TiGRE
Trust in Governance and Regulation in Europe

Deliverable D1.2

Report on meta-analysis of empirical trust studies and data sources

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Contents

Abbreviations, Participant short names

Abbreviations

CAPI	Computer-Assisted Personal Interviewing
DOI	Digital Object Identifier
ECB	European Central Bank
EQLS	European Quality of Life Survey
ESS	European Social Survey
EU	European Union
EVS	European Values Study
ISSP	International Social Survey Programme
MP	Member of Parliament
OECD	Organisation for Economic Co-operation and Development
QoG EQI	Quality of Government – Individual Survey
WP	Work Package
WoS	Web of Science
WVS	World Value Survey

Participant short names

UNIL	Université de Lausanne
UAntwerpen	Universiteit Antwerpen
IBEI	Institut Barcelona d'Estudis Internacionals, Fundacio Privada
HUJI	The Hebrew University of Jerusalem
Uni-Speyer	German University of Administrative Sciences
AU	Aarhus Universitet
UiO	Universitetet i Oslo
UU	Universiteit Utrecht
Kozminski	Akademia Leona Kozminskiego
SCIPROM	SCIPROM Sàrl

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Summary

This deliverable constitutes a building block for the TiGRE project, as part of its first work package. Its main goal is to perform a systematic synthesis of the most recent research on trust and regulation to enhance knowledge accumulation and to develop a theory-based approach to trust in regulation. More specifically, this deliverable appraises and analyses available cross-country survey data and empirical studies on citizens' trust in governments, in public institutions and in private actors. Aiming at summarizing the state-of-the-art empirical knowledge on levels of citizens' trust, their variations, determinants, correlates, effects, and dynamics. Therefore, this deliverable enables the TiGRE consortium to take stock of the existing knowledge on citizens' trust, and to feed this knowledge into the other project's WPs.

Introduction

This report is geared towards the **reappraisal of existing knowledge on citizens' trust in various actors**, and therefore includes:

- an assessment of existing indicators of trust and datasets;
- an extraction of possible insight to be drawn out of some of these datasets;
- and a systematic review of the literature exploiting these datasets.

Trust processes consist of three phases whose importance varies depending on the research focus: (1) assessment of the other party's trustworthiness; (2) the trust decision; or (3) the trust-informed action (Dietz, 2011). An important distinction that deserves more attention is between trust in competence (which concerns expectations of the abilities of the trustee, i.e. in policymakers being able to solve societal problems) versus trust in intentions or goodwill (which relates to expectations of integrity and non-harmful behaviour i.e. in policymakers being committed to the public interest) (Elster, 2015). Another distinction could be made between generalized trust and institutional trust. While the first refers to peoples' trust in other people (e.g. neighbours, personal acquaintances, family, people you meet for the first time), the latter focuses on peoples' trust in governmental institutions (e.g. parliament, the civil service, political parties, the current government).

For the purposes of the deliverable, we have focused on institutional trust, but have not limited to a certain definition of it. Since we aimed at reviewing existing knowledge on institutional trust, we preferred to look for it using broader lenses, and including any survey item and every article that looked at trust (or confidence) toward any of the following actors: government in general (EU, national, subnational governments); political actors and political parties; parliaments; administrations; judicial actors and courts; and market and societal actors at different levels. We have also included items and articles that measure the perception of the institutions' integrity (or corruption), intentions and competence.

A similar assessment of exiting measures of trust has been performed by the OECD (OECD, 2017). This deliverable has indeed built on this previous assessment. However, it also differs from it in several ways. First, while the OECD assessment expands much on the assessment of the surveys' statistical quality, the assessment made in this deliverable focused on their ability to provide cross-country and longitudinal insights with a focus on the TiGRE countries. Second, the assessment in this deliverable was in light of the foci of the TiGRE project – citizen' trust in various institutional actors. Therefore, while the OECD also assesses measures of generalized trust, this deliverable focused only on institutional trust. In other words, while the OECD report has many insights on how to measure trust in a broad manner, this deliverable was more focused on identifying the optimal surveys from which we can draw conclusions on citizens trust in the countries of interest.

Eight cross-country surveys were chosen as a subject of inquiry for this deliverable:

1. The World Values Survey (WVS)
2. Quality of Government –Individual Survey (QoG EQI)
3. The International Social Survey Programme (ISSP)
4. Eurobarometer
5. The European Social Survey (ESS)
6. The European Values Study (EVS)
7. World Gallup
8. European Quality of Life Survey (EQLS)

These surveys were chosen mainly for their geographical scope, preferring datasets that collected data on EU countries and on the three other TIGRE partner countries: Israel, Switzerland, and Norway. We chose surveys that collected data on at least 3 countries, and that measure citizens', and not experts', institutional trust.

After choosing these surveys and learning about their different methodologies and characteristics, we have then focused on tracing all of the items that measure citizens' trust toward: government in general (EU, national, subnational governments); political actors and political parties; parliaments; administrations; judicial actors and courts; and market and societal actors at different levels, as well as items measuring trust in a more specific manner. Then, after compiling a dataset of all trust items, we were able to assess the quality of the dataset according to their sensitivity (mainly their ability to grasp trust in a multidimensional manner and their use of more sophisticated measuring scales), coverage (the scope of countries the survey covers and its historical scope) and consistency (whether the survey included the same questions every wave and was administered to the same countries). The two latter criteria seemed important to extract cross-country insights and to perform longitudinal analysis on the trends of citizens' trust.

Our assessment of the eight surveys resulted in the conclusion that these existing surveys vary in their sensitiveness, coverage, and consistency. In addition, we found that **there is a trade-off between sensitiveness and consistency.** Surveys that are more consistent usually include only general measurements of trust (such as: how much trust do you have in the following actors?). While surveys that include items that measure a certain dimension of trust or ask about trust in a specific context (for example; do you trust [an actor] to do what is best for the country?], do not repeat the same question more than once. Therefore, a longitudinal analysis of more sensitive trust items is not always possible. Eventually, we identified four datasets that cover all the countries of interest [TiGRE countries plus the United States and the UK] and ranked high in consistency, coverage and sensitivity: **the European social Survey (ESS), the World Values Survey (WVS), the European Values Survey (EVS) and the International Social Survey Programme (ISSP).**

We have analysed the data from these surveys and found that they show **contradicting findings** on which actor do citizens trust the most. According to ESS data, the actors of which TiGRE citizens trust the most are the police, the UN, and the legal system. Contrarily, the WVS and EVS data shows that public administration enjoys the highest levels of citizens' trust, or at least very high levels. Meanwhile, the datasets show **similar trends of citizens' trust** in the TiGRE countries, showing that trust has been declining and reached its lowest point around 2008-2010, and that it has since inclined and almost recovered. In addition, in all datasets, Israel, Spain and Poland had lower levels of citizens' trust in institutions, overall. When examining correlation, ESS data indicates positive associations between trust levels in all different actors.

The main findings from the systematic literature review were that most scholar work, which use survey data to produce insights on citizens' institutional trust, focus on national and political actors (either the national-level executive or the national-level legislative branch, or a combination of these two branches). Other actors (such as EU, legal system, police, press, major companies, and banks) receive far less scholarly attention. We have also found that slightly more articles explain trust rather than examine the effects of trust. An overwhelming majority of studies in our dataset analyse these surveys with the use of explanatory statistics, but a smaller portion draw upon some form of longitudinal design, or cross-sectional analysis. These findings stress the importance of TiGRE project, and the need to create new knowledge on citizens' trust in regulatory governance in a comparative manner and to learn more on its drivers, effects, and dynamics.

This deliverable is structured as follows. Section 1 summarizes the existing data available on trust of this type in eight different datasets and appraises the advantages and disadvantages of each dataset. Section 2 analyses the existing surveys to draw conclusion on the trends of citizens' trust across countries and to look for correlations. Section 3 presents the results of a systematic literature review of studies that utilize the surveys of interest. The final section concludes.

1. Reviewing existing survey data on citizens' trust

This section presents, summarizes, and critically reviews eight cross-country survey datasets that measure citizens' trust toward public and private entities. First, the criteria for choosing datasets to cover in this deliverable will be described. Then, a general description of the datasets that were included is presented. This is followed by an account of the methodology of searching the relevant survey items and compiling the table. Finally, basing on the information gathered, the datasets will be critically assessed according to several criteria including scope, sensitivity, measurement level and context.

1.1 Datasets and selection criteria

The main criterion for inclusion of datasets in our review was the geographical scope of the dataset, preferring cross-country surveys instead of single-country surveys. Specifically, we chose datasets that collected data on EU countries and on the three other TIGRE partner countries: Israel, Switzerland, and Norway. For this reason, we have excluded datasets such as the Global Barometer Survey (GBS), which is cross-national but does not cover European countries at all and several datasets that include data on one country only such as; (a) the Swiss Household Panel; (b) the Israeli democracy survey; (c) the British Household Panel Study (BHPS); (d) US surveys such as the National Election Studies (NES) and the General Social Survey data (GSS). The OECD trust database and the World Bank Worldwide Governance Indicators were also excluded since the data they include on citizens' trust is already included in the datasets which we cover in this deliverable. Therefore, trust was not a criterion when selecting surveys. We opted to cast the net out widely in this stage, and then narrow down in the later stage, of compiling the trust items table.

Following these criteria, eight surveys were chosen as a subject of inquiry for this deliverable:

1. The World Values Survey (WVS)

The World Values Survey is run by a global network of social scientists studying changing values and their impact on social and political life, led by the WVS Association and WVSA Secretariat headquartered in Vienna, Austria. The survey started in 1981 and consists of nationally representative surveys conducted in almost 100 countries. The survey is conducted globally every 5 years.

2. European Quality of Government Index –Individual Survey (QoG EQI)

The EQI contains data on sub-national governance in Europe from three rounds (2010, 2013 & 2017), of a large, pan-European survey on citizen perceptions and experiences with public services. Both micro and sub-national data are provided. It is carried out by the Quality of Government institution, founded in 2004 by Professor Bo Rothstein and Professor Sören Holmberg. The QoG institute is an independent research institute within the Department of Political Science at the University of Gothenburg.

3. The International Social Survey Programme (ISSP)

The ISSP is a cross-national collaboration programme conducting annual surveys on diverse topics relevant to social sciences. Established in 1984 by its founding members in Australia, Germany, Great Britain, and the US, the ISSP has since included members covering various cultures around the globe. Its institutional members, each of them representing one nation, consist of academic organizations, universities, or survey agencies. Since its foundation, over one million respondents have participated in the surveys of the ISSP.

4. Eurobarometer

Since 1973, the European institutions commission annual public opinion surveys, the Eurobarometer, in all EU Member States. In 2007, the European Parliament launched its own specific Eurobarometer series. These surveys cover a wide range of issues, focusing on citizens' perceptions and expectations towards EU action, and the main challenges the Union is facing. The surveys also measure in detail citizens' attitudes towards the EU and the European Parliament, while also keeping a close eye on the public's views on the European elections.

5. The European Social Survey (ESS)

The European Social Survey (ESS) is a cross-national survey that has been conducted across Europe since its establishment in 2001. Every two years, face-to-face interviews are conducted with newly selected, cross-sectional samples. The survey measures the attitudes, beliefs, and behaviour patterns of diverse populations in more than thirty nations.

6. The European Values Study (EVS)

The European Values Study is a large-scale, cross-national, and longitudinal survey research programme on basic human values. It provides insights into the ideas, beliefs, preferences, attitudes, values, and opinions of citizens all over Europe. It has started in 1981 when a thousand citizens in the European Member States of that time were surveyed using standardized questionnaires. Every nine years since then, the survey is repeated in a variable number of countries. In total, about 70,000 people in Europe are surveyed.

7. Gallup World Poll

In 2005, Gallup began its World Poll, which annually surveys citizens in 160 countries. The Gallup World Poll consists of more than 100 global questions as well as region-specific items. It includes the following global indexes: law and order, food and shelter, institutions and infrastructure, good jobs, wellbeing, and brain gain. Gallup also works with organizations, cities, governments, and countries to create custom items and indexes to gather information on specific topics of interest.

8. European Quality of Life Surveys (EQLS)

Carried out every four years, this unique, pan-European survey examines both the objective circumstances of European citizens' lives and how they feel about those circumstances and their lives in general. It looks at a range of issues, such as employment, income, education, housing, family, health, and work-life balance. It also looks at subjective topics, such as people's levels of happiness, how satisfied they are with their lives, and how they perceive the quality of their societies.

1.2 Items measuring trust

A table compiling the items in the above-mentioned surveys that measure citizens' trust was assembled[1]. The table was compiled after systematically analyzing the questionnaires following these steps:

First, for every dataset, the master questionnaires from all waves were downloaded. Then, the questionnaires were searched for items including the terms: *trust, confidence, corruption, legitimacy, reputation, and capacity*, omitting items about tendency to trust others ('general trust'). This procedure was designed to fit the broad working definition of institutional trust, which this deliverable focuses on. First, we did not include items measuring generalized trust since it is not the foci of our project and deliverable. Second, as the foci is institutional trust, we use a broad definition and wanted to include all the items that measure either the *perception* of the other party's trustworthiness (its benevolence, integrity or competence) or the *trust decision*, which could be also defined as confidence[2].

After identifying the items, they were copied to an excel spreadsheet, adding additional information coded for each item which included: the survey name, the type of question, the actor (the trustee), the measurement level/answer categories scale, the wave number and year, countries covered and item code.

[1] Available upon request, please contact Libby Maman.

[2] The OECD report, has found that there is a difference between the measurement of confidence vs. trust, they conclude that the exact wording matters and recommend future surveys to ask about "trust" and not "confidence" (OECD, 2017). However, for the goals of this deliverable, we included both search terms, to ensure we cover all existing data on institutional trust, despite the pitfalls of such measurement.

1.3 Comparing and assessing the datasets

When comparing the general characteristics of the datasets, it was evident that they differ much (see Table 1). Some of the datasets cover countries from all over the world (such as Gallup, ISSP and WVS) while other focus mainly on European countries (QoG, Eurobarometer, EVS, EQLS and ESS). Most surveys are executed via face-to-face interviews, often assisted by computer (CAPI). The exception is the Gallup survey, which collects data mainly by telephone and only collects the data face-to-face in areas with low telephone coverage. The sample size per country varies across the surveys, usually depending on the size of population. However, the WVS maintained a constant size of sample (1200) disregarding the size of the population. Finally, the surveys' methodology of sampling was either random without stratification or a two-step method of stratifying and then selecting respondents randomly.

Measurements quality is mostly assessed by the examination of two features: validity and reliability. Validity concerns what an instrument measure, and how well it does so. Reliability concerns the faith that one can have in the data obtained from the use of an instrument, that is, the degree to which any measuring tool controls for random error (Mohajan, 2017). However, these are general concepts which reflect the general quality of a measurement. When assessing the surveys for this deliverable, we were looking to move beyond this general approach and assess certain virtues that we sought as crucial to enable the goals of our deliverable including: (a) cross country comparison of citizens' trust (b) longitudinal insights on the trends of institutional trust among the different TiGRE countries and (c) data that reflects our broad definition of trust which encompasses both the trust and perceptions of trustworthiness. Therefore, in this deliverable, **we have chosen to examine the quality of the eight datasets basing on three aspects: their sensitivity, consistency, and coverage**. Nine criteria were used to assess these aspects (Figure 1).

The assessment of trust measurements could vary in the criteria it examines. For example, the OECD critical assessment of trust measurements has used different criteria for examining the quality of measurements focusing mainly on methodological considerations including: the survey design, wording, flow, response formats and more.

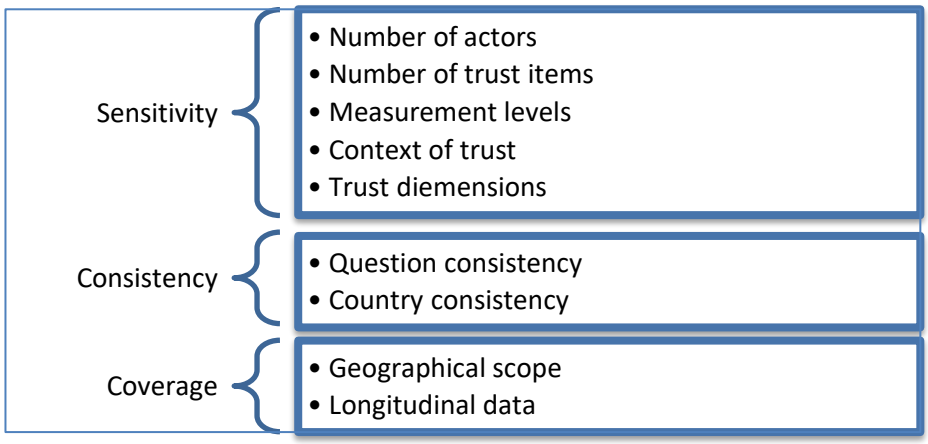

Figure 1: Criteria of assessment

Table 1: General characteristics of the cross-national datasets

	Dataset name	Coverage	Geographical scope	Data collection methodology	Sample size and methodology
1	The World Values Survey [WVS]	1981-2017 (7 waves – every 5 years)	100~ countries	Face-to-face interview at respondent's home.	The minimum sample size - is 1200 per country. Representative samples (stratified)
2	Quality of Government Individual Survey [QoG EQI]	2010, 2013, 2017 (3 waves)	28 EU members state (+Serbia and Turkey in 2013)	Telephone surveys	~500-~10,000 per country Random samples
3	The International Social Survey Programme [ISSP]	1984-2018 (every year)	42 countries	Face-to-face interviews, telephone or self-completion	~1000-~4500 per country. Varying methodologies for sampling
4	Eurobarometer	(1989) 2007-2019 (every year)	All EU member states	Face-to-face interview at respondent's home.	1000 per country. Random after stratification
5	The European Social Survey [ESS]	2002-2018 (9 rounds – every 2 years)	EU countries (varies per year see here)	Face-to-face CAPI interviews	1,500 (or 800 in countries with populations of less than 2 million). Random (no quota)
6	The European Values Study [EVS]	Since 1981 (every 9 years)	47 European countries	Face-to-face interview	1000 in 1981; increased up to 1500 in 2008; 1200 in 2017. Since 2008 only probabilistic representative sample
7	Gallup World Poll	Since 2005, every year	160 countries	Telephone surveys in countries where telephone coverage represents at least 80% of the population. Otherwise, face-to-face interviewing.	500-2000 per country. Random after stratification
8	European Quality of Life Survey [EQLS]	2003-2016 (4 waves, every 4-5 years)[3]	Member states and candidate countries (varies per wave)	Face-to-face interview	1000-2000 per country. Random sampling.

