

Supplementary Material:

Table 1. Description of the independent variables.

Variable Name	Variable Definition	Variable Type
Population Size	FFF-LGs contexts' total resident population (ISTAT22).	Ordinal and rescaled
Region	Geographical, political and administrative categorization of the Italy (ISTAT)	Categorical (Abruzzo, Basilicata, Calabria, Campania, Emilia-Romagna, Friuli-Venezia Giulia, Lazio, Liguria, Lombardia, Marche, Molise, Piemonte, Puglia, Sardegna, Sicilia, Toscana, Trentino-Alto Adige, Umbria, Valle d'Aosta and Veneto)
Founding Group	LG's foundation period (Questionnaire)	Categorical (Earlier, Middle, Later)
Milan Collective Action Frames	Result of the frame analysis inductively conducted on FFF-LGs speeches during the meeting in Milan	Categorical (Global Climate Justice – reference category, Glocal Reformist, National Reformist, Global Rejectionist, Glocal Rejectionist, Local Rejectionist, Lifestyle Change, NA)
Milan Rejectionist Collective Action Frame	Grouping of the collective action frames with a rejectionist orientation towards political institutions	Dichotomous (1 Rejectionist, 0 Reformist, NA)
Naples Collective Action Frames	Result of the frame analysis inductively conducted on FFF-LGs speeches during the meeting in Naples	Categorical (Global Climate Justice – ref, Global Reformist, Local Reformist, National Reformist, Global Rejectionist, Glocal Rejectionist, Local Rejectionist, NA)
Naples Rejectionist Collective Action Frame	Grouping of the collective action frames with a rejectionist orientation towards political institutions	Dichotomous (1 Rejectionist, 0 Reformist, NA)

Table 2. ERGMs Goodness of Fit

Model 0 (sim5000)	obs	min	mean	max	MC p-value
edges (Arc)	257,00	152,00	259,00	400,00	0,98
mutual (Reciprocity)	100,00	52,00	101,00	163,00	1,00
gwideg.fixed.0.2 (AinS)	102,00	80,00	102,00	119,00	0,97
gwodeg.fixed.0.2 (AoutS)	105,00	80,80	105,00	121,00	0,96
gwesp.OTP.fixed.0.2 (AT-T)	127,00	34,10	130,00	266,00	0,98

