## Online Appendix Interests, Norms, and Support for the Provision of Global Public Goods: The Case of Climate Cooperation

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# Appendix: Sample

Respondents were interviewed in summer 2012. In each country, respondents were subsequently matched down to a sample of 2,000 (except for the US were the sample was 2,500) based on gender, age, and education. The matched set of respondents was then weighted to the marginal distributions of sociodemographics in the country's total population. Weights were applied to remove remaining imbalances after the matching procedure. Table A-1 shows the distributions of the sociodemographics in the population, the weighted sample, and the raw sample.

#### France

- Interview period: August-September 2012
- Sample size: 2,000
- Source of data on population socio-demographics: Based on 2009 French population census, available from the French Statistical Institute (INSEE)
- Weights range from 0.66 to 1.39, with a mean of one and a standard deviation of 0.28.

#### Germany

- Interview period: August 2012
- Sample size: 2,000
- Source of data on population socio-demographics: September-October 2011 Eurobarometer survey
- Weights range from 0.63 to 1.60, with a mean of one and a standard deviation of 0.32.

### United Kingdom

- Interview period: August 2012
- Sample size: 2,000
- Source of data on population socio-demographics: August-September 2010 Eurobarometer survey
- Weights range from 0.74 to 1.44, with a mean of one and a standard deviation of 0.29.

#### United States

- Interview period: June 2012
- Sample size: 2,500
- Source of data on population socio-demographics: 2007 American Community Survey, the 2008 Current Population survey and the 2007 Pew Religious Landscape Survey
- Weights range from 0.56 to 1.9, with a mean of one and a standard deviation of 0.29.

Group	Population	Weighted Sample	Raw Sample
France			
Age: 18-39	31.6	31.6	34.2
Age: 40-54	28.5	26.1	29.8
Age: $55+$	39.9	42.4	36.0
Gender: Male	47.6	47.6	47.6
Gender: Female	52.4	52.4	52.4
Education: CAP/BEP or less	59.8	59.8	46.9
Education: Bac to $Bac+2$	27.5	27.5	36.1
Education: Bac $+3$ or more	12.7	12.7	16.9
Germany			
Age: 18-34	23.1	23.1	34.2
Age: 35-54	36.6	36.6	29.8
Age: $55+$	40.3	40.3	36.0
Gender: Male	49.0	49.0	49.0
Gender: Female	51.0	51.0	51.0
Education: 16 years or fewer	43.4	43.2	30.3
Education: 17-19 years	33.0	32.8	44
Education: 20 years or more	23.6	24.1	25.7
United Kingdom			
Age: 18-34	23.4	23.4	25.4
Age: 35-54	33.7	33.7	44.6
Age: $55+$	42.9	43.0	30.0
Gender: Male	47.3	47.3	47.3
Gender: Female	52.7	52.7	52.7
Education: 16 years or fewer	55.3	53.5	50.4
Education: 17-19 years	21.2	23.0	24.7
Education: 20 years or more	23.5	23.5	25.0
United States			
Age: 18-34	29.5	27.1	19.4
Age: 35-54	38.5	34.0	32.4
Age: $55+$	32.1	39.0	48.1
Gender: Male	48.2	48.2	47.6
Gender: Female	51.8	51.8	52.4
Education: HS or less	45.0	44.9	39.7
Education: Some College	30.0	22.2	23.4
Education: College Graduate	16.3	24.1	27.5
Education: Postgraduate	8.8	8.7	9.5

Table A-1: Distribution of Socio-demographics in the Survey Sample and the Population. The table shows the distributions of socio-demographics in the population, the weighted sample, and the raw sample. See text for data sources on the population socio-demographics. N=8,500

## **Appendix:** Industry Measures

Our industry cost indicators measure the environmental impact (i.e. 'footprint') of the respondents' sectors of employment. In order to construct them, we first collected information on the respondents' employment status. In our survey we asked all 8,500 individuals to choose one of the following employment situations: paid work; in education; unemployed actively looking for a job; unemployed not actively looking for a job; permanently sick or disabled; retired; in community service; in military service; and doing housework. Those that selected *paid work* were asked in which type of industry they currently worked. We listed 21 options that correspond to the 21 categories of the United Nations Statistics Division's International Standard Industrial Classification (ISIC) of All Economic Activities (Revision 4),  $^{16}$  plus an an alternative 'none of these' category, in which case they were asked to describe in words their employment. After the survey we qualitatively evaluated the descriptions generated by this alternative category, to assess whether each of these individuals could actually be assigned to one of the 21 UNSD sectors based on the verbal description. For example, an American respondent in category 22 noted 'I work in a supermarket', so we reassigned her to the Retail sector, because Group 471 under the ISIC Retail section (G) includes "sale in non-specialized stores, such as supermarkets or department stores." Similarly, a French respondent wrote 'securité privé,' and was reassigned to the Administrative and Support Service sector, because Group 801 under the ISIC Administrative Services section (N) includes "security-related services such as investigation and detective services and guard and patrol services." The total of employed respondents is 4179 (854 in France, 978 in Germany, 1177 in the UK, 1170 in the US). Of these, 4009 respondents identified themselves as workers of one of the 21 specific sectors (817 in France, 929 in Germany, 1141 in the UK, 1122 in the US). Out of 792 'none of these' answers, we were able to reassign 625 employed respondents to one of the 21 ISIC categories. The ISIC categories upon which we constructed our pollution measures are listed in Table A-2.

		ISIC Category
1	(A)	Agriculture, forestry and fishing
2	(B)	Mining and quarrying
3	(C)	Manufacturing
4	(D)	Electricity, gas, steam and air conditioning supply
5	(E)	Water supply; sewerage, waste management and remediation
6	$(\mathbf{F})$	Construction
7	(G)	Wholesale and retail trade; repair of motor vehicles
8	(H)	Transportation and storage
9	(I)	Accommodation and food service activities
10	$(\mathbf{J})$	Information and communication
11	(K)	Financial and insurance activities
12	(L)	Real estate activities
13	(M)	Professional, scientific and technical activities
14	(N)	Administrative and support service activities
15	(O)	Public administration and defence; compulsory social sec
16	(P)	Education
17	$(\mathbf{Q})$	Human health and social work activities
18	$(\mathbf{R})$	Arts, entertainment and recreation
19	(S)	Other service activities
20	(T)	Activities of households as employers; undifferentiated services
21	(U)	Activities of extraterritorial organizations and bodies

Table A-2:ISIC Categories

Our first and main industry indicator is the *Greenhouse Gases (GHG) Emissions* variable. This measures gross direct emissions in million tons of produced Co2 equivalent gases for the year 2011. The indicator comes from the OECD Environmental Statistics database,<sup>17</sup> where GHG emissions follow the concept of

<sup>&</sup>lt;sup>16</sup>Detailed structure and explanatory notes at: https://unstats.un.org/unsd/cr/registry/regcst. asp?Cl=27. Accessed on 6 August 2014.

<sup>&</sup>lt;sup>17</sup>See database at 10.1787/env-data-en.

the International Panel on Climate Change (IPCC), the scientific intergovernmental body of the United Nations Framework Convention on Climate Change. According to the IPCC definition, GHG includes gaseous constituents of the atmosphere (both natural and anthropogenic) that absorb and emit radiations. The gases that are included in the definition are six: carbon dioxide (CO2), nitrous oxide (N2O), methane (CH4), plus sulphur hexafluoride (SF6), hydrofluorocarbons (HFCs) and perfluorocarbons (PFCs).<sup>18</sup>

The IPCC (and thus the OECD) refers to emissions by six main industrial categories: Energy (1), Industrial Processes and Solvents (2), Agriculture (3), Waste, including water treatment and disposal (4), Land use Change and Forestry (5), and Others (6). The Energy sector is further broken down into the following 'subsectors': Electricity and Heat (1.A1); Manufacturing and Construction (1.A2); Transportation (1.A3); Fuel Combustion at the Source (Commercial and Residential) (1.A4) and Fugitive Emissions (1.B), including Extraction and Mining (1.A1C, 1.A5). We exclude Land-Use Change and Forestry, because this captures emission absorption and we are interested in emission production. Based on the rest of these main categories, we derived the 21 ISIC-concordant measures of GHG emissions by sector of employment according to conversion table A-3:

IPCC (OECD) category	Transformation notes	ISIC category
Energy (1.A1)		ISIC 4
Manufacture & Construction (1.A2)	Manufacture & Construction GHG	ISIC 3
	minus Manufacture & Construction (GHG-CO2)	
Manufacture & Construction (1.A2)	Manufacture & Construction (GHG-CO2)	ISIC 6
	plus Construction CO2	
Energy (1.A1C, 1.A5) &		ISIC 2
Fugitive Emissions $(1.B)$		
Transport (1.A3)		ISIC 8
Industrial Processes (2)		ISIC 3
Agriculture (3)		ISIC 1
Waste (4)		ISIC 5
Fuel Combustion at Source (1.A4)		ISIC 7
Others (6)	Assigned to 'other sectors'	ISIC 9-21
	and weighted by value added of each of these sectors	

 Table A-3:
 GHG Emissions Conversion Table: IPCC Categories and ISIC Categories.