3 EQLS 2003: Covered 28 countries, EU25 and 3 candidate countries of Bulgaria, Romania and Turkey. EQLS 2007: Covered 31 countries, EU27, Norway and the candidate countries of Croatia, the former Yugoslav Republic of Macedonia and Turkey. EQLS 2011: Covered 34 countries, EU27 and 7 candidate or pre-accession countries: Croatia, the former Yugoslav Republic of Macedonia, Iceland, Kosovo, Montenegro, Serbia and Turkey. New EQLS 2016: Covered 33 countries, EU28 and 5 candidate countries of Albania, the former Yugoslav Republic of Macedonia, Montenegro, Serbia and Turkey.

1.3.1 Sensitivity

Sensitivity is one of the main criteria for assessing measures. It could be defined as the ability to achieve accuracy of an instrument and to increase probability of correctly grasping a phenomenon. In this case, sensitivity could be achieved through five different criteria:

1. **Number of actors covered:**

As mentioned above, this deliverable's focus is on citizens' trust toward various actors including: government in general (EU, national, subnational governments); political actors and political parties; parliaments; administrations; judicial actors and courts; and market and societal actors at different levels. This criterion refers to the number of actors (as trustees[4]) that each survey includes. Appendix 1 includes more information on the actors that each dataset includes.

2. **Number of trust items:**

This criterion reflects the total number of trust items in each survey, which were achieved basing on the search strategy explained above (using the search terms: *trust, confidence, corruption, legitimacy, reputation, and capacity).* The more trust items a survey includes, the more we considered its capability to grasp the concept of trust and therefore, the more increased is its sensitivity.

3. **Measurement level/Number of answer categories:**

A good scale captures as much meaningful variation between responses as possible. Offering too few response options might lead to an inability to detect variation, hampering sensitivity. Numerical scales would be considered better than binary response options, as it allows for a high degree of variance in responses, increases overall data quality and facilitates translatability across languages. Using the same logic, 1-10 scales will be considered superior to 1-5 scales (OECD, 2017).

4. **Context of trust:**

We also qualified items that measured trust as more sensitive if it measured trust in a specific context, rather than just generally. While a general trust item asks whether the respondent has confidence in a certain institution, a context-specific item of trust will ask about confidence in an actor to do a *specific thing*. Previous research suggests that adding a specific trust context can lead to a slightly different interpretation of the trust measure: adding "trust [the institution] to act in the national interest" results in a higher proportion of respondents indicating a great deal of confidence (OECD, 2017).

5. **Trust dimension:**

Finally, sensitivity was also considered as higher if the survey included item that ask not only about a general feeling of trust or confidence toward an institution but rather measures a *certain dimension of trust.* Mayer et al. (1995) have identified three main dimensions that could be perceived as trustworthiness: integrity, benevolence, and competence. Items could measure the respondents' perception of these or similar traits. We have qualified this as increasing sensitiveness since it expands the narrow measurement of purely asking about the 'act' of trust.

1.3.2 Consistency

The consistency of the dataset refers to both having the same questions along the surveys and covering the same countries along the surveys. Consistency is important since it can enable us to compare and detect trends in trust across countries and time. Consistency could be assessed with two criteria:

1. **Question consistency:**

This criterion asks whether the items that measure citizens' trust repeat every survey wave. Contrarily it could be that a survey changes the items in every wave.

[4] A trustee is an actor that citizens (in their role as trustors) trust.

2. **Country consistency:**

This criterion asks whether the survey was held in same countries along the waves, or, contrarily, whether there was a great variance between the waves.

1.3.3 Coverage

Coverage refers to the extent of which the dataset includes data on more countries and on more years, enabling to draw a wider scope of comparative research. It includes two criteria:

1. **Geographical scope:**

This criterion includes two aspects. First, it includes the total number of countries covered by the survey. Second, it examined whether the survey covers the countries of interest: EU countries and five additional countries: Israel, Norway, Switzerland, UK and USA.

2. **Historical scope:**

This criterion included the year that the survey has initiated (indicating more longitudinal data), the frequency of the waves and the total number of survey waves.

Each of the eight datasets was assessed using these criteria. Table 2 presents the scoring of the datasets along these criteria.

As visible from Table 2, the datasets vary greatly in their sensitivity, coverage, and consistency.

Table 2: Comparison of the datasets

		Sensitivity					Consistency		Coverage	
		Actors	Items	Answer	Context	Dimensions	Question consistency	Country consistency	Geographical	Historical
1	**The World Values Survey (WVS)**	23	23	4-point Likert scale (a great deal of confidence to none at all)	no	no	almost completely	no	100 countries Since wave 3 – all countries of interest except Israel	1981-2017 (Every 5 years) 7 waves
2	**Quality of Government – Individual Survey (QoG EQI)**	8	18 (wave 3) 9 (wave 1 and 2). 26 in total.	10/11-point scale (0-10 or 1-10) Sometimes binary option (yes or no)	yes	yes	no	yes	28 countries Only EU countries	2010-2017 (every 3 years) 3 waves
3	**The International Social Survey Programme (ISSP)**	16	1-8 per wave. 35 in total.	Mostly 5-point Likert scale (1=Strongly agree; 2=Agree; 3=Neither agree nor disagree; 4=Disagree; 5=Strongly disagree)	yes	yes	no	yes	42 countries All countries of interest (for most questions and waves, there are some exceptions)	1984-2018 (every year)
4	**Eurobarometer**	36	0-9 per survey 145 in total	Mostly 3 categories, 1 to 3; 1=Yes, definitely; 2=Maybe, somewhat; 3=No, it's already fine	yes	yes	no	yes	28 countries Only EU countries	1989 (2007-2019) (every year)
5	**The European Social Survey (ESS)**	12	6 -28 per wave 35 in total	3-11-point Likert scales	yes	yes	yes	yes	25-40 countries All countries of interest (with some exceptions)	2002-2018 (every 2 years) 9 waves
6	**The European Values Study (EVS)**	19	19	4-point Likert scale (a great deal of confidence to none at all)	no	no	yes	last 2 waves	47 countries Israel not included Switzerland only in late waves	Since 1981 (every 9 years)
7	**World Gallup**	18	1-14 per survey 28 in total	Binary (yes/no)	yes	no	no	no	160 countries All countries of interest (with some exceptions)	Since 2005 (every year)
8	**European Quality of Life Survey (EQLS)**	7	6 per wave 7 in total	1-10 numeric scales (1 to 3=Do not trust at all; 8 to 10=Trust completely)	no	no	yes	mostly	~28 countries Only EU countries	2003-2016 (every 4-5 years) 3 waves

1.3.4 Sensitivity

The datasets vary in the number of actors they include, from five actors only (EQLS) to 23 actors (WVS) and even 28 actors (Eurobarometer). The total number of trust items also varies from 0-6 per survey wave (EQLS, ESS, Eurobarometer, ISSP) to 10 (Gallup), 19 (EVS) and 23 (WVS). Most surveys include high measurement levels of 10- or 11-point scales, which are considered as more sensitive since they allow for a greater degree of variance in responses and increases overall data quality as well as translatability across languages. However, Gallup has only binary response options of yes and no[1]. EVS and WVS include 4- or 5-point scales. Regarding context-specific items, ESS, QoG, ISSP, Gallup and Eurobarometer had included such items. However, none of these surveys repeated the same questions every wave, making it impossible to compare data on these items across time. It is hard to draw conclusions on the sensitivity of EVS and WVS. While these two surveys have measure trust toward various actors (n=23), which increases sensitivity, their response scale is not high and they have no context-specific items, hindering sensitivity.

1.3.5 Consistency

With regards to consistency in country (covering same countries in each wave), the ISSP, EQLS, Eurobarometer and ESS were identified as consistent. With regards to consistency in questions (including same items in each wave), the WVS was the most consistent since it has included almost same items to measure trust toward actors. Other consistent surveys in this aspect were the ESS, EVS and the EQLS.

1.3.6 Coverage

The surveys that have data on the most countries are Gallup and WVS which are more global in their nature. The surveys that have data stretching back to the 1980s are EVS, Eurobarometer, ISSP and WVS.

Beyond the descriptive differences, this analysis suggests that there is a trade-off between survey sensitivity and consistency. The most sensitive dataset is Eurobarometer, including questions on trust toward 28 different actors and about a hundred questions that are context specific and not general. However, this dataset is not consistent in the sense that each survey includes different trust related items, making it impossible to draw conclusions on trust trends.

Another sensitive survey is the ISSP, which also includes context specific and dimension specific questions. However, these context specific items were administered scarcely, in one wave only, disabling longitudinal analysis.

Contrarily, the WVS and the EVS include only items that measure confidence toward a list of actors (23 in WVS, 19 in EVS) without any context-specific items nor dimension specific items. Yet, the survey waves repeated the same items consistently every time. These two surveys also have a large coverage (but do not include Israel). which is included as a country of interest since it is a member of the TiGRE project).

1.4 Summary

Section 1 focuses on the critical assessment of eight cross-country surveys that include the measurement of citizens' trust in institutions. It describes the surveys, compiles a file with all trust related items included in them and critically assess the surveys.

Section 1 shows that the existing surveys vary in their sensitiveness, coverage, and consistency. Mostly, there is a trade-off between sensitiveness and consistency. Surveys that are more consistent usually include only general measurements of trust (how much trust/confidence do you have in the following actors). While surveys that include items that ask context-specific questions on trust or that measure a certain dimension

[1] For example: Do you Trust the supreme court and judges in this country to be autonomous in their decisions. That is, not to follow instructions or act under pressure from other powers? [2 categories; 1=Yes; 2=No]

of trust, do not repeat the same question more than once. Therefore, a longitudinal analysis of more sensitive trust items is not always possible.

Eventually, we identified four datasets that cover all the countries of interest [TiGRE countries plus the United States and the UK] and ranked high in consistency, coverage and sensitivity: the European social Survey (ESS), the World Values Survey (WVS), the European Values Survey (EVS) and the International Social Survey Programme (ISSP). Used together, these surveys could enable us to draw conclusions on citizens' trust in institutions on the widest scope.

Table 3: Advantages and disadvantages of selected datasets

Name of dataset	Advantages	Disadvantages
ESS	Very consistent (enabling longitudinal analysis) Most sensitive measurement scale (10/11-point scale)	Some minor inconsistency in country coverage Context/dimension items asked only once No items measuring private actors
WVS and EVS	Very consistent (enabling longitudinal analysis) Asks about trust toward private actors	Insensitive measurement scale (4-point) Israel not included Insensitive items (no questions on context and dimensions)
ISSP	Includes sensitive questions – context and dimensions of trust All countries included	No question consistency - very wave asking different items – disabling longitudinal analysis

We suggest using the **ESS** for the main longitudinal analysis of trust toward main public actors since it covers all countries of interest and has a sensitive measurement scale (11 points). However, since the ESS only measures trust toward 7 public actors (countries' parliament, the legal system, police, politicians, political parties, European Parliament and the United Nations) we supplement our analysis of citizens' trust toward various actors with two more datasets: WVS and EVS.

The **WVS** and the **EVS** datasets include items that measure trust toward 12 public actors (the civil service, universities, the education system, the government, political parties, the justice system/courts, the police, the parliament, social security system, the European Union, United Nations, and the health care system), and toward 5 private actors (banks, major companies, labor unions, the press and television). The disadvantage of these datasets is that they do not include all countries of interest. Specifically, Israel is not included, and Switzerland is only included in the more recent waves. In addition, they use a poor measuring scale (4-point Likert scale). They were merged since they use same questionnaire. Together they provide more coverage of countries and of time points.

To measure trust in a more sophisticated way, grasping various dimensions of trust, we have used the **ISSP** survey which included such questions along three different survey waves. There are other datasets that include measure of dimensions of trust, however, the ISSP was chosen since it is the only dataset that covers all countries of interest.

2. Analysing existing data on citizens' trust

This section analyses how did citizens' trust evolve in the EU and some additional countries of interest; United Kingdom, Unites States, Israel, Switzerland, and Norway. In the previous section we have shown that the existing data on citizens' trust builds on several large-scale datasets which differ much in their characteristics and their quality. However, we have detected four datasets that, used together, could enable us to draw conclusions on the widest scope: the ESS, WVS, EVS and ISSP. We have analysed these datasets to explore these following questions:

1. **How did citizens' trust in political and private actors evolve in the last 40 years and across countries?**
2. **How do the different countries of interest differ in their level of citizens' trust exploiting context and dimensional measures of trust?**
3. **Are there any correlations between trust toward the different actors?**

The selected datasets cover different samples of countries. Additionally, the surveys do not always cover all countries of interest: the ESS does not cover the US and the WVS+EVS do not cover Israel. Nonetheless, we have compared the countries of interest (that are available) to the rest of the countries in the survey sample.

2.1 Methodology of the analysis

The first step in analyzing the existing data was to compile an excel file and creating country average scores per each country and per each survey year for all items of interest. The excel file includes three separate sheets: one integrating the WVS and the EVS, the second for the ESS and the third with the ISSP data for the selected items[1]. The data has gone through the following modifications:

2.1.1 European Social Survey (ESS)

To create the ESS database, data from 9 separate datasets (1 per each wave, 2002-2016) were integrated and downloaded using the ESS Wizard (available on the ESS website), downloading meta-data and data on these following variables:

- Trust in parliament
- Trust in legal system
- Trust in police
- Trust in politicians
- Trust in political parties
- Trust in European Parliament
- Trust in United Nations

These variables were first cleaned (recoding missing and other categories as ".") and reversed so that all items reflect a high score for higher trust. Accordingly, an item measuring corruption was reversed so that the higher score will reflect lack of corruption (and therefore, high trust). Then, a country-wave variable was created, which is the average of all respondent's data in each country and each wave separately. A weight variable (pspwght) was calculated to correct for sampling errors. According to the ESS documentation, the pspwght weight (post-stratification weights) compensates for small deviations in the resulting sample with respect to socio-demographic categories, mainly age and sex.

2.1.2 World Value Survey (WVS) + European Value Survey (EVS)

To create the integrated database of the WVS and the EVS, three datasets were downloaded and combined:

1. **EVS longitudinal data file 1981-2008**
2. **EVS 2017 integrated dataset, version 3.0.0.**

[1] Available upon request, please contact Libby Maman.

3. **WVS longitudinal data file 1981-2014**

The data on the following variables was downloaded:

- Confidence in civil service
- Confidence in universities
- Confidence in major companies
- Confidence in education system
- Confidence in press
- Confidence in television
- Confidence in labour unions
- Confidence in government
- Confidence in political parties
- Confidence in the courts
- Confidence in police
- Confidence in the parliament
- Confidence in social security system
- Confidence in banks
- Confidence in the European Union
- Confidence in United Nations
- Confidence in health care system

These variables were cleaned (recoding missing and other categories as ".") and then reversed so that 4 will reflect high confidence and 1 low confidence. Then, a country-wave variable was created, which calculates an average of all respondent's data for each country in each wave separately. A weight variable was calculated to correct for sampling errors. According to the WVS and EVS documentation, their weight variable compensates for small sample errors including age and sex categories, to ensure representativeness of the sample.

Table 4 summarizes the items used from both the ISSP and the integrated WVS+EVS.

Table 4: EVS+WVS and ESS items used

EVS+WVS	ESS
Political actors	
Confidence in the parliament	Trust in the parliament
Confidence in the courts	Trust in the legal system
Confidence in police	Trust in police
Confidence in political parties	Trust in political parties
Confidence in United Nations	Trust in United Nations
Confidence in European Union	Trust in European Parliament
Confidence in civil service	Trust in politicians
Confidence in government	
Confidence in health care system	
Confidence in social security system,	
Confidence in education system	
Confidence in universities	
Private actors	
Confidence in banks	
Confidence in major companies	

Confidence in labor unions
Confidence in press
Confidence in television

2.1.3 The International Social Survey Programme (ISSP)

To create the ISSP database, data from 2 separate surveys were collected:

1. **The Role of Government 5, 2015-2018**
2. **Citizenship 2, 2013-2016**

8 items in total were used which measure various dimensions of trust (see Table 5).

Table 5: ISSP items used

Citizenship 2, 2013-2016	The Role of Government 5, 2015-2018
How widespread do you think corruption is in the public service in (Country)? V61	How many politicians in [country] are involved in corruption? v58
Thinking of the public service in (Country), how committed is it to serve the people? V60	How many public officials in [country] are involved in corruption? v59
I don't think the government cares much what people like me think. V42	People we elect as MPs try to keep the promises they have made during the election. v49
Most of the time we can trust people in government to do what is right V49	Most civil servants can be trusted to do what is best for the country. v50

These items were cleaned and recoded when necessary, so that the higher score will reflect higher trust. In addition, a weight has been applied to correct for sample errors and maintain representativeness, similarly to the previous datasets.

2.2 Descriptive analysis

This section will describe the insights we managed to extract from the existing datasets, trying to exploit them to the fullest. Specifically, in this section we will try to answer the first two research questions: (a) How did citizens' trust in political and private actors evolve in the last 40 years and across countries? And (b) How do the different countries of interest differ in their level of citizens' trust exploiting context and dimensional measures of trust? Figures and graphs could be found in Appendices 3 and 4 of this deliverable.

2.2.1 ESS analysis

This section shows the analysis we have made on the following ESS items which were asked in all waves from 2002 until 2016:

Using this card, please tell me on a score of 0-10 how much you personally, trust each of the institutions I read out. 0 means you do not trust an institution at all, and 10 means you have complete trust…

- …[country's] parliament?
- …the legal system?
- …the police?
- …politicians?
- …political parties?
- …the European Parliament?
- …the United Nations?

Answer ranged on a 11-category scale (0 to 10; 0=No trust; 10=Full trust). However, to provide plots that display the data in a sensitive manner, the scales axis has been set up to the minimum-maximum.

Our data is aggregated at the country level. Longitudinal country level data exists for eight waves (2002, 2004, 2006, 2008, 2010, 2012, 2014, 2016).