gwersp.ITP.fixed.0.2 (AT-C)	117,00	25,40	120,00	250,00	0,99
Model 1 (sim50000)	obs	min	mean	max	MC p-value
edges (Arc)	257,00	199,00	257,20	323,00	1,00
mutual (Reciprocity)	100,00	71,00	100,00	130,00	1,00
gwideg.fixed.0.2 (AinS)	102,10	87,50	102,10	117,00	0,98
gwodeg.fixed.0.2 (AoutS)	104,70	88,00	104,62	120,00	1,00
gwersp.OTP.fixed.0.2 (AT-T)	127,30	48,00	128,00	212,00	0,99
gwersp.ITP.fixed.0.2 (AT-C)	116,70	44,00	117,47	198,00	0,92
absdiff.population (difference)	91,90	48,90	91,00	141,00	1,00
nodeocov.earlier (sender)	159,00	111,00	159,48	212,00	1,00
nodeicov.earlier (receiver)	168,00	125,00	168,35	220,00	0,99
nodeocov.later (sender)	27,00	9,00	26,68	47,00	1,00
nodeicov.later (receiver)	25,00	9,00	24,70	48,00	1,00
nodematch.region (match)	183,00	137,00	183,17	327,00	1,00
nodematch.Milan CAFs (match)	85,00	51,00	85,61	122,00	1,00
nodeocov.Milan Gloc Ref (sender)	47,00	26,00	47,16	74,00	1,00
nodeicov.Milan Gloc Ref (receiver)	47,00	26,00	47,13	71,00	1,00
nodeocov.Milan Nat Ref (sender)	19,00	7,00	19,20	34,00	1,00
nodeicov.Milan Nat Ref (receiver)	19,00	9,00	19,19	35,00	1,00
nodeocov.Milan Glob Rej (sender)	13,00	4,00	13,13	26,00	1,00
nodeicov.Milan Glob Rej (receiver)	11,00	2,00	11,11	23,00	1,00
nodeocov.Milan Gloc Rej (sender)	69,00	42,00	68,93	98,00	1,00
nodeicov.Milan Gloc Rej (receiver)	80,00	49,00	80,07	112,00	1,00
nodeocov.Milan Loc Rej (sender)	12,00	2,00	12,13	27,00	1,00
nodeicov.Milan Loc Rej (receiver)	5,00	0,00	5,07	16,00	1,00
nodeocov.Milan Lc (sender)	27,00	11,00	27,26	49,00	1,00
nodeicov.Milan Lc (receiver)	15,00	4,00	15,20	30,00	1,00
nodeocov.Milan Not Attending (sender)	32,00	13,00	31,81	56,00	1,00
nodeicov.Milan Not Attending (receiver)	32,00	14,00	31,89	55,00	1,00
Model 2 (sim50000)	obs	min	mean	max	MC p-value
edges (Arc)	257,00	192,00	257,00	319,00	1,00
mutual (Reciprocity)	11,00	71,00	100,00	131,00	1,00
gwideg.fixed.0.2 (AinS)	102,10	87,20	102,10	118,00	0,97
gwodeg.fixed.0.2 (AoutS)	104,70	88,10	104,70	117,00	1,00
gwersp.OTP.fixed.0.2 (AT-T)	127,30	42,90	127,40	205,00	0,98
gwersp.ITP.fixed.0.2 (AT-C)	116,70	35,50	116,80	195,00	0,99
absdiff.population (difference)	91,90	44,90	91,70	150,00	0,98
nodeocov.earlier (sender)	159,00	112,00	158,90	203,00	1,00
nodeicov.earlier (receiver)	168,00	119,00	167,80	210,00	1,00
nodeocov.later (sender)	27,00	12,00	27,10	50,00	1,00
nodeicov.later (receiver)	25,00	10,00	25,10	45,00	1,00

nodematch.region (match)	183,00	119,00	183,30	235,00	1,00
nodeocov.Milan Rejectionist (sender)	94,00	61,00	94,50	130,00	1,00
nodeicov.Milan Rejectionist (receiver)	96,00	64,00	96,50	130,00	1,00
nodematch.Milan Rejectionist (match)	179,00	127,00	178,40	226,00	1,00
nodeocov.Milan Not Attending (sender)	32,00	13,00	31,90	57,00	1,00
nodeicov.Milan Not Attending (receiver)	32,00	14,00	32,00	55,00	1,00
Model 3 (sim50000)	obs	min	mean	max	MC p-value
edges (Arc)	257,00	196,00	257,56	323,00	1,00
mutual (Reciprocity)	100,00	73,00	100,24	134,00	1,00
gwideg.fixed.0.2 (AinS)	102,10	82,20	102,19	115,00	0,96
gwodeg.fixed.0.2 (AoutS)	104,70	87,30	104,72	117,00	0,98
gwersp.OTP.fixed.0.2 (AT-T)	127,30	52,60	127,19	220,00	0,97
gwersp.ITP.fixed.0.2 (AT-C)	116,70	42,20	116,66	213,00	0,97
absdiff.population (difference)	91,90	48,90	92,22	143,00	0,99
nodeocov.earlier (sender)	159,00	115,00	159,54	212,00	1,00
nodeicov.earlier (receiver)	168,00	125,00	168,45	229,00	1,00
nodeocov.later (sender)	27,00	11,00	26,98	46,00	1,00
nodeicov.later (receiver)	25,00	11,00	25,00	47,00	1,00
nodematch.region (match)	183,00	137,00	183,04	243,00	1,00
nodematch.Naples CAFs (match)	71,00	42,00	70,55	103,00	1,00
nodeocov.Naples Glob Reformist (sender)	13,00	2,00	13,10	26,00	1,00
nodeicov.Naples Glob Reformist (receiver)	14,00	3,00	14,08	26,00	1,00
nodeocov.Naples Loc Reformist (sender)	28,00	13,00	28,10	45,00	1,00
nodeicov.Naples Loc Reformist (receiver)	25,00	11,00	25,07	42,00	1,00
nodeocov.Naples Nat Reformist (sender)	56,00	34,00	56,00	91,00	1,00
nodeicov.Naples Nat Reformist (receiver)	68,00	41,00	67,95	100,00	1,00
nodeocov.Naples Glob Rejectionist (sender)	28,00	11,00	27,92	45,00	1,00
nodeicov.Naples Glob Rejectionist (receiver)	24,00	7,00	23,93	39,00	1,00
nodeocov.Naples Gloc Rejectionist (sender)	20,00	7,00	20,14	35,00	1,00
nodeicov.Naples Gloc Rejectionist (receiver)	19,00	5,00	19,15	34,00	1,00
nodeocov.Naples Loc Rejectionist (sender)	7,00	0,00	6,89	16,00	1,00
nodeicov.Naples Loc Rejectionist (receiver)	8,00	1,00	7,91	20,00	1,00
nodeocov.Naples Not Attending (sender)	56,00	34,00	56,18	83,00	1,00
nodeicov.Naples Not Attending (receiver)	46,00	25,00	46,11	71,00	1,00
Model 4 (sim50000)	obs	min	mean	max	MC p-value
edges (Arc)	257,00	198,00	257,60	319,00	1,00
mutual (Reciprocity)	100,00	71,00	100,30	130,00	1,00
gwideg.fixed.0.2 (AinS)	102,10	87,50	102,10	116,00	0,97