The Manufacture & Construction GHG emissions are disaggregated following the notion that construction is the main source of GHG beyond CO2 in the industry and production sector. Consequently, the emissions of Manufacture should be virtually equal to the CO2 of Manufacture.<sup>19</sup> So we used the CO2-only emissions of manufacture and constructions from the OECD CO2 Emissions from Fuel Combustion Statistics,<sup>20</sup> and subtracted them from the Manufacture & Construction GHG. The result is the non-CO2 emissions of the construction sector. We added this value to the construction sector CO2 and assigned the sum to ISIC 6 (Construction), while the CO2–only emissions for Manufacture were assigned to ISIC 3 (Manufacture). Both the Energy subcategories 1.A1C and 1.A5 are used to calculate the emissions in the Mining sector (ISIC 2), because together they make up the total emissions from fuel combusted in petroleum refineries, coal mining and oil and gas extraction. Fuel Combustion at Source (1.A4) instead measures combustion

<sup>&</sup>lt;sup>18</sup>Ozone (O3) is technically a greenhouse gas, but it is not included in these calculations, since it does not directly affect the climate.

<sup>&</sup>lt;sup>19</sup>There is general agreement on this assumption. For example, page 9 of the report 'Buildings and Climate Change,' the UNEP (2009) states that "the Construction Sector is responsible for the most significant non-CO2 GHG emissions such as halocarbons, CFCs, and HCFCs, due to their applications for cooling, refrigeration, and in the case of halocarbons, insulation material." See http://www.unep.org/sbci/pdfs/sbci-bccsummary.pdf. Accessed on 6 August 2014.

 $<sup>^{20}</sup>$ See database at 10.1787/co2-data-en.

from public and commercial services, referring to emissions from trade and retail.<sup>21</sup> Finally, the Others (6) category includes all emissions that do not fall in the pre-set categories. Although it may overlap in some cases with residential emissions (from stationary sources), these are gases emitted mainly through 'Miscellaneous' combustion or small-scale installations from the rest of the economy. Unfortunately the 'others' value is not broken-down further, which makes it hard to match with the industries in the service sector from ISIC 9 (accommodation and food service) up to ISIC 21 (extraterritorial organizations). To calculate a proxy of the emissions for each employment sector in this range of service industries, we multiplied the total services emissions by each sector's proportion of the total service sectors value added. For example: for France 2011, the total value added of the tertiary (precisely ISIC 9 to ISIC 21) is 1136.05 billion Euros. The accommodation and food service activity sector (ISIC 9) had a value added of 44.37 B Euros. Also, the service sectors total GHG emissions sum up to 23.75 Mt. Then the emissions for the accommodation and food service sectors total GHG emissions sum up to 23.75 = 0.927. Note that the value added data for France, Germany and the United Kingdom comes from the Eurostat, and is naturally broken down in the 21 ISIC sectors (the values are in Euros). By contrast, the value added of the US comes from the US Department of Commerce "GDP by industry" data, and it is in USD.<sup>22</sup>

Additional to the *GHG Emissions* indicators, we collected other measures for industry costs and pollution. The first alternative indicator is the *World Bank GHG Emissions* from the World Bank Development Indicators database. The World Bank compiles data of the International Energy Agency (IEA) in collaboration with the Carbon Dioxide Information Analysis Center.<sup>23</sup> In the World Bank scheme, GHGs are measured for the following categories: (1) Agriculture; (2) Electricity and Heat; (3) Manufacture, Construction and Industrial Process; (4) Transportation; (5) Fuel Combustion at the Source (Extraction and Mining); (6) Residential; (7) Land Use Change and Forestry, (8) Other Sectors. These data is easier to use from an industrial sector point of view, but its most up to date series is from 2010, and the commercial and residential services are combined.<sup>24</sup> We make the same transformations and weighting that we did for the IPCC GHG Emissions indicator, as per Table A-4.<sup>25</sup>

<sup>&</sup>lt;sup>21</sup>See discussion in Chapter 4 of the IPCC Guidelines for National Greenhouse Gas Inventories, 2006, http://www.ipcc-nggip.iges.or.jp/public/2006gl/pdf/1\_Volume1/V1\_4\_Ch4\_MethodChoice.pdf. Accessed on 6 August 2014.

 $<sup>^{22}</sup>$ While in the paper we use the estimates based on this calculation of emissions in the service sectors, we alternatively followed a separate approach to find equal contributions in the service sectors. We divided the total emissions in 'others' by 13 and assigned this value to each of the ISIC from 9 to 21, without weighing by value added. The results are robust to both types of measures.

<sup>&</sup>lt;sup>23</sup>See http://data.worldbank.org/about/world-development-indicators-data/environment.

<sup>&</sup>lt;sup>24</sup>By including all activities of ISIC Divisions 41, 50-52, 55, 63-67, 70-75, 80, 85, 90-93 and 99 in the Residential (6) category, the GHG measure for trade and retail and residential emissions partially overlap.

<sup>&</sup>lt;sup>25</sup>For a discussion of the World Bank GHG indicators data, see http://www.tsp-data-portal.org/ Breakdown-of-GHG-Emissions-by-SectortspQvAbout (Accessed on 6 August 2014). See also full database at the Shift Project Data Portal, http://www.tsp-data-portal.org/.

World Bank categories	Transformation notes	ISIC categories
Energy		ISIC 4
Manufacture, Construction	Manufacture, Construction & Indust'l Processes GHG minus	ISIC 3
& Indust'l Processes	Manufacture, Construction & Indust'l Processes (GHG-CO2)	
Manufacture, Construction	Manufacture, Construction & Indust'l Processes (GHG-CO2)	ISIC 6
& Indust'l Processes	plus Construction CO2	
Energy & Fugitive Emissions		ISIC 2
Transport		ISIC 8
Agriculture		ISIC 1
Waste		ISIC 5
Commercial services		ISIC 7
Residential and public services	Assigned to 'other sectors' and	ISIC 9-21
	weighted by value added of each of these sectors	

Table A-4: GHG Emissions (WB) Conversion Table: IPCC Categories and ISIC Categories.

The two additional measures that we constructed for our analyses are the CO2 Emissions and the Oil equivalent Energy Flows variables. The CO2 Emissions are measured as gross directed emissions of million tons of produced carbon dioxide for the year 2011. This measure excludes other greenhouse gases. This means it will underestimate the climate impact of sectors that produce N2O (e.g. agriculture), or CH4 (e.g. mining sectors). The Oil equivalent Energy Flows instead corresponds to the annual net flow (supply, trade and consumption) of coal, oil, energy output, gas, electricity, heat, combustible renewables and waste, expressed in tonnes of oil equivalent (toe) for the year 2011. We collect the CO2–only values from the 'Detailed CO2 Estimates' database based on the IEAs CO2 Emissions from Fuel Combustion Statistics and hosted by the OECD.<sup>26</sup> This data follows the IPCC emission reporting guidelines and is broken down at lower sectoral levels. By contrast, the Energy Flows indicator comes from the IEA 'Extended World Energy Balances' database hosted by the OECD.<sup>27</sup>

For both types of indicators, we match the industry flows to the ISIC categories as per conversion table A-5. We rely on the 26 industries in the Detailed CO2 and Extended World Energy Balances databases, and aggregate them if necessary. For example, the volumes of 'agriculture and forestry' and 'fishing' are summed and together form the CO2 volume of the ISIC 1 category. Note however that the 'Commercial and public services' category in the IEA database is aggregated. We split into Commercial (ISIC 7) and Public Services (ISIC 9-21) following the Industrial Efficiency Policy Database (IEPD) figures, collected by the Institute for Industrial Productivity of the United Nations Industrial Development Organization (UNIDO). The IEPD figures are identical to the IEA figures for all industrial sectors, but further differentiate trade emissions/energy production and other services.<sup>28</sup> We then subtracted from the IEA aggregate figures the two respective 'commercial' and 'other services' figures, to find the values for ISIC 7 and ISIC 9-21, respectively. We finally weighted the ISIC 9 through 21 CO2 values like we did for GHG Emissions, using the value added of each sector.

<sup>&</sup>lt;sup>26</sup>See the database at 10.1787/co2-data-en. Note also that we prefer this data over the 'Per capita Co2 Emissions by Sector' and any other IEA dataset in the CO2 Emissions from Fuel Combustion Statistics because the latter are aggregated at the higher levels to the IPCC sectors, and these are not congruent with the 21 ISIC sectors. The Detailed CO2 estimates dataset helps us assembling CO2 of the 21 specific ISIC categories.

<sup>&</sup>lt;sup>27</sup>See the database at 10.1787/enestats-data-en.

<sup>&</sup>lt;sup>28</sup>See database at http://iepd.iipnetwork.org/ and description at http://www.unido.org/en/resources/statistics/statistical-databases.html.

IEA code	Transformation notes	ISIC code
Agriculture and forestry		ISIC 1
Fishing		ISIC 1
Mining and quarrying		ISIC 2
Chemical manufacturing		ISIC 3
Food and tobacco manufacturing		ISIC 3
Iron and steel manufacturing		ISIC 3
Machinery manufacturing		ISIC 3
Non energy use industry		ISIC 3
Non ferrous metals manufacturing		ISIC 3
Non metallic minerals manufacturing		ISIC 3
Non specified industry		ISIC 3
Paper and pulp manufacturing		ISIC 3
Textile manufacturing		ISIC 3
Transport equipment manufacturing		ISIC 3
Wood production		ISIC 3
Heat and electricity production		ISIC 4
Heat and electricity autoproducers		ISIC 4
Waste and water disposal		ISIC 5
Construction		ISIC 6
Commercial and Public Services	Commercial and Public Services minus IEPD Other Services	ISIC 7
Domestic aviation		ISIC 8
Domestic navigation		ISIC 8
Pipeline transport		ISIC 8
Rail transport		ISIC 8
Road transport		ISIC 8
Commercial and Public Services	Commercial and Public Services minus IEPD Commercial	ISIC 9-21

Table A-5: Conversion Table for CO2 Emissions and Oil Equivalent Energy Flows: IEA Categories and ISIC Categories.