In general, the ESS data shows that in average, the actors in which citizens trust the most are the police, the UN and the legal system. On the other hand, political parties and politicians have the lowest level of trust among all actors (Figure 6). The data also shows that trust toward all actors has declined since 2002, and has reached its lowest point in the 2010 wave, suggesting an indirect consequence of the 2008 crisis. However, trust levels have recovered since then to an equal or higher level comparing to pre-crisis level for the police and legal system. Trust in other actors has not been recovered completely since. An exception is trust towards the UN which has mainly remained the same, aside from a small drop in 2010.

Figure 7 compares the average level of trust toward the UN, the European Parliament, and a composite measure of all national public actors (an average score of trust toward the parliament, the legal system, the police, politicians and political parties). This figure shows that trust toward the UN is significantly higher than trust toward both the European Parliament and national public actors. This figure also shows that trust toward national actors has increased significantly (as compared to other actors) since 2012.

Figure 8 compares the average level of trust toward all actors measured in the ESS in selected countries (TiGRE + US and UK) and the average score of all countries surveyed in the ESS. It shows that Israel, Poland and Spain have lower level of trust than the overall average. Contrarily, Denmark, Norway, Switzerland and the Netherlands have trust levels much higher than the average.

Figure 9 shows how trust toward the different actors differs over time per country (range from minimum to maximum). It shows that trust towards the police is the highest comparing to other actors in all countries (except in Israel). In all countries, respondents have the lowest levels of trust in politicians and political parties. European Parliament also has very low levels of trust in most countries. While all countries have an overall increase in trust – Israel, Denmark, Spain and Poland show contrasting results, where trust is declining (eyeball inspection).

Differences between TiGRE countries are also visible. Spain, for instance, seems to have trust in political actors far below the average, with the crisis moreover seeming to provide a major drop in political trust specifically. This is reflected in its average score, which drops below Poland around 2012 before slowly recovering. Simultaneously, their trust in police and trust in legal system is higher.

Also notable is that the difference between actors is higher in some countries than in others, showing a divergence in trustees. For instance, trust seems very consistent between actors in countries such as Belgium, The Netherlands and Switzerland, but the divergence is far greater in Spain, Germany Israel and Poland.

Finally, Figure 10 shows a graph of trust trends in all countries surveyed in the ESS. It shows that most countries have a total increase in trust levels. Italy, Cyprus, Bulgaria, Slovakia, Israel and Ukraine are clearly showing a decline. Other countries show mixed trends.

To summarize, the ESS data shows that:

- The actors in which citizens trust the most are the police, the UN, and the legal system.
- The actors in which citizens trust the least are political parties and politicians.
- Trust toward all actors has declined in the 2010 wave, suggesting an effect of the 2008 economic crisis.
- Trust levels have recovered since then to an equal or higher level comparing to pre-crisis level only for the police and the legal system.
- Trust toward the UN is significantly higher than trust toward both the European Parliament and [a composite measure of trust toward] national public actors.
- Comparing the level of trust toward national actors in the countries of interest shows that:
  - Denmark, Norway, Switzerland, Netherlands, and Belgium have trust levels higher than the average of this sample. This remains consistent throughout 2002-2016.
  - Poland and Israel have lower levels of trust toward national actors throughout the time.
  - Spain has experienced a decline in trust – it ranked around the average in 2002 and since then declined to levels closely to Israel and Poland.
  - trust toward the police is the highest comparing to other actors in all countries (except in Israel)
  - Politicians and political parties have the lowest levels of trust in all countries.
  - European parliament also has very low levels of trust in most countries.
  - While all countries have an overall increase in trust – Israel, Denmark, Spain and Poland show the contrary, where trust is declining.

2.2.2 WVS+EVS analysis

This section shows the data on the following items:

Please look at this card and tell me, for each item listed, how much confidence you have in them, is it a great deal, quite a lot, not very much or none at all?

- … the parliament
- … the courts
- ... in police
- ... political parties
- ... United Nations
- ... European Union
- ... civil service
- ... government
- ... health care system
- ... social security system
- ... education system
- ... universities
- … private actors
- ... banks

- ... major companies
- ... labour unions
- ... press
- ... television

These items were asked in various waves between 1984-2017 (not in all waved and not in all countries). Answers ranged on a 4-point scale (a great deal of confidence to none at all). However, like in the previous section, the scales axis has been set up to the minimum-maximum to ensure sensitive data presentation.

Since the WVS covers countries from all over the world, we have created a sub-sample of "TiGRE selected countries" which includes the following countries: the United States, Israel, Switzerland, Poland, Germany, United Kingdom, Norway, Belgium, Spain, Netherlands and Denmark. Figure 11 compares these countries and shows their average levels of trust toward all actors included in the WVS and EVS survey combined. Figure 12 also compares these countries, but it shows their levels of trust toward groups of actors.

These graphs show that in most countries the public administration enjoys higher levels of citizens' trust (except for Norway, Poland, and the Netherlands). Consistent with the ESS data, the WVS+EVS data also shows that the political actors (parliament and political parties) have the lowest levels of trust from citizens, along with the media (television and the press). Interestingly, trust toward interest groups is higher in Netherland and Norway, than trust toward other actors. Although there is no longitudinal data on trust on the scientific expertise, it is visible that it ranks higher than all other actors.

When highlighting only the civil service and major companies, to try and learn on the difference between trust in the public administration (and regulators) to the market (the regulatees) we can see that in some countries the administration enjoys higher trust than the market (such as Denmark, Germany, Switzerland and the US).

Figure 13 shows how trust toward national public actors has fluctuated in the selected countries and Figure 14 shows how trust toward private actors has fluctuated in the selected countries. [loose points are due to items collected in only part of the waves].

To summarize, the WVS+EVS data shows that:

- In most countries included in the sample, the public administration enjoys the highest levels of citizens' trust (except for Norway, Poland, and the Netherlands where is still ranks very high).
- Citizens' have the lowest level of trust toward political actors and political parties in all countries.
- In Germany, Denmark, Switzerland, Netherlands, Spain and the US, the public administration enjoys higher levels of citizens' trust comparing with the private sector (Major companies and/or Banks).
- Eyeball inspection could not establish clear trends in citizens' trust.

2.2.3 ISSP analysis

This section shows the data from the ISSP survey which was collected in two surveys in the time period of 2013 – 2018 (Citizenship II and The Role of Government IV). It focuses on the sample list of countries of interest (TiGRE partners plus the UK and the USA) similar to the previous section. On the one hand, in the ISSP, trust is addressed in the questions very directly (and not described as "confidence" which may have somewhat different implications), on the other hand the data is available per single wave (even if for different years, but with a relatively low range of years within the wave).
This chapter on ISSP data is structured in three sections. First, as one of the aims was to see if the Tigre-sample is somewhat representative, we run some tests for group differences between the Tigre-sample and the rest of the sample that covers other countries from all regions worldwide (T-Tests/Mann Whitney U tests). The results as indicated below show that the representativeness of the TiGRE-sample is restricted. For the following questions/items, there are statistically significant differences between the TiGRE-countries and other countries.

2.2.3.1 Cross-country comparison of ISSP data

This section briefly introduces descriptive statistics of ISSP data relating to the following indicators which were included in the most recent ISSP surveys:

How widespread do you think corruption is in the public service in (Country)? *(1=Hardly anyone is involved; 2=A small number of people are involved; 3=A moderate number of people are involved; 4=A lot of people are involved; 5=Almost everyone is involved)*[1]

Thinking of the public service in (Country), how committed is it to serve the people? *(1=Very committed; 2=Somewhat committed; 3=Not very committed; 4=Not at all committed)*[2]

To what extent do you agree or disagree with the following statements? I don't think the government cares much what people like me think. *(1=Strongly agree; 2=Agree; 3=Neither agree nor disagree; 4=Disagree; 5=Strongly disagree)*

To what extent do you agree or disagree with the following statements? Most of the time we can trust people in government to do what is right. *(1=Strongly agree; 2=Agree; 3=Neither agree nor disagree; 4=Disagree; 5=Strongly disagree)*[3]

Most civil servants can be trusted to do what is best for the country. (1=Strongly agree; 2=Agree; 3=Neither agree nor disagree; 4=Disagree; 5=Strongly disagree)[4]

People we elect as MPs try to keep the promises they have made during the election. (1=Strongly agree; 2=Agree; 3=Neither agree nor disagree; 4=Disagree; 5=Strongly disagree)[5]

How many public officials in [country] are involved in corruption? (1=Almost none; 2=A few; 3=Some; 4=Quite a lot; 5=Almost all)[6]

How many politicians in [country] are involved in corruption? (1=Almost none; 2=A few; 3=Some; 4=Quite a lot; 5=Almost all)[7]

These items response options are five-point Likert scales.

Since the countries of interest cannot be assumed to be homogeneous, the major interest of this section lies at deriving an overview of how mean trust levels are and how they vary between the countries of interest. On that account, as follows, the indicators as introduced above are discussed one by one. Response scales have been aligned inasmuch a higher value indicates a higher level of trust respectively of a trust-related indicator. As such, as for example in Figure 15, the original scale has been reversely coded, so that a higher value indicates “less perceived corruption”.

As Figure 15 indicates, the perceived presence of corruption in the public service varies strongly across the countries of interest. Highlighting the heterogeneity within here in particular TiGRE countries, the TiGRE countries Denmark and Poland depict the extreme values with the former scoring a “4” and the latter a “2.5”. Of further interest, the “middle group” consisting of the Netherlands, Norway, Switzerland, the United Kingdom, Belgium, and Germany are to be found relatively closely together with values ranging from approximately “3.3” to “3.7”.

Figure 16 demonstrates the mean values of perceived commitment of the public service to serve the people. Again, coding is reversed so that a higher mean value indicates a higher perceived commitment. In addition to the large difference between the extreme values, of particular importance, the ranking of the countries changes considerably. As a matter of fact, both the middle group as discussed above and the lower-scoring countries Spain and Poland mostly confirm the values attained above, Israel and Denmark show some major

[1] CODING REVERSED; higher scores indicate less corruption
[2] CODING REVERSED; higher scores indicate more commitment
[3] CODING REVERSED; higher scores indicate more trust
[4] CODING REVERSED; higher scores indicate more trust
[5] CODING REVERSED; higher scores indicate more integrity
[6] CODING REVERSED; higher scores indicate less corruption
[7] CODING REVERSED higher scores indicate less corruption

movements, switching their positions. Israel attains the highest mean value regarding perceived commitment of the public service to serve the people and Denmark scores substantially lower than before.

Figure 17 demonstrates the mean values of perceived government's consideration of what people think. Remarkably, extreme values are less extreme and the entire sample lies in a range from approximately "2" to "3.1". In comparison to Figure 16, Israel shows a relatively strong downwards movement and the lower-scoring group of Spain and Poland is further confirmed.

Figure 18 demonstrates the mean values of trust in the government to do what is right. Coding is reversed so that a higher mean value indicates a higher level of trust. The sample lies relatively closely together with a range of slightly above one unit. The leading group, the middle group and the lowest-scoring group remains mostly stable and confirms the hitherto discussion. Hence, apart from minor movements, the general pattern and variation of trust are reaffirmed.

Figure 19 highlights the first indicator out of the "The Role of Government 5" survey. In comparison to the "Citizenship 2" survey, Poland, the Netherlands, and the United Kingdom have not been surveyed. Figure 19 demonstrates the mean values of trust level in civil servants to do what is best for the country. Coding is reversed so that a higher mean value indicates a higher level of trust. Again, the known pattern is confirmed inasmuch as Switzerland and the Scandinavian countries compose the group with the highest mean values. The middle group with Germany, Belgium, the United States, and Israel is followed by Spain with a considerable drop scoring approximately half the value of Switzerland.

Figure 20 demonstrates the mean values of the belief that elected MPs (members of parliament) try to keep the promises made during the election. Coding is reversed so that a higher mean value indicates a higher belief in MPs integrity. Again, the distance between Switzerland and Spain is relatively large. In absolute values, Switzerland almost doubles the value of Spain. In general, the picture remains very stable with minor movements only between Belgium, United States, and Israel.

Figure 21 demonstrates the perceived corruption levels of public officials. Coding is reversed so that a higher mean value indicates a lower level of perceived corruption. Differences in perceived corruption levels are relatively high with the extreme values of Denmark scoring highly, approximately a "4.1" and Spain and Israel – as the lowest-scoring countries - scoring a "2.5". Along the same lines, differences between adjacent countries are considerably high. Regarding politicians' corruption, Israel scores lowest and replaces Spain as the lower extreme.

Figure 22 demonstrates the perceived corruption levels of politicians. Coding is reversed so that a higher mean value indicates a lower level of perceived corruption. Shifting attention from "public officials" to "politicians, does hardly affect the ranking within the sample. The only movement to be recognized is the one between Israel and Spain. Remarkably though, the picture relating to corruption levels of politicians is characterized by extremes. The sample's range of approximately "2.5" is by far the largest observed. Both countries that constitute the extremes are extreme also when discussed across the indicators. Denmark scores a "4.2" and depicts the highest value regarding all indicator-country pairs observed. Further contributing to the high difference, Spain is dropping off significantly and marks the lowest overall score in this section. Of further interest, the difference between the top-scorers and the middle group is quite high as well, contributing to a relative steep horizontal trajectory of the mean values.

To summarize:

In general, this section leads to various findings. First, the countries of interest are fairly heterogeneous and bear a relative high degree of variation regarding the trust-related indicators discussed. Following this line of thought, one can reasonably argue that the TiGRE region covers countries from the upper, middle, and lower end of trust (-related) levels. Second, across the different trust-related indicators, the ranking between the countries in the sample is mostly stable. In the majority of cases, one can observe a stable and self-contained leading group, middle group and lower-scoring group. Spain, Israel US and Poland mostly rank lower than

other countries. Denmark, Norway and Switzerland rank consistently highest comparing to other countries. Regarding the "outliers": In the question: *Thinking of the public service in (Country), how committed is it to serve the people?* Israel ranks the highest. This suggests that in Israel, despite a low trust on the public service with regard to its integrity, corruption and equality, citizens trust it to be committed. In the Netherlands we see the opposite: citizens believe the government has high integrity, but they doubt their commitment to serve the public.

2.2.3.2 TiGRE vs. non-TiGRE countries in comparison

This section scrutinizes ISSP data by analyzing group differences between the group of TiGRE countries and the group of non-TiGRE countries (see Table 6 and Table 7). Regarding the tests applied, indeed, the original scale is a five-point one that may best be approached by rank-based nonparametric tests. However, as we refer to mean values at the country level, we no longer have integers but distinguish in between. Therefore, the dependent variable is assumed to be continuous here and accordingly, the independent samples t-test is the test of choice.

In very general, this section aims at dismantling group differences between the means of the two groups regarding their existence, characteristic and statistical significance. The subsequent testing attempts to embed the TiGRE region within the larger context of "trust geography" and compares TiGRE with a sample of the "rest of the world". Findings need be interpreted very cautiously though. As indicated above, the TiGRE region is quite heterogeneous regarding trust (-related) characteristics and one cannot expect the non-TiGRE countries to be less. However, one may assume the group of non-TiGRE countries to cover a wide variety of countries and to represent variation of trust levels well. Along these lines, this section roughly compares the TiGRE region with the rest of the world and may contribute to the general discussion on trust levels by setting a most general reference.

Throughout this section, only statistically significant differences are reported. Data are mean ± standard deviation, unless otherwise stated.

Table 6: TiGRE vs. non-TiGRE countries surveyed in Citizenship 2

TiGRE countries	Non-TiGRE countries
Belgium, Denmark, Germany, Israel, Netherlands, Norway, Poland, Spain, Switzerland	Australia, Austria, Chile, Taiwan, Croatia, Czech Republic, Finland, France, Georgia, Hungary, Iceland, India, Japan, South Korea, Lithuania, Philippines, Russia, Slovak Republic, Slovenia, South Africa, Sweden, Turkey, UK, US, Venezuela

Figure 34 demonstrates group differences regarding the perception of corruption in the public service between TiGRE and non-TiGRE countries. Coding is reversed so that a higher mean value indicates a higher level of trust. An independent-samples-t-test was run to determine if there were differences in the perception of corruption in the public service between TiGRE and non-TiGRE countries. Corruption scores were higher in TiGRE countries (3.272±0.498) than in non-TiGRE countries (2.829±3.272), a statistically significant difference of 0.443 (95% CI, 0.038 to 0.848), t(32)=2.228, p=.033.

Figure 35 demonstrates group differences regarding the perception of commitment of the public service to serve the people between TiGRE and non-TiGRE countries. Coding is reversed so that a higher mean value indicates a higher perceived commitment. An independent-samples-t-test was run to determine if there were differences in the perception of corruption in the public service between TiGRE and non-TiGRE countries. Corruption scores were higher in TiGRE countries (2.760±0.368) than in non-TiGRE countries (2.519±0.259), a statistically significant difference of 0.241 (95% CI, 0.009 to 0.473), t(31)=2.117, p=.042.

Table 7: TiGRE vs. non-TiGRE countries surveyed in Role of Government 5

TiGRE countries	Non-TiGRE countries
Belgium, Denmark, Germany, Israel, Norway, Spain, Switzerland	Australia, Chile, Taiwan, Croatia, Czech Republic, Finland, France, Georgia, Hungary, Iceland, India, Japan, South Korea, Lithuania, Philippines, Russia, Slovenia, South Africa, Sweden, Turkey, US, Venezuela

Figure 36 demonstrates group differences regarding the perception of corruption amongst public officials between TiGRE and non-TiGRE countries. Coding is reversed so that a higher mean value indicates a lower perceived level of corruption. An independent-samples-t-test was run to determine if there were differences in the perception of corruption in the public service between TiGRE and non-TiGRE countries. Corruption scores were higher in TiGRE countries (3.232±0.564) than in non-TiGRE countries (2.723±0.455), a statistically significant difference of 0.508 (95% CI, 0.099 to 0.918), t(33)=2.524, p=.017.

Figure 37 demonstrates group differences regarding the perception of corruption amongst politicians between TiGRE and non-TiGRE countries. Coding is reversed so that a higher mean value indicates a lower perceived level of corruption. An independent-samples-t-test was run to determine if there were differences in the perception of corruption in the public service between TiGRE and non-TiGRE countries. Corruption scores were higher in TiGRE countries (3.061±0.839) than in non-TiGRE countries (2.508±0.519), a statistically significant difference of 0.553 (95% CI, 0.045 to 1.060), t(33)=2.215, p=.034.

