Does Consultation Count for Corruption? The Causal Relations in the EU-28

Appendix 1 Measures and Calibration

This Appendix has two purposes. First, it provides detail on how the consultation conditions were operationalised and calibrated using Ostrom's IGT. Second, it outlines how we transformed the Legatum Prosperity Index™ on Social Capital and by the World Governance Indicators (WGI) on Control on Corruption to make them suitable for fsQCA.

In the text we identify and use four conditions based on features of consultation procedures. Although we organised our data collection by including all seven rule types devised by Ostrom's action situation, empirically we did not find payoffs and aggregation rules in our sample. Moreover, we found it useful to create a condition called thickness that was not considered in the list of seven rule types of Ostrom. This is because we wanted to generate data on the volume of rules included in the consultation procedures, as well as other features of thickness illustrated below. Another preliminary point is that we were seeking parsimony to carry out the QCA analysis with a limited number of conditions. In the remainder we shall explain how we achieved parsimony.

Let us start by describing how the data collection process was organised.

To organise the text included in consultation legal base(s) according to Ostrom rule types, we created a data collection protocol composed of four tasks used for all the EU-28 countries (outlined below). We launched a public call for legal experts across the EU to find native speaking legal experts able to collect legal texts in their original language and translate them into English.

Under Task 1 of the protocol, we required our legal experts to detect the relevant legal base(s) for consultation in the country of interest, including year of adoption, latest amendments and presence of sectorial/regional consultation guidelines (if present). Under Task 2, the most substantial in terms of collected data points, the legal experts extracted all the statements included in the legal base(s) and organize them according to the seven Ostrom categories. To support the task, we relied on clearly written instructions further explained in a webinar, a face-to-face workshop plus a number of one-to-one sessions via Skype™. In Task 3 of the protocol, the experts drew a flowchart graphically summarising the consultation procedure

in the country of interest. Finally, under Task 4, the experts answered a series of open-ended questions.[1]

Once we received the 28 protocols on consultation, we distributed the validation work across our team. This is because the data collectors we hired are recognized legal experts (mostly, academic lawyers, a few working in law firms, and 2 social scientists with at least a Master's degree), but we could not expect that their understanding of Ostrom rule types led to a flawless categorization. Working in pairs to increase the reliability of the categorisation, we validated all the protocols (i.e. reallocated the extracted statements in the *correct* Ostrom categories). In all cases, we worked on the experts' English translation of the original text.

Once the protocols were fully validated, we created a data architecture including 36 rules/variables. These are mainly "Yes" or "No" micro-procedural items which reflect the rules we have extracted from the legal bases. We devised each of the four conditions presented in the article drawing on a variable number of these rules . For the sake of fsQCA, the four conditions are computed by weighing and summing the scores of those subsets of micro procedural items (measured in terms of presence/absence in the legal texts). To give an example, we have both observed in our sample and learned from the literature of the salience of online portals for consultation and hence included this item in the Information condition. See Table 1 in the main text for an overview of the micro items feeding into each of the conditions.

Calibration

Having developed these compound conditions (i.e. after having chosen a set of micro-procedural items for each condition) we proceeded to calibrate them.

The Thickness condition concerns how thick, legally stringent and detailed a consultation procedure is. As can be seen from Table A1.1 below, it includes eight micro items and it was calibrated as follows.[2] If a country has a hard legal base plus an above average (14.54/36) number of rules *or* if it has right of notification and participation plus an above average

[1] Examples of the raw protocols are available upon request.

[2] A calibration of a compound condition can be simply additive (i.e. assigning each item the same weight and summing the individual scores to get to the final one) or ad hoc. For all our conditions, we decided to adopt ad hoc weighing/calibration schemes which we describe in this Appendix.

number of rules it will get a .6 score – with other items helping to get a fuller membership and weighing .2.[3] The table below details individual scores and the final calibration of the Thickness condition.

Table A1.1 Thickness[4]

