

Appendices

Appendix A – Descriptive statistics and nonlinear regression models

Table A1 – Number of observations per country by year and wave

	Wave 3			Wave 4			Wave 5			Wave 6				Wave 7		
Country	1995	1996	1997	1999	2000	2001	2005	2006	2007	2010	2011	2012	2013	2017	2018	2019
Australia	1,102	0	0	0	0	0	718	0	0	0	0	751	0	0	858	0
Canada	0	0	0	0	986	0	0	1,021	0	0	0	0	0	0	0	0
Finland	0	435	0	0	0	0	474	0	0	0	0	0	0	0	0	0
Germany	0	0	1,033	0	0	0	0	797	0	0	0	0	1,040	0	812	0
Italy	0	0	0	0	0	0	370	0	0	0	0	0	0	0	0	0
Japan	579	0	0	0	677	0	568	0	0	1,267	0	0	0	0	0	675
South Korea	0	452	0	0	0	508	507	0	0	465	0	0	0	0	756	0
Netherlands	0	0	0	0	0	0	0	487	0	0	0	880	0	0	0	0
Norway	0	713	0	0	0	0	0	0	643	0	0	0	0	0	0	0
Spain	388	0	0	0	479	0	0	0	515	0	437	0	0	0	0	0
Sweden	0	616	0	638	0	0	0	621	0	0	692	0	0	0	0	0
Switzerland	0	661	0	0	0	0	0	0	672	0	0	0	0	0	0	0
United States	818	0	0	770	0	0	0	597	0	0	1,131	0	0	1,596	0	0

Table A2 – Descriptive statistics on dependent and independent variables

	Min	Max	Mean	S.d.	Observations
Inconsistent non-member	0	1	.3459739	.4756967	19883
Inconsistent member	0	1	.4263752	.4945794	8326
Country – Australia	0	1	.1135243	.3172378	30205
Canada	0	1	.066446	.2490641	30205
Finland	0	1	.0300944	.1708498	30205
Germany	0	1	.1219003	.3271761	30205
Italy	0	1	.0122496	.1099999	30205
Japan	0	1	.1246813	.3303627	30205
South Korea	0	1	.0889919	.2847367	30205
Netherlands	0	1	.0452574	.2078716	30205
Norway	0	1	.0448932	.207073	30205
Spain	0	1	.0602218	.2379013	30205
Sweden	0	1	.0849859	.2788654	30205
Switzerland	0	1	.0441318	.2053912	30205
United States	0	1	.1626221	.3690266	30205
Wave 3 (1995-1997)	0	1	.225029	.4176083	30205
Wave 4 (1999-2001)	0	1	.1343486	.3410321	30205
Wave 5 (2005-2007)	0	1	.2645257	.4410876	30205
Wave 6 (2010-2013)	0	1	.2205926	.4146531	30205
Wave 7 (2017-2019)	0	1	.1555041	.3623905	30205
Woman	1	2	1.4821	.4996878	30195
Age – 0-30 years	0	1	.2407862	.4275678	30172
31-50 years	0	1	.501856	.5000048	30172
51 years or more	0	1	.2573578	.4371854	30172
Working part-time	1	2	1.209336	.4068415	30205
Education – Primary or less	0	1	.1351677	.3419085	29075
Secondary	0	1	.5762683	.4941574	29075
Tertiary	0	1	.2885641	.4531025	29075
Subjective social class – Lower	0	1	.0321523	.1764075	28054
Working	0	1	.2664504	.4421103	28054
Low middle	0	1	.4055037	.490998	28054
Upper middle	0	1	.2858416	.4518224	28054
Upper	0	1	.010052	.0997565	28054
Int. in politics – Not at all interested	0	1	.1284675	.3346153	29416
Not very interested	0	1	.3052081	.4605033	29416
Somewhat interested	0	1	.430446	.495147	29416
Very interested	0	1	.1358784	.3426653	29416
Political orientation	1	10	5.271003	1.963291	27151
ln(GDP/1000)	2.447659	4.444296	3.618243	.4122517	30205
Unemployment	2.048	22.675	6.443567	3.672511	30205
Empl. prot. Regular	.09	3.3	1.724125	.9635622	30205
Empl. prot. Temporary	.25	3.25	1.27751	.8925933	30205

Table A3 – Proportion of inconsistent non-members by country

Country	Proportion of inconsistent non-members
Australia	0.21
Canada	0.30
Finland	0.43
Germany	0.40
Italy	0.34
Japan	0.40
South Korea	0.45
Netherlands	0.41
Norway	0.58
Spain	0.28
Sweden	0.33
Switzerland	0.36
United States	0.26

Table A4 – Proportion of inconsistent members by country

Country	Proportion of inconsistent members
Australia	0.52
Canada	0.52
Finland	0.33
Germany	0.40
Italy	0.41
Japan	0.40
South Korea	0.36
Netherlands	0.35
Norway	0.23
Spain	0.49
Sweden	0.47
Switzerland	0.43
United States	0.48

Table A5 – Logit average marginal effects – Micro- and meso-level models estimating the likelihood of being an inconsistent union non-member