In general, it has to be mentioned that on average corruption is perceived as being lower in the TiGRE-sample (scores are reversed), and the public service being more committed. This may indicate for an on-average overall “higher” performance of the politico-administrative systems of the TiGRE-countries, but also makes it necessary to interpret all findings in later stages with caution: if trust levels are on average higher in the TiGRE -sample, findings may be generalized for other – developed or developing – regions worldwide only after correcting for this difference in the “trust basic level”. This applies in particular when it comes to the analysis of change.

2.3 Correlations

In the following, using pooled data from the ESS, EVS and WVS. We tested for correlation between the different "dimensions" of trust, or trust in different actors. Against the backdrop of the different surveys that ask for very differentiated trust levels regarding different actor groups, one may expect that trust levels for different actor groups are not related to each other. To put it differently: Can individuals, being asked about their trust levels, really differentiate between different actors, or is it more trust in "the public administration", or "the politicians", or even more aggregated, trust in "the state"?

This question is of pivotal relevance for the overall TiGRE-project: later stages of the project will focus on intra-regime trust in different actors of the respective regulatory regimes. One of the implicit assumptions behind TiGRE is that individuals working in institutions within the regime are able to differentiate very carefully between the different other actors in the regime, and do not only come to an overall judgement of trust or mistrust. Furthermore, it is of relevance if there are "spill-over effects" between different actors, independent of the behavior or the performance of single actors.

2.3.1 Correlation Matrix and Trust Levels Over Time - European Social Survey (ESS)

This section scrutinizes the same questions stemming from the ESS as described in previous section.

The data applied to testing is aggregated at the country level. Longitudinal country level data exists for eight waves (2002, 2004, 2006, 2008, 2010, 2012, 2014, 2016).

Of major interest are correlations between trust towards different actors. On that account, as a first approach, all longitudinal data is applied to simple bivariate correlations (see Table 12). This analysis is quite fuzzy, since countries that participate various times are factored in accordingly, even though one can assume trust patterns not to change significantly between, e.g., two years in one country. For example, the Netherlands participate in all waves and are therefore overrepresented.

To address this question on a more general level, we decided to test for correlations (at least exemplarily for the ESS). In line with the related literature, we find that trust in different administrative actors and in political institutions is highly correlated (see Table 13 – robustness checks using Kendall's tau instead of Pearson's correlation coefficient reveal that the correlations are stable).

Obviously, trade-offs between trust in the administration on the one hand, and the political level on the other hand are not given. However, remarkably, trust levels across all actors are associated positively suggesting general positive "spillover effects". Along these lines, regarding the absence of negative correlations, trust in different actors is most likely not substitutive in nature. This question surrounding spillovers, substitution etc. will be addressed at least implicitly more deeply in later stages of the TiGRE-project, where an elite survey will be used to survey trust relations within the regulatory regime.

In general, as expected, there is strong correlations between the levels of trust towards different actors. If one tends to see aggregated Likert-type data as non-parametric, the correlation matrix in Table 13 uses Kendall's tau instead of Pearson's correlation coefficient. In general, significance levels remain stable with slightly decreasing effect sizes.

In order to demonstrate the trajectory of trust development, as done in Figure 2, we established aggregate variables that sum up the single TiGRE country levels for each survey wave. This allows to grasp change in trust levels into various actors over time. However, interpretations need to be conducted with caution. The composition of the country sample changes slightly between the waves. Generally, ESS fits well since it covers all TiGRE countries, though not in all waves. The waves of 2004 and 2006 do not cover Israel and the wave of 2016 does not include Denmark.

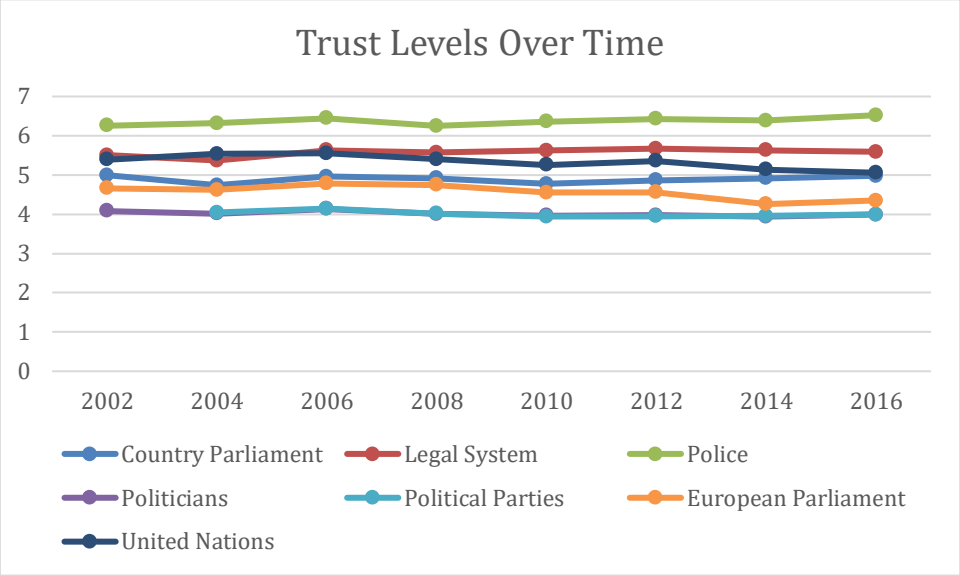

Figure 2: Aggregated trust levels in TiGRE countries over time

In very general, one can observe various trends. First, absolute values of trust levels are indeed considerably different. As such, relating to the extremes, the "Police" constantly scores "6" and more, whereas trust for "Politicians" and "Political Parties" constantly attain scores of "4" and less. Second, the different trust levels are fairly stable over time and show – if at all – only slight vertical movement. Occasionally, such minor movements as the general downward movement between 2006 and 2008 may be traced back to the global financial crisis of 2007-2008. Interestingly though, trust levels decreased only slightly and recovered quickly in the crisis' aftermath. Other movements certainly need further investigation and triangulation for valid interpretation.

2.3.2 Correlation Matrix - World Value Study (WVS) & European Value Study (EVS)

In addition to the correlations using ESS data above, the subsequent section analyzes associations between trust levels in different actors relying on pooled WVS and EVS data. It serves twofold and complements analyses above. First, it challenges findings made above and, second, it includes other actors such as private ones and more abstract ones such as the health care or social security system.

This section scrutinizes the same questions stemming from the EVS and WVS as described in previous section.

Accordingly, the number of different actors' trust levels increases and, here, lean reporting as shown by Table 14 suffices. In very general, positive associations between the different trust levels in the various actors are found. The inclusion of private and rather abstract actors does not change the picture and may strengthen the understanding of "trust" as a trustee's general attitude rather than one that is distinguished relating to different trustors. However, effect sizes indeed vary and associations are mostly stronger between familiar concepts of actors. As such the relation between related actors of "banks" and "major companies" is particularly strong.

Along the same lines, actors that may be perceived to have a small overlap such as the "police" and the "united nations" are associated positively as well, though characterized by a low effect. Remarkably, the only trust level that seems entirely detached from the other ones, mostly not showing any associations but from time to time even allowing for negative ones is the European Union. This finding of the European Union understood as a rather isolated actor in the context of trust relationships is certainly pivotal for the general TiGRE project.

2.3.3 Summary

- Generally, ESS data indicates positive associations between trust levels in the different actors. Correlations depict a general positive relationship between trust levels in all different actors; there is not a single negative one. E.g. someone who trusts the parliament, on average, tends to trust in the legal system, too. Same counts for all possible other relationships between trust levels in parliament, legal system, police, politicians, political parties, the European Parliament, and the United Nations.
- Correlation analysis on the ESS data indicates that the vast majority of associations has a moderate to strong effect size. In fact, various relationships are described by correlation coefficient values that are 0.8 or higher, indicating very strong associations. Such very strong associations are to be found in particular:
  - Parliament – legal system
  - Parliament – politicians
  - Parliament – political parties
  - Legal system – police
  - Legal system – politicians
  - Legal system – political parties
  - Politicians – political parties
- Similar analysis in the WVS+EVS data finds positive associations between the different trust levels in the various actors. The inclusion of private and rather abstract actors does not change the picture and may strengthen the understanding of "trust" as a trustee's general attitude rather than one that is distinguished relating to different trustors. However, effect sizes indeed vary and associations are mostly stronger between familiar concepts of actors.

3. Systematic literature review of empirical studies

To investigate extant insights on trust in government flowing from the various major survey projects analyzed in work package 1.2., we rely on a systematic literature review. Such a strategy was considered especially relevant for our purposes, given that works on citizens' trust in governments, politics, institutions and other actors studied in TiGRE are dispersed over various disciplines and literatures. Systematic literature reviews can use structured search terms across these disciplines to detect relevant contributions in areas that would otherwise be left unconsidered. Additionally, systematic literature reviews benefit from their replicability and transparency, being based on a structured set of choices (Voorberg, Bekkers & Tummers, 2015).

This section first describes the methodology we have used for the systematic literature review and then moves on to review and discuss our findings.

3.1 Methodology

3.1.1 Search strategy

The first step in developing this review was to establish a search strategy. Our key interest was to review studies that address trust in government, trust in private or civil society actors or that address a substantially related variable, and that use the eight major international surveys discussed and evaluated in section (i.e. WVS, QOG individual data, ISSP, ESS, Gallup, EQLS or EVS data). This suggests a search syntax incorporating three elements: the concept to be measured, the actor studied, and the survey drawn upon. With regard to the first element, we have included not only trust as a search term, but also the substantially related term 'confidence'. Trust in entities and confidence in entities has been used synonymously in some literatures, suggesting that omitting confidence as a search term could cause us to miss relevant contributions.

Second, we have included a concept that is substantially related to trust in governments or in other actors, namely 'corruption'. The reasoning here is twofold. First, perceived corruption of an actor is likely strongly tied to trust in that actor. It will be recalled from earlier work packages that an essential element of trust is the expectation that the trustee will not behave opportunistically and will instead behave based on *inter alia* integrity and benevolence. Conversely, corrupt behavior almost inherently entails opportunistic acts and is defined by a lack of integrity (and, for most citizens, a lack of benevolence). Second, corruption is frequently measured in international surveys, and may thus have formed the basis for a large amount of survey-based research with relevant insights for the study of trust in government or trust in other actors.

The second element concerns the actors studied within the context of TiGRE. In terms of public actors, TiGRE is interested in actors in the three branches of government, including executive entities, politicians, and courts, as the role of the European level. In terms of private and civil society actors, TiGRE aims to evaluate the position of academia, non-governmental organizations, interest groups and companies in the regulatory process. For this reason, our search syntax included a range of terms related to these actors, including various public actors on multiple governmental levels, courts, politicians, companies, banks, interest groups, the press, academia and unions. Additionally, we incorporate academia as an additional societal actor that frequently interacts with the regulatory regime and can influence trust in the regulatory regime (as was the case in e.g. the Covid-19 crisis).

Finally, the third element in search string concerns the international surveys that are the main focus of this deliverable., namely the WVS, QOG individual data, ISSP, ESS, Gallup, EQLS and the EVS. By including these surveys in the search terms, we focused our attention specifically on studies incorporating these surveys.

In order to increase the comprehensiveness of our review, we developed our syntax for two prominent databases that index scientific literature across a variety of disciplines (Scopus and Web of Science). To obtain a valid set of results, the syntax was applied in Scopus to the fields Title, Abstract and Keywords and in Web of Science to the field Abstract (as the latter database does not offer an option to search in all three fields

simultaneously, abstract was considered to be the most relevant field of the three). The syntax relied on Boolean operators, using OR operators to designate sets of terms of which at least one must occur in the fields searched (e.g. trust OR confidence OR corruption specifies that these are alternative criteria), and AND operators to designate sets of terms which must cumulatively exist in the fields searched (i.e. the fields must contain 1. a trust-related concept, 2. a term designating an actor of interest and 3. any of the names of the surveys studied in work package 1.2.).

The example string for Scopus reads as follows:

> TITLE-ABS-KEY((*trust OR trust* OR confiden* OR corrupt*) AND (administrat* OR bureaucra* OR "civil serv*" OR govern* OR state* OR authorit* OR court* OR universit* OR "non-profit organization*" OR media* OR compan* OR bank* OR "interest group" OR press OR parliament* OR union* OR {EU} OR politic* OR parties OR "non-governmental organization*" OR "environmental organization*") AND ({wvs} OR {qog} OR {issp} OR eurobarometer OR {ess} OR gallup OR {eqls} OR {evs} OR "european social survey" OR "world values survey" OR "quality of government" OR "international social survey programme" OR "european quality of life" OR "european values study"))

Although the inclusion of the requirement that one of the survey names must be mentioned in one of the fields of interest already reduces search results substantially, the total amount of results still contained substantial noise, with acronyms for surveys for instance also being acronyms in the area of medicine or technology. For instance, ESS denotes the European Social Survey for our purposes, but is also an acronym for a medical scale (Al Shammari et al., 2020).

Therefore, we opted to include several additional inclusion criteria. First, we narrowed our scope to the social sciences, which are the primary users of the international surveys considered here.[1] This reduced the amount of results for Scopus to 674 and for Web of Science to 371 (searches performed on 16-06-2020). After removing duplicates found in both databases, this brought the total amount of results to 744. In a subsequent step, we identified studies that were manifestly irrelevant based on their title (e.g. when an article obviously concerned a topic unrelated to trust or a related concept), further reducing the amount of studies to 551 results.

In a final step, introduced to retain a manageable workload, we opted to focus on articles published from 2015 onwards, which reduces the amount of results that we consider based on abstract to 303.

3.1.2 Eligibility criteria

Each article in the remaining dataset was subsequently considered for inclusion in the analysis based on several eligibility criteria, which were formed on the basis of the goals of the deliverable. More specifically, we included in our analysis peer-reviewed articles and book chapters that:

1. Study actors relevant to TiGRE, which include: governments (at different levels, local to international), political and administrative institutions, public authorities and organizations (including courts), political actors and/or private actors, civil society organizations such as NGO's, consumer organizations and academia, as well as media (see list under code of 'trustee' in codebook).
2. Examine drivers, patterns, dynamics and/or outcomes of citizens' trust/distrust/related concepts in these actors.
3. Use at least one dataset considered in WP1.2. (WVS, QOG, ISSP, Eurobarometer, ESS, GALLUP, EQLS or EVS)
4. Incorporate either descriptive or explanatory analysis of this/these WP1.2. dataset(s)

[1] In Scopus this is simply accomplished by refining results to only include contributions tagged with Social Sciences. In Web of Science a more fine-grained distinction is used.

5. Use cross-country analyses (incorporating two or more countries).

Using these criteria, the relevance of the remaining 303 manuscripts was assessed based on their abstracts. Where abstracts suggested potential relevance but were inconclusive, the full text was considered to decide on the inclusion of the manuscript. In total, 157 articles were found to conform to our inclusion criteria, with these articles forming the final dataset on which our analyses are based.

3.1.3 Coding strategy

The final dataset was coded on a number of conceptual, methodological and theoretical aspects, with the codebook being available in Appendix 2. First, we identified whether the manuscript is mainly concerned with explaining trust or whether it deals with the effects of trust, a choice determining the applicability of several other coding categories. Next, we coded the concepts, actors, methodology and dataset used in the study. This included coding categories for the sophistication of trust measurements (specifically in terms of the number of items incorporated), which statistical analyses were used, how many countries were included and whether TiGRE partner countries were included.

Subsequently, several theoretical codes were applied. We coded whether articles simply explain trust, or more elaborately delve into the dynamics of trust processes. We also coded whether the manuscript simply discusses citizens' trust in an entity, or whether the manuscript also considers relationships between trust in one actor/governmental level and another actor/governmental level (e.g. relationships between trust in national governments and trust in EU institutions). Moreover, we considered whether the article draws upon an established and named theory.

Several codes were included that either apply to studies explaining levels of trust or apply to studies explaining the effects of trust. For studies explaining trust, we coded what the main examined 'drivers of trust (i.e. independent variables) are, focusing chiefly on variables of interest as identified in the manuscripts in our dataset. We distinguished between trustor-related, trustee-related, issue/sector related and country related drivers, each with several subcodes to allow for more granularity (trustor-related drivers are for instance subdivided into personal traits, status-related traits (e.g. education), disposition towards others, beliefs/values, information sources used, expectations and exposure to media). We also included an 'other' option for each of these categories, to allow for the possibility that our initial codes are not exhaustive and include an open 'elaboration' field that allows us to enter additional details where necessary. Finally, we identified what the main findings on these drivers were (i.e. significant relationship or null finding). The coding categories for effects follow a similar setup, with a first category distinguishing between several types of effects (e.g. effects on cooperation, effects on transaction costs, etc.), a second category including an open field for further details, and a category pertaining to the main findings.

3.2 Results

3.2.1 General profile of studies analysed

Before elaborating on the theoretical insights generated by studies in the dataset, it is first useful to provide a general overview of the characteristics and state of the survey-based literature on citizen trust in government and/or other actors. Most manuscripts (109) in our dataset focus on a form of trust as a concept, although a considerable minority of manuscripts (22) label their variable of interest as confidence (see Figure 3). This illustrates that, although there is some convergence in terms of variable labels, incorporating synonymous terms in reviews has an added value. Another 20 articles deal with corruption, suggesting a reasonable degree of interest in this concept – and thus its relevance when reviewing citizen relationships with governmental and other societal actors. A small minority of articles deal with concepts that are arguably subdimensions of trust, i.e. perceived integrity, fairness, and impartiality (1). This smaller number is likely related to the substantial usage of items measuring overall trust in an entity in the various surveys reviewed in deliverable 1.2., although some articles use trust indices comprised of multiple trust items.