gwodeg.fixed.0.2 (AoutS)	104,70	88,30	104,70	118,00	0,98
gwapsp.OTP.fixed.0.2 (AT-T)	127,30	53,60	128,10	217,00	0,97
gwapsp.ITP.fixed.0.2 (AT-C)	116,70	46,90	117,60	202,00	0,98
absdiff.population (difference)	91,90	50,50	92,30	151,00	0,99
nodecov.earlier (sender)	159,00	115,00	159,40	206,00	1,00
nodecov.earlier (receiver)	168,00	122,00	168,40	220,00	1,00
nodecov.later (sender)	27,00	10,00	27,10	45,00	1,00
nodecov.later (receiver)	25,00	9,00	25,10	45,00	1,00
nodematch.region (match)	183,00	120,00	183,10	239,00	1,00
nodecov.Naples Rejectionist (sender)	146,00	103,00	146,30	197,00	1,00
nodecov.Naples Rejectionist (receiver)	160,00	114,00	160,40	205,00	1,00
nodematch.Naples Rejectionist (match)	163,00	118,00	163,50	217,00	1,00
nodecov.Naples Not Attending (sender)	56,00	31,00	56,20	88,00	1,00
nodecov.Naples Not Attending (receiver)	46,00	22,00	46,10	77,00	1,00

Table 3. ERGM VIFs

Model 0	VIF
mutual (Reciprocal)	1,49
gwideg.fixed.0.2 (AinS)	1,74
gwodeg.fixed.0.2 (AoutS)	1,73
gwapsp.OTP.fixed.0.2 (AT-C)	13,50
gwapsp.ITP.fixed.0.2 (AT-T)	14,50
Model 1	
mutual (Reciprocity)	2,08
gwideg.fixed.0.2 (AinS)	2,13
gwodeg.fixed.0.2 (AoutS)	1,87
gwapsp.OTP.fixed.0.2 (AT-T)	16,40
gwapsp.ITP.fixed.0.2 (AT-C)	17,10
absdiff.population (difference)	1,53
nodecov.earlier (sender)	2,67
nodecov.earlier (receiver)	2,81
nodecov.later (sender)	3,59
nodecov.later (receiver)	3,61
nodematch.region (match)	2,02
nodematch.Milan CAFs (match)	1,25
nodecov.Milan Gloc Ref (sender)	4,90
nodecov.Milan Gloc Ref (receiver)	4,36
nodecov.Milan Nat Ref (sender)	3,41
nodecov.Milan Nat Ref (receiver)	3,15
nodecov.Milan Glob Rej (sender)	2,73
nodecov.Milan Glob Rej (receiver)	2,51
nodecov.Milan Gloc Rej (sender)	5,67
nodecov.Milan Gloc Rej (receiver)	5,07
nodecov.Milan Loc Rej (sender)	2,61