Item	Legal base for consultation	Hard or soft law	Sectors/independent regulators	Right of notification	Right of participation	Primary	Secondary	Total No. of rules (only Ostrom rule types) - Max value 36, mean 14.64	CALIBRATION
Question	Is there a generally-applicable, nationwide, cross-cutting legal base for consultation?	Is the base for general consultation requirements grounded in hard law or soft law?	Is there a legal base for independent regulators/sectors?	Is there a right to notification in general administrative law?	Is there a right of participation/be consulted in general administrative law?	Consultation applies to primary legislation	Consultation applies to secondary legislation	NA	NA
Austria	N	NA	Y	N	N	NA	NA	0	**0.2**
Belgium	N	NA	Y	N	N	NA	NA	0	**0.2**
Bulgaria	Y	Y - Hard Law	Y	Y	Y	Y	Y	20	**1**
Croatia	Y	Y - Hard Law	Y	Y	Y	Y	Y	24	**1**
Cyprus	Y	N - Soft Law	Y	Y	Y	N	N	22	**0.6**
Czech Rep	N	NA	Y	N	N	NA	NA	0	**0.2**
Denmark	N	NA	N	N	N	NA	NA	0	**0**
Estonia	Y	Y - Hard Law	N	Y	Y	Y	Y	15	**0.8**
Finland	Y	Y - Hard Law	N	Y	Y	Y	Y	21	**0.8**
France	N	NA	Y	N	N	NA	NA	0	**0.2**
Germany	Y	Y - Hard LAw	N	Y	Y	Y	Y	20	**0.8**
Greece	Y	Y - Hard Law	Y	Y	Y	Y	N	19	**0.8**
Hungary	Y	Y- Hard law	N	Y	Y	Y	Y	25	**0.8**
Ireland	Y	N - Soft law	N	N	N	Y	Y	23	**0.4**
Italy	Y	N - Soft law	Y	N	N	N	N	8	**0.2**
Latvia	Y	Y- Hard law	Y	Y	Y	Y	Y	24	**1**
Lithuania	Y	Y - Hard law	Y	Y	Y	Y	Y	25	**1**
Luxembourg	Y	Y - Hard Law	Y	Y	Y	Y	Y	12	**1**
Malta	Y	N - Soft law	Y	N	N	Y	Y	15	**0.4**
Netherlands	Y	Y - Hard law	N	N	N	Y	N	7	**0.4**
Poland	Y	N - Soft Law	Y	Y	Y	N	Y	11	**0.4**
Portugal	Y	Y - Hard Law	Y	Y	Y	Y	Y	15	**1**
Romania	Y	Y - Hard Law	Y	N	N	Y	Y	19	**0.8**
Slovakia	Y	Y - Hard Law	Y	N	N	Y	Y	17	**0.8**
Slovenia	Y	Y - Hard Law	Y	Y	Y	Y	Y	20	**1**
Spain	Y	Y - Hard Law	N	Y	Y	Y	Y	17	**0.8**
Sweden	N	Y - Hard Law	N	N	N	Y	Y	8	**0.4**
UK	Y	N - Soft law	Y	N	N	Y	Y	23	**0.4**

When it comes to the Access condition (which include Ostrom rule types Position, Boundary and Scope) we rely on the idea that a pluralistic access open to "all citizens" (regardless of status and personal interest in the matter under consultation) is better suited to mitigate perceptions of corruption than a framework where access is granted only to selected interests or is decided on a discretionary basis by the public authorities. Therefore our calibration followed the simple scheme below (Tables A1.2, A1.3).

[3] For the sake of the calibration we categorised our countries in six categories representing different degrees of set membership - 0, .2, .4, .6, .8, 1 - with 0 denoting no membership and 1 full membership. In some cases, the final calibration may lead to .3 or .7 scores. When this occurred, we rounded the score drawing on qualitative considerations of the observed rule configuration.

[4] Legend: Y – Yes; N – No; NA – Not available (scored as a No); DA – Drafting authority; CE – Consulted entity.

Table A1.2 Calibration Scheme of Access

Citizens	Y	Y	N	N
Unions/Professional associations	N	Y	N	Y
Score	0.6	0.4	0.2	0

Each of the other items would then weigh .2. The table below details individual scores and the final calibration, as a result of the above scheme, of the Access condition.