	(1) Estimate (Standard error)	(2) Estimate (Standard error)	(3) Estimate (Standard error)	(4) Estimate (Standard error)	(5) Estimate (Standard error)
Country (ref. United States)	0 (.)	0 (.)	0 (.)	0 (.)	0 (.)
Australia	-0.0730*** (0.0124)	-0.0590*** (0.0132)	-0.0609*** (0.0125)	-0.0594*** (0.0131)	0.0358 (0.137)
Canada	0.0443** (0.0181)	0.0323* (0.0179)	0.0331* (0.0177)	0.0337 (0.0212)	0.0137 (0.143)
Finland	0.161*** (0.0303)	0.193*** (0.0321)	0.188*** (0.0385)	0.212*** (0.0370)	0.178 (0.191)
Germany	0.143*** (0.0128)	0.163*** (0.0132)	0.162*** (0.0149)	0.134*** (0.0147)	0.00814 (0.0918)
Italy	0.0693** (0.0329)	0.101*** (0.0337)	0.110*** (0.0353)	0.106** (0.0417)	0.0662 (0.231)
Japan	0.137*** (0.0123)	0.145*** (0.0125)	0.138*** (0.0149)	0.124*** (0.0164)	-0.111 (0.105)
South Korea	0.181*** (0.0138)	0.182*** (0.0137)	0.186*** (0.0156)	0.194*** (0.0152)	0.150 (0.196)
Netherlands	0.133*** (0.0192)	0.170*** (0.0202)	0.133*** (0.0255)	0.152*** (0.0273)	0.128 (0.213)
Norway	0.313*** (0.0204)	0.341*** (0.0211)	0.343*** (0.0202)	0.354*** (0.0242)	0.226 (0.146)
Spain	0.00249 (0.0149)	0.0127 (0.0150)	0.00607 (0.0146)	0.00392 (0.0199)	-0.145 (0.0906)
Sweden	0.0650*** (0.0205)	0.0800*** (0.0225)	0.0863*** (0.0248)	0.154*** (0.0255)	-0.162 (0.143)
Switzerland	0.108*** (0.0197)	0.140*** (0.0205)	0.152*** (0.0219)	0.150*** (0.0254)	0.124 (0.207)
Wave (Ref. 1995-1997)		0 (.)	0 (.)	0 (.)	0 (.)
1999-2001		0.0714*** (0.0156)	0.0812*** (0.0159)	0.0938*** (0.0165)	0.0334 (0.123)
2005-2007		-0.00160 (0.0116)	0.00999 (0.0117)	0.0109 (0.0114)	0.0395 (0.0931)
2010-2013		-0.00727 (0.0126)	0.0167 (0.0141)	0.00402 (0.0131)	0.0226 (0.103)
2017-2019		0.0541*** (0.0132)	0.0741*** (0.0122)	0.0622*** (0.00977)	0.194** (0.0982)
Man			-0.0386*** (0.00764)	-0.0416*** (0.00975)	-0.0594 (0.0515)
Age class (ref. 0-30 years)			0 (.)	0 (.)	0 (.)
31-50 years			-0.0596***	-0.0673***	0.0115

		(0.00812)	(0.0106)	(0.0701)
51 years or more		-0.0782*** (0.0103)	-0.0798*** (0.0109)	0.0176 (0.0716)
Working full-time		-0.0541*** (0.0116)	-0.0442*** (0.0108)	0.0225 (0.0768)
Education (ref. Primary or less)		0	0	0
		(.)	(.)	(.)
Secondary		-0.0196 (0.0127)	-0.0322** (0.0128)	-0.0631 (0.108)
Tertiary		-0.0282** (0.0137)	-0.0575*** (0.0146)	-0.0618 (0.126)
Subjective social class (ref. Lower)		0	0	0
		(.)	(.)	(.)
Working		0.0306 (0.0229)	0.0143 (0.0219)	-0.196 (0.215)
Low middle		0.0268 (0.0245)	0.00790 (0.0228)	-0.158 (0.235)
Upper middle		0.0267 (0.0243)	0.0103 (0.0251)	-0.150 (0.239)
Upper		-0.0629 (0.0395)	-0.0509 (0.0447)	-0.0445 (0.294)
Int. in politics (ref. Not at all interested)			0	
			(.)	
Not very interested			0.0557*** (0.0129)	
Somewhat interested			0.0922*** (0.0130)	
Very interested			0.127*** (0.0165)	
Political orientation			-0.0331*** (0.00196)	-0.0580*** (0.00929)
Observations	19883	19883	17808	16041
				528

Note: significance levels: * p < 0.10. ** p < 0.05. *** p < 0.01.

Source: World Values Survey

Table A6 – Probit average marginal effects – Micro- and meso-level models estimating the likelihood of being an inconsistent union non-member

	(1) Estimate (Standard error)	(2) Estimate (Standard error)	(3) Estimate (Standard error)	(4) Estimate (Standard error)	(5) Estimate (Standard error)
Country (ref. United States)	0	0	0	0	0
	(.)	(.)	(.)	(.)	(.)
Australia	-0.0708*** (0.0122)	-0.0562*** (0.0128)	-0.0595*** (0.0121)	-0.0586*** (0.0128)	0.0388 (0.131)
Canada	0.0433** (0.0177)	0.0315* (0.0176)	0.0317* (0.0174)	0.0334 (0.0207)	0.0103 (0.129)