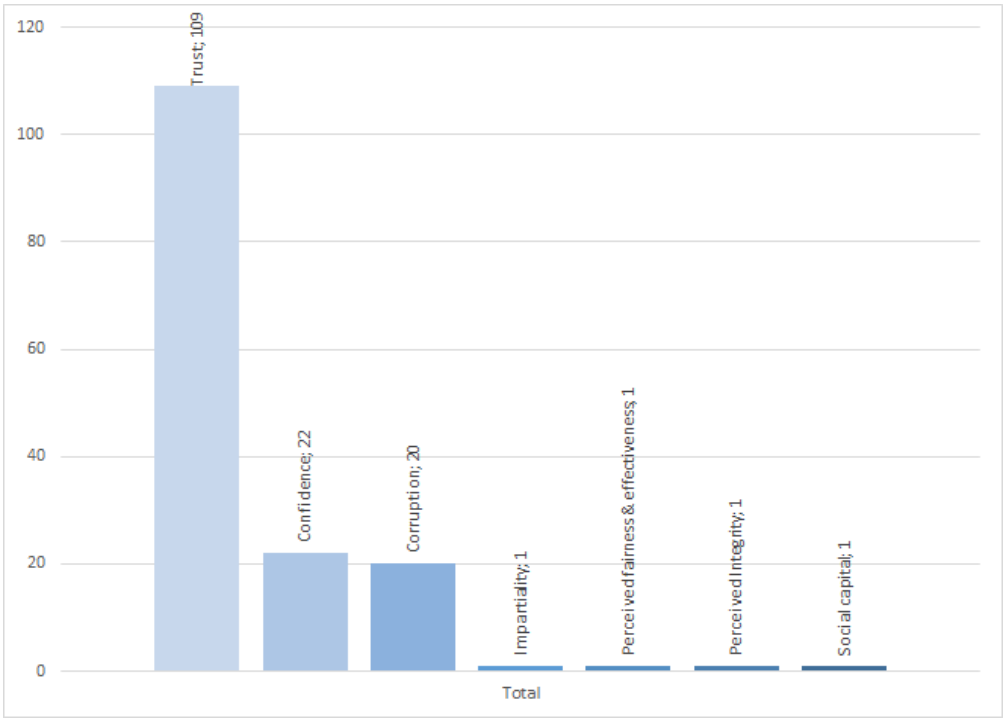

Figure 3: Overview of the usage of trust and related concepts in reviewed manuscripts

Furthermore, it is notable that considerable attention is being devoted to both the drivers and the effects of trust. 78 manuscripts focused on explaining trust, 63 manuscripts focused on effects and 12 focused on both drivers and effects (with the remaining 3 articles using trust as a control variable) (see Figure 4). As may be expected of a cross-disciplinary literature review of a concept as widely applicable as trust, there is substantial variation in the theoretical approaches used to capture trust. Most studies (104) use a *sui generis* approach, developing a theoretical framework based without a specific theoretical underpinning. While the remaining 67 articles did use an explicit theoretical approach, dominant approaches were difficult to identify. One exception is social capital theory, which is explicitly called upon in 3 contributions.

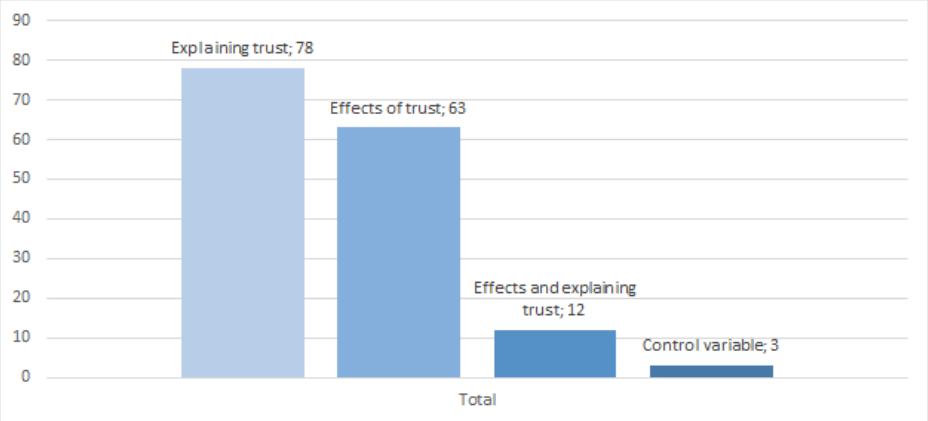

Figure 4: Overview of the aim of reviewed manuscripts

When considering the interest of scholars in terms of trustees a less balanced pattern is visible. Although our search included various private, international and civil society actors,[1] as well as the judicial branch of government, by far the largest category of manuscripts (78) deals with either the national-level executive or the national-level legislative branch, or a combination of these two branches (often denoted as institutional trust) (see Figure 5). By contrast, the EU is considered in 14 studies, banks and major companies are considered in 2 studies, courts, the legal system, and judges in 8 studies, the police in 3 studies, and the press in 2 studies. This suggests that there is ample room for citizen trust studies incorporating actors not directly tied to the executive or the legislative branches, but which form important actors in the (regulatory) governance of many states.

In terms of data used and analysis strategy, greater variation is visible. Most studies use one survey dataset (80), although a large minority of studies either incorporate multiple surveys or other non-survey sources (76). Only one study combines quantitative analyses with qualitative analyses, suggesting an opportunity for future research by mixed methods researchers. The ESS is the most popular survey to draw upon in the 2015-2020 waves (with 68 studies using this survey), followed by the WVS (35) and the Eurobarometer (19).

An overwhelming majority of studies in our dataset analyze these surveys with the use of explanatory statistics, such as various forms of regression models or structural equation models. Out of these, 68 draw upon some form of longitudinal design, mostly panel data estimations or multiple cross-sectional analyses. The remainder uses some form of cross-sectional analysis, with multi-level modelling seeming particularly prevalent – which makes sense given the nested country-level – individual-level structure of most datasets. Only a small number of analyses rely on purely descriptive statistics (12). By and large this suggests that the analysis strategy favored by authors from the various fields dealing with citizen trust in governments and other actors has become relatively sophisticated, although it is notable that substantial amounts of studies remain limited by potential endogeneity (e.g. due to a lack of panel data or instrumental variable estimation options). The remainder of this section explores recurring topics studied in our dataset, with the textual discussion representing 105 of 157 studies.

[1] As was elaborated in the Introduction, the main focus of this deliverable is on actors: government in general (EU, national, subnational governments); political actors and political parties; parliaments; administrations; judicial actors and courts; and market and societal actors at different levels

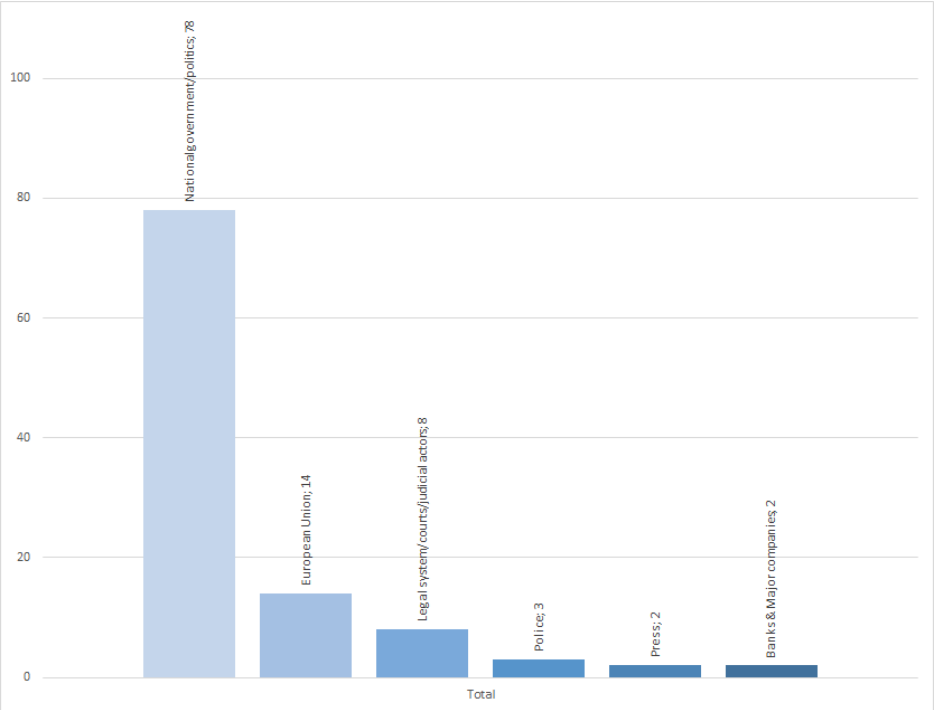

Figure 5: Overview of trustee actors studied

3.2.2 Drivers of trust

In total, 90 studies have the aim to explain levels of trust in actors or a related variable. Although the theoretical foci of these articles are – as mentioned earlier – disparate, some common themes can nevertheless be distilled. Presenting the large majority of these papers, we divide our analysis into four major categories of drivers of trust: trustor-related variables, trustee-related variables, country-related variables and issue/sector-related variables. When discussing trustor-related variables, an overview is given of factors relating to the citizen that trusts with another actor, which may range from personal characteristics to beliefs, attitudes and perceptions. With regard to trustee-related variables, we focus on the characteristics of the actor that is being trusted by a citizen and concerns aspects such as perceived fairness or perceived performance of the actor. The discussion of country-related variables pertains to macro-level characteristics, such as cultures, economies or legal traditions. Finally, issue and sector-related variables relate to specific events or sectoral developments that may affect levels of trust among citizens.

3.2.2.1 Trustor-related variables

One of the predominant avenues of research concerns the characteristics of trustors as a determinant of trust relationships. In this line of inquiry, variables may range from personal characteristics to attitudes and beliefs, creating a diverse palette of potential drivers. Here, we discuss the drivers most frequently investigated in our sample. We start by discussing several personal characteristics that may influence trust, before moving on to attitudinal, status and behavioral antecedents.

Personal characteristics (generalized trust, age, gender and health)

Among personal characteristics, possessing a predisposition for generalized trust finds relatively consistent support among the reviewed manuscripts as a predictor of trust in government, trust in other actors and corruption, with Pitlik & Couba (2015) finding that those individuals displaying low generalized trust in others also display relatively low amounts of trust in governmental and private actors. Similarly, Buriak et al. (2019) find that higher interpersonal trust has a positive effect on trust in banks, while finding no significant effect of trust in courts and trust in governments on trust in banks. Dellmuth & Tallberg (2015) use a slightly

different approach, measuring general confidence in political institutions as a predictor for trust in UN, finding it to be an important predictor of trust in international organizations. Predispositions of individuals towards trusting government and other actors may also be formed through other relatively unchangeable factors such as age, gender, and health. Women for instance seem to have higher levels of political trust – which can be defined as trust in the performance of political systems and institutions – than men (Coromina & Kustec, 2020; Mattila & Rapeli, 2018), while age seems to be negatively associated with trust (Coromina & Kustec, 2020; Garciá-Albacete, Lorente, 2019). Reher (2018) moreover notes that possessing a disability may be negatively related to political trust, further suggesting that health may be a predictor of trust.

Education and social status

Another individual-level predictor which enjoys relatively consistent support is the effect of education and social status on institutional trust. Boyadjieva & Ilieva-Trichkova (2015) for instance find this relationship to hold for most countries in their sample, although Slovakia and Bulgaria were notable exceptions, while Aydin & Şekercioğlu (2016) find that education raises confidence in judicial actors, while Ruelens et al. (2018) find support that education – used as a proxy for social status – is positively associated with trust in national parliament. Van Erkel & Van der Meer (2016) nuance the relationship between education and trust, observing that the positive impact of macroeconomic performance on political trust is moderated by education, such that lower educated individuals are impacted more strongly by performance. Kołczyńska (2020) furthermore argue that the relationship between education and trust may itself be subject to country-level mediators, with their results showing that countries with higher levels of democracy display a stronger effect of education on political trust. Although support for the role of education in determining trust is thus found frequently, the variable seems to be intertwined with multiple macro-level factors. Contributions focusing more specifically on social status also find positive effects. Kotze & Garcia-Rivero (2017) for instance find that elites have more trust in institutions than the general public, while Dotti & Magistro (2016) observe a greater decline in trust in institutions among respondents from lower social strata, although Koivula, Saarinen & Räsänen (2017) suggest these dynamics may differ across party boundaries, suggesting that political family plays a moderating or mediating role. Thus, it seems that although variables such as education and social status are generally associated with positive effects on trust, they are also highly dynamic, either being mediated or moderated by country-level, political and time-dependent variables.

Political ideology, beliefs and attitudes

Among the most prominently studied themes is the influence of ideals and political beliefs on trust in government and politics. In this context, it is perhaps relevant to start with Hooghe, Marien & Oser (2017)'s observation that high levels of political trust are not necessarily desirable. They find that highly idealistic respondents frequently perceive less political trust, in particular in countries where quality of government is limited. As such, the negative effect of strong democratic ideals may be indicative of critical citizens. Other contributions suggest that trust in government may be tied to political beliefs, with individuals with populist ideas and left-authoritarian citizens being observed to have lower levels of institutional confidence (Koivula, Saarinen & Räsänen, 2017; Hillen & Steiner, 2020). Similarly, Mingo & Faggiano (2020) find that disinterest in politics, fluctuating voters and those against classic political demarcations exhibit greater mistrust in institutions. Piterová & Výrost (2019) moreover find that individuals with social-democratic attitudes towards welfare possess more institutional trust than individuals with conservative, liberal or radical ideas on welfare policies. Although not directly measuring political preferences, similar findings have been put forward with regard to fears of migration, with both Chacha & Kobayashi (2018) and Jeannet (2020) finding that such fears reduce trust in government, while Brosius, Van Elsas & De Vreese (2019) find a negative impact of refugee news coverage on trust in government among right-wing voters specifically. Together, these findings suggest that recent surges in populism and anti-immigration attitudes are related to reductions in trust in government and politics. Simultaneously, it has been noted that factors such as environmental activism are positively related to trust (Marquart-Pyatt, 2016). Finally, it is notable that while ideology and political beliefs thus seem to predict political trust, no such relationship has been found in the context of trust in press

(Hanitzsch, Van Dalen & Steindl, 2018), suggesting that the variable may be particularly relevant in predicting levels of trust in public sector and political entities.

Political participation/involvement

Similarly, there could be relevant effects related to active political involvement. Bozogáňová & Výrost (2019) point to this based on descriptive analyses, finding that citizens participating in the political process have higher average levels of trust in various national-level public entities (e.g. parliament, legal system and police), as well as higher levels of trust in the EU and the UN. Hooghe & Kern (2015) provide further context to this argument by finding no relationship between party membership and political trust and observing that political trust instead seems to be determined by perceptions of closeness to a political party. These results suggest not only that recent reductions in party membership may not be problematic from a trust perspective, but that analyses of political involvement need to consider the heterogeneous form such involvement may take. Turper & Aarts (2017) provide further nuance by finding that political sophistication, an indicator construed by combining measures for university education vs. other education levels and high/low political interest, produce significant albeit minor effects on political trust. Finally, it is noteworthy that being a civil servant seems to have a positive effect on trust (Van de Walle & Lahat, 2017), suggesting that broader conceptualizations of involvement in the public sector may also be a relevant avenue for inquiry.

Migrant status

Trust may also differ per social group, with some attention being devoted to the different level of trust in government that migrants or ethnic and religious minorities may have. Results seem mixed, however. On the one hand, Helliwell, Wang & Xu (2016) find no evidence that migrant status is related to political trust, arguing that migrants' attitudes are determined by social norms in their host country. A similar observation is provided by Voicu & Tufiş (2017), who find that living in a country where others are confident in institutions is a better predictor of confidence than country-of-origin variables. Conversely, Isani & Schlipphak (2017) note that European Muslims are relatively trustful of national institutions, an attitude that extrapolates to international organizations, thus arguing that a positive effect exists. The mixed results on this driver suggests that further research may be necessary to evaluate competing insights or potential mediators. A noteworthy related contribution shows that different subtypes of migrants may provide a potential moderator, with first-generation migrants perceiving more discrimination than second-generation migrants (Jeong, 2016). Another noteworthy addition by Reher (2018) finds that perceptions of discrimination among disabled citizens decreases these citizens' trust.

Exposure to media

An increasingly relevant area of attention is the consumption of and exposure to (new forms of) media. Ceron and Memoli provide two contributions on this topic, with the first finding that access to online media has divergent effects on political trust, depending on media type. Where citizens consume news content from websites a positive effect on political trust is found, while consumption of news from social media is associated with a negative effect (Ceron, 2015). Ceron & Memoli (2015), after noting that media often act as echo chambers, explores whether exposure to counter-attitudinal information affects respondents' trust in government, but finds no effects. You & Wang (2020) furthermore find that internet use in general reduces trust in political institutions, although this effect is stronger in regimes where offline expressions are restricted. Finally, Brosius, Van Elsas & De Vreese (2019) find that news coverage of immigration reduces trust in EU, although the effect is mediated such that left-wing citizens show no changes in evaluations, while right-wing oriented citizens show a stronger reduction in trust in EU. Together, these studies suggest a complex relationship between internet usage, news consumption and trust, in which specific internet sources may play an important mediating role.

3.2.2.2 Trustee-related drivers

Trustor-related drivers are an interesting topic of inquiry, but often beyond the control of governments attempting to foster trust. It is therefore also interesting to consider how attributes of trustees, such as governments, politicians and the EU can codetermine levels of trust in government, politics or related variables. This section outlines several major branches of research on trustee-related factors, focusing on governmental performance, justice, reliability and independence.

Government performance and responsiveness

A major discussion in several branches of political science is whether government and politicians' performance can improve attitudes toward government among citizens. Several contributions in our sample deal with this topic by studying the impact of performance on trust in government. Bešić (2016) finds that satisfaction with government is the most reliable predictor of confidence in institutions in six countries. Goubin (2018) moreover finds that politicians' responsiveness to citizens is strongly related to political trust, albeit this relationship is less strong in relatively unequal societies. Bustikova & Corduneanu (2017) find a significant impact of historic state capacity on trust in the civil service, using historical infant mortality rates as a proxy for historic state capacity. The studies in our review thus consistently suggest that – at least at the macro-level – governmental performance is related to trust in politicians and governments.

Perceptions of fairness and/or (procedural) justice

A related discussion pertains to the degree to which a government's or another actor's actions are considered fair and/or procedurally just. In this category, we find contributions dealing with the effects of discrimination (Piatkowska, 2015; Jeong, 2016) and fair treatment (Ariely & Uslaner, 2017; Marien & Werner, 2019) on trust in government or related actors. The findings of these contributions are consistent, with discrimination reducing confidence in police (Piatkowska, 2015) and perceptions of fair treatment by government reducing the belief that corruption exists (Ariely & Uslaner, 2017). Jeong (2016) argues that discrimination should itself be seen as a multidimensional construct, distinguishing between discrimination based on color, nationality, religion, language, ethnicity, age, language, gender, sexuality, and disability. While most of these forms of discrimination reduce political trust among first generation immigration, effects of religion and language-based discrimination disappear among second-generation immigrants (Jeong, 2016). This illustrates that individual-level characteristics may moderate the relationship between trustee-related characteristics and trust. Marien & Werner (2019) argue, moreover, that perceptions of fair treatment not only result in higher levels of trust in political institutions, but in turn also in an increase in cooperative attitudes of citizens (see also the discussion on effects of trust in government below).