Table A1.3 Access

Item	Citizens	Unions-Professional associations	Personal interest	Mandatory	Particiaption / engagement	Calibration
Question	Does the legal base mention citizens (as consulted entities)?	Does the legal base mention unions/professional associations (as consulted entities)?	Consulted entity: to be able to participate to consultation, does the consulted entity (sh, citizens, unions, etc.) need to hold a personal interest?	Is consultation mandatory or the drafting authority can exercise discretion? Must/may consult? Yes --> mandatory; No --> discretionary	Does the legal base spell out the above aim of the consultation procedure?	NA
Austria	NA	NA	NA	NA	NA	**0**
Belgium	NA	NA	NA	NA	NA	**0**
Bulgaria	Y	N	Y	Y	N	**0.8**
Croatia	Y	Y	Y	Y	Y	**0.8**
Cyprus	N	N	Y	N	Y	**0.4**
Czech Rep	NA	NA	NA	NA	NA	**0**
Denmark	NA	NA	NA	N	NA	**0**
Estonia	N	N	Y	Y	N	**0.4**
Finland	Y	N	N	Y	Y	**1**
France	NA	NA	NA	NA	NA	**0**
Germany	N	Y	Y	Y	N	**0.2**
Greece	Y	N	Y	Y	Y	**1**
Hungary	Y	Y	N	Y	N	**0.8**
Ireland	N	Y	Y	N	Y	**0.2**
Italy	NA	NA	NA	NA	Y	**0.2**
Latvia	Y	Y	Y	Y	Y	**0.8**
Lithuania	Y	Y	Y	N	Y	**0.6**
Luxembourg	N	Y	Y	Y	N	**0.2**
Malta	N	N	N	N	Y	**0.6**
Netherlands	N	N	Y	N	N	**0.2**
Poland	N	Y	N	N	N	**0.2**
Portugal	Y	Y	Y	N	Y	**0.6**
Romania	Y	Y	Y	Y	Y	**0.8**
Slovakia	Y	Y	Y	Y	Y	**0.8**
Slovenia	Y	N	Y	N	N	**0.6**
Spain	Y	Y	Y	Y	Y	**0.8**
Sweden	Y	Y	Y	Y	N	**0.6**
UK	N	N	N	Y	Y	**0.8**

When it comes to third condition, Choice, we assigned a .6 weight to the item concerning the obligation of public authorities to provide feedback to the inputs received by the consulted entities. This is because within the set of actions structuring consultation procedures, the

presence of a clearly stated duty to respond, in an official administrative act, to the received comments creates a decisive accountability and transparency link. This also reflects the fact that such acts can be used in administrative courts in case of litigation or judicial review of rulemaking. For this reason, we decided to let this item determine alone the set membership with all the other weighing .1. The table below (A1.4) details individual scores and the final calibration of the Choice condition.

Table A1.4 Choice

Item	Typology	Timetable	Draft regulation	Background material	Feedback	Calibration
Question	Does the legal base identify different typologies of consultation?	Does the DA have to set a consultation timetable?	Does the DA have to publish draft regulation/law at the inception of the consultation procedures?	Does the DA have to publish a summary of options, reports, additional and/or background material?	Does the DA have to provide feedback on why some of the concerns reaised by the CEs were not accepted?	NA
Austria	NA	NA	NA	NA	NA	**0**
Belgium	NA	NA	NA	NA	NA	**0**
Bulgaria	Y	Y	Y	Y	Y	**1**
Croatia	Y	Y	Y	Y	Y	**1**
Cyprus	Y	Y	N	Y	Y	**0.8**
Czech Rep	NA	NA	NA	NA	NA	**0**
Denmark	NA	NA	NA	NA	NA	**0**
Estonia	N	Y	Y	N	Y	**0.8**
Finland	Y	Y	N	Y	Y	**0.8**
France	NA	NA	NA	NA	NA	**0**
Germany	N	Y	Y	Y	N	**0.4**
Greece	Y	Y	Y	Y	Y	**1**
Hungary	Y	Y	Y	Y	Y	**1**
Ireland	Y	Y	Y	N	N	**0.2**
Italy	NA	NA	NA	NA	NA	**0**
Latvia	Y	Y	Y	Y	N	**0.4**
Lithuania	Y	Y	Y	Y	Y	**1**
Luxembourg	N	N	N	Y	N	**0.2**
Malta	Y	N	N	Y	N	**0.2**
Netherlands	N	Y	Y	Y	N	**0.4**
Poland	Y	Y	Y	Y	Y	**1**
Portugal	Y	Y	Y	N	N	**0.2**
Romania	N	Y	Y	Y	Y	**1**
Slovakia	N	Y	Y	Y	Y	**1**
Slovenia	Y	Y	Y	Y	Y	**1**
Spain	Y	Y	Y	Y	N	**0.4**
Sweden	N	N	N	N	N	**0**
UK	N	N	Y	Y	Y	**0.8**

Finally, the table below (A1.5) details individual scores and the final calibration of the Information condition.