Finland	0.159*** (0.0301)	0.190*** (0.0318)	0.183*** (0.0382)	0.206*** (0.0366)	0.154 (0.195)
Germany	0.141*** (0.0125)	0.161*** (0.0130)	0.160*** (0.0145)	0.133*** (0.0142)	0.0148 (0.0878)
Italy	0.0678** (0.0323)	0.0990*** (0.0329)	0.107*** (0.0345)	0.101** (0.0408)	0.0732 (0.228)
Japan	0.135*** (0.0120)	0.143*** (0.0123)	0.136*** (0.0145)	0.123*** (0.0159)	-0.0903 (0.102)
South Korea	0.179*** (0.0136)	0.180*** (0.0135)	0.183*** (0.0152)	0.192*** (0.0147)	0.140 (0.167)
Netherlands	0.131*** (0.0189)	0.167*** (0.0199)	0.131*** (0.0249)	0.149*** (0.0264)	0.119 (0.209)
Norway	0.311*** (0.0206)	0.340*** (0.0214)	0.339*** (0.0206)	0.350*** (0.0243)	0.205 (0.147)
Spain	0.00243 (0.0146)	0.0127 (0.0146)	0.00610 (0.0142)	0.00413 (0.0194)	-0.153* (0.0922)
Sweden	0.0636*** (0.0201)	0.0794*** (0.0219)	0.0853*** (0.0242)	0.152*** (0.0247)	-0.147 (0.147)
Switzerland	0.106*** (0.0193)	0.137*** (0.0201)	0.148*** (0.0214)	0.146*** (0.0247)	0.122 (0.190)
Wave (Ref. 1995-1997)		0 (.)	0 (.)	0 (.)	0 (.)
1999-2001		0.0708*** (0.0154)	0.0793*** (0.0155)	0.0915*** (0.0159)	0.0290 (0.113)
2005-2007		-0.00139 (0.0115)	0.00974 (0.0116)	0.0104 (0.0112)	0.0231 (0.0834)
2010-2013		-0.00806 (0.0125)	0.0149 (0.0139)	0.00214 (0.0128)	0.00817 (0.0910)
2017-2019		0.0535*** (0.0130)	0.0730*** (0.0119)	0.0603*** (0.00967)	0.173* (0.0892)
Man			-0.0386*** (0.00758)	-0.0419*** (0.00968)	-0.0583 (0.0493)
Age class (ref. 0-30 years)			0 (.)	0 (.)	0 (.)
31-50 years			-0.0594*** (0.00818)	-0.0672*** (0.0105)	0.00360 (0.0659)
51 years or more			-0.0787*** (0.0103)	-0.0806*** (0.0109)	0.0104 (0.0680)
Working full-time			-0.0538*** (0.0115)	-0.0442*** (0.0107)	0.0207 (0.0728)
Education (ref. Primary or less)			0 (.)	0 (.)	0 (.)
Secondary			-0.0207* (0.0126)	-0.0326** (0.0128)	-0.0579 (0.0994)

Tertiary			-0.0292** (0.0136)	-0.0587*** (0.0147)	-0.0546 (0.116)
Subjective social class (ref. Lower)			0 (.)	0 (.)	0 (.)
Working			0.0311 (0.0228)	0.0158 (0.0218)	-0.194 (0.207)
Low middle			0.0276 (0.0244)	0.00901 (0.0228)	-0.153 (0.218)
Upper middle			0.0272 (0.0242)	0.0109 (0.0249)	-0.151 (0.223)
Upper			-0.0613 (0.0393)	-0.0491 (0.0443)	-0.0459 (0.274)
Int. in politics (ref. Not at all interested)				0 (.)	
Not very interested				0.0541*** (0.0124)	
Somewhat interested				0.0896*** (0.0126)	
Very interested				0.123*** (0.0157)	
Political orientation				-0.0331*** (0.00193)	-0.0562*** (0.00847)
Observations	19883	19883	17808	16041	528

Note: significance levels: * p < 0.10. ** p < 0.05. *** p < 0.01.

Source: World Values Survey

Table A7 – Logit average marginal effects – Micro- and meso-level models estimating the likelihood of being an inconsistent union member

	(1) Estimate (Standard error)	(2) Estimate (Standard error)	(3) Estimate (Standard error)	(4) Estimate (Standard error)	(5) Estimate (Standard error)
Country (ref. United States)	0 (.)	0 (.)	0 (.)	0 (.)	0 (.)
Australia	0.0546** (0.0254)	0.0480* (0.0262)	0.0517** (0.0223)	0.0475** (0.0234)	0.153 (0.183)
Canada	0.0288 (0.0206)	0.0200 (0.0237)	0.00522 (0.0292)	0.0346 (0.0278)	-0.0685 (0.145)
Finland	-0.132*** (0.0210)	-0.156*** (0.0232)	-0.180*** (0.0252)	-0.194*** (0.0237)	-0.107 (0.182)
Germany	-0.0802*** (0.0249)	-0.0888*** (0.0262)	-0.104*** (0.0225)	-0.0824*** (0.0268)	0.212 (0.159)
Italy	-0.0556 (0.0496)	-0.0475 (0.0541)	-0.0802 (0.0518)	-0.0577 (0.0607)	-0.164 (0.204)
Japan	-0.0715*** (0.0242)	-0.0692*** (0.0250)	-0.0494* (0.0295)	-0.0444 (0.0318)	0.0558 (0.279)
South Korea	-0.0664** (0.0311)	-0.0720** (0.0320)	-0.0634* (0.0346)	-0.0737* (0.0397)	0.0675 (0.296)