Fourthly, we generated a further industry measure that we call the *Employee-weighted GHG Emissions*. Here we standardize the *GHG Emissions* variable by the total of employees in each sector. The employees data (in millions) for France, Germany and UK is broken down by 21 sectors and comes from the Eurostat's National Accounts. The employees data for the US comes from the US Department of Commerce 'GDP by industry' data, which breaks down employees across Bureau of Labor Statistics sub sectors that we aggregate at the 21 ISIC sectors.<sup>29</sup> Evidently we have specific numbers of employees for the different tertiary industries (ISIC 9 to 21), however we do not know the specific figures of emissions of each service sector. Therefore, we follow the approach for the original non-standardized data, and divided the total of employees in industries ISIC 9 to 21 by 13 and assigned this value to each of the ISIC in this range.

<sup>&</sup>lt;sup>29</sup>See US data at http://www.bea.gov/industry/gdpbyind\_data.htm.

Dependent Variable		port for Clin		
Model	(1)	(2)	(3)	(4)
Female	-0.013	-0.007	-0.007	-0.013
	(0.015)	(0.015)	(0.015)	(0.015)
Age: 30-39	0.028	0.027	0.027	0.028
	(0.025)	(0.025)	(0.025)	(0.025)
Age: 40-49	0.018	0.017	0.016	0.018
	(0.025)	(0.025)	(0.025)	(0.025)
Age: 50-59	$0.042^{*}$	$0.042^{*}$	$0.042^{*}$	$0.042^{*}$
	(0.024)	(0.024)	(0.024)	(0.024)
Age: 60+	0.030	0.031	0.030	0.030
	(0.031)	(0.031)	(0.031)	(0.031)
Income: Lower Middle	0.034	0.030	0.030	0.034
	(0.030)	(0.030)	(0.030)	(0.030)
Income: Middle	0.042	0.042	0.042	0.042
	(0.029)	(0.029)	(0.029)	(0.029)
Income: High	$0.056^{**}$	$0.057^{**}$	$0.057^{**}$	$0.056^{**}$
	(0.028)	(0.028)	(0.028)	(0.028)
Education: High	$0.120^{***}$	$0.129^{***}$	$0.129^{***}$	0.120***
	(0.016)	(0.016)	(0.016)	(0.016)
Reciprocity: High	0.109***	0.110***	0.110***	0.109***
	(0.015)	(0.015)	(0.015)	(0.015)
Altruism: High	0.094***	$0.093^{***}$	$0.094^{***}$	0.094***
	(0.017)	(0.017)	(0.017)	(0.017)
GHG Emissions (WB): High	-0.071***			
	(0.015)			
CO2 Emissions: High		-0.045***		
		(0.015)		
Oil eq Energy Flow: High			-0.043***	
			(0.015)	
Employee-weighted GHG: High				-0.071***
				(0.015)
Germany	0.054**	$0.056^{***}$	0.056***	0.054**
	(0.021)	(0.021)	(0.021)	(0.021)
United Kingdom	-0.086***	-0.080***	-0.080***	-0.086***
	(0.021)	(0.021)	(0.021)	(0.021)
United States	-0.247***	-0.247***	$-0.246^{***}$	-0.247***
	(0.022)	(0.022)	(0.022)	(0.022)
Constant	$0.542^{***}$	$0.526^{***}$	$0.524^{***}$	$0.542^{***}$
	(0.037)	(0.037)	(0.037)	(0.037)
Observations	4,008	4,008	4,008	4,008
R-squared	0.095	0.092	0.092	0.095

## **Appendix: Correlational Results**

Table A-6: Support for Climate Cooperation: Norms and Interests (Alternative Measures of Pollution Cost). This table reports OLS regression coefficients and robust standard errors (in parentheses). \*\*\* p < .01, \*\* p < .05, \*p < .10. Reference groups are: Sex: Male, Age: 18-29, Income: Low, Education: Low, Reciprocity: Low, Altruism: Low, GHG (World Bank) Emissions: Low, CO2 Emissions: Low, Oil equivalent Energy Flow: Low, Employee-weighted GHG Emissions: Low, Country: France. The sample is employed respondents in the pooled data for France, Germany, the United Kingdom, and the United States.

Dependent Variable Model	-	$\frac{1}{(2)}$		
	(1)	(2)	(3)	(4)
Female	0.582***	0.617***	0.619***	0.582***
4 20.20	(0.088)	(0.088)	(0.088)	(0.088)
Age: 30-39	0.119	0.115	0.115	0.119
	(0.139)	(0.139)	(0.139)	(0.139)
Age: 40-49	-0.141	-0.146	-0.147	-0.141
	(0.145)	(0.145)	(0.145)	(0.145)
Age: 50-59	0.032	0.030	0.031	0.032
	(0.145)	(0.145)	(0.145)	(0.145)
Age: 60+	0.014	0.016	0.015	0.014
	(0.199)	(0.199)	(0.199)	(0.199)
Income: Lower Middle	$0.317^{*}$	$0.292^{*}$	$0.293^{*}$	$0.317^{*}$
	(0.174)	(0.174)	(0.174)	(0.174)
Income: Middle	$0.307^{*}$	$0.307^{*}$	$0.309^{*}$	$0.307^{*}$
	(0.169)	(0.169)	(0.169)	(0.169)
Income: High	0.027	0.038	0.038	0.027
	(0.166)	(0.166)	(0.166)	(0.166)
Education: High	0.318***	$0.367^{***}$	$0.370^{***}$	$0.318^{**}$
	(0.098)	(0.098)	(0.098)	(0.098)
Reciprocity: High	0.543***	0.553***	0.553***	0.543**
	(0.091)	(0.091)	(0.091)	(0.091)
Altruism: High	$0.515^{***}$	$0.511^{***}$	$0.514^{***}$	$0.515^{**}$
	(0.102)	(0.102)	(0.102)	(0.102)
GHG Emissions (WB): High	-0.392***	. ,	· /	. ,
	(0.092)			
CO2 Emissions: High	× ,	-0.262***		
U U		(0.090)		
Oil eq Energy Flow: High		× ,	-0.241***	
1 55 5			(0.090)	
Employee-weighted GHG: High			( )	-0.392**
100000				(0.092)
Germany	-0.008	0.002	0.001	-0.008
~	(0.116)	(0.115)	(0.115)	(0.116)
United Kingdom	-0.841***	-0.811***	-0.810***	-0.841**
5	(0.110)	(0.110)	(0.110)	(0.110)
United States	-1.556***	-1.555***	-1.547***	-1.556**
	(0.133)	(0.133)	(0.133)	(0.133)
Constant	6.352***	6.273***	6.257***	6.352**
	(0.214)	(0.214)	(0.214)	(0.214)
Observations	4,009	4,009	4,009	4,009
R-squared	0.085	0.083	0.082	0.085

Table A-7: Importance of CO2 Reductions: Norms and Interests (Alternative Measures of Pollution Cost). This table reports OLS regression coefficients and robust standard errors (in parentheses). \*\*\* p < .01, \*\* p < .05, \*p < .10. Reference groups are: Sex: Male, Age: 18-29, Income: Low, Education: Low, Reciprocity: Low, Altruism: Low, GHG (World Bank) Emissions: Low, CO2 Emissions: Low, Oil equivalent Energy Flow: Low, Employee-weighted GHG Emissions: Low, Country: France. The sample is employed respondents in the pooled data for France, Germany, the United Kingdom, and the United States.

Dependent Variable	Envi	ronment: W	illingness to	Pay
Model	(1)	(2)	(3)	(4)
Female	1.648***	1.815***	$1.825^{***}$	1.648***
	(0.619)	(0.613)	(0.614)	(0.619)
Age: 30-39	-0.173	-0.179	-0.176	-0.173
	(1.031)	(1.032)	(1.032)	(1.031)
Age: 40-49	-0.778	-0.772	-0.775	-0.778
	(1.020)	(1.021)	(1.022)	(1.020)
Age: 50-59	-0.800	-0.796	-0.782	-0.800
	(1.001)	(1.002)	(1.002)	(1.001)
Age: 60+	-1.472	-1.442	-1.444	-1.472
	(1.264)	(1.268)	(1.268)	(1.264)
Income: Lower Middle	0.382	0.227	0.227	0.382
	(1.267)	(1.267)	(1.267)	(1.267)
Income: Middle	-0.319	-0.327	-0.316	-0.319
	(1.190)	(1.190)	(1.190)	(1.190)
Income: High	-0.701	-0.630	-0.625	-0.701
-	(1.155)	(1.156)	(1.157)	(1.155)
Education: High	-0.094	0.156	0.171	-0.094
-	(0.686)	(0.673)	(0.673)	(0.686)
Reciprocity: High	-2.442***	-2.398***	-2.399***	-2.442***
	(0.647)	(0.647)	(0.647)	(0.647)
Altruism: High	3.564***	3.531***	3.551***	3.564***
-	(0.724)	(0.723)	(0.723)	(0.724)
GHG Emissions (WB): High	-2.095***	· · · ·	× /	× /
	(0.640)			
CO2 Emissions: High	· · · ·	-1.857***		
-		(0.628)		
Oil eq Energy Flow: High		× /	-1.780***	
1 00 0			(0.628)	
Employee-weighted GHG: High			× ,	-2.095***
				(0.640)
Germany	-0.488	-0.419	-0.422	-0.488
	(0.988)	(0.986)	(0.986)	(0.988)
United Kingdom	-5.043***	-4.900***	-4.898***	-5.043***
, i i i i i i i i i i i i i i i i i i i	(0.912)	(0.908)	(0.909)	(0.912)
United States	-2.820***	-2.846***	-2.796***	-2.820***
	(0.987)	(0.990)	(0.989)	(0.987)
Constant	21.268***	21.114***	21.044***	21.268***
	(1.601)	(1.586)	(1.583)	(1.601)
Observations	4,009	4,009	4,009	4,009
R-squared	0.022	· ·		

Table A-8: Willingness to Pay for the Environment: Norms and Interests (Alternative Measures of Pollution Cost). This table reports OLS regression coefficients and robust standard errors (in parentheses). \*\*\* p < .01, \*\* p < .05, \*p < .10. Reference groups are: Sex: Male, Age: 18-29, Income: Low, Education: Low, Reciprocity: Low, Altruism: Low, GHG (World Bank) Emissions: Low, CO2 Emissions: Low, Oil equivalent Energy Flow: Low, Employee-weighted GHG Emissions: Low, Country: France. The sample is employed respondents in the pooled data for France, Germany, the United Kingdom, and the United States.