Table A1.5 Information

Item	Publishing comments	Consultation report	Portal	Red Tape reduction	Calibration
Question	Is the DA required to record and make public the comments of the CEs?	Does the DA have to publish a report on comments filed by the CEs (consultation report)?	Is there a governmental consultation portal/website?	Are there provisions to encourage the spontaneous submisson by CEs of burdensome regulations?	NA
Austria	NA	NA	NA	NA	0
Belgium	NA	NA	NA	NA	0
Bulgaria	Y	Y	Y	N	0.8
Croatia	Y	Y	Y	Y	1
Cyprus	N	Y	N	N	0.2
Czech Rep	N	N	Y	N	0.2
Denmark	NA	NA	NA	Y	0.2
Estonia	Y	Y	Y	Y	1
Finland	Y	Y	Y	N	0.8
France	NA	NA	NA	NA	0
Germany	Y	Y	N	N	0.6
Greece	Y	Y	Y	N	0.8
Hungary	Y	Y	Y	N	0.8
Ireland	N	Y	Y	N	0.6
Italy	N	N	Y	N	0.2
Latvia	N	Y	N	N	0.4
Lithuania	Y	Y	Y	Y	1
Luxembourg	N	N	N	N	0
Malta	Y	Y	Y	N	0.8
Netherlands	N	N	Y	N	0.2
Poland	Y	Y	Y	N	0.8
Portugal	N	N	Y	N	0.2
Romania	Y	Y	Y	N	0.8
Slovakia	Y	Y	Y	N	0.8
Slovenia	Y	Y	Y	Y	1
Spain	Y	Y	Y	N	0.8
Sweden	N	N	N	N	0
UK	Y	Y	Y	Y	1

Again the Information condition was calibrated according to an ad hoc, non-fully additive scheme based on the idea that the most salient information obligation for the public authority is the one related to the drafting and publication of a consultation report which similarly to the obligation to be proactive in the provision of feedback (see Choice condition) strengthens the accountability link with the consultees. As a result, we followed the scheme below.

If all four items are Yes we calibrate at 1

If all four items are NO we calibrate at 0

If we observe 1 Yes and three N we calibrate at 0.2

If we observe 1 No and three YES we calibrate at 0.8

If we observe 2 Yes and 2 No we look at the item "Consultation report": if it is a Yes we calibrate at 0.6 otherwise we calibrate at 0.4. This is because the consultation report is the most stringent requirement about information at the level of design.

A final consideration regarding the nature of the data we have collected to take stock of the designs of consultation procedures is in order. We do not want to question the utility of ad-hoc measurements of policy instruments' features produced by international organizations (IO), yet we consider out approach superior in term of validity and reliability. This is for two reasons. First, since we were interested in the legal design of consultation procedures we did not rely on expert surveys/opinions but rather on the primary legal source. This means that the Ostrom rule types that we have identified in each country and that shape up the different consultation action situations are not based on answers to survey items, but they are provisions (institutional statements in Ostrom's vocabulary) included in legal texts disciplining consultation. Second, we do not pre-select a set of salient dimensions of variation of consultation procedures, but we base on our measurement on theory-driven conceptual categories like the rules that regulate the access, or the information requirements underpinned by the procedures, etc. As such, these categories can be used to measure any administrative procedure, regardless of its type and legal status. Finally, although they have been reduced to ordinal conditions for the sake fsQCA, the interaction of the different rule types renders a much crispier and detailed account of the procedure itself. This is in stark contrast with the understanding one researcher can get by perusing the long lists of binary items typically constituting expert questionnaires on which IOs' measures are based.

We now elaborate on how we came up the fuzzy values for our outcome (based on 2017 WGI Control of Corruption) and environmental conditions (based on 2018 Legatum Prosperity Index™ on Social Capital).[5] In fact, the fuzzy values which were used for the analysis are not the only ones we computed.[6] For both the outcome and the social capital condition, original values were recoded (through percentile rank assignment) in two different ordinal variables, featuring respectively 4 and 6 levels. On the top of that, for the outcome, two further ordinal

[5] For both metrics we went for the most recent iteration, that is, 2017 for WGI and 2018 for Legatum.

variables were computed (again with 4 and 6 levels) through, respectively 4 and 6-means clusters. In the following step, we measured the correlations between the values arising out of the different specifications and of the different recoding techniques for the outcome. It turned out that all four computations (the two employing ranks -4 and 6-tiles- and the two using clusters -4 and 6-means) result highly correlated with each other (all Pearson's a Spearman's bivariate correlation coefficients >.9). We hence selected the calibration based on 6-tile rank transformation[7] which ensured a fairly homogenous distribution of cases across categories (see table below).