Netherlands	-0.110*** (0.0218)	-0.0822*** (0.0251)	-0.0283 (0.0448)	-0.0154 (0.0435)	0.0530 (0.265)
Norway	-0.235*** (0.0207)	-0.259*** (0.0214)	-0.274*** (0.0191)	-0.275*** (0.0189)	-0.287*** (0.0886)
Spain	0.0198 (0.0402)	0.00105 (0.0406)	-0.00200 (0.0463)	0.00618 (0.0397)	0.0849 (0.232)
Sweden	0.00589 (0.0203)	-0.00973 (0.0204)	-0.0240 (0.0234)	-0.0668*** (0.0201)	0.0446 (0.183)
Switzerland	-0.0511 (0.0342)	-0.0809** (0.0325)	-0.111*** (0.0302)	-0.109*** (0.0336)	0.0657 (0.391)
Wave (Ref. 1995-1997)		0 (.)	0 (.)	0 (.)	0 (.)
1999-2001		-0.0289 (0.0226)	-0.0454** (0.0177)	-0.152*** (0.0266)	0.0727 (0.160)
2005-2007		-0.0749*** (0.0155)	-0.0705*** (0.0131)	-0.0815*** (0.0188)	-0.0614 (0.0927)
2010-2013		-0.107*** (0.0166)	-0.118*** (0.0172)	-0.127*** (0.0185)	-0.00395 (0.119)
2017-2019		-0.0913*** (0.0205)	-0.0966*** (0.0242)	-0.107*** (0.0202)	-0.130 (0.142)
Man			-0.0111 (0.0115)	-0.00587 (0.0124)	-0.109 (0.0921)
Age class (ref. 0-30 years)			0 (.)	0 (.)	0 (.)
31-50 years			0.0596*** (0.0153)	0.0607*** (0.0176)	0.0993 (0.143)
51 years or more			0.0439** (0.0186)	0.0621*** (0.0222)	-0.0164 (0.122)
Working full-time			-0.00311 (0.0184)	-0.00939 (0.0215)	-0.0625 (0.119)
Education (ref. Primary or less)			0 (.)	0 (.)	0 (.)
Secondary			0.00674 (0.0169)	0.0235 (0.0202)	-0.0692 (0.115)
Tertiary			-0.0215 (0.0187)	0.0261 (0.0232)	-0.0245 (0.132)
Subjective social class (ref. Lower)			0 (.)	0 (.)	0 (.)
Working			-0.0584* (0.0338)	-0.0583 (0.0451)	-0.156 (0.721)
Low middle			-0.0470 (0.0313)	-0.0515 (0.0435)	-0.0600 (0.804)
Upper middle			-0.0377 (0.0338)	-0.0504 (0.0412)	-0.00134 (0.826)

Upper			-0.0400 (0.0674)	-0.141** (0.0707)	-0.193 (0.502)
Int. in politics (ref. Not at all interested)				0 (.)	
Not very interested				-0.0454** (0.0203)	
Somewhat interested				-0.0757*** (0.0195)	
Very interested				-0.0954*** (0.0226)	
Political orientation				0.0399*** (0.00320)	0.0472*** (0.0181)
Observations	8326	8326	7515	6649	283

Note: significance levels: * p < 0.10. ** p < 0.05. *** p < 0.01.

Source: World Values Survey

Table A8 – Probit average marginal effects – Micro- and meso-level models estimating the likelihood of being an inconsistent union member

	(1) Estimate (Standard error)	(2) Estimate (Standard error)	(3) Estimate (Standard error)	(4) Estimate (Standard error)	(5) Estimate (Standard error)
Country (ref. United States)	0 (.)	0 (.)	0 (.)	0 (.)	0 (.)
Australia	0.0548** (0.0254)	0.0481* (0.0261)	0.0521** (0.0222)	0.0479** (0.0232)	0.154 (0.162)
Canada	0.0289 (0.0207)	0.0196 (0.0237)	0.00487 (0.0293)	0.0344 (0.0277)	-0.0582 (0.143)
Finland	-0.133*** (0.0214)	-0.159*** (0.0238)	-0.182*** (0.0260)	-0.198*** (0.0247)	-0.115 (0.170)
Germany	-0.0807*** (0.0252)	-0.0896*** (0.0265)	-0.105*** (0.0228)	-0.0827*** (0.0270)	0.213 (0.148)
Italy	-0.0560 (0.0501)	-0.0485 (0.0545)	-0.0817 (0.0526)	-0.0586 (0.0602)	-0.130 (0.213)
Japan	-0.0720*** (0.0245)	-0.0694*** (0.0251)	-0.0496* (0.0296)	-0.0430 (0.0315)	0.0603 (0.272)
South Korea	-0.0669** (0.0314)	-0.0722** (0.0322)	-0.0633* (0.0346)	-0.0720* (0.0397)	0.0744 (0.288)
Netherlands	-0.111*** (0.0221)	-0.0825*** (0.0252)	-0.0281 (0.0448)	-0.0141 (0.0431)	0.0501 (0.233)
Norway	-0.236*** (0.0213)	-0.261*** (0.0222)	-0.277*** (0.0199)	-0.278*** (0.0195)	-0.302*** (0.0857)
Spain	0.0199 (0.0403)	0.00110 (0.0405)	-0.00175 (0.0460)	0.00601 (0.0392)	0.0863 (0.217)
Sweden	0.00592 (0.0204)	-0.0100 (0.0204)	-0.0242 (0.0235)	-0.0668*** (0.0203)	0.0497 (0.167)
Switzerland	-0.0515 (0.0344)	-0.0817** (0.0330)	-0.112*** (0.0308)	-0.111*** (0.0343)	0.0722 (0.356)