Relatedly, there are limited indications that the perceived reliability and independence of government has a role to play in the formation of citizens' trust. Choi (2018) observes that the politicization of bureaucracies decreases citizens' trust in these organizations, presumably due to lower perceived impartiality. Moreover, Garoupa & Magalhães (2020) observe that perceived independence increases public trust. Together, these contributions suggest that classic values of the public sector remain important in fostering trust, and that improving procedural justice, fairness and/or independence could increase trust in government.

3.2.2.3 Country-related drivers

The surveys studied in the context of this review provide considerable opportunities for international comparative research. It is therefore unsurprising that country-related drivers are a significant topic of research among manuscripts using these surveys, with two main lines of inquiry emerging. The first deals with the effects of the economic crisis, while the second concerns differences between socio-political country groups.

Economic crisis

Given our focus on 2015-2020 articles, it is perhaps unsurprising that the effect of the economic crisis on levels of trust across various countries has been a core topic in studies based on surveys such as the ESS and WVS. In this context, multiple works conclude that the economic crisis indeed had a negative impact on political trust in various (Hooghe & Okolikj, 2020; Obert, Theocharis, Van Deth, 2020; Kroknes, Jakobsen & Grønning, 2015; Coromina & Kustec, 2020; Kang & Oh, 2020), although Hooghe & Okolikj (2020) also observe that gradual post-crisis recovery was associated with a gradual recovery of political trust. Moreover, countries which were heavily affected by the crisis and/or possessed relatively low-capacity public institutions exhibited higher decreases in citizen's trust in political institutions (Kroknes, Jakobsen & Grønning, 2015; Obert, Theocharis, Van Deth, 2020).

Socio-political country group

Several other contributions consider the impact of sociopolitical groupings of countries. Marozzi (2015) describes European country group differences between trust in public institutions, noting that Scandinavian countries and Northern European are generally near the top ranking while post-communist countries generally rank low. Additionally, several Southern European countries, namely Cyprus, Spain and Portugal also exhibit relatively low levels of trust in public institutions. Epperly (2019) casts doubt on the argument that post-communist status is necessarily the variable reducing trust in these states, however, finding instead that poor institutional performance accounts for this phenomenon. Diwan, Tzannatos & Akin (2018) analyze how Arab countries compare to other Muslim-majority countries in terms of trust in state institutions, finding that Arab countries exhibit lower levels of trust and higher levels of perceived corruption. Two manuscripts in our review deal with the impact of national culture on trust in government – a number that was lower than expected. Drawing in part on Hofstede's dimensions of national culture and relating these to levels of corruption, Mornah & Macdermott (2018) find that more collectivist, high power distance, highly masculine, short-term oriented and low indulgence cultures tend to exhibit higher levels of corruption. Zhu, Habisch & Thøgersen (2018) furthermore note that autonomy versus embeddedness (denoting cultural predispositions to openness for change), egalitarianism versus hierarchy and harmony versus mastery are significantly related to trust in government such that higher levels of autonomy, egalitarianism and harmony produce higher trust.

Societal systems

Other manuscripts use governmental, traditional and societal systems as their independent variable. Cammett, Lynch & Bile (2015) find that private national healthcare systems increase perceived risks of not receiving care, in turn functioning as a reason for lower trust in the healthcare system. Navarrete & Castillo-Ortiz (2020) moreover find that legal systems designed to incorporate constitutional courts and that possess a Romano-Germanic legal tradition yield lowered perceptions of judicial independence and judicial fairness, two effects close to sub-dimensions of trust (in particular integrity). Lu, Qi & Yu (2019) moreover find that countries where internet blockage takes place generally have higher levels of political trust, suggesting that restricted information availability may be affecting perceptions. Finally, taking a more general view, Khan (2016) finds that perceived quality of government tends to increase political trust among citizens.

3.2.2.4 Issue and sector-related drivers

Finally, a limited amount of contributions deals with specific events or sector-related drivers of trust. Although these contributions are relatively heterogeneous in nature, they warrant attention as they highlight the dynamic nature of trust. Given the studied time-period of 2015-2020, it is perhaps unsurprising that themes such as the refugee crisis, terrorism and corruption are prominent themes. Nevertheless, the studies listed here could hold lessons for similar events and their effects (or lack thereof) on trust in government and related variables in other time-periods.

Disillusionment of citizens

A first category of papers considers the disillusionment of citizens on various topics. Spierings (2017) for instance describes the aftermath of the Arab spring and concludes that recent reductions in political-institutional trust can be attributed to unfulfilled promises made during regime change and/or democratization. Citizens have not seen significant improvement on various social problems, likely negatively impacting their trust evaluations. Simultaneously, Ishiyama & Pechenina (2016) note that Middle Eastern states having experienced an uprising displayed an increased level of institutional trust compared to those that did not experience an uprising, although social and interpersonal trust declined.

Major events: terrorism and corruption scandals

A second category of papers in concerned with the impact of terror attacks on trust in government. Doosje, Van Der Veen & Klaver (2018) and Arvanitidis, Economou & Kollias (2016) find a negative effect directly following the occurrence of an attack, although trust levels recover again later. Ares & Hernández (2017), using differences in results between ESS survey interviews conducted before and after the uncovering of a major corruption scandal, find that there is a strong negative immediate effect on trust in politicians, although this effect becomes less pronounced in later months. These results suggest that although dips are temporary, major breaches of citizens' trust can lead to significant reductions in said trust.

Long-term socio-economic phenomena

Other contributions deal with less event-based phenomena, arguing instead that long-term socio-economic variables may also have an impact on trust in government and related variables. Farvaque, Hayat & Klaver (2017) find that expected inflation can significantly reduce trust in the ECB, although they find no relationship between actual inflation and trust in ECB, indicating that such factors may be related to perceived performance. A similar result is found for international education rankings and their influence on trust in education in different state (Pizmony-Levy & Bjorklund, 2018).

Euroscepticism and its drivers

A final set of noteworthy contributions attempt to explain recent rises in Euroscepticism measured as trust in government. The first of these contributions is provided by Schoene (2018), who notes urban areas display somewhat higher levels of trust in EP, although this association was relatively weak. A second contribution is provided by Kang & Oh (2020), who argue that not only the recession, but also the recent refugee crisis had a negative impact on trust in the EU.

3.2.2.5 Summarizing the drivers of trust in government and trust in other actors

Perhaps the most notable feature of research into the antecedents of trust in government and related actors is the heterogeneity of potentially relevant factors. Policies with positive effects on trust in government seem to 'compete' with various individual level factors, ranging from age to health, as well as country-related factors such as overarching socio-political factors. Despite the conclusion that trust is thus at least in part formed by factors beyond the control of governments, there are notable indications that governments' performance and modes of governance are still capable of enhancing or reducing trust in government to some degree. Improving performance, taking into account citizens' perceptions of procedural justice and promoting governmental reliability and independence seem to provide viable avenues to improve trust in government and related factors. Conversely, long-term disillusionment and major corruption scandals seem to produce downturns in trust, warning that underperformance is likewise a risk to trust in government. For our purposes, one downside of studies based on large multi-country surveys such as the ESS or WVS is that most trustee-related variables are operationalized at the macro-level. While these studies thus provide relevant insights into the overarching elements that shape the trustworthiness of governments, they are often too general to draw conclusions on meso-level variables such as the influence of specific regulatory

regimes on trust. Future efforts could be dedicated at more specific regulation and enforcement-related topics, including trust in specific sectoral regimes and sectoral governmental performance.

Another notable feature of the research covered here is an overwhelming emphasis on trust in government and political trust. The query underlying our dataset explicitly sought to include other regulatory regime actors such as the press, banks, major companies and academia. However, beyond a small number of contributions on trust in press (e.g. Hanitzsch, Van Dalen & Steindl, 2018), there seems to be a lack of international survey-based research on trust in non-governmental actors. This suggests a gap in the current literature, providing an avenue for research investigating e.g. the co-evolution of trust in non-governmental regime actors and their governmental counterparts.

3.2.3 Effects of trust in government and related variables

Our review furthermore highlights that trust in government, trust in other actors and related variables can have wide-ranging effects. As with the drivers of trust, the sheer variation of effects of trust studied in the literature is interesting in and of itself. Here, we first discuss the most frequently discussed category of effect of trust in government and related variables, namely effects on political participation, voting behaviour and political activism. Subsequently, we primarily devote attention to other variables which have received reasonable amounts of attention in the studies incorporated in our review, namely impacts on health- and well-being, economic and business-related effects, effects on support for, satisfaction with and compliance with government (policies and actions) and the impact on attitudes toward immigration and support for populist parties/ideals.

3.2.3.1 Participation in democratic and political processes

Most frequently studied are variables related to political activism, participation and voting behavior. There seems to be some evidence for the argument that higher levels of trust or confidence in government increase citizen participation in democratic and political processes, having a positive effect on variables such as voting behavior and willingness to sign petitions (e.g. Marchenko, 2016; Ejrnæs, 2017; Lee & Schachter, 2019). However, the relationship is likely more complex, depending on the exact specification of the dependent variable and the trustor examined. Lee & Schachter (2019), while finding a positive effect on voting and petition-signing, for instance also find a significant negative relationship with attending demonstrations. Furthermore, Katsanidou & Eder (2018) find evidence that trustor-trustee dyads matter, arguing that trust in parliament increases elite participation while grass-roots participation is increased by a lack of confidence in institutions. Corruption similarly remains subject to discussion as to whether it produces positive or negative effects on political participation, activism and voting (Haveric, Ronchi & Cabeza, 2019). Some studies find that corruption reduces the inclination towards such behaviors (e.g. Sundström & Stockemer, 2015). Others, however, have posited that the relationship is likely more complex. The sum of these results suggests that trust and corruption matter for political participation, although it remains unclear how exactly. Going forward it will be important to replicate results, in particular regarding potential mediators of relationships between trust, corruption and political participation.

3.2.3.2 Satisfaction with, support for and compliance with governmental policies and actions

A topic of interest for the study of regulatory regimes, specifically, is the role that trust in government, corruption and related variables play in fostering satisfaction with, support for and compliance with governmental positions and actions. These topics are explored in several interrelated branches of the literature on trust and corruption effects. First, there seems to be a consensus that trust in government is positively related to satisfaction with and perceptions of responsiveness of government (Weber, Steinmetz & Kabst, 2017; Bowler, 2017; Huang, 2018). Moreover, although the causal direction of closely related variables such as satisfaction with government and trust in government is often subject to debate, Weber, Steinmetz & Kabst (2017) provide evidence that a reciprocal relationship exists using an instrumental variables approach. Simultaneously, Huang (2018) points out that different societies may display different

relationships, observing that in China the trust-satisfaction level primarily manifests on the local level, while it exists primary on the central level in Taiwan, suggesting that the relationship does have important nuances.

Trust in government may also affect support in various areas, such as EU integration or on sectoral issues. Genna (2017) and Daniele & Geys (2015) respectively find that transnational trust increases support for EU integration while mistrust of EU institutions decreases such support. Ejrnæs & Jensen (2019) furthermore observe that discontentment is linked to reduced support for integration in low-corruption Member States, while citizens in high-corruption Member States are more supportive of integration overall. Similar effects have been found for sectoral policies. Corruption may reduce support for public spending or international financial assistance (Hedegaard, 2018; Bauhr & Charron, 2018) and foster skeptical attitudes towards new environmental taxes or invasive public security measures (Mansfeldová et al., 2019; Fairbrother, Sevä & Kulin, 2019). Conversely, institutional trust has been found to foster support for welfare and environmental policies (Daniele & Geys, 2015; Otto & Gugushvili, 2020; Sivonen, 2020; Davidovic, Harring, Jagers, 2020). In addition to support for and satisfaction with governments and their policies, trust in government and related variables may also stimulate adherence to those policies, although evidence for this was limited in our review. Forteza & Noboa (2019) provide some evidence that confidence in government, the civil service and the justice system may reduce tax evasion. Simultaneously, perceptions of fair treatment and procedural justice – concepts close to the integrity and benevolence dimensions usually incorporated in definitions of trust – regarding police conduct increased willingness to cooperate with the police (Moravcová, 2016; Marien & Werner, 2019).

3.2.3.3 Economic effects

Other studies have looked at various economic and business-related effects of trust in government and corruption. Nistotskaya, Charron & Lapuente (2015) find a significant negative effect of corruption on a region's amount of SME's and a significant positive effect for perceived impartiality on the same dependent variable, suggesting that confidence and corruption are related to business venturing. Heinemann & Grigoriadis (2016) find that low trust in government may reduce the public's willingness to accept major economic reforms. Other studies have taken a more overarching approach, finding that trust is positively related to GDP (Jalil & Rabab, 2017; Zakharov et al., 2020). Together, these findings provide relatively consistent support for the argument that societal levels of trust in government may positively influence nations' economies.

3.2.3.4 Socio-psychological effects

Another major subject has been whether trust in government, corruption and related variables may influence well-being and/or (self-)rated health. Seven studies address this topic, with findings being relatively consistent. First, authors point to a negative relationship between corruption and health and well-being, measured as mental health (Van Deurzen, 2017) and life satisfaction (Ciziceno & Travaglino, 2019). Trust or confidence in government, conversely, tend to be associated with higher levels of subjective well-being (Neira et al., 2018; Venetoklis, 2019) and life satisfaction (Macchia & Plagnol, 2019; Ciziceno & Travaglino, 2019). Rönnerstrand & Lapuente (2017) furthermore report higher antibiotics use in regions where perceptions of corruption are higher and speculate that the health system may be abused for personal gain in more corrupt systems. Their contribution thus provides evidence of a specific mechanism through which corruption may impact health-related variables, although this is likely but one of many mechanisms.

3.2.3.5 Support for immigration policies and populism

It is also worth devoting some attention to more normatively loaded dependent variables that have been studied, in particular regarding immigration and support for populist parties. It has for instance been argued that trust in governments may produce more accepting attitudes towards ethnic or religious out-groups. Ekici & Yucel (2015) indeed find that trust in EU, as well as generalized trust, are negatively associated with prejudice against other religious and ethnic groups, although Chang & Kang (2018) only find mixed evidence

for the impact of trust in political institutions on attitudes toward immigration. With regard to support for populist parties, Staerklé & Green (2018) find that institutional trust was lower among individuals who identify as populist than among left- or right-wing identifiers, while Agerberg (2017) finds that perceived corruption increases support for populist parties. Generally speaking, these results are in line with the idea that disenfranchised individuals who perceive current political climates to be hostile towards them may have a reduced propensity to support migration, and an increased propensity to support populist parties, although Chang & Kang's (2018) results warn that additional research is necessary before concluding this definitively.

3.2.3.6 Summarizing effects of trust in government and related variables

As with the drivers of trust, perhaps the most notable feature of studies investigating the independent effect of variables such as political trust, trust in government and corruption is their wide-ranging nature. In addition to likely candidates such as support for certain policies, effects have been found on variables such socio-psychological well-being and business venturing. The existence of effects on 'downstream' factors such as economic performance reminds us of the supporting role of governments in societies, suggesting that the trustworthiness of governments can facilitate the performance of other sectors. More directly tied to governments' internal functioning, there seems to be relatively consistent support that trust in government has a positive effect on factors such as support for policies and voluntary compliance. Coupled with our earlier discussion on the drivers of trust, which suggested there is some leeway for governments to increase citizen trust by increasing performance or acting in fair ways, this suggests that governments may to some degree see positive actions towards citizens rewarded with stronger levels of support and assent. As with studies on drivers of trust, the absence of studies regarding trust in non-governmental actors is notable. Future studies could consider potential interaction effects between trust in government and trust in other actors on other variables, thus taking into account trust in regulatory regime partners more comprehensively. Simultaneously, such studies may be relatively difficult to perform on major surveys such as the ESS and WVS, given the potential common method bias issues that threaten the correct estimation of effect sizes between multiple trust variables. This suggests that while an avenue exists for broader studies into trust, these would have to be based either on original survey data or make use of solutions such as instrumental variables estimation.

3.2.4 Trust dynamics

Up until now, the discussion of trust has remained relatively static, positing trust as either an antecedent or an effect of other factors. In reality, trust is a strongly dynamic factor, characterized by virtuous and downward spirals and complex interrelationships between trust variables. Articles in our sample of articles detail various of these processes, some related to sectoral events (such as the financial crisis and terrorism, for such event-based predictors see section 3.2.2.4), but others discussing trust repair, long-term societal developments impacting levels of and associations between different forms of trust and related variables.

3.2.4.1 (Mis)matches between reality and expectations

A first relevant group of studies is dedicated to dynamic trust evolutions devote attention to potential (mis)matches between expectations and governmental performance, which may produce breaches of trust. Such a mismatch between expectations and changing realities comes to the forefront in Spierings' (2017) analysis of the Arab spring's aftermath (and the limited nature of reforms following the Arab spring), who points to disappointment in implemented reforms reducing both political and social trust. Other processes may also generate negative trust trends, with Jeannet (2020) finding that the relative performance of political institutions in the context of immigration policies increases political distrust among sub-groups of European citizens. While describing disparate processes, these studies all suggest that disillusionment with political and governmental processes may produce long-term and gradual downturn processes in trust development. Simultaneously, Hooghe & Okolikj (2020), although observing a steep decline in political trust following the financial crisis (see also section 3.2.2.4), note that trust repair also seems possible. Starting out with the

expectation that the crisis would create a drop in political trust that would remain consistent in subsequent years, they instead find that economic recovery improved trust to pre-crisis levels. Kang & Oh (2020) reach similar positive results for the relationship between post-crisis economic recovery and trust in the EU. They argue that more recent manifestations of Euroscepticism are instead related to other crises, including the migration crisis. These results suggest that even major downturns in levels of trust in society may be turned around when governments can communicate that the problem underlying this downturn is solved.

