# **Appendix 1: Background on survey**

The field work began during the month of May, 2017 and were conducted in the local majority language in each country/region. The results were returned to the Quality of Government Institute in August, 2017.

The E.U. regional survey was undertaken by Efficience 3 (E3), a French market-research, Survey Company specializing in public opinion throughout Europe for researchers, politicians and advertising firms. E3 has also conducted the 2010 and 2013 rounds of the EQI and were thus familiar with the question format and goals of the survey. E3 conducted the interviews themselves in several countries and used sub-contracting partners in others1. The respondents, from 18 years of age or older, were contacted randomly via telephone in the local language. Telephone interviews were conducted via both landlines and mobile phones, with both methods being used in most countries. Decisions about whether to contact residents more often via land or mobile lines was based on local expertise of market research firms in each country. For purposes of regional placement, respondents were used.

Ideally, a survey would be a mirror image of actual societal demographics – gender, income, education, rural-urban, ethnicity, etc. However, we are not privy to exact demographic distributions; in particular at the regional level in most cases, thus imposing artificial demographic lines might lead to even more problems than benefits. We thus sought the next best solution. Based on their expert advice, to achieve a random sample, we used what was known in surveyresearch as the 'next birthday method'. The next birthday method is an alternative to the so-called quotas method. When using the quota method for instance, one obtains a (near) perfectly representative sample – e.g. a near exact proportion of the amount of men, women, certain minority groups, people of a certain age, income, etc. However, as one searches for certain demographics within the population, one might end up with only 'available' respondents, or those that are more 'eager' to respond to surveys, which can lead to less variation in the responses, or even bias in the results. The 'next-birthday' method, which simply requires the interviewer to ask the person who answers the phone who in their household will have the next birthday, still obtains a reasonably representative sample of the population. The interviewer must take the person who has the next coming birthday in the household (if this person is not available, the interviewer makes an appointment), thus not relying on whomever might simply be available to respond in the household. So, where the quota method is stronger in terms of a more even demographic spread in the sample, the next-birthday method is stronger at ensuring a better range of opinion. The nextbirthday method was thus chosen because we felt that what we might have lost in demographic representation in the sample would be made up for by a better distribution of opinion. In attempt to compensate for some key demographic over/under-representation, E3 provides weights based on age and gender for each region, comparing the sample drawn to actual demographic statistics from Eurostat. In the end, we find variation in response and refusal rates by country, which could

<sup>1</sup> http://www.efficience3.com/en/accueil/index.html. For names of the specific firms to which Efficience 3 subcontracted in individual countries, please write cati@efficience3.com

have to do with many factors including the sensitivity of one of the primary the topics at hand – corruption.

Table A1 provides a summary of the sample, proportion of mobile response (vis-à-vis landlines) and response rates by country. More details and full wording and order of survey questions can be found in the appendix section in Charron, Lapuente and Annoni (2019).

country	Number of respondents	Sample per NUTS region	% total sample	proportion mobile respondents	Response rate
Austria	4050	450	5.2	0.521	9%
Belgium	1350	450	1.7	0.453	7%
Bulgaria	2400	400	3.1	0.796	34%
Croatia	900	450	1.2	0.482	23%
Czech Rep.	3600	450	4.6	1.000	12%
Denmark	2250	450	2.9	0.957	14.3%
Finland	2000	400	2.6	0.982	9%
France	10422	401	13.4	0.647	9%
Germany	7200	450	9.2	0.237	8%
Greece	1620	405	2.1	0.519	21.3%
Hungary	2800	400	3.6	1.000	25%
Ireland	900	450	1.2	0.382	13%
Italy	8400	400	10.8	0.643	18%
Netherlands	1840	460	2.4	0.552	8.3%
Poland	6442	403	8.3	0.900	15.7%
Portugal	2800	400	3.6	0.745	10%
Romania	3600	450	4.6	0.611	19%
Slovakia	1800	450	2.3	1.000	12%
Spain	6992	411	9	0.641	14%
Sweden	1200	400	1.5	0.905	10.6%
UK	5400	450	6.9	0.244	10%