Wave (Ref. 1995-1997)	0	0	0	0
	(.)	(.)	(.)	(.)
1999-2001	-0.0284 (0.0227)	-0.0448** (0.0179)	-0.154*** (0.0273)	0.0709 (0.147)
2005-2007	-0.0742*** (0.0153)	-0.0696*** (0.0130)	-0.0804*** (0.0185)	-0.0663 (0.0880)
2010-2013	-0.108*** (0.0168)	-0.119*** (0.0175)	-0.127*** (0.0186)	-0.00338 (0.111)
2017-2019	-0.0917*** (0.0208)	-0.0971*** (0.0246)	-0.108*** (0.0205)	-0.125 (0.144)
Man		-0.0104 (0.0114)	-0.00562 (0.0123)	0.106 (0.0899)
Age class (ref. 0-30 years)		0	0	0
		(.)	(.)	(.)
31-50 years		0.0589*** (0.0152)	0.0597*** (0.0173)	0.0910 (0.137)
51 years or more		0.0435** (0.0183)	0.0607*** (0.0218)	-0.0201 (0.113)
Working full-time		-0.00282 (0.0184)	-0.00859 (0.0214)	-0.0669 (0.110)
Education (ref. Primary or less)		0	0	0
		(.)	(.)	(.)
Secondary		0.00687 (0.0167)	0.0234 (0.0198)	-0.0799 (0.109)
Tertiary		-0.0211 (0.0186)	0.0257 (0.0228)	-0.0376 (0.133)
Subjective social class (ref. Lower)		0	0	0
		(.)	(.)	(.)
Working		-0.0598* (0.0336)	-0.0593 (0.0443)	-0.163 (0.409)
Low middle		-0.0481 (0.0310)	-0.0521 (0.0425)	-0.0706 (0.455)
Upper middle		-0.0389 (0.0334)	-0.0511 (0.0403)	-0.00985 (0.465)
Upper		-0.0413 (0.0674)	-0.142** (0.0718)	-0.181 (0.330)
Int. in politics (ref. Not at all interested)			0	
			(.)	
Not very interested			-0.0456** (0.0204)	
Somewhat interested			-0.0748*** (0.0195)	
Very interested			-0.0950***	

				(0.0230)	
Political orientation				0.0394*** (0.00316)	0.0466*** (0.0165)
Observations	8326	8326	7515	6649	283

Note: significance levels: * p < 0.10. ** p < 0.05. *** p < 0.01.

Source: World Values Survey

Table A9 – Logit average marginal effects – Macro-level models estimating the likelihood of being an inconsistent union non-member for wage-earners whose interest in politics and political orientation are not extreme

	(1) Estimate (Standard error)	(2) Estimate (Standard error)	(3) Estimate (Standard error)	(4) Estimate (Standard error)
Country (ref. United States)	0 (.)	0 (.)	0 (.)	0 (.)
Australia	-0.0672*** (0.0181)	-0.0529*** (0.0190)	-0.0538*** (0.0206)	-0.147*** (0.0428)
Canada	0.0651*** (0.0188)	0.0374* (0.0217)	0.0513** (0.0229)	0.00726 (0.0297)
Finland	0.181*** (0.0408)	0.203*** (0.0421)	0.285*** (0.0424)	0.100 (0.0943)
Germany	0.159*** (0.0153)	0.179*** (0.0150)	0.190*** (0.0168)	-0.0189 (0.0841)
Italy	0.0791*** (0.0280)	0.102*** (0.0284)	0.129*** (0.0319)	-0.104 (0.0875)
Japan	0.166*** (0.0148)	0.171*** (0.0146)	0.141*** (0.0160)	0.0226 (0.0523)
South Korea	0.198*** (0.0155)	0.197*** (0.0156)	0.134*** (0.0328)	-0.0748 (0.0828)
Netherlands	0.151*** (0.0211)	0.184*** (0.0198)	0.173*** (0.0204)	-0.0780 (0.0986)
Norway	0.336*** (0.0240)	0.357*** (0.0240)	0.338*** (0.0233)	0.168** (0.0815)
Spain	0.0243 (0.0163)	0.0258 (0.0157)	0.150*** (0.0227)	-0.0520 (0.0832)
Sweden	0.118*** (0.0290)	0.148*** (0.0299)	0.178*** (0.0296)	-0.0173 (0.0883)
Switzerland	0.134*** (0.0206)	0.157*** (0.0221)	0.133*** (0.0223)	0.0376 (0.0465)
Wave (ref. 1995-1997)		0 (.)	0 (.)	0 (.)
1999-2001		0.0816*** (0.0174)	0.0529*** (0.0177)	0.0601*** (0.0197)
2005-2007		-0.000305 (0.0116)	-0.0150 (0.0131)	0.00272 (0.0171)
2010-2013		-0.0143 (0.0137)	-0.00155 (0.0184)	0.0230 (0.0224)
2017-2019		0.0301**	0.0153	0.0435*