Dependent Variable	Support for	Importance of CO2	Environment:
M 11	Climate Cooperation	Reductions	Willingness to Pay
Model	(1)	(2)	(3)
Female	-0.013	0.585***	1.634***
1 00.00	(0.015)	(0.088)	(0.617)
Age: 30-39	0.03	0.146	-0.094
	(0.025)	(0.138)	(1.035)
Age: 40-49	0.023	-0.085	-0.605
	(0.025)	(0.146)	(1.032)
Age: 50-59	0.047*	0.083	-0.651
	(0.024)	(0.145)	(1.012)
Age: 60+	0.037	0.076	-1.294
	(0.031)	(0.2)	(1.272)
Income: Lower Middle	0.038	$0.352^{**}$	0.482
	(0.03)	(0.173)	(1.266)
Income: Middle	$0.049^{*}$	$0.377^{**}$	-0.132
	(0.029)	(0.17)	(1.193)
Income: High	$0.065^{**}$	0.118	-0.452
	(0.028)	(0.168)	(1.158)
Education: High	$0.121^{***}$	$0.323^{***}$	-0.101
	(0.016)	(0.098)	(0.684)
Reciprocity: High	0.108***	$0.533^{***}$	-2.471***
	(0.015)	(0.09)	(0.647)
Altruism: High	0.093***	$0.510^{***}$	$3.550^{***}$
	(0.017)	(0.102)	(0.723)
GHG Emissions: High	-0.066***	-0.369***	-2.209***
	(0.015)	(0.093)	(0.647)
Car Ownership	-0.038*	-0.379***	-0.961
	(0.02)	(0.121)	(0.864)
Germany	0.046**	-0.069	-0.753
-	(0.021)	(0.116)	(0.99)
United Kingdom	-0.096***	-0.928***	-5.388***
	(0.021)	(0.113)	(0.923)
United States	-0.253***	-1.587***	-3.017***
	(0.022)	(0.134)	(0.994)
Constant	0.567***	6.609***	22.103***
	(0.039)	(0.226)	(1.683)
Observations	4008	4009	4009
R-squared	0.096	0.087	0.023

Table A-9: Support for Climate Cooperation: Norms and Interests (Car Ownership). This table reports OLS regression coefficients and robust standard errors (in parentheses). \*\*\* p < .01, \*\* p < .05, \*p < .10. Reference groups are: Sex: Male, Age: 18-29, Income: Low, Education: Low, Reciprocity: Low, Altruism: Low, GHG (CO2 equivalent) Emissions: Low, Car: No ownership, Country: France. The sample is employed respondents in the pooled data for France, Germany, the United Kingdom, and the United States.

Dependent Variable	Support for	Importance of CO2	Environment:
Model	Climate Cooperation	Reductions	Willingness to Pay
	(1)	(2)	(3)
Female	-0.028*	0.455***	1.488**
1 00 00	(0.014)	(0.086)	(0.622)
Age: 30-39	0.037	0.204	-0.069
1 10 10	(0.024)	(0.135)	(1.036)
Age: 40-49	0.032	-0.018	-0.605
1 50 50	(0.024)	(0.141)	(1.027)
Age: 50-59	0.045*	0.060	-0.745
	(0.024)	(0.141)	(1.003)
Age: 60+	0.049	0.169	-1.275
	(0.030)	(0.189)	(1.268)
Income: Lower Middle	0.034	0.316*	0.394
	(0.030)	(0.170)	(1.273)
Income: Middle	$0.056^{*}$	$0.426^{***}$	-0.176
	(0.029)	(0.164)	(1.199)
Income: High	$0.078^{***}$	0.215	-0.471
	(0.028)	(0.161)	(1.168)
Education: High	0.123***	$0.341^{***}$	-0.087
	(0.016)	(0.096)	(0.685)
Reciprocity: High	0.108***	$0.538^{***}$	-2.452***
	(0.015)	(0.088)	(0.646)
Altruism: High	$0.089^{***}$	$0.479^{***}$	$3.521^{***}$
	(0.016)	(0.097)	(0.723)
GHG Emissions: High	-0.061***	-0.334***	-2.207***
	(0.015)	(0.089)	(0.642)
Ideology: Right	-0.198***	-1.670***	-1.815**
	(0.016)	(0.099)	(0.710)
Germany	0.023	-0.253**	-0.912
	(0.022)	(0.118)	(0.991)
United Kingdom	-0.094***	-0.900***	-5.280***
	(0.021)	(0.112)	(0.922)
United States	-0.236***	-1.441***	-2.863***
	(0.022)	(0.128)	(1.001)
Constant	0.590***	6.767***	21.941***
	(0.037)	(0.215)	(1.611)
Observations	4,008	4,009	4,009
R-squared	0.130	0.152	0.025

Table A-10: Support for Climate Cooperation: Norms and Interests (Political Ideology). This table reports OLS regression coefficients and robust standard errors (in parentheses). \*\*\* p < .01, \*\* p < .05, \*p < .10. Reference groups are: Sex: Male, Age: 18-29, Income: Low, Education: Low, Reciprocity: Low, Altruism: Low, GHG (CO2 equivalent) Emissions: Low, Ideology: Left, Country: France. The sample is employed respondents in the pooled data for France, Germany, the United Kingdom, and the United States.

Dependent Variable Scale	Binary	5 points	for Climate Binary	Binary	Binary
Model	Full	Full	Full	Full	Employed only
Female	-0.035***	0.003	-0.031***	-0.035***	-0.070***
1 cmaic	(0.010)	(0.025)	(0.011)	(0.010)	(0.012)
Age: 30-39	0.014	0.003	0.007	0.013	0.012)
11ye. 00-00	(0.019)	(0.043)	(0.019)	(0.019)	(0.013)
Age: 40-49	0.011	-0.040	0.006	0.011	0.034
Aye. 40-49	(0.011)	(0.043)	(0.018)	(0.011)	(0.034)
Age: 50-59	$0.055^{***}$	(0.043) 0.055	(0.018) $0.052^{***}$	(0.019) $0.054^{***}$	(0.021) $0.040^{**}$
Age. 50-59	(0.035)	(0.035) $(0.041)$	(0.052) (0.017)	(0.054)	(0.040)
Age: 60+	(0.017) $0.045^{**}$	(0.041) -0.023	· · · ·	(0.017) $0.042^{**}$	0.034
Age: 60+			$0.039^{*}$		
r r 16-111	(0.018)	(0.042)	(0.021)	(0.021)	(0.025)
Income: Lower Middle	0.025	0.038	0.021	0.025	0.006
	(0.017)	(0.039)	(0.017)	(0.017)	(0.025)
Income: Middle	0.035**	0.028	0.035**	0.035**	0.017
	(0.017)	(0.039)	(0.017)	(0.017)	(0.024)
Income: High	0.038**	-0.002	$0.037^{**}$	$0.038^{**}$	$0.059^{**}$
	(0.016)	(0.039)	(0.016)	(0.017)	(0.023)
Education: High	0.119***	$0.287^{***}$	$0.128^{***}$	$0.119^{***}$	$0.092^{***}$
	(0.011)	(0.027)	(0.011)	(0.011)	(0.014)
Reciprocity: High	0.099***	0.205***	0.100***	0.099***	$0.059^{***}$
	(0.011)	(0.026)	(0.010)	(0.011)	(0.012)
Altruism: High	0.085***	0.205***	0.085***	0.085***	0.046***
U	(0.012)	(0.030)	(0.012)	(0.012)	(0.013)
GHG Emissions: High	-0.069***	-0.200***		-0.069***	-0.030**
5	(0.015)	(0.037)		(0.015)	(0.013)
GHG Emissions: Missing	-0.025*	-0.043		-0.028*	()
	(0.014)	(0.033)		(0.015)	
Paid Work	(0.011)	(0.000)	-0.005	(0.010)	
			(0.014)		
Unemployed			0.014)	0.008	
Chempiogea			(0.010)	(0.022)	
Retired			0.009	0.007	
neurea				(0.007)	
COO Deduction of Imment			(0.020)	(0.020)	0.092***
C02 Reductions: Important					
					(0.002) -0.045***
Ideology: Right					
2	0.010***	0.001	0.000****	0.041***	(0.014)
Germany	0.040***	0.034	0.038***	0.041***	0.047**
** ***	(0.014)	(0.032)	(0.014)	(0.015)	(0.020)
United Kingdom	-0.075***	-0.280***	-0.066***	-0.075***	-0.012
	(0.015)	(0.033)	(0.015)	(0.015)	(0.019)
United States	-0.217***	-0.725***	-0.214***	-0.217***	-0.103***
	(0.015)	(0.036)	(0.015)	(0.015)	(0.019)
Constant	0.563***	$3.740^{***}$	$0.529^{***}$	$0.563^{***}$	-0.030
	(0.025)	(0.059)	(0.023)	(0.025)	(0.035)
Observations	8,329	8,329	8,499	8,329	4,008
R-squared	0.075	0.092	0.072	0.075	0.392

