party/Party Events
Criticize or denounce	0.108
Accuse	0.081
Reject	0.021
Demand	0.020
Reduce relations	0.010

Table 19: Top 5 CAMEO categories for cooperative events, interactions between one political party and one societal actor only

Event Type	Proportion of Party/Non-Party Events
Make an appeal or request	0.133
Consult	0.099
Express intent to meet or negotiate	0.089
Engage in negotiation	0.034
Praise or endorse	0.032

Table 20: Top 5 CAMEO categories for conflictual events, interactions between one political party and one societal actor only

Event Type	Proportion of Party/Non-Party Events
Criticize or denounce	0.112
Accuse	0.107
Demand	0.029
Demonstrate or rally	0.028
Reject	0.027

Table 21: Top 5 CAMEO categories for cooperative events, interactions between one political party and non-party actor (broader category than societal actors) only

Event Type	Proportion of Party/Non-Party Events
Consult	0.149
Make an appeal or request	0.101
Express intent to meet or negotiate	0.098
Praise or endorse	0.063
Host a visit	0.037

Table 22: Top 5 CAMEO categories for conflictual events, interactions between one political party and one non-party actor (broader category than societal actors) only

Event Type	Proportion of Party/Non-Party Events
Criticize or denounce	0.084
Accuse	0.067
Demand	0.033
Reject	0.025
Investigate	0.017

Table 23: Top 5 CAMEO categories for cooperative events, interactions between societal actors only

Event Type	Proportion of Non-Party/Non-Party Events
Make an appeal or request	0.068
Consult	0.028
Express intent to meet or negotiate	0.017
Return, release person(s)	0.017
Provide humanitarian aid	0.015

Table 24: Top 5 CAMEO categories for conflictual events, interactions between societal actors only

Event Type	Proportion of Non-Party/Non-Party Events
Use unconventional violence	0.127
Accuse	0.073
Use conventional military force	0.062
Criticize or denounce	0.061
fight with small arms and light weapons	0.052

Table 25: Top 5 CAMEO categories for cooperative events, interactions between non-party actors (broader category than societal actors) only

Event Type	Proportion of Non-Party/Non-Party Events
Make an appeal or request	0.051
Express intent to meet or negotiate	0.039
Consult	0.032
Praise or endorse	0.018
Return, release person(s)	0.016

Table 26: Top 5 CAMEO categories for conflictual events, interactions between non-party actors (broader category than societal actors) only

Event Type	Proportion of Non-Party/Non-Party Events
Arrest, detain, or charge with legal action	0.267
Investigate	0.065
Use conventional military force	0.046
Use unconventional violence	0.042
Criticize or denounce	0.040

B Summary Statistics of Regression Data

Table 27: Summary statistics of variables used.

	Mean	Std. Dev.	Min	Max
Expected Cooperation Score	0.00	0.01	-0.23	0.36
Growth GDPpc	0.76	2.50	-9.00	5.54
Trade Openness	80.21	39.39	45.61	190.23
Population (log)	17.15	1.04	15.17	18.23
Election Year	0.27	0.44	0.00	1.00
Number of Parties	4.78	1.38	2.00	8.00
Number of Events	1583.43	1167.89	50.00	6682.00
Mean Cooperation Score	0.00	0.00	-0.00	0.01

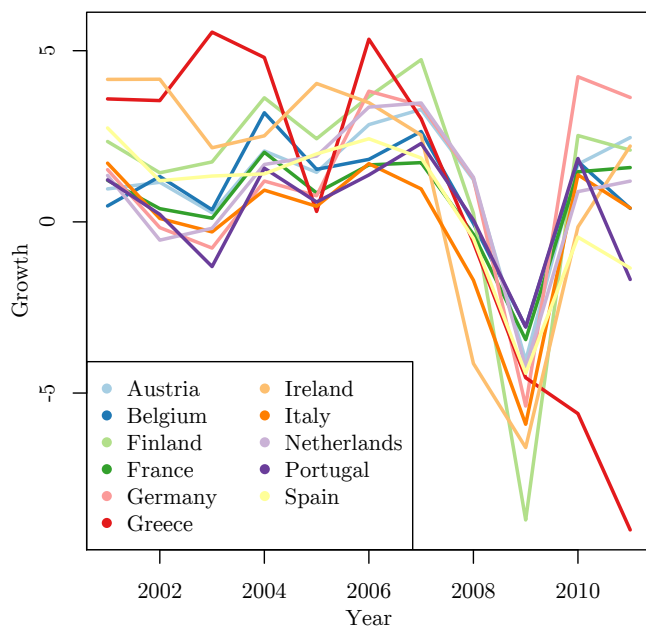


Figure 2: Main Independent Variable: GDP per capita growth by country and year.