	(0.0128)	(0.0199)	(0.0240)
ln(GDP / 1000)		-0.0370 (0.0267)	-0.0614** (0.0271)
Unemployment		-0.0145*** (0.00216)	-0.0136*** (0.00225)
Empl. prot. regular			0.0757** (0.0347)
Empl. prot. temporary			0.00168 (0.0175)
Observations	17065	17065	17065

Note: significance levels: * p < 0.10. ** p < 0.05. *** p < 0.01.

Sources: World Values Survey, World Bank, OECD/IDB Employment Protection Database

Table A10 – Probit average marginal effects – Macro-level models estimating the likelihood of being an inconsistent union non-member for wage-earners whose interest in politics and political orientation are not extreme

	(1) Estimate (Standard error)	(2) Estimate (Standard error)	(3) Estimate (Standard error)	(4) Estimate (Standard error)
Country (ref. United States)	0 (.)	0 (.)	0 (.)	0 (.)
Australia	-0.0647*** (0.0176)	-0.0500*** (0.0184)	-0.0514** (0.0200)	-0.148*** (0.0448)
Canada	0.0634*** (0.0182)	0.0362* (0.0211)	0.0504** (0.0223)	0.00617 (0.0296)
Finland	0.177*** (0.0402)	0.199*** (0.0416)	0.278*** (0.0423)	0.0962 (0.0926)
Germany	0.156*** (0.0149)	0.176*** (0.0145)	0.186*** (0.0162)	-0.0202 (0.0848)
Italy	0.0770*** (0.0273)	0.0987*** (0.0275)	0.125*** (0.0307)	-0.107 (0.0915)
Japan	0.163*** (0.0144)	0.168*** (0.0141)	0.139*** (0.0155)	0.0229 (0.0523)
South Korea	0.196*** (0.0150)	0.195*** (0.0151)	0.134*** (0.0319)	-0.0739 (0.0857)
Netherlands	0.148*** (0.0207)	0.180*** (0.0194)	0.169*** (0.0199)	-0.0805 (0.102)
Norway	0.334*** (0.0241)	0.354*** (0.0243)	0.337*** (0.0236)	0.172** (0.0798)
Spain	0.0236 (0.0158)	0.0252* (0.0151)	0.147*** (0.0222)	-0.0509 (0.0851)
Sweden	0.115*** (0.0283)	0.144*** (0.0291)	0.173*** (0.0289)	-0.0193 (0.0889)
Switzerland	0.131*** (0.0200)	0.154*** (0.0214)	0.131*** (0.0216)	0.0379 (0.0462)
Wave (ref. 1995-1997)		0 (.)	0 (.)	0 (.)

1999-2001	0.0813*** (0.0171)	0.0521*** (0.0175)	0.0578*** (0.0192)
2005-2007	0.000135 (0.0115)	-0.0153 (0.0131)	0.00157 (0.0170)
2010-2013	-0.0149 (0.0135)	-0.00161 (0.0185)	0.0219 (0.0224)
2017-2019	0.0297** (0.0126)	0.0157 (0.0198)	0.0429* (0.0239)
ln(GDP / 1000)		-0.0364 (0.0266)	-0.0625** (0.0274)
Unemployment		-0.0140*** (0.00212)	-0.0132*** (0.00220)
Empl. prot. regular			0.0764** (0.0349)
Empl. prot. temporary			0.0000707 (0.0177)
Observations	17065	17065	17065

Note: significance levels: * p < 0.10. ** p < 0.05. *** p < 0.01.

Sources: World Values Survey, World Bank, OECD/IDB Employment Protection Database

Table A11 – Logit average marginal effects – Macro-level models estimating the likelihood of being an inconsistent union member for wage-earners whose interest in politics and political orientation are not extreme

	(1) Estimate (Standard error)	(2) Estimate (Standard error)	(3) Estimate (Standard error)	(4) Estimate (Standard error)
Country (ref. United States)	0 (.)	0 (.)	0 (.)	0 (.)
Australia	0.0531** (0.0240)	0.0339 (0.0244)	0.0265 (0.0257)	0.0850 (0.0912)
Canada	0.0105 (0.0292)	0.0409 (0.0292)	0.0144 (0.0279)	0.0418 (0.0384)
Finland	-0.152*** (0.0216)	-0.181*** (0.0197)	-0.242*** (0.0255)	-0.179* (0.108)
Germany	-0.0898*** (0.0213)	-0.110*** (0.0213)	-0.132*** (0.0226)	-0.0415 (0.154)
Italy	-0.0124 (0.0744)	-0.00363 (0.0727)	-0.0520 (0.0709)	0.0653 (0.208)
Japan	-0.108*** (0.0226)	-0.105*** (0.0232)	-0.0829*** (0.0236)	-0.0281 (0.0930)
South Korea	-0.0993*** (0.0277)	-0.0960*** (0.0282)	-0.0909** (0.0417)	0.00583 (0.189)
Netherlands	-0.128*** (0.0247)	-0.108*** (0.0241)	-0.107*** (0.0233)	0.0280 (0.207)
Norway	-0.252*** (0.0170)	-0.281*** (0.0161)	-0.249*** (0.0221)	-0.207* (0.106)
Spain	-0.00647 (0.0376)	-0.0126 (0.0385)	-0.161*** (0.0498)	-0.107 (0.150)