Table A-11: Support for Climate Cooperation: GHG Emissions Missingness and Employment Status. This table reports OLS regression coefficients and robust standard errors (in parentheses). \*\*\* p < .01, \*\* p < .05, \*p < .10. Reference groups are: Sex: Male, Age: 18-29, Income: Low, Education: Low, Reciprocity: Low, Altruism: Low, GHG Emissions: Low, Employment: Other, C02 Reductions: Unimportant, Ideology: Left, Country: France. The sample is all respondents in France, Germany, the United Kingdom, and the United States except for Model 5 (employed only). 13

Dependent Variable	Support for Climate Cooperation				
	(1)	(2)	(3)	(4)	
Country	France	Germany	United Kingdom	United States	
Female	-0.119*	-0.138**	0.034	0.237***	
	(0.068)	(0.063)	(0.062)	(0.088)	
Age: 30-39	-0.008	0.110	0.051	-0.012	
	(0.112)	(0.105)	(0.095)	(0.146)	
Age: 40-49	0.320***	$0.180^{*}$	-0.163	-0.267*	
	(0.113)	(0.108)	(0.099)	(0.137)	
Age: 50-59	0.260**	$0.273^{***}$	-0.126	-0.125	
	(0.113)	(0.105)	(0.109)	(0.123)	
Age: 60+	0.436**	$0.367^{***}$	0.014	-0.299**	
	(0.190)	(0.132)	(0.152)	(0.150)	
Income: Lower Middle	0.004	0.161	0.102	-0.038	
	(0.119)	(0.272)	(0.110)	(0.167)	
Income: Middle	0.204*	0.047	0.039	-0.185	
	(0.112)	(0.273)	(0.104)	(0.160)	
Income: High	0.185*	0.153	0.063	-0.260*	
	(0.106)	(0.272)	(0.102)	(0.155)	
Education: High	0.229***	0.220***	0.352***	0.408***	
	(0.072)	(0.070)	(0.066)	(0.099)	
Reciprocity: High	0.305***	0.252***	0.176***	0.183**	
	(0.068)	(0.063)	(0.063)	(0.089)	
Altruism: High	0.104	0.124	0.318***	0.332***	
	(0.079)	(0.082)	(0.065)	(0.090)	
GHG Emissions: High	-0.053	-0.097	-0.136**	-0.426***	
	(0.068)	(0.063)	(0.067)	(0.092)	
Constant	3.431***	3.573***	3.398***	3.183***	
	(0.149)	(0.283)	(0.132)	(0.200)	
Observations	816	929	1,141	1,122	
R-squared	0.074	0.055	0.079	0.088	

Table A-12: Support for Climate Cooperation: Norms and Interests by Country. This table reports OLS regression coefficients and robust standard errors (in parentheses). \*\*\* p < .01, \*\* p < .05, \*p < .10. Reference groups are: Sex: Male, Age: 18-29, Income: Low, Education: Low, Reciprocity: Low, Altruism: Low, GHG (CO2 equivalent) Emissions: Low. The sample is employed respondents in the data for France, Germany, the United Kingdom, and the United States.

Dependent Variable	Support for	or Climate	Cooperation	L	Importance of CO2	Environment:
		(scale 1-5)	Reductions	Willingness to Pay		
Model	(1)	(2)	(3)	(4)	(5)	(6)
	Socio-demographics	Norms	Interest	Full		
Female	0.016	0.008	-0.009	-0.016	0.710***	2.202***
	(0.034)	(0.034)	(0.035)	(0.035)	(0.120)	(0.680)
Age: 30-39	-0.013	0.005	-0.006	0.012	0.126	-0.130
	(0.056)	(0.056)	(0.056)	(0.056)	(0.186)	(1.117)
Age: 40-49	-0.069	-0.030	-0.054	-0.015	-0.141	-1.114
	(0.056)	(0.056)	(0.056)	(0.056)	(0.195)	(1.122)
Age: 50-59	0.002	0.055	0.011	0.062	0.087	-0.855
	(0.056)	(0.056)	(0.056)	(0.056)	(0.195)	(1.098)
Age: 60+	0.043	0.086	0.051	0.093	0.125	-1.636
_	(0.078)	(0.079)	(0.078)	(0.079)	(0.275)	(1.407)
Income: Lower Middle	0.080	0.066	0.087	0.073	0.321	0.783
	(0.064)	(0.064)	(0.065)	(0.065)	(0.231)	(1.404)
Income: Middle	0.079	0.063	0.077	0.062	0.355	0.016
	(0.062)	(0.062)	(0.062)	(0.063)	(0.227)	(1.323)
Income: High	0.078	0.057	0.081	0.060	-0.040	-0.486
5	(0.060)	(0.060)	(0.061)	(0.061)	(0.221)	(1.291)
Education: High	0.349***	0.329***	0.322***	0.303***	0.394***	0.232
5	(0.036)	(0.037)	(0.037)	(0.037)	(0.132)	(0.761)
Reciprocity: High		0.235***	, ,	0.230***	0.707***	-1.977***
1 0 5		(0.035)		(0.035)	(0.122)	(0.713)
Altruism: High		0.233***		0.231***	0.690***	4.308***
5		(0.042)		(0.042)	(0.140)	(0.788)
GHG Emissions: High		( )	-0.199***	-0.190***	-0.516***	-2.466***
			(0.036)	(0.036)	(0.124)	(0.708)
Germany	0.068	$0.095^{*}$	0.051	0.079	0.048	-0.799
Ū.	(0.049)	(0.049)	(0.049)	(0.049)	(0.161)	(1.062)
United Kingdom	-0.199***	-0.217***	-0.237***	-0.254***	-1.085***	-5.813***
5	(0.045)	(0.045)	(0.046)	(0.046)	(0.150)	(0.993)
United States	-0.614***	-0.640***	-0.644***	-0.668***	-1.890***	-4.567***
	(0.052)	(0.052)	(0.052)	(0.053)	(0.183)	(1.094)
Constant		( )	( )		6.625***	19.910***
					(0.290)	(1.769)
Observations	4,008	4,008	4,008	4,008	4,009	4,009

Table A-13: Support for Climate Cooperation: Ordered Probit and Tobit Estimates. Models 1-4 report ordered probit results for Support for Climate Cooperation defined on a 5-point scale (see main text for description). Models 5 and 6 report tobit estimates for Importance of CO2 Reductions and Willingness to Pay for the Environment. The table shows coefficients and robust standard errors (in parentheses). \*\*\* p < .01, \*\* p < .05, \*p < .10. Reference groups are: Sex: Male, Age: 18-29, Income: Low, Education: Low, Reciprocity: Low, Altruism: Low, GHG Emissions: Low, Country: France. The sample is employed respondents in France, Germany, the United Kingdom, and the United States.

Dependent Variable	Support for	Importance of CO2	Environment: Willingness to Pay		
	Climate Cooperation	Reductions			
Model	(1)	(2)	(3)		
Female	-0.017	$0.551^{***}$	1.615***		
	(0.015)	(0.090)	(0.624)		
Age: 30-39	0.027	0.113	-0.162		
	(0.025)	(0.139)	(1.031)		
Age: 40-49	0.017	-0.145	-0.734		
	(0.025)	(0.145)	(1.020)		
Age: 50-59	0.042*	0.028	-0.774		
	(0.024)	(0.144)	(1.001)		
Age: 60+	0.029	-0.000	-1.444		
	(0.031)	(0.199)	(1.260)		
Income: Lower Middle	0.033	0.304*	0.392		
	(0.030)	(0.174)	(1.269)		
Income: Middle	0.039	$0.284^{*}$	-0.310		
	(0.029)	(0.169)	(1.194)		
Income: High	0.053*	0.006	-0.676		
5	(0.028)	(0.166)	(1.161)		
Education: High	0.117***	0.293***	-0.119		
5	(0.016)	(0.099)	(0.688)		
Reciprocity: High	0.108***	0.535***	-2.448***		
1 0 0	(0.015)	(0.090)	(0.646)		
Altruism: High	0.095***	0.521***	3.562***		
5	(0.017)	(0.102)	(0.723)		
GHG Emissions: High	-0.057***	-0.304***	-2.244***		
5	(0.016)	(0.097)	(0.711)		
Public Sector Employment: High	0.028*	0.235**	0.071		
1 0 5	(0.016)	(0.097)	(0.710)		
Germany	0.052**	-0.017	-0.676		
0	(0.021)	(0.116)	(0.996)		
United Kingdom	-0.090***	-0.864***	-5.249***		
5	(0.021)	(0.111)	(0.923)		
United States	-0.250***	-1.561***	-3.016***		
	(0.022)	(0.134)	(1.000)		
Constant	0.533***	6.289***	21.492***		
	(0.038)	(0.219)	(1.646)		
Observations	4,008	4,009	4,009		
R-squared	0.096	0.086	0.023		
n-squared	0.090	0.080	0.023		

Table A-14: Support for Climate Cooperation (Public Sectors). This table reports OLS regression coefficients and robust standard errors (in parentheses). \*\*\* p < .01, \*\* p < .05, \*p < .10. Reference groups are: Sex: Male, Age: 18-29, Income: Low, Education: Low, Reciprocity: Low, Altruism: Low, GHG (CO2 equivalent) Emissions: Low, Public Sector Employment: Low Country: France. The sample is employed respondents in the pooled data for France, Germany, the United Kingdom, and the United States. Sectors with a large share of public employees are: Scientific and Technical Activities, Administration and Support Service, Public Administration and Defense, Education, Human Health and Social Work, Arts and Recreation.