nodeicov.Milan Loc Rej (receiver)	1,87
nodeocov.Milan Lc (sender)	3,82
nodeicov.Milan Lc (receiver)	2,81
nodeocov.Milan Not Attending (sender)	5,66
nodeicov.Milan Not Attending (receiver)	5,13
Model 2	
mutual (Reciprocity)	1,67
gwideg.fixed.0.2 (AinS)	2,03
gwodeg.fixed.0.2 (AoutS)	1,91
gwestp.OTP.fixed.0.2 (AT-T)	16,40
gwestp.ITP.fixed.0.2 (AT-C)	17,00
absdiff.population (difference)	1,18
nodeocov.earlier (sender)	2,63
nodeicov.earlier (receiver)	2,77
nodeocov.later (sender)	3,11
nodeicov.later (receiver)	3,15
nodematch.region (match)	1,89
nodeocov.Milan Rejectionist (sender)	2,96
nodeicov.Milan Rejectionist (receiver)	3,00
nodematch.Milan Rejectionist (match)	1,10
nodeocov.Milan Not Attending (sender)	3,31
nodeicov.Milan Not Attending (receiver)	3,26
Model 3	
mutual (Reciprocity)	1,82
gwideg.fixed.0.2 (AinS)	2,18
gwodeg.fixed.0.2 (AoutS)	1,89
gwestp.OTP.fixed.0.2 (AT-T)	16,00
gwestp.ITP.fixed.0.2 (AT-C)	16,50
absdiff.population (difference)	1,68
nodeocov.earlier (sender)	2,87
nodeicov.earlier (receiver)	3,15
nodeocov.later (sender)	2,56
nodeicov.later (receiver)	2,57
nodematch.region (match)	2,11
nodematch.Naples CAFs (match)	1,09
nodeocov.Naples Glob Reformist (sender)	2,44
nodeicov.Naples Glob Reformist (receiver)	2,43
nodeocov.Naples Loc Reformist (sender)	2,77
nodeicov.Naples Loc Reformist (receiver)	2,53
nodeocov.Naples Nat Reformist (sender)	3,96
nodeicov.Naples Nat Reformist (receiver)	4,24
nodeocov.Naples Glob Rejectionist (sender)	2,89
nodeicov.Naples Glob Rejectionist (receiver)	2,63

nodeocov.Naples Gloc Rejectionist (sender)	2,80
nodeicov.Naples Gloc Rejectionist (receiver)	2,67
nodeocov.Naples Loc Rejectionist (sender)	2,22
nodeicov.Naples Loc Rejectionist (receiver)	2,22
nodeocov.Naples Not Attending (sender)	3,70
nodeicov.Naples Not Attending (receiver)	3,32
Model 4	
mutual (Reciprocity)	1,76
gwideg.fixed.0.2 (AinS)	2,05
gwodeg.fixed.0.2 (AoutS)	1,80
gwestp.OTP.fixed.0.2 (AT-T)	15,70
gwestp.ITP.fixed.0.2 (AT-C)	16,20
absdiff.population (difference)	1,20
nodeocov.earlier (sender)	2,63
nodeicov.earlier (receiver)	2,70
nodeocov.later (sender)	2,44
nodeicov.later (receiver)	2,47
nodematch.region (match)	2,12
nodeocov.Naples Rejectionist (sender)	4,03
nodeicov.Naples Rejectionist (receiver)	4,14
nodematch.Naples Rejectionist (match)	1,09
nodeocov.Naples Not Attending (sender)	3,21
nodeicov.Naples Not Attending (receiver)	3,24