3.2.4.2 Long-term evolutions in trust

Related to the literature on mismatches is a stream of research on long-term dynamics of the citizen-government trust dyad. Sarracino & Mikucka (2017) provide an interesting perspective in attempting to determine trends in social capital among European countries, including whether divergences and convergences of types of trust have occurred. Although their thorough review produces mixed results, one prominent finding was that differences in trust in political institutions and public services tended to increase across European countries. Simultaneously, their diverging results warn that theories cannot always be extrapolated to other countries and that local explanation may be necessary. Doosje, Van der Veen & Klaver (2018) take a long-term view of trust relationships following terror attacks which, despite being discussed under sectoral drivers, is also useful to mention here. Although they do find an effect of terrorist attacks immediately following the event on institutional trust, this dip is temporary and rebounds in later years, suggesting that not all trust breaches produce long-term dynamic trends in trust in government. Moreover, it is worth mentioning that political trust was not affected at all in their results. Bustikova & Corduneanu-Huci (2020) use another approach to investigate long-term trends in trust in government. They argue that historic state capacity should inform current-day levels of trust in civil service, finding that historic infant mortality rates are a predictor of current-day levels of trust. Together, results on post-crisis recovery (Kang & Oh, 2020; Hooghe & Okolikj, 2020) and research into terrorist attacks (Doosje, Van der Veen & Klaver, 2018) suggest that although trust breaches may occur, overall levels of political trust and trust in government could be surprisingly resilient in the long-term, although Sarracino & Mikucka (2017) do show that limited differences may gradually emerge between countries.

3.2.4.3 Interrelationships between trust variables

Another branch of the literature has looked at whether different forms of trust or variables substantially related to trust may influence one another. Some of the found relationships are quite intuitive, with various contributions suggesting positive associations between trust variables (e.g. Hanitzsch, Van Dalen & Steindl, 2018 for trust in press and political trust; Iglič, Rözer & Volker, 2020 for political and social trust). Moreover, several contributions have noted positive relations between trust at the national and international levels (Lamprianou & Charalambous, 2018; Brosius, Van Elsas & De Vreese, 2019; Ruelens & Nicaise, 2020). Lamprianou & Charalambous (2018) for instance observe that trust in European Parliament may form a proxy for trust in the UN, although higher levels of political interest and knowledge of UN programmes leads to more differentiated trust evaluations. This suggests that citizens may judge public organizations based on similar organizations in the absence of sufficient knowledge, using evaluations of the former as a heuristic tool to form trust evaluations. Similarly, Brosius, Van Eslas & De Vreese, 2019 observe that trust in national parliament is positively related to trust in EU. Furthermore, their results suggest that exposure to positive media information on an EU summit increased the coefficient for individuals with high trust in national parliaments, while not doing so for individuals with low trust. The authors argue that this may lead to polarization: those who already trust substantially increase their level of trust in the EU, while low trustors will remain at a roughly similar level of trust (Brosius, Van Elsas & De Vreese, 2019). Focusing on the interrelationship between two trust variables on the same level of government, Cinar & Ugur-Cinar (2018) furthermore note that although trust in government is correlated with trust in public organizations such as the civil service, judiciary and law enforcement, the strength of this association varies across countries, arguing that this variation is due to the degree to which the executive is restrained in a particular country.

Finally, Buriak et al. (2019) find evidence that similar relationships may exist for systemic private actors, such as banks. Their analyses indicate that interpersonal trust is positively correlated with trust in banks, with this effect being strengthened by institutional factors such as the rule of law. These contributions illustrate the interrelated nature of various forms of trust, but suggest that the relationships may be more complex than is often anticipated. While high correlations between trust concepts are likely to emerge, mediators on the country- and individual levels are still likely to cause substantial differences. Differences in information exposure seems a particularly interesting mediator for further study in this regard, having been found to affect the degree to which one trustee is used as a heuristic proxy for another (Lamprianou & Charalambous, 2018) and to impact some individuals more strongly than others, depending on these individuals' prior beliefs (Brosius, Van Elsas & De Vreese, 2019).

Other contributions point to interesting subtleties in the relationship between trust in government and related variables such as corruption (Houston et al., 2016; Obert, Theocharis & Van Deth, 2019). Ejrnæs & Jensen (2019) demonstrate that national levels of corruption and distrust in national establishments impact distrust in the EU, but observe an interaction effect: in countries where corruption levels are low, distrust in national establishments is positively related to distrust in EU integration, while for relatively corrupt countries distrust in national establishment increases trust in EU integration. Simultaneously, Obydenkova & Arpino (2018), although obtaining similar results to Ejrnæs & Jensen (2019) in the pre-crisis period, do not observe such a relationship between national-level corruption and trust in EU in the post-crisis period. Similarly, perceptions of fair treatment are arguably closely related to trust dimensions such as integrity and benevolence, as well as the concept of corruption. It is therefore perhaps unsurprising that Marien & Werner (2019) find that perceived fair treatment by police is positively correlated with institutional trust, although it is noteworthy that this association seems to differ across countries (such that the relationship is stronger for Northern European countries). Again, levels of corruption seem to be the driving factor in this interaction effect, with perceptions of fair treatment being more important for evaluations of institutional trust in countries with relatively low levels of corruption. Similarly, Ciziceno & Travaglino (2019) find evidence that corruption may influence institutional trust, which in turns influences life satisfaction (although Baboš, 2015 finds no evidence of such a relationship). Together these results thus point to sometimes positive, but also sometimes mediating effects between different variables related to trust. However, given the closely related nature of these variables (with some variables arguably overlapping with or being proxies for others), the causal direction between these variables remains open for debate. Perhaps the most consistent and interesting result of this literature is the multi-level impact of corruption: it seems that some citizens have been convinced that EU integration may alleviate national corruption issues. Given recent exposure of limitations in the ability of the EU to do so, it will be interesting to consider whether these attitudes will remain consistent over the long-term, or will begin to change in future survey results.

3.2.4.4 Other topics

Two final interesting topics discussed regarding trust dynamic include immigrants' trust and person-oriented trust perspectives. Voicu & Tufiş (2017), studying the political trust of migrants, observe that both home-country socialization during childhood and the host-country context are drivers of political trust, although host-country influences dominate. They argue that host-country cultures of political are thus particularly relevant in determining migrants' political trust. Ruelens & Nicaise (2020) apply latent class analysis to individuals' trust in national- and EU institutions. Such analyses produce typologies of individuals based on class characteristics. Ruelens & Nicaise (2020) specifically observe the existence of skeptical citizens, who have low trust in institutions regardless of governmental level, trusting citizens, who have high trust in both national- and EU institutions and two mixed types. The first type, EU supporters, trusts EU institutions but possesses comparatively low trust in national institutions. The final group concerns nationalists, which hold inverse attitudes from the EU supporters, being trustful of national institutions but not trusting EU institutions. Interesting is moreover that skeptical citizens form the largest class, followed by trustful citizens, EU supporters and nationalists. Both Voicu & Tufiş (2017) and Ruelens & Nicaise (2020) thus show that trust

in government and political trust are formed in complex, context-dependent ways on the individual-level and that attitudes (and combinations of attitudes) may differ considerably among citizens. Further analysis is necessary to determine whether trust relations may also differ based on different sub-groups on society, such as those identified by Ruelens & Nicaise (2020).

3.2.4.5 Summarizing patterns and dynamics of trust in government and trust in related actors

Trust is an inherently dynamic phenomenon, as is captured by a substantial amount of the studies reported in this subsection. Even when dealing with general trust in government and political trust variables, it seems it is very possible for trust breaches to occur when reality fails to live up to citizens' expectations of governments and politicians. This is a general point to take into account for scholars and practitioner dealing with specific regulatory regimes: failures of regimes related to policies such as economics, social welfare and immigration may spark drops in citizen trust in government, which may in turn have effects on policy support and voluntary compliance (as was seen in the previous subsection on the effects of trust in government). Simultaneously, in a perhaps more optimistic note, Hooghe & Okolikj (2020) and Doosje, Van der Veen & Klaver (2018) suggest that trust repair may follow decreases in trust in government, implying that crises need not necessarily produce permanent effects on trust in government.

An interesting point in the literature on the relationship between trust in government and corruption is that both variables may be related in dynamic ways. Findings that national-level corruption may foster trust in international organizations point at possible substitution effects, i.e. that citizens may place their faith in other entities than the national government to safeguard their positions. When combining these findings with results on the negative effect of mismatches between expectations and realities on trust, one may wonder whether a risk is inherent in this effect. If trust in organizations such as the EU is increased to levels beyond the EU's actual capability to deliver (e.g. due to limitations in competences or political feasibility), initial substation effects could be followed with substantial disillusionment and drops in trust in the post-accession phase (or, alternatively, due to the postponement of accession). If this reasoning holds true, such effects could suggest that moderating trust in government may in some cases actually be beneficial for at least some public entities.

Again, only a small number of studies in this review seemed to be interested in studying the dynamics of trust in non-governmental actors, with Hanitzsch, Van Dalen & Steindl (2018) studying trust in press and Buriak et al. (2019) studying trust in banks. A viable avenue for further research may therefore be the interrelationships between trust in public actors and other systemic actors in regulatory regimes, in particular when related to major societal developments such as crises or the installation of new governments following events such as the Arab spring (with the last perhaps being a topic mainly relevant for non-Western countries). Are downturns in trust in political actors following certain events for instance associated with drops in trust in press, corporations or banks? Or are these non-governmental actors to some degree shielded from the impact of crises on trust in public sector actors? Answering such questions may have important implications for policy-making in post-crisis societies. If corruption scandals for instance strongly reduce trust in private actors involved in such scandals, this may imply greater support for regulation with limited involvement of private actors. Bridging sectoral divides in research on trust in actors involved in the regulatory process thus seems an important area of attention for future studies.

Table 8: Overview of trust relationships studied

Category	Variable	Source
Drivers for trust/distrust		
Trustor-related drivers(A)	1. Generalized trust	Pitlik & Couba, 2015; Buriak et al., 2019; Dellmuth & Tallberg, 2015.
	2. Personality traits a. Age b. Gender c. Health status (e.g. disability)	Coromina & Kustec, 2020; Garciá-Albacete, Lorente, 2019. Coromina & Kustec, 2020; Mattila & Rapeli, 2018. Reher, 2018.
	3. Education	Boyadjieva & Ilieva-Trichkova, 2015; Aydin & Şekercioğlu, 2016; Ruelens et al., 2018; Van Erkel & Van der Meer, 2016; Kołczyńska , 2020.
	4. Social status	Kotze & Garcia-Rivero, 2017; Dotti & Magistro,2016; Koivula, Saarinen & Räsänen, 2017.
	5. Political ideology, beliefs and attitudes	Hooghe, Marien & Oser, 2017; Koivula, Saarinen & Räsänen, 2017; Hillen & Steiner, 2020; Mingo & Faggiano, 2020; Piterová & Výrost, 2019; Chacha & Kobayashi, 2018; Jeannet, 2020; Brosius, Vam Elsas & De Vreese, 2019; Marquart-Pyatt, 2016.
	6. Political participation/ involvement	Bozogáňová & Výrost, 2019; Hooghe & Kern, 2015; Turper & Aarts, 2017; Van de Walle & Lahat, 2017.
	7. Migrant status	Helliwell, Wang & Xu, 2016; Voicu & Tufiş, 2017; Isani & Schlipphak, 2017; Jeong, 2016.
	8. Exposure to media	Ceron, 2015; Ceron & Memoli, 2015; You & Wang, 2020; Brosius, Van Elsas & De Vreese, 2019.
Trustee-related drivers (B)	1. Government performance, responsiveness to citizens	Bešić, 2016, Goubin, 2018, Bustikova & Corduneanu, 2017.
	2. Perceptions of fairness and/or (procedural) justice	Piatkowska, 2015; Jeong, 2016; Ariely & Huslaner, 2017; Marien & Werner, 2019.
	3. Perceived reliability and independence of government	Choi, 2018; Garoupa & Magalhães, 2020.
Country-related drivers (Y)	1. Economic crisis	Hooghe & Okolikj, 2020; Obert, Theocharis, Van Deth, 2020; Kroknes, Jakobsen & Grønning, 2015; Coromina & Kustec, 2020; Kang & Oh, 2020.
	2. Socio-political country group	Marozzi, 2015; Epperly, 2019; Diwan, Tzannatos & Akin, 2018; Mornah & Macdermott, 2018; Zhu, Habisch & Thøgersen, 2018.
	3. Governmental, traditional and societal system	Cammett, Lynch & Bile, 2015; Navarrete & Castillo-Ortiz, 2020; Lu, Qi & Yu, 2019; Khan, 2016.

Issue- and sector-related drivers (X)	1. Disillusionment of citizens	Spierings, 2017; Ishiyama & Pechenina, 2016.
	2. Major events: Terrorism and corruption scandals	Doosje, Van Der Veen & Klaver, 2018; Arvanitidis, Economou & Kollias, 2016. Ares & Hernández, 2017.
	3. Long-term socio-economic phenomena	Farvaque, Hayat & Klaver, 2017; Schoene, 2018, Kang & Oh, 2020. Pizmony-Levy & Bjorklund, 2018.
	4. Inflation, recession, financial crisis	Kang & Oh, 2020.
	5. Urbanization	Schoene, 2018.
Effects of trust/distrust		
Participation in democratic and political processes	Participation in democratic and political processes	Marchenko, 2016; Ejrnæs, 2017; Lee & Schachter, 2019; Katsanidou & Eder, 2018; Haveric, Ronchi & Cabeza, 2019; Sundström & Stockemer, 2015
Satisfaction	Satisfaction with and perceptions of responsiveness of government	Weber, Steinmetz & Kabst, 2017; Bowler, 2017; Huang, 2018.
Support, cooperation and voluntary compliance	1. Support for EU integration	Genna, 2017; Daniele & Geys, 2015; Ejrnæs & Jensen, 2019.
	2. Support for public spending, international financial assistance, introduction of new taxes, reforms	Hedegaard, 2018; Bauhr & Charron, 2018; Mansfeldová et al., 2019; Fairbrother, Johansson Sevä & Kulin, 2019; Heinemann & Grigoriadis, 2016.
	3. Support for governmental policies	Daniele & Geys, 2015; Otto & Gugushvili, 2020; Sivonen, 2020; Davidovic, Harring, Jagers, 2020;
	4. Willingness to cooperate with police	Moravcová, 2016; Marien & Werner, 2019.
	5. reduction in tax evasion	Forteza & Noboa, 2019.
Economic effects	1. Amount of SME's	Nistotskaya, Charron & Lapuente, 2015
	2. Economic reform	Heinemann & Grigoriadis, 2016.
	3. GDP	Jalil & Rabab, 2017; Zakharov et al., 2020
Socio-psychological effects	1. Health & well-being	Van Deurzen, 2017, Neira et al., 2018, Venetoklis, 2019.
	2. Life satisfaction	Ciziceno & Travaglino, 2019, Macchia & Plagnol, 2019
	3. Anti-biotics use	Rönnerstrand & Lapuente, 2017.
Support for immigration policies and populism		Ekici & Yucel, 2015, Staerklé & Green, 2018, Agerberg, 2017.

Patterns and dynamics of trust/distrust		
Processes of trust-building (virtuous cycles)	1. Economic recovery	Kang & Oh, 2020.
	2. Social capital	Sarracino & Mikucka, 2017.
	3. Recovery after terrorist attacks	Doosje, Van der Veen & Klaver, 2018
Processes of trust-depletion (vicious cycles)	1. The limited nature of reforms following the Arab spring	Spierings, 2017.
	2. Performance of political institutions in immigration policy	Jeannet, 2020.
	3. Financial crisis	Hooghe & Okolikj, 2020
	4. Terrorist attacks	Doosje, Van der Veen & Klaver, 2018.
Interrelationships between trust in government, trust in other actors, other trust variables, corruption and trust	1. Trust in government and trust in press	Hanitzsch, Van Dalen & Steindl, 2018
	2. Trust in government and social trust	Iglič, Rözer & Volker, 2020
	3. Trust in government at various governmental levels	Lamprianou & Charalambous, 2018; Brosius, Van Elsas & De Vreese, 2019; Ruelens & Nicaise, 2020; Ejrnæs & Jensen, 2019; Obydenkova & Arpino, 2018; Voicu & Tufiş, 2017; Ruelens & Nicaise, 2020.
	4. Various forms of trust in government (e.g. police, judiciary, civil service)	Cinar & Ugur-Cinar, 2018
	5. Trust in banks and interpersonal trust	Buriak et al., 2019
	6. Trust in government and corruption	Ejrnæs & Jensen, 2019, Houston et al., 2016; Obert, Theocharis & Van Deth, 2019; Obydenkova & Arpino, 2018, Marien & Werner, 2019, Ciziceno & Travaglino, 2019, Baboš, 2015 (-)

4. Conclusions

This deliverable has summarized the state-of-the-art empirical knowledge on levels of citizens' trust, their variations, determinants, and correlates. The eight surveys that were chosen as a subject of inquiry for this deliverable are: (1) The World Values Survey (WVS); (2) the Quality of Government –Individual Survey (QoG EQI); (3) The International Social Survey Programme (ISSP); (4) the Eurobarometer; (5) The European Social Survey (ESS): (6) The European Values Study (EVS); (7) World Gallup; and (8) the European Quality of Life Survey (EQLS). These surveys are important sources on citizens' surveys of trust toward: government in general (EU, national, subnational governments); political actors and political parties; parliaments; administrations; judicial actors and courts; and market and societal actors at different levels. Our analysis of the eight cross-country surveys and empirical studies on citizens' trust in governments, in public institutions and in private actors reveals the strong and long-term interest in issues of trust and distrust. It gave us some indications on the citizens' perceptions of the trustworthiness of public and private actors, their variations, determinants, and correlates.

We have started in section 1 with an assessment of the existing survey data available on citizens' trust and have identified criteria to capture their advantages and disadvantages. We have demonstrated that the existing surveys vary in their sensitiveness, coverage, and consistency; whereas mostly there is a tradeoff between sensitiveness and consistency. Surveys that are more consistent usually include only general measurements of trust (how much trust/confidence do you have in the following actors). While surveys that include items that ask context-specific questions on trust or that measure a certain dimension of trust, do not repeat the same question more than once. The surveys that we have analyzed differ also their coverage. Finally, we have identified 4 datasets that cover the countries of interest: The United States, Israel, Switzerland, Poland, Germany, United Kingdom, Norway, Belgium, Spain, Netherlands, and Denmark. These surveys are ESS, ISSP and a merge of WVS and EVS. The analysis led us to compile a file with all trust related items included in them and critically assess the surveys[1].