Dependent Variable	Support for Climate Cooperation	Importance of CO2 Reductions	Environment: Willingness to Pay		
Model	(1)	(2)	(3)		
Female	-0.014	0.580***	1.591***		
1 cmute	(0.014)	(0.089)	(0.617)		
Age: 30-39	0.028	0.124	-0.174		
11ge. 00 05	(0.025)	(0.139)	(1.032)		
Age: 40-49	0.020	-0.127	-0.778		
1190. 40 40	(0.025)	(0.146)	(1.022)		
Age: 50-59	0.043*	0.043	-0.834		
11ye. 00-05	(0.024)	(0.145)	(1.003)		
Age: 60+	0.032	0.028	-1.532		
11ge. 007	(0.031)	(0.199)	(1.270)		
Income: Lower Middle	0.034	$0.317^*$	0.407		
Income. Lower maute	(0.034)	(0.174)	(1.269)		
Income: Middle	0.042	0.308*	-0.264		
Income. Muaute	(0.042)	(0.169)	(1.192)		
Income: High	0.057**	0.034	-0.665		
income. ingh	(0.028)	(0.166)	(1.157)		
Education: High	0.120***	0.320***	-0.122		
Education. Ingh	(0.016)	(0.098)	(0.684)		
Reciprocity: High	0.115***	0.526***	-1.754**		
neerproceeg. migh	(0.018)	(0.108)	(0.772)		
Altruism: High	0.104***	0.578***	3.125***		
1101 atsm. 11191	(0.019)	(0.118)	(0.850)		
GHG Emissions: High	-0.054***	-0.373***	-1.734**		
GIIG Emissions. Ingh	(0.020)	(0.124)	(0.881)		
GHG EmissionsXReciprocity	-0.023	0.049	-2.302*		
GIIG EmissionsAlteciprocity	(0.033)	(0.204)	(1.321)		
GHG EmissionsXAltruism	-0.001	-0.003	0.020		
GIIG EmissionsAntinuism	(0.000)	(0.003)	(0.023)		
Germany	0.049**	-0.040	-0.673		
Germany	(0.043)	(0.116)	(0.993)		
United Kingdom	-0.090***	-0.873***	-5.228***		
Onnea Mingaom	(0.021)	(0.112)	(0.920)		
United States	-0.253***	-1.583***	-3.098***		
Chuca States	(0.022)	(0.134)	(0.990)		
Constant	0.537***	6.364***	21.308***		
00113101111	(0.038)	(0.221)	(1.658)		
Observations	4,007	4,008	4,008		
R-squared	4,007	4,008 0.085	4,008 0.024		
n-squareu	0.095	0.080	0.024		

Table A-15: Support for Climate Cooperation and Environmentalism: Norms, Interests, and their Interactions. This table reports OLS regression coefficients and robust standard errors (in parentheses). \*\*\* p < .01, \*\* p < .05, \*p < .10. Reference groups are: Sex: Male, Age: 18-29, Income: Low, Education: Low, Reciprocity: Low, Altruism: Low, GHG Emissions: Low, Country: France. The sample is employed respondents in the pooled data for France, Germany, the United Kingdom, and the United States.

Dependent Variable	Support for	or Climate C	Cooperation
Scale	Binary	5  points	Binary
Female	-0.035***	0.003	-0.035***
	(0.010)	(0.025)	(0.010)
Age: 30-39	0.014	0.003	0.013
	(0.019)	(0.043)	(0.019)
Age: 40-49	0.011	-0.040	0.011
	(0.019)	(0.043)	(0.019)
Age: 50-59	0.055***	0.055	$0.054^{***}$
	(0.017)	(0.041)	(0.017)
Age: 60+	0.045**	-0.023	0.042**
	(0.018)	(0.042)	(0.021)
Income: Lower Middle	0.025	0.038	0.025
	(0.017)	(0.039)	(0.017)
Income: Middle	0.035**	0.028	$0.035^{**}$
	(0.017)	(0.039)	(0.017)
Income: High	0.038**	-0.002	0.038**
	(0.016)	(0.039)	(0.017)
Education: High	0.119***	0.287***	0.119***
	(0.011)	(0.027)	(0.011)
Reciprocity: High	0.099***	0.205***	0.099***
	(0.011)	(0.026)	(0.011)
Altruism: High	0.085***	0.205***	0.085***
	(0.012)	(0.030)	(0.012)
GHG Emissions: Low	$0.025^{*}$	0.043	$0.028^{*}$
	(0.014)	(0.033)	(0.015)
GHG Emissions: High	-0.044***	-0.157***	-0.041**
	(0.015)	(0.036)	(0.017)
Unemployed			0.008
			(0.022)
Retired			0.007
			(0.020)
Germany	0.040***	0.034	0.041***
	(0.014)	(0.032)	(0.015)
United Kingdom	-0.075***	-0.280***	-0.075***
	(0.015)	(0.033)	(0.015)
United States	-0.217***	-0.725***	-0.217***
	(0.015)	(0.036)	(0.015)
Constant	0.538***	3.696***	0.535***
	(0.022)	(0.051)	(0.023)
Observations	8,329	8,329	8,329
R-squared	0.075	0.092	0.075

Table A-16: Support for Climate Cooperation: GHG Emissions Missingness and Employment Status (Unemployed as Reference Group). This table reports OLS regression coefficients and robust standard errors (in parentheses). \*\*\* p < .01, \*\* p < .05, \*p < .10. Reference groups are: Sex: Male, Age: 18-29, Income: Low, Education: Low, Reciprocity: Low, Altruism: Low, GHG (CO2 equivalent) Emissions: Missing, Country: France. The sample is all respondents in France, Germany, the United Kingdom, and the United States.

Dependent Variable GHG Emissions Measure	Support for Continuous	Tertiles	Quartiles
Model	(1)	(2)	(3)
Female	-0.013	-0.017	-0.016
	(0.015)	(0.015)	(0.015)
Age: 30-39	0.029	0.028	0.028
5	(0.025)	(0.025)	(0.025)
Age: 40-49	0.018	0.016	0.019
5 1 1	(0.025)	(0.025)	(0.025)
Age: 50-59	0.044*	$0.042^{*}$	$0.043^{*}$
5	(0.024)	(0.024)	(0.024)
Age: 60+	0.031	0.029	0.031
5	(0.031)	(0.031)	(0.031)
Income: Lower Middle	0.031	0.031	0.031
	(0.030)	(0.030)	(0.030)
Income: Middle	0.042	0.040	0.041
	(0.029)	(0.029)	(0.029)
Income: High	0.057**	0.054*	0.056**
	(0.028)	(0.028)	(0.028)
Education: High	0.125***	0.121***	0.121***
	(0.016)	(0.016)	(0.016)
Reciprocity: High	0.110***	0.110***	0.110***
	(0.015)	(0.015)	(0.015)
Altruism: High	0.096***	0.094***	0.094***
	(0.017)	(0.017)	(0.017)
GHG Emissions: Billion Tons	-0.135***	(0.02.)	(0.02.)
	(0.033)		
GHG Emissions: Middle	()	-0.016	
		(0.018)	
GHG Emissions: High		-0.074***	
		(0.019)	
GHG Emissions: Lower Middle		()	-0.017
			(0.020)
GHG Emissions: Higher Middle			-0.059***
			(0.022)
GHG Emissions: High			-0.094***
0-1-0-1			(0.022)
Germany	0.058***	0.058***	0.052**
a crimany	(0.021)	(0.021)	(0.021)
United Kingdom	-0.079***	-0.078***	-0.086***
	(0.021)	(0.021)	(0.021)
United States	-0.214***	-0.241***	-0.254***
	(0.023)	(0.022)	(0.022)
Constant	0.506***	0.539***	0.553***
	(0.036)	(0.037)	(0.038)
Observations	4,008	4,008	4,008
R-squared	0.095	0.094	0.096

Table A-17: Support for Climate Cooperation: Different GHG Emission Indicator Scaling. This table reports OLS regression coefficients and robust standard errors (in parentheses). \*\*\* p < .01, \*\* p < .05, \*p < .10. Reference groups are: Sex: Male, Age: 18-29, Income: Low, Education: Low, Reciprocity: Low, Altruism: Low, GHG (CO2 equivalent) Emissions: Low, Employment: Other, Country: France. The sample is employed respondents in France, Germany, the United Kingdom, and the United States. Model 1 employs the raw (continuous) GHG emissions. Model 2 and 3 use indicator variables that distinguish between tertiles and quartiles, respectively.