I use GDP per capita growth as the main independent variable while focusing much of the discussion on how representation was affected by the Great Recession. Figure 2 plots economic growth for all 11 countries from 2001 to 2011. It shows that growth is relatively stable and positive in the Eurozone countries until 2007. In 2008 and especially in 2009, there is a dramatic drop in all 11 countries, before recovering again except for the countries that were most severely affected (Greece, Spain, Portugal). This makes it clear that much of the variance in the growth data is driven by the Great Recession.

To further illustrate this, I regress GDP per capita growth on a set of year dummies. Table 28 uses 2001 as the baseline, so the coefficients show how different growth in the other years was from then. Years for which the difference is significant at the 5 percent level are highlighted in gray. They are 2008, 2009, and 2011. In each of those years, growth in the Eurozone was significantly lower than in 2001, up to almost 7 percent lower. All pre-crisis years do not significantly differ from 2001. This again suggests that the bulk of the variance in the variable comes from the Great Recession.

Table 28: Regressing GDP per capita growth on a set of year dummies. Baseline year: 2001.

	Estimate	Std. Error	t value	Pr(> t)
2001	-	-	-	-
2002	-0.7710	0.7663	-1.01	0.3165
2003	-1.1217	0.7663	-1.46	0.1461
2004	0.3350	0.7663	0.44	0.6629
2005	-0.4548	0.7663	-0.59	0.5540
2006	0.9238	0.7663	1.21	0.2306
2007	0.7838	0.7663	1.02	0.3086
2008	-2.2298	0.7663	-2.91	0.0044
2009	-6.7970	0.7663	-8.87	0.0000
2010	-1.0659	0.7663	-1.39	0.1670
2011	-1.7599	0.7663	-2.30	0.0235
(Intercept)	1.9374	0.5418	3.58	0.0005

C Additional Analyses

C.1 Descriptive Analysis of Compression Effect

In the paper, I show that lower GDP per capita growth leads to a “compression” of political representation, and interpret this mainly as the consequence of the Great Recession. I have already presented evidence in Section B showing that much of the variance in the growth data is a consequence of the crisis. The findings also suggest that the compression effect is larger for countries more affected by the recession. In this section, I provide further support for this using a simple descriptive analysis.

Table 29: Standard deviation of all cooperation scores by period and country

Country	SD 01-07	SD 08-09	% Red. 08-09	SD 10-11	Red. 10-11
Austria	0.0234	0.0055	-76.4	0.0092	-60.6
Belgium	0.0114	0.0093	-18.8	0.0069	-39.4
Finland	0.0250	0.0215	-14.1	0.0179	-28.4
France	0.0063	0.0064	0.8	0.0035	-44.9
Germany	0.0100	0.0073	-27.1	0.0028	-72.4
Greece	0.0092	0.0006	-93.3	0.0003	-96.6
Ireland	0.0146	0.0078	-46.6	0.0058	-60.3
Italy	0.0063	0.0055	-12.8	0.0081	27.3
Netherlands	0.0093	0.0081	-13.2	0.0188	102.6
Portugal	0.0188	0.0067	-64.2	0.0340	80.8
Spain	0.0138	0.0130	-5.6	0.0027	-80.6

As a descriptive indicator of how parties represent societal actors, I compute the standard deviation of the cooperation scores for each country for three time periods: 2001-07, 2008-09, and 2010-11. The first column in Table 29 shows the standard deviation for the pre-crisis period, and the second column for the two years that were the height of the crisis. The lower the number, the more compressed is political representation, roughly speaking. The third column shows the percentage change from the first period to the second. The largest drops happened Greece, Austria, Portugal, and Ireland. This list contains three of the five so-called PIIGS countries that were affected the worst by the crisis. The other two (Italy and Spain) do not see a large reduction, but they also stand out in that the former has an unusually large number of parties competing, and the latter is the only country in the sample that at the time had a two-party system. The final two columns show the standard deviations for the years 2010-11 and the percentage change compared to 2001-07. Here the two countries with the largest drop are Greece and Spain.

C.2 Regressions Including All Non-Party Groups

I have divided the non-party actors into two categories: non-partisan political and societal. Non-partisan political actors are those belonging to the state apparatus, but are not explicitly partisan (e.g. police, judges, military). Societal actors consist of e.g. citizens, representatives of corporations or unions, religious groups, or other civil society organizations. Since the paper examines political representation in political communication, I only include the latter in the manuscript. Tables 30 and 31 replicate Tables 1 and 2 of the paper using both non-partisan political as well as societal actors. The substantive findings are the same as in the paper.