Sweden	-0.0410** (0.0175)	-0.0588*** (0.0176)	-0.0801*** (0.0203)	0.0133 (0.146)
Switzerland	-0.0848** (0.0353)	-0.124*** (0.0348)	-0.0785* (0.0408)	-0.0359 (0.0717)
Wave (ref. 1995-1997)		0 (.)	0 (.)	0 (.)
1999-2001		-0.142*** (0.0226)	-0.108*** (0.0261)	-0.103*** (0.0292)
2005-2007		-0.0907*** (0.0147)	-0.0382* (0.0231)	-0.0435 (0.0319)
2010-2013		-0.112*** (0.0161)	-0.0755*** (0.0279)	-0.0805* (0.0422)
2017-2019		-0.0840*** (0.0196)	-0.0196 (0.0344)	-0.0247 (0.0446)
ln(GDP / 1000)			-0.0284 (0.0380)	-0.00924 (0.0541)
Unemployment			0.0135*** (0.00433)	0.0143*** (0.00433)
Empl. prot. regular				-0.0472 (0.0635)
Empl. prot. temporary				0.0160 (0.0301)
Observations	6585	6585	6585	6585

Note: significance levels: * p < 0.10. ** p < 0.05. *** p < 0.01.

Sources: World Values Survey, World Bank, OECD/IDB Employment Protection Database

Table A12 – Probit average marginal effects – Macro-level models estimating the likelihood of being an inconsistent union member for wage-earners whose interest in politics and political orientation are not extreme

	(1) Estimate (Standard error)	(2) Estimate (Standard error)	(3) Estimate (Standard error)	(4) Estimate (Standard error)
Country (ref. United States)	0 (.)	0 (.)	0 (.)	0 (.)
Australia	0.0533** (0.0240)	0.0343 (0.0244)	0.0274 (0.0257)	0.0914 (0.0902)
Canada	0.0106 (0.0293)	0.0404 (0.0292)	0.0144 (0.0280)	0.0442 (0.0381)
Finland	-0.154*** (0.0220)	-0.185*** (0.0203)	-0.248*** (0.0266)	-0.174 (0.112)
Germany	-0.0907*** (0.0217)	-0.111*** (0.0217)	-0.133*** (0.0233)	-0.0307 (0.155)
Italy	-0.0125 (0.0746)	-0.00435 (0.0728)	-0.0518 (0.0716)	0.0783 (0.206)
Japan	-0.109*** (0.0230)	-0.105*** (0.0234)	-0.0832*** (0.0237)	-0.0219 (0.0931)
South Korea	-0.100***	-0.0964***	-0.0886**	0.0206

	(0.0282)	(0.0284)	(0.0421)	(0.188)
Netherlands	-0.130*** (0.0253)	-0.109*** (0.0244)	-0.108*** (0.0236)	0.0413 (0.205)
Norway	-0.254*** (0.0174)	-0.285*** (0.0166)	-0.252*** (0.0230)	-0.201* (0.112)
Spain	-0.00651 (0.0378)	-0.0127 (0.0384)	-0.162*** (0.0508)	-0.0966 (0.154)
Sweden	-0.0413** (0.0176)	-0.0592*** (0.0178)	-0.0811*** (0.0206)	0.0223 (0.145)
Switzerland	-0.0857** (0.0358)	-0.126*** (0.0357)	-0.0810** (0.0413)	-0.0334 (0.0720)
Wave (ref. 1995-1997)		0 (.)	0 (.)	0 (.)
1999-2001		-0.143*** (0.0232)	-0.108*** (0.0264)	-0.103*** (0.0296)
2005-2007		-0.0897*** (0.0147)	-0.0383* (0.0232)	-0.0449 (0.0319)
2010-2013		-0.112*** (0.0164)	-0.0776*** (0.0280)	-0.0843** (0.0421)
2017-2019		-0.0841*** (0.0199)	-0.0217 (0.0344)	-0.0282 (0.0444)
ln(GDP / 1000)			-0.0243 (0.0375)	-0.00312 (0.0533)
Unemployment			0.0135*** (0.00425)	0.0144*** (0.00425)
Empl. prot. regular				-0.0512 (0.0631)
Empl. prot. temporary				0.0160 (0.0299)
Observations	6585	6585	6585	6585

Note: significance levels: * p < 0.10. ** p < 0.05. *** p < 0.01.