Dependent Variable	Support for	Importance of CO2	Environment:
	Climate Cooperation	Reductions	Willingness to Pay
Model	(1)	(2)	(3)
Female	0.004	0.650***	$1.237^{*}$
	(0.017)	(0.104)	(0.714)
Age: 30-39	0.021	0.080	-0.537
	(0.028)	(0.160)	(1.189)
Age: 40-49	0.008	-0.292*	-1.373
	(0.029)	(0.168)	(1.191)
Age: 50-59	0.026	-0.187	-1.244
	(0.028)	(0.168)	(1.168)
Age: 60+	0.009	-0.281	-1.213
	(0.036)	(0.235)	(1.496)
Income: Lower Middle	0.030	$0.317^{*}$	0.020
	(0.033)	(0.187)	(1.369)
Income: Middle	0.053*	$0.303^{*}$	-0.738
	(0.031)	(0.178)	(1.252)
Income: High	0.057*	0.029	-0.783
-	(0.029)	(0.175)	(1.214)
Education: High	0.138***	0.370***	-0.391
-	(0.019)	(0.115)	(0.784)
Reciprocity: High	0.107***	0.480***	-2.680***
	(0.017)	(0.106)	(0.746)
Altruism: High	0.098***	0.545***	3.486***
	(0.018)	(0.112)	(0.787)
GHG Emissions: High	-0.079***	-0.473***	-2.959***
	(0.018)	(0.110)	(0.748)
United Kingdom	-0.094***	-0.895***	-5.349***
-	(0.021)	(0.113)	(0.924)
United States	-0.256***	-1.577***	-3.162***
	(0.022)	(0.135)	(1.002)
Constant	0.540***	6.521***	22.999***
	(0.041)	(0.236)	(1.773)
Observations	3,079	3,080	3,080
R-squared	0.087	0.086	0.026

Table A-18: Support for Climate Cooperation: Norms and Interests, Germany excluded). This table reports OLS regression coefficients and robust standard errors (in parentheses). \*\*\* p < .01, \*\* p < .05, \*p < .10. Reference groups are: Sex: Male, Age: 18-29, Income: Low, Education: Low, Reciprocity: Low, Altruism: Low, GHG Emissions: Low, Country: France. The sample is employed respondents in the pooled data for France, the United Kingdom, and the United States.

Dependent Variable	Support for	or Climate (	Cooperation		Importance of CO2 Reductions	Environment:
Model	(1)	(2)	(3)	(4)	(5)	Willingness to Pay (6)
Model	Socio-demographics	(2) Norms	(5) Interest	(4) Full	(5)	(0)
Female	-0.001	-0.005	-0.011	-0.014	0.587***	1.682***
remaie	(0.015)	(0.015)	(0.011)	(0.014)	(0.091)	
4 90 90	0.006	· · · ·	(0.013) 0.009	(0.013) 0.016	0.064	$(0.631) \\ 0.141$
Age: 30-39		0.013				
1 10 10	(0.026)	(0.026)	(0.026)	(0.026)	(0.146)	(1.063)
Age: 40-49	-0.009	0.009	-0.003	0.015	-0.178	-0.603
1 50 50	(0.026)	(0.025)	(0.026)	(0.025)	(0.151)	(1.042)
Age: 50-59	0.002	0.025	0.005	0.028	-0.067	-0.751
4	(0.025)	(0.025)	(0.025)	(0.025)	(0.150)	(1.020)
Age: 60+	0.002	0.023	0.005	0.025	-0.046	-1.230
	(0.032)	(0.032)	(0.032)	(0.032)	(0.199)	(1.284)
Income: Lower Middle	0.038	0.032	0.040	0.035	0.320*	0.096
	(0.032)	(0.031)	(0.032)	(0.031)	(0.178)	(1.332)
Income: Middle	0.052*	0.046	$0.051^{*}$	0.045	0.349**	-0.683
	(0.030)	(0.030)	(0.030)	(0.030)	(0.174)	(1.252)
Income: High	$0.065^{**}$	$0.057^{**}$	$0.066^{**}$	$0.058^{**}$	0.030	-1.174
	(0.029)	(0.029)	(0.029)	(0.029)	(0.171)	(1.206)
Education: High	$0.139^{***}$	$0.128^{***}$	$0.128^{***}$	$0.118^{***}$	0.302***	-0.179
	(0.017)	(0.017)	(0.017)	(0.017)	(0.102)	(0.706)
Reciprocity: High		0.106***		0.103***	0.536***	-2.649***
		(0.015)		(0.015)	(0.093)	(0.662)
Altruism: High		$0.098^{***}$		$0.097^{***}$	0.503***	3.871***
-		(0.017)		(0.017)	(0.104)	(0.748)
GHG Emissions: High		. ,	-0.076***	-0.070***	-0.401***	-2.263***
0			(0.016)	(0.015)	(0.095)	(0.660)
Germany	0.046**	0.058**	0.039*	0.051**	-0.025	-0.516
Ŭ	(0.021)	(0.021)	(0.022)	(0.021)	(0.116)	(1.001)
United Kingdom	-0.069***	-0.076***	-0.083***	-0.089***	-0.898***	-5.153***
5	(0.022)	(0.021)	(0.022)	(0.022)	(0.114)	(0.931)
United States	-0.232***	-0.240***	-0.242***	-0.249***	-1.548***	-3.137***
	(0.023)	(0.022)	(0.023)	(0.022)	(0.136)	(1.014)
Constant	0.589***	0.508***	0.637***	0.555***	6.435***	21.803***
001000000	(0.036)	(0.037)	(0.037)	(0.038)	(0.223)	(1.676)
Observations	4,008	4,008	4,008	4.008	4.009	4,009
R-squared	0.072	0.092	0.078	0.097	0.086	0.024
it squared	0.012	0.002	0.010	0.001	0.000	0.041

Table A-19: Support for Climate Cooperation: Weighted Estimates. This table reports OLS regression coefficients and robust standard errors (in parentheses). \*\*\* p < .01, \*\* p < .05, \*p < .10. Reference groups are: Sex: Male, Age: 18-29, Income: Low, Education: Low, Reciprocity: Low, Altruism: Low, GHG Emissions: Low, Country: France. The sample is employed respondents in the pooled data for France, Germany, the United Kingdom, and the United States.

# **Appendix: Experimental Results**

### **Conjoint Instructions**

The directions for the conjoint experiment appeared on two pages before the respondent began choosing between agreements. First, respondents were given the following instructions:

Most countries around the world are currently discussing the possibility of agreeing to new policies that would address the problem of global warming. We are interested in what you think about these international efforts and the United States's possible participation in such an agreement.

We will now provide you with several examples of what agreements between countries to address climate change could look like. We will always show you two possible agreements in comparison. For each comparison we would like to know which of the two agreements you prefer. You may like both alternatives similarly or may not like either of them at all. Regardless of your overall evaluation, please indicate which alternative you prefer over the other.

In total, we will show you four comparisons. People have different opinions about this issue and there are no right or wrong answers. Please take your time when reading the potential agreements. In addition to deciding which climate agreement you would prefer, we also ask you how likely you would be to vote for or against the United States joining each agreement in a referendum.

Second, respondents were shown the following screenshot example with further instructions:

Figure A-1 shows the features of the two possible agreements that you will be choosing between. Note that the order of the features may vary.

	Features	Agreement 1	Agreement 2			
	Number of participating countries	This says how many countries (	participate in the agreeme			
	Costs to average household per month	This says how much the implementation of the agreeme will cost a household per month				
Different features of	Share of emissions represented by participating countries	This says for how much emissions the participating countries are responsible				
the agreements	Distribution of costs from implementing the agreement	This says how the costs of the agreements are distribute between countries				
	Sanctions for missing emission reduction targets	This says whether and how missing emission reduction targets will be sanctioned				
	Monitoring: Emission reductions will be monitored by	This says how emission reduction efforts will be monitor				
Your choice between the	Which agreement do you prefer?	0	0			
agreements	If you could vote on each of these agr vote in favor or against each of the ag scale from definitely against (1) to def	reements? Please give your an				

		Vote definitely against 1	2	3	4	5	6	7	8	9	Vote definitely in favor 10
Your rating of the	Agreement 1	0	0	0	0	0	0	0	0	0	0
agreements	Agreement 2	0	0	0	0	0	0	0	0	0	0

Figure A-1: Conjoint Instructions

#### Additional Conjoint Results

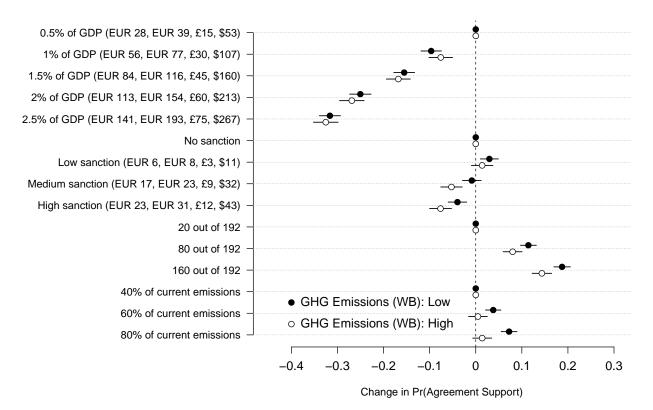


Figure A-2: The Effects of Costs and Participation on Support for Climate Agreements by GHG Emissions (CO2 equivalent, World Bank measure). This plot shows estimates of the effect of randomly assigned agreement features on the probability of supporting an agreement for employed respondents (N = 33,408 agreements, pooled data for France, Germany, the United Kingdom, and the United States) by CO2–equivalent emissions of respondents' sector of employment. Estimates are based on the regression of Agreement Support on dummy variables for values of the agreement dimensions, with SEs clustered by respondent. The bars indicate 95% confidence intervals based on robust standard errors clustered by respondent. Points without bars indicate the reference category for a given agreement dimension.