# Table A1: Survey Statistics by Country

# **Appendix II: More details on variables**

Survey question wording

i. Dependent variables (answered on a 1-10 scale, with 1=strongly disagree and 10=strongly agree) **need**: *People in my area must use some form of corruption to just to get some basic public services* **greed**: *Corruption in my area is used to get access to special unfair privileges and wealth.* 

*ii*. independent variables

**corruption experience (approached):** In the last 12 months, have you or anyone in your family been asked by a public official to give an informal gift or bribe in: (a): Education services? (b): Health or medical services? (c): Police? d) any other public service? '(yes/no)' (bribe)

**corruption experience (paid):** 'In the past 12 months have you or anyone living in your household paid an informal gift or bribe in any form to: (a): Education services? (b): Health or medical services? (c): Police? d) any other public service? '(yes/no)' (bribe)

\*we take a binary variable (0/1) if respondent respondents 'yes' to any of these items for approached or paid.

**Support redistribution:** The government in (COUNTRY) should take measures to reduce differences in peoples' income.

**Economic perceptions:** *How would you judge the current state of the economy in (COUNTRY)?* (1=very good, 2= somewhat good, 3= somewhat bad, 4= very bad)

**Education:** self-reported highest level of education achieve. Re-coded binary, so that *l=university and above*, *0<university*.

Age: self reported age, re-coded into four categories.

Variable	Obs	Mean	Std.Dev.	Min	Max
Need	77966	4.028	2.902	1	10
Greed	77966	4.808	3.032	1	10
Female	77966	.514	.5	0	1
Corruption exp.	78012	.124	.33	0	1
Education	77966	.423	.494	0	1
Econ sat.					
Very good	77966	.08	.271	0	1
Somewhat good	77966	.485	.5	0	1

## **Table A2: Summary statistics**

Somewhat bad	77966	.274	.446	0	1
Very bad	77966	.157	.364	0	1
Don't know	77966	.004	.066	0	1
Age: 18-29	77966	.167	.373	0	1
Age: 30-49	77966	.342	.474	0	1
Age: 50-64	77966	.258	.438	0	1
Age: 65+	77966	.232	.422	0	1
Support gov. party	77966	.275	.446	0	1
Support	77612	.371	.28	.1	1
redistribution					
<u>Regional level</u>					
EQI 2018	78012	.129	.955	-2.598	2.64
% women in parl.	75060	27.665	8.192	10	44.967

# **Appendix III: mediation analysis**

To test possible mediation effects of gender on perceptions of corruption via occupational status, as implied in theories of socialization, we run several meditation analyses and report the summarized findings in Table A3.

In this case our model implies the following channels of effects:

# **Figure A1: Expected Mediation Effects**



Table A3 shows the results of the empirical tests of this prediction, using hierarchical mediation analysis due to the multilevel structure of our data. The models include all controls variables from Table 2. In sum, we find some evidence for the mediation effect, which suggests some evidence for the theory of socialization via occupational status, yet much of the gender effects on perceptions of corruption remains direct. Admittedly, more factor should be explored, yet we

see this as a fruitful 'first start' on which future research could build to develop more on the mechanisms of gender disparities found in this study.

	Need Corruption		Greed Corruption		
	beta	s.e.	beta	s.e.	
a path effect	-0.126	0.003	-0.126	0.003	
b path effect	0.101	0.021	0.238	0.022	
c' effect	0.064	0.019	-0.077	0.020	
Indirect effect	-0.012	0.003	-0.030	0.010	
Total effect	0.052	0.021	-0.107	0.038	
proportion mediated	0.25		0.28		

# Table A3: Mediation analysis: summary of results

*Note:* hierarchical mediation analysis (*ml\_mediation in Stata*), with full set of control variables included. Mediating variable is occupational sector (private sector employee=1, 0 if otherwise). 'a path' represents the effects of gender on the moderating variable, while 'b path' is the effects of moderating variable on the outcome variable, controlling for gender. The 'c' effect' is the 'direct effect' of gender on each outcome, controlling for the moderating variable. The indirect effect is the product of the 'a path' and 'b path', while the 'total effect' is the sum of the indirect and 'c' path'. The final estimate 'proportion mediated' is the ratio of the total over the indirect effects. As recommended by Alwin & Hauser (1975) we take the absolute value of the proportion calculated. Standard errors for the total effects are estimated via bootstrapping (500 replications).