Table 30: Effect of economic conditions on the expected cooperation score between political parties and non-party groups (broader category than societal actors): Quantile regression based on 43,522 observations. 95 percent confidence intervals in parentheses.

	0.01	0.05	0.25	0.50	0.75	0.95	0.99
Growth GDPpc	-0.00106 (-0.00213, 0.00002)	-0.00054 (-0.00073, -0.00032)	-0.00003 (-0.00004, -0.00002)	0.00000 (0.00000, 0.00000)	0.00003 (0.00002, 0.00004)	0.00059 (0.00040, 0.00078)	0.00159 (0.00027, 0.00290)
Trade Openness	0.00019 (0.00003, 0.00033)	0.00006 (0.00002, 0.00009)	0.00000 (0.00000, 0.00000)	0.00000 (0.00000, 0.00000)	0.00000 (0.00000, 0.00000)	-0.00007 (-0.00010, -0.00004)	-0.00029 (-0.00048, -0.00010)
Population (log)	0.00939 (0.00379, 0.01501)	0.00263 (0.00116, 0.00395)	0.00016 (0.00008, 0.00025)	0.00000 (0.00000, 0.00001)	-0.00012 (-0.00019, -0.00005)	-0.00504 (-0.00627, -0.00376)	-0.01080 (-0.01796, -0.00381)
Election Year	-0.00561 (-0.01217, 0.00070)	-0.00153 (-0.00294, -0.00026)	-0.00011 (-0.00019, -0.00005)	0.00000 (-0.00001, 0.00001)	0.00013 (0.00007, 0.00019)	-0.00071 (-0.00218, 0.00071)	0.00419 (-0.00379, 0.01209)
Number of Parties	0.00479 (0.00262, 0.00693)	0.00166 (0.00118, 0.00214)	0.00005 (0.00002, 0.00008)	0.00000 (-0.00001, 0.00000)	-0.00007 (-0.00009, -0.00004)	-0.00155 (-0.00203, -0.00110)	-0.00616 (-0.00875, -0.00357)
Number of Events	0.00000 (0.00000, 0.00000)	0.00000 (0.00000, 0.00000)	0.00000 (0.00000, 0.00000)	0.00000 (0.00000, 0.00000)	0.00000 (0.00000, 0.00000)	0.00000 (0.00000, 0.00000)	0.00000 (-0.00001, 0.00000)
Mean Cooperation Score	-1.18098 (-18.98414, 13.72440)	-1.32931 (-6.20105, 2.95624)	-0.02402 (-0.45731, 0.33141)	0.08484 (0.00828, 0.20863)	0.93240 (0.42645, 1.45116)	11.04978 (7.10766, 16.14422)	42.57647 (26.69761, 62.19683)
Constant	-0.22992 (-0.33327, -0.12625)	-0.06527 (-0.08990, -0.03893)	-0.00355 (-0.00514, -0.00210)	-0.00003 (-0.00019, 0.00010)	0.00290 (0.00167, 0.00418)	0.10510 (0.08194, 0.12741)	0.28577 (0.15793, 0.41686)

Table 31: Effect of economic conditions on the expected cooperation score between political parties and non-party groups (broader category than societal actors): Quantile regression based on 43,522 observations. 95 percent confidence intervals in parentheses. First table: with country fixed effects. Second table: with country and year fixed effects.