Table A1.6 Set Membership, Control of Corruption

Values – Control of Corruption	Countries
0	Bulgaria, Greece, Hungary, Romania
0.2	Croatia, Italy, Latvia, Romania, Spain
0.4	Cyprus, Czech. Rep., Lithuania, Malta, Poland
0.6	Belgium, Estonia, France, Portugal, Slovenia
0.8	Austria, Germany, Ireland, the Netherlands, UK
1	Denmark, Finland, Luxembourg, Sweden

Having chosen an outcome specification based on 6 categories, we transformed the Legatum Index™ on social capital again through ranks and cluster means but this time only into 6 categories variables. Yet again, the two transformations resulted highly correlated (Pearson's a Spearman's bivariate correlation coefficients >.78). For reasons of consistency with the outcome transformation and homogeneous distribution across categories, we chose also for the social capital condition the transformation based on 6-tile ranks.

The table below shows original scores along with our transformations.

[7]In more detail, we collected WGI control of corruption values for our sample, computed z-scores and ranked the cases. Ranks were based on percentile groups. Technically, the 6-tiles transformation we chose assigned a rank of 1 to cases scoring below the 16th percentile, 2 to cases scoring between the 17th and 33th percentile, 3 to cases scoring between the 34th and 50th percentile, and so on, to crate the six groups.

Table A1.7 Social Capital and Corruption Indicators

Country	WGI CoC 2017	WGI fuzzy values based on percentile ranking	Legatum Soc Cap 2018	Soc Cap fuzzy values based on percentile ranking
AUT	1.53	0.8	17	0.8
BEL	1.5	0.6	24	0.6
BGR	-0.16	0	85	0.2
CRO	0.19	0.2	109	0
CYP	0.78	0.4	28	0.6
CZE	0.57	0.4	71	0.2
DNK	2.19	1	5	1
EST	1.24	0.6	69	0.4
FIN	2.22	1	14	0.8
FRA	1.26	0.6	34	0.4
GER	1.84	0.8	16	0.8
GRC	-0.14	0	131	0
HUN	0.09	0	77	0.2
IRL	1.55	0.8	7	1
ITA	0.19	0.2	41	0.4
LVA	0.54	0.2	113	0
LTU	0.55	0.4	98	0
LUX	1.99	1	18	0.8
MLT	0.74	0.4	10	0.8
NLD	1.87	0.8	9	1
POL	0.73	0.4	76	0.2
PRT	0.87	0.6	39	0.4
ROM	-0.03	0	83	0.2
SVK	0.22	0.2	59	0.4
SVN	0.81	0.6	20	0.6
SPA	0.49	0.2	26	0.6
SWE	2.14	1	22	0.6
UK	1.84	0.8	8	1

Finally, the six steps detailed above (calibration of four consultation conditions and transformation of corruption and social capital indicators) led to the creation of the dataset used by fsQCA (see Appendix 2 for technical detail on the QCA analyses).

Table A1.8 The Dataset

	Thickness	Access	Choice	Information	Social capital[8]	Corruption[9]
Austria	0.2	0	0	0	0.8	0.8
Belgium	0.2	0	0	0	0.6	0.6
Bulgaria	1	0.8	1	0.8	0.2	0
Croatia	1	0.8	1	1	0	0.2
Cyprus	0.6	0.4	0.8	0.2	0.6	0.4
Czech Rep	0.2	0	0	0.2	0.2	0.4
Denmark	0	0	0	0.2	1	1
Estonia	0.8	0.4	0.8	1	0.4	0.6
Finland	0.8	1	0.8	0.8	0.8	1
France	0.2	0	0	0	0.4	0.6
Germany	0.8	0.2	0.4	0.6	0.8	0.8
Greece	0.8	1	1	0.8	0	0
Hungary	0.8	0.8	1	0.8	0.2	0
Ireland	0.4	0.2	0.2	0.6	1	0.8
Italy	0.2	0.2	0	0.2	0.4	0.2
Latvia	1	0.8	0.4	0.4	0	0.2
Lithuania	1	0.6	1	1	0	0.4
Luxembourg	1	0.2	0.2	0	0.8	1
Malta	0.4	0.6	0.2	0.8	0.8	0.4
Netherlands	0.4	0.2	0.4	0.2	1	0.8
Poland	0.4	0.2	1	0.8	0.2	0.4
Portugal	1	0.6	0.2	0.2	0.4	0.6
Romania	0.8	0.8	1	0.8	0.2	0
Slovakia	0.8	0.8	1	0.8	0.4	0.2
Slovenia	1	0.6	1	1	0.6	0.6
Spain	0.8	0.8	0.4	0.8	0.6	0.2
Sweden	0.4	0.6	0	0	0.6	1
UK	0.4	0.8	0.8	1	1	0.8

[8] Based on The Legatum Prosperity Index™ 2018.
[9] Based on Worldwide Governance Indicators (WGI) – Control of Corruption 2017.