Sources: World Values Survey, World Bank, OECD/IDB Employment Protection Database

Appendix B – Methodological details on the limited value of a multilevel approach

Since our regression models imply the focus on both individual-level and country-level independent variables, the reader may wonder why we did not adopt a multilevel modelling approach in order to consider potential heterogeneous effects between countries and to ensure that standard errors are not underestimated by taking into account intraclass correlation. We refrained from pursuing a multilevel approach for both theoretical and empirical reasons. From a theoretical point of view, in Figure 1 we show that both types of inconsistency are heterogeneously linked to the 13 countries we focus on. When considering such heterogeneity in regression models, we decided not to treat it as random, but as an idiosyncratic variability that deserved to be explicitly explained and modelled. In other words, instead of modelling them as random intercepts, we treated country cases as fixed effects with the goal of explaining them away by making them become insignificant, first through individual-level determinants (Tables 1 and 2) and then through country-level variables only (Tables 3 and 4). We used the United States as reference country both because it is the country case with the largest number of individual observations in our dataset (4912) and because it is not an outlier in neither of the two forms of inconsistency we consider. By benchmarking the differences of all countries to one “average” country, we are able to also indirectly evaluate the differences between all of them. In addition, the United States are a very well studied type of industrial relations system, which makes it appropriate to use it not only as empirical, but also as analytical reference point. If the differences with respect to the benchmark decrease for all or most of the countries when including additional control variables, this implies that the overall variability between countries has decreased. By taking into account 13 countries, we may make some type II errors since some non-significant effects may be statistical incidents, partly related to multicollinearity and partly

related to the fact that we use one specific country as benchmark. Nevertheless, the very fact of focusing on 13 countries makes such concerns less relevant when it comes to the general pattern of results we identify. Although using a precise p-value cut-off point to distinguish between significant and non-significant effects may hide some substantive patterns associated with estimates that are not far from being significant, it is difficult to argue that the general decrease in the differences in terms of statistical significance we observe between almost all 13 countries is the result of a series of statistical incidents. Some estimates may still be close to be significant or become insignificant if we relied on a dataset providing us with more statistical power, but the general empirical pattern we identified is very unlikely to change. Despite our efforts, the inconsistency levels of two outlying countries (Norway and Australia) still remain unexplained by the factors we considered. We made sense of them only in the discussion section by providing in-depth contextual knowledge. This strengthens the idea that treating these countries as being drawn from a pool of countries whose union member and non-member inconsistency levels are linked to random effects is probably not the correct assumption to make with the set of countries we focus on.

Since we do not consider country random intercepts (but country fixed effects), it is difficult to justify the focus on random slopes. Theoretically, we did not provide any elements that make us expect the presence of heterogeneous effects between countries for any of the additional independent variables we took into account. In other words, our theoretical framework led us to only make hypotheses about the average effects of the independent variables we considered. Therefore, from a purely theoretical point of view, we did not have arguments to justify the focus either on random intercepts or on random slopes.

If we leave aside theoretical arguments and focus only on empirical criteria, we explored the pertinence of multilevel modelling through the classical step one uses when evaluating the added value of multilevel modelling by estimating null unconstrained models with no predictors with countries as level-2 variable. Using both non-member and member inconsistency as dependent variables and employing as estimators both multilevel logit and probit, we derived in all four cases a low intraclass correlation, not above 5% in any of these four models. This means that the proportion of variance in the dependent variable accounted for by between-country variability is relatively limited and makes the switch to a multilevel framework difficult to justify. We also experimented with waves used as level-2 variable, again obtaining intraclass correlations not higher than 5%.

This low correlation among individuals within the same country allows us to better evaluate the macro-level models in Tables 3 and 4, where we control for country and wave fixed effects. A low intraclass correlation implies both that, on average, variability over time within the same country is not particularly low and that the neglected between-country heterogeneity is much less important. Indeed, this within-country variation is not that small, since the 25 years covered by WVS data are associated with important changes in both the proportions of inconsistent non-members and members and in the macro-level factors we focus on. Furthermore, while the estimates of these macro-level variables have some interest on their own, the main reason we include them in the models is to be able to explain away the different levels of non-member inconsistency between countries. And these variables do a very good job in that respect since only two residual countries (Norway and Australia) show inconsistency levels lower/higher than other countries that cannot be traced back to these contextual factors.

If one still wanted to adopt a multilevel approach, this would be hindered by another crucial limitation of the set of countries we focus on. Looking at various reference manuals on multilevel modelling (e.g. Rabe-Hesketh and Skrondal, 2011; Wang et al., 2011),¹ there seems to be a consensus that one should rely on at least 20 level-2 clusters in order to estimate meaningful multilevel models both from a theoretical point of view (in order to be able to consider these clusters as random draws from a pool of a general population of clusters) and from an empirical point of view (in order to rely on the asymptotic behaviour of maximum likelihood or of restricted maximum likelihood). With 13 countries, we are clearly below this minimal threshold.

However, not considering the multilevel structure may result in an underestimation of standard errors. That is why we adopted the least assumption-encumbered and most robust form of standard errors we could employ without switching to a multilevel framework, i.e. fully robust bootstrapped standard errors. Considering the low intraclass correlation described above, this should be enough to avoid a serious underestimation of standard errors.

Nevertheless, in the conclusion we mention that a multilevel framework could be adopted in the future if researchers were to focus on a larger set of countries, giving more between-country variability and hence making the assumption of working with a random pool of country cases more reasonable than for the 13 we included in our paper.

¹ Rabe-Hesketh S and Skrondal A (2011) Multilevel and Longitudinal Modeling Using Stata, Volumes I and II. College Station: Stata Press.

Wang J, Xie H, Fisher JF, et al. (2011) Multilevel Models: Applications Using SAS. Göttingen: De Gruyter.