	0.01	0.05	0.25	0.50	0.75	0.95	0.99
Country FE:							
Growth GDPpc	-0.00061 (-0.00139, 0.00027)	-0.00019 (-0.00034, -0.00001)	-0.00001 (-0.00002, -0.00001)	0.00000 (0.00000, 0.00000)	0.00001 (0.00000, 0.00002)	0.00029 (0.00009, 0.00048)	0.00036 (-0.00078, 0.00149)
Trade Openness	0.00047 (0.00005, 0.00091)	0.00008 (-0.00001, 0.00018)	0.00001 (0.00000, 0.00001)	0.00000 (0.00000, 0.00000)	0.00000 (0.00000, 0.00001)	0.00000 (-0.00011, 0.00011)	-0.00060 (-0.00106, -0.00012)
Population (log)	0.12614 (0.03574, 0.22056)	0.05115 (0.01905, 0.08685)	0.00295 (0.00127, 0.00479)	0.00020 (-0.00005, 0.00049)	-0.00101 (-0.00258, 0.00043)	-0.06323 (-0.11639, -0.01342)	-0.22159 (-0.33089, -0.11137)
Election Year	-0.00193 (-0.00809, 0.00395)	0.00090 (-0.00065, 0.00228)	0.00003 (-0.00005, 0.00009)	0.00000 (-0.00001, 0.00002)	0.00003 (-0.00003, 0.00009)	-0.00118 (-0.00263, 0.00037)	-0.00598 (-0.01405, 0.00235)
Number of Parties	0.00164 (-0.00150, 0.00486)	0.00009 (-0.00050, 0.00078)	-0.00005 (-0.00009, -0.00002)	-0.00001 (-0.00001, 0.00000)	0.00000 (-0.00004, 0.00004)	-0.00069 (-0.00172, 0.00038)	-0.00184 (-0.00627, 0.00321)
Number of Events	0.00000 (0.00000, 0.00000)	0.00000 (0.00000, 0.00000)	0.00000 (0.00000, 0.00000)	0.00000 (0.00000, 0.00000)	0.00000 (0.00000, 0.00001)	0.00000 (0.00000, 0.00001)	0.00000 (0.00000, 0.00001)
Mean Cooperation Score	-7.50232 (-25.76173, 7.81577)	-1.87620 (-7.88543, 3.41415)	0.04070 (-0.46808, 0.43950)	0.10456 (0.01351, 0.24490)	1.12677 (0.62723, 1.69075)	19.38693 (12.23199, 27.75891)	59.40035 (34.35024, 80.91576)
Constant	-2.11179 (-3.60382, -0.68309)	-0.83628 (-1.40028, -0.33039)	-0.04836 (-0.07733, -0.02182)	-0.00326 (-0.00771, 0.00069)	0.01670 (-0.00599, 0.04157)	1.02293 (0.23533, 1.86527)	3.66015 (1.92551, 5.37609)
Country and Year FE:							
Growth GDPpc	-0.00142 (-0.00259, -0.00022)	-0.00064 (-0.00093, -0.00035)	-0.00003 (-0.00004, -0.00001)	0.00000 (0.00000, 0.00000)	0.00002 (0.00001, 0.00003)	0.00061 (0.00036, 0.00088)	0.00175 (0.00012, 0.00328)
Trade Openness	0.00043 (-0.00006, 0.00089)	0.00006 (-0.00003, 0.00016)	0.00001 (0.00000, 0.00001)	0.00000 (0.00000, 0.00000)	0.00001 (0.00000, 0.00001)	0.00004 (-0.00006, 0.00014)	-0.00071 (-0.00115, -0.00029)
Population (log)	0.15781 (0.01654, 0.29943)	0.05331 (0.00892, 0.09925)	0.00232 (-0.00086, 0.00592)	0.00012 (-0.00044, 0.00065)	-0.00185 (-0.00472, 0.00094)	-0.03097 (-0.08495, 0.02126)	-0.10501 (-0.25231, 0.03890)
Election Year	-0.00038 (-0.00751, 0.00645)	0.00188 (0.00002, 0.00358)	0.00003 (-0.00006, 0.00013)	0.00001 (-0.00001, 0.00002)	0.00005 (-0.00004, 0.00014)	-0.00354 (-0.00514, -0.00195)	-0.01150 (-0.01890, -0.00381)
Number of Parties	0.00231 (-0.00078, 0.00547)	0.00002 (-0.00065, 0.00072)	-0.00004 (-0.00008, 0.00000)	0.00000 (-0.00001, 0.00000)	-0.00001 (-0.00006, 0.00003)	-0.00089 (-0.00190, 0.00012)	-0.00293 (-0.00656, 0.00068)
Number of Events	-0.00001 (-0.00001, 0.00000)	0.00000 (-0.00001, 0.00000)	0.00000 (0.00000, 0.00000)	0.00000 (0.00000, 0.00000)	0.00000 (0.00000, 0.00001)	0.00001 (0.00000, 0.00001)	0.00001 (0.00001, 0.00002)
Mean Cooperation Score	-6.40002 (-27.18769, 10.57798)	-2.08608 (-8.63779, 3.59308)	0.02821 (-0.57604, 0.51628)	0.12551 (0.01181, 0.28744)	1.23177 (0.66003, 1.87857)	18.46949 (11.39245, 26.63386)	52.14912 (26.31168, 80.56860)
Constant	-2.60936 (-4.85606, -0.36528)	-0.86573 (-1.59180, -0.16268)	-0.03835 (-0.09546, 0.01214)	-0.00195 (-0.01047, 0.00687)	0.00002 (-0.00020, 0.00023)	0.50497 (-0.32210, 1.36071)	1.82982 (-0.43798, 4.15641)

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