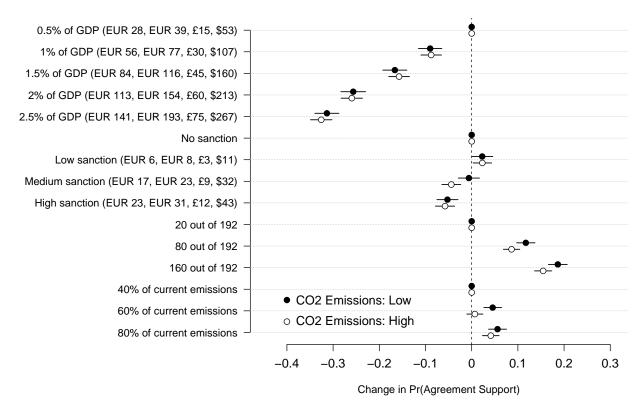


Figure A-3: The Effects of Costs and Participation on Support for Climate Agreements by CO2-only Emissions. This plot shows estimates of the effect of randomly assigned agreement features on the probability of supporting an agreement for employed respondents (N = 33,408 agreements, pooled data for France, Germany, the United Kingdom, and the United States) by CO2-only emissions of respondents' sector of employment. Estimates are based on the regression of Agreement Support on dummy variables for values of the agreement dimensions, with SEs clustered by respondent. The bars indicate 95% confidence intervals based on robust standard errors clustered by respondent. Points without bars indicate the reference category for a given agreement dimension.

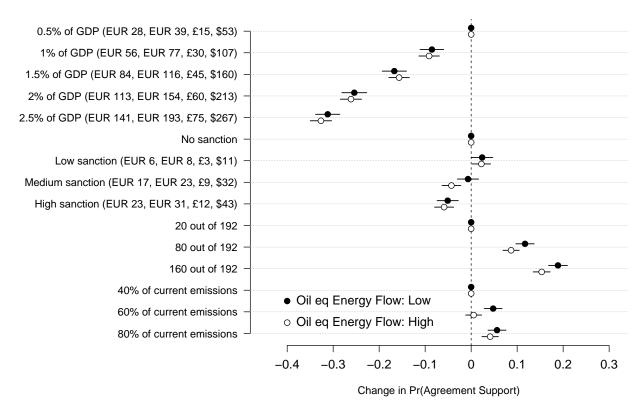


Figure A-4: The Effects of Costs and Participation on Support for Climate Agreements by Oil-equivalent Energy Flows. This plot shows estimates of the effect of randomly assigned agreement features on the probability of supporting an agreement for employed respondents (N = 33, 408 agreements, pooled data for France, Germany, the United Kingdom, and the United States) by net energy transfers of respondents' sector of employment. Estimates are based on the regression of Agreement Support on dummy variables for values of the agreement dimensions, with SEs clustered by respondent. The bars indicate 95% confidence intervals based on robust standard errors clustered by respondent. Points without bars indicate the reference category for a given agreement dimension.

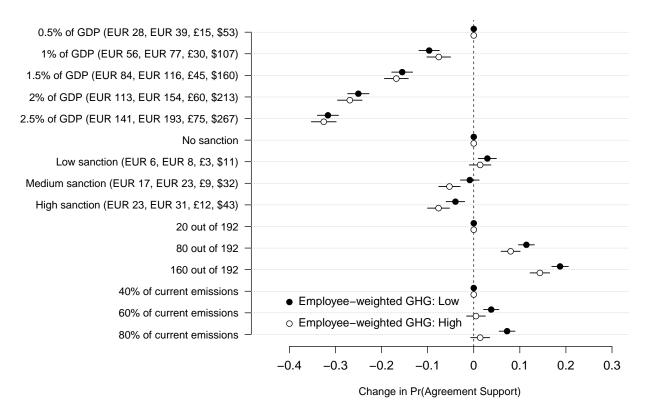


Figure A-5: The Effects of Costs and Participation on Support for Climate Agreements by Employee-weighted GHG Emissions. This plot shows estimates of the effect of randomly assigned agreement features on the probability of supporting an agreement (N = 33,408agreements, pooled data for France, Germany, the United Kingdom, and the United States) by employee-weighted GHG (CO2-equivalent) emissions of respondents' sector of employment. Estimates are based on the regression of Agreement Support on dummy variables for values of the agreement dimensions, with SEs clustered by respondent. The bars indicate 95% confidence intervals based on robust standard errors clustered by respondent. Points without bars indicate the reference category for a given agreement dimension.

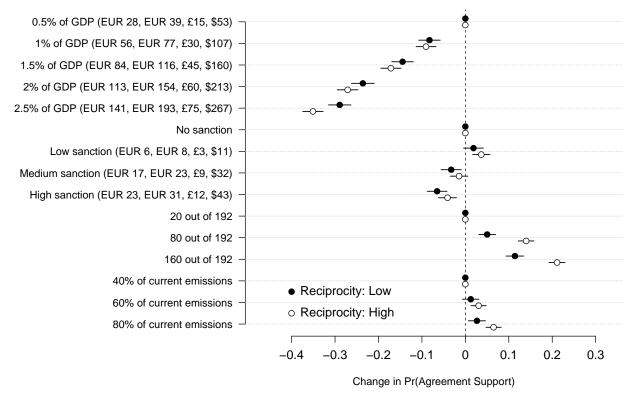


Figure A-6: The Effects of Costs and Participation on Support for Climate Agreements by Level of Reciprocity. This plot shows estimates of the effect of randomly assigned agreement features on the probability of supporting an agreement (N = 68,000 agreements, pooled data for France, Germany, the United Kingdom, and the United States) by respondents' level of reciprocity. Estimates are based on the regression of Agreement Support on dummy variables for values of the agreement dimensions, with SEs clustered by respondent. The bars indicate 95% confidence intervals based on robust standard errors clustered by respondent. Points without bars indicate the reference category for a given agreement dimension.

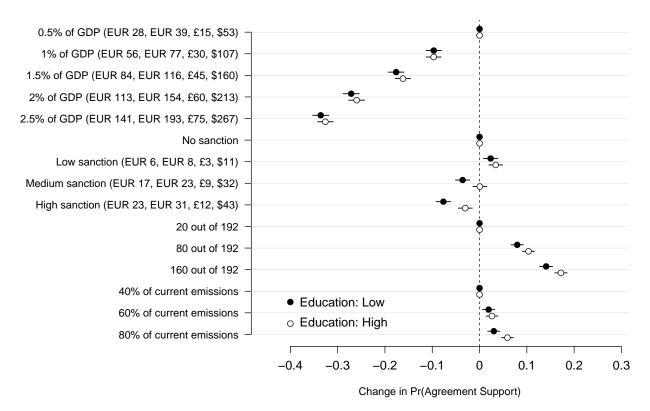


Figure A-7: The Effects of Costs and Participation on Support for Climate Agreements by Level of Education. This plot shows estimates of the effect of randomly assigned agreement features on the probability of supporting an agreement (N = 68,000 agreements, pooled data for France, Germany, the United Kingdom, and the United States) by respondents' level of education attainment. Estimates are based on the regression of Agreement Support on dummy variables for values of the agreement dimensions, with SEs clustered by respondent. The bars indicate 95% confidence intervals based on robust standard errors clustered by respondent. Points without bars indicate the reference category for a given agreement dimension.

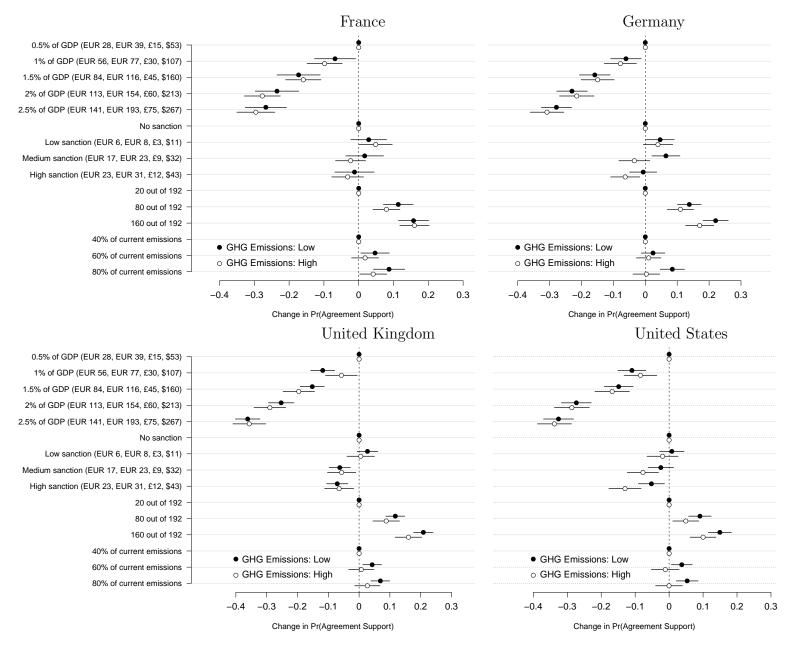


Figure A-8: The Effects of Costs and Participation on Support for Climate Agreements by GHG (CO2 equivalent) Emissions by Country. This plot shows estimates of the effect of randomly assigned agreement features on the probability of supporting an agreement for employed respondents in each country subset. Estimates are based on the regression of Agreement Support on dummy variables for values of the agreement dimensions, with SEs clustered by respondent. The bars indicate 95% confidence intervals based on robust standard errors clustered by respondent. Points without bars indicate the reference category for a given agreement dimension.