In section 2 we have analysed the relevant data from the abovementioned four surveys (ESS, ISSP, WVS and EVS) to draw conclusion on the trends of citizens' trust across countries and to look for correlations. We have focused on the following questions: (1) How did citizens' trust in political and private actors evolve in the last 40 years and across countries? (2) Are there any correlations between trust toward the different actors? And (3) How do the different countries of interest differ in their level of citizens' trust exploiting context and dimensional measures of trust? Some of the more interesting conclusions are summarized in Table 9, Table 10 and Table 11. **What is clear and is worth emphasizing is that the datasets present different and often contrary results with regards to which actors do citizens trust more, and similar results with regarding to the overall level and overall trend of citizens' trust toward different actors in the countries of interest. When examining data that measures trust in a more nuanced manner, examining trust in a context or a certain dimension of trust, than the variance between the countries is not as stable.**

We have also compared the TiGRE sample to non-TiGRE countries on the ISSP data. In general, it was found that on average corruption is perceived as being lower in the TiGRE-sample (scores are reversed), and the public service being more committed. This may indicate for an on-average overall "higher" performance of the politico-administrative systems of the TiGRE-countries, but also makes it necessary to interpret all findings in later stages with caution: if trust levels are on average higher in the TiGRE -sample, findings may be generalized for other – developed or developing – regions worldwide only after correcting for this difference in the "trust basic level". This applies in particular when it comes to the analysis of change.

[1] Available upon request, please contact Libby Maman.

Table 9: Some insights from the European Social Survey Data

Some insights from the European Social Survey Data

- The actors of which citizens trust the most are the police, the UN and the legal system.
- The actors of which citizens trust the least are political parties and politicians.
- Trust toward the UN is significantly higher than trust toward both the European Parliament and [a composite measure of trust toward] national public actors.
- Trust toward all actors has declined in the 2010 wave, suggesting an effect of the 2008 economic crisis. Trust levels have recovered since then to an equal or higher level comparing to pre-crisis level only for the police and the legal system.
- Comparing the level of trust toward national actors in the countries of interest shows that:
    - Denmark, Norway, Switzerland, Netherlands and Belgium have trust levels higher than the average of this sample. This remains consistent throughout 2002-2016.
    - Poland and Israel have lower levels of trust toward national actors throughout the same time period.
    - Spain has experienced a decline in trust – it was around the average in 2002 and since then declined to levels closely to Israel and Poland.
    - While all countries have an overall increase in trust – Israel, Denmark, Spain and Poland show the contrary, where trust is declining.

Table 10: Some insights from the WVS+EVS Datasets

Some insights from the WVS+EVS Datasets

- In most countries of interest, public administration enjoys the highest levels of citizens' trust (except for Norway, Poland, and the Netherlands where is still ranks very high).
- In Germany, Denmark, Switzerland, Netherlands, Spain and the US, public administration enjoys higher levels of citizens' trust comparing with the private sector (Major companies and/or Banks).

Table 11: Some insights from The ISSP Datasets

Some insights from The ISSP Datasets

- The ranking of countries differs across different measurements of trust.
- However, Spain, Israel, US and Poland rank lower than other countries most of the time.
- Denmark, Norway and Switzerland rank consistently highest comparing to other countries.
- In the question: Thinking of the public service in (Country), how committed is it to serve the people? Israel ranks the highest. This suggests that in Israel, despite a low trust on the public service with regard to its integrity, corruption and equality, citizens trust it to be committed.
- In the Netherland we see the opposite: citizens believe the government has high integrity, but they doubt their commitment to serve the public.

The correlation analysis tested for correlation between the different "dimensions" of trust, or trust in different actors. This question is of pivotal relevance for the overall TiGRE-project: later stages of the project will focus on intra-regime trust in different actors of the respective regulatory regimes. Remarkably, trust levels across all actors **are associated positively** suggesting general positive "spillover effects". Along these lines, regarding the absence of negative correlations, trust in different actors is most likely not substitutive in nature. This question surrounding spillovers, substitution etc. will be addressed at least implicitly more deeply in later stages of the TiGRE-project, where an elite survey will be used to survey trust relations within the regulatory regime.

In Section 3 we have presented a systematic literature performed to examine the existing literature that exploits the existing datasets that were explored in this deliverable. In addition to the descriptive findings which were elaborated in the deliverable, the systematic literature review reveals found the following conclusions:

Perhaps the most notable feature of research into the antecedents of trust in government and related actors is the heterogeneity of potentially relevant factors. Policies with positive effects on trust in government seem to 'compete' with various individual level factors, ranging from age to health, as well as country-related factors such as overarching socio-political factors. Despite the conclusion that trust is thus at least in part formed by factors beyond the control of governments, there are notable indications that governments' performance and modes of governance are still capable of enhancing or reducing trust in government to some degree. Conversely, long-term disillusionment and major corruption scandals seem to produce downturns in trust, warning that underperformance is likewise a risk to trust in government.

Another notable feature of the research covered is an overwhelming emphasis on trust in government and political trust. The query underlying our dataset explicitly sought to include other regulatory regime actors such as the press, banks, major companies and academia. However, beyond a small number of contributions on trust in press, there seems to be a lack of international survey-based research on trust in non-governmental actors. This suggests a gap in the current literature, providing an avenue for research investigating e.g. the co-evolution of trust in non-governmental regime actors and their governmental counterparts.

As with the drivers of trust, perhaps the most notable feature of studies investigating the independent effect of variables such as political trust, trust in government and corruption is their wide-ranging nature. In addition to likely candidates such as support for certain policies, effects have been found on variables such socio-psychological well-being and business venturing. The existence of effects on 'downstream' factors such as economic performance reminds us of the supporting role of governments in societies, suggesting that the trustworthiness of governments can facilitate the performance of other sectors.

More directly tied to governments' internal functioning, there seems to be relatively consistent support that trust in government has a positive effect on factors such as support for policies and voluntary compliance. Coupled with our earlier discussion on the drivers of trust, which suggested there is some leeway for governments to increase citizen trust by increasing performance or acting in fair ways, this suggests that governments may to some degree see positive actions towards citizens rewarded with stronger levels of support and assent.

As with studies on drivers of trust, the absence of studies regarding trust in non-governmental actors is notable. Future studies could consider potential interaction effects between trust in government and trust in other actors on other variables, thus taking into account trust in regulatory regime partners more comprehensively. Simultaneously, such studies may be relatively difficult to perform on major surveys such as the ESS and WVS, given the potential common method bias issues that threaten the correct estimation of effect sizes between multiple trust variables. This suggests that while an avenue exists for broader studies into trust, these would have to be based either on original survey data or make use of solutions such as instrumental variables estimation.

Trust is an inherently dynamic phenomenon, as is captured by a substantial amount of the studies reported in this section 3. Even when dealing with general trust in government and political trust variables, it seems it is very possible for trust breaches to occur when reality fails to live up to citizens' expectations of governments and politicians. This is a general point to take into account for scholars and practitioner dealing with specific regulatory regimes: failures of regimes related to policies such as economics, social welfare and immigration may spark drops in citizen trust in government, which may in turn have effects on policy support and voluntary compliance.

An interesting point in the literature on the relationship between trust in government and corruption is that both variables may be related in dynamic ways. Findings that national-level corruption may foster trust in international organizations point at possible substitution effects, i.e. that citizens may place their faith in other entities than the national government to safeguard their positions. When combining these findings with results on the negative effect of mismatches between expectations and realities on trust, one may wonder whether a risk is inherent in this effect. If trust in organizations such as the EU is increased to levels beyond the EU's actual capability to deliver (e.g. due to limitations in competences or political feasibility), initial substation effects could be followed with substantial disillusionment and drops in trust in the post-accession phase (or, alternatively, due to the postponement of accession). If this reasoning holds true, such effects could suggest that moderating trust in government may in some cases actually be beneficial for at least some public entities.

Again, only a small number of studies in this review seemed to be interested in studying the dynamics of trust in non-governmental actors. A viable avenue for further research may therefore be the interrelationships between trust in public actors and other systemic actors in regulatory regimes, in particular when related to major societal developments such as crises or the installation of new governments following events such as the Arab spring (with the last perhaps being a topic mainly relevant for non-Western countries). Are downturns in trust in political actors following certain events for instance associated with drops in trust in press, corporations or banks? Or are these non-governmental actors to some degree shielded from the impact of crises on trust in public sector actors? Answering such questions may have important implications for policy-making in post-crisis societies. If corruption scandals for instance strongly reduce trust in private actors involved in such scandals, this may imply greater support for regulation with limited involvement of private actors. Bridging sectoral divides in research on trust in actors involved in the regulatory process thus seems an important area of attention for future studies.

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Appendices

Appendix 1: Actors included in the surveys

Surveys	Number of actors	Public actors	Private actors
The World Values Survey (WVS)	23	1. Armed forces 2. The education system 3. The legal system 4. Police 5. The Courts 6. The government (in your nation's capital) 7. Political Parties 8. Parliament 9. The Civil Service 10. Universities 11. The European Union 12. The United Nations 13. NATO	1. The Church/Religious organizations 2. The Press 3. Television 4. Labor Unions 5. Major Companies 6. The Social Security System 7. Banks 8. Environmental organizations 9. Women's organizations 10. Charitable or humanitarian organizations
Quality of Government – Individual Survey (QoG EQI)	8	1. National parliament 2. The European Union 3. Regional parliament 4. The education system 5. The healthcare system 6. Police 7. The civil service	1. The media
The International Social Survey Programme (ISSP)	16	1. National Elections 2. The Government 3. Politicians 4. Public Servants 5. Public Service 6. Civil Service 7. Members of Parliament 8. Parliament 9. Political Parties 10. Public Officials 11. The Courts 12. The Education System 13. The Health Care System 14. The Police	1. Newspapers 2. Radio or TV Programmes
Eurobarometer	36	1. Army 2. Council of the European Union 3. Courts 4. Elections 5. European Commission 6. European Parliament 7. European Parliament Elections 8. Government Representatives 9. Legal System 10. Local Government / Local/Regional Institutions	1. Local Media 2. Newspapers 3. Online Newspapers and News Magazines 4. Online Social Networks / Online Social Networks and Messaging Apps 5. Printed Newspapers and Magazines / The Written Press 6. Radio 7. Social media 8. Television 9. The Internet

		11. National Authorities / Government / National Public Authorities/institutions 12. National Media 13. National Media Regulator 14. National Parliament / Parliament 15. Police / Police and Law Enforcement Authorities / Police and Prosecution Service 16. Political Leaders 17. Political Parties / Political Parties and Movements 18. Political System 19. Politicians 20. Politicians and Officials National Level 21. Politicians and Officials Regional/Local Level / Urban Public Administration 22. Public Administration / Public Authorities / Public Service 23. Regional/Local Authorities 24. The Country in General 25. The State	10. The Media 11. Video Hosting Websites and Podcasts
The European Social Survey (ESS)	12	1. National Elections 2. National Parliament 3. Political Parties 4. Politicians 5. Public Officials 6. The Courts 7. The European Parliament 8. The Government 9. The Legal System 10. The Police 11. The United Nations	1. Media
The European Values Study (EVS)	19	1. The armed forces 2. The education system 3. The police 4. Parliament 5. Civil service 6. The social security system 7. The European Union 8. NATO 9. United Nations Organization 10. Health care system 11. The justice system 12. Political parties 13. Government	1. Social media 2. The church 3. The press 4. Trade unions 5. Major companies 6. Environmental organizations
World Gallup	18	1. Police 2. Military 3. Judicial System / Courts 4. Supreme Court and Judges 5. National Government 6. State Government 7. Government 8. State Media	1. Media

		9. The Supreme Council of Armed Forces 10. The Electoral Authority 11. Elections 12. Parliament 13. Attorney General 14. Local Government 15. Civil Services 16. President 17. Parties	
European Quality of Life Survey (EQLS)	7	1. Parliament 2. Legal System 3. Police 4. Government 5. Local (Municipal) Authorities 6. Political Parties	1. News Media

Appendix 2: Codebook for the systematic literature review

Step 1: Read title and abstract and decide whether the article should be included or excluded according to the following criteria:

peer-reviewed articles and book chapters that:

(1) study actors relevant to TiGRE, which include: governments (at different levels, local to international), political and administrative institutions, public authorities and organizations (including courts), political actors and/or private actors, civil society organizations such as NGO's, consumer organizations and academia, as well as media (see list below under code of 'trustee').

(2) examine drivers, patterns, dynamics and/or outcomes of citizens' trust/distrust/related concepts in these actors

(1. Trust
2. Trust to do something specific/
3. Confidence
4. Perceived corruption
5. Perceived capacity
6. Perceived benevolence
7. Perceived integrity
[satisfaction is not relevant – please exclude]

(3) use at least one dataset considered in WP1.2. (WVS, QOG, ISSP, Eurobarometer, ESS, GALLUP, EQLS or EVS)

(4) incorporate either descriptive or explanatory analysis of this/these WP1.2. dataset(s)

(5) use cross-country analyses. (do not include single-country studies)

A. Should the article be included according to the above criteria? (column A)
   0=exclude
   1=include
   2=uncertain, full-text read necessary

B. Briefly explain if 0 or 2 (column B)

Step 2: Code the articles (coded as 1 in previous step) according to the following coding sheet.[1]

Analytical codes

	Variable	Question	Answer categories	Details/Instructions
1	**Drivers or effects / DV or IDV**	Is the study about explaining citizens' trust (determinants – trust as the dependent variable) or about studying the effects of citizens' trust (trust as the independent variable)?	1. Study explaining trust (trust as dependent variable) 2. Study with trust as explanatory factor (trust as independent variable) 3. Both driver and effect 4. Study with trust only used as control variable	
2	**Trust definition**	Is the DV/IDV variable trust, or a substantive similar concept?	1. Trust 2. Trust to do something specific/ 3. Confidence 4. Perceived corruption 5. Perceived capacity 6. Perceived benevolence 7. Perceived integrity 8. other	If it is not trust nor something similar, the article should be excluded
3	**Trustee**	What is the name of the trustee (the actor who is trusted)?	1. The government / governmental institutions / National government 2. The public sector/Public institutions 3. The civil service, civil servants 4. Local/regional government 5. Armed forces/military 6. Education system 7. University 8. Legal system/courts/judges 9. Police 10. Political Parties 11. Politicians 12. The Parliament 13. The European Union 14. Social Security System 15. Health care system 16. The United Nations 17. The Church/Religious organizations 18. The Press/Media/Television/Newspaper 19. Labor Unions 20. Major Companies/Businesses 21. Banks	

[1] the articles coded as '2' will be considered and coded later.

			22. Non-Profit organizations/Environmental/Women organization 23. Other	
4	**Trustor**	Trust *by whom*?	1. Citizens 2. Other	
5	**Methodology**	Methodologically, *what kind of study* is it?	1. Quantitative – one survey data only (from the list*) 2. Quantitative – more than one survey data (from the list*) 3. Quantitative – survey data (from the list*) + other survey data (not from the list*) 4. Quantitative – survey data (from the list*) + other data (not survey, or expert survey) 5. Mixed - quantitative with qualitative component (case study/interview/….)	*The list of datasets: 1.The World Values Survey (WVS) 2.Quality of Government – Individual Survey (QoG EQI) 3.The International Social Survey Programme (ISSP) 4.Eurobarometer 5.The European Social Survey (ESS) 6.The European Values Study (EVS) 7.World Gallup 8.European Quality of Life Survey (EQLS)
6	**Dataset**	What dataset (from which cross-country survey) do the authors use?	1. The World Values Survey (WVS) 2. Quality of Government – Individual Survey (QoG EQI) 3. The International Social Survey Programme (ISSP) 4. Eurobarometer 5. The European Social Survey (ESS) 6. The European Values Study (EVS) 7. World Gallup 8. European Quality of Life Survey (EQLS)	Flash eurobarometer is included in Eurobarometer
7	**Trust measurement**	How is trust measured?	1. One item 2. Several items 3. Other option	
8	**Statistical analyses**	What kind of analysis has been employed?	1. Explanatory analyses (e.g. regressions) using data from one moment in time 2. Explanatory analyses using data from multiple moments in time 3. Only descriptive analyses using data from one moment in time 4. Only descriptive analyses using data from multiple moments in times	
9	**Countries included - number**	How many countries are included in the analysis	[Open-Write number of countries]	

10	**Are partner countries included?**	Are one of these countries included: 1. Switzerland 2. Norway 3. Israel 4. Belgium 5. Netherlands 6. Spain 7. Germany 8. Poland 9. US 10. UK	1. Yes 2. No	
11	**Patterns and dynamics**	Does the study aim at looking into insights in terms of trust processes/dynamics	1. Yes 2. No	Such insights include: trust building, trust repair, trust breach, The relation between terms Choose yes only of it is clearly stated that it is the aim of the paper in the abstract. Usually in mixed methods articles and in quantitative articles that based on data from several years
12		If yes, please elaborate what processes are described, how do they work and what are the underlying mechanisms which are mentioned	OPEN	To be found in discussion
13	**Trust relations**	Does the article discuss the relations between trust in one actor/governmental level and trust in another actor/governmental level?	1. Yes 2. No	
14		If yes, please elaborate what relations are described 1. between actors of the same levels 2. between actors of different 3. other?	OPEN	To be found in discussion
15	**Theory used**	What is the theory used to link the variables?	4. None/not mentioned explicitly 5. Write name	

If trust is the dependent variable:

1. What are **the drivers** the article is investigating (data to be retrieved from the introduction/ methodology section) – NOT CONTROL or Interaction VARIABLES

Driver Type	What is the type of the driver of trust the article is investigating?	1. Trustor-related drivers 2. Trustee-related drivers 3. Issue/sector-related drivers of trust 4. Country-related drivers of trust	**Trustor-related drivers** these are features related to the trustor - normally trustor will be the individual citizen/survey respondent in these studies **Trustee-related drivers** causes related to the (perceived) characteristics or behavior of the actor who is trusted **Issue/sector-related drivers of trust** these are features of the issue/sector to which the trust relation relates – most likely in these studies based on these cross-country studies, such drivers/causes will probably not be included **Country-related drivers of trust** these are features of the country to which the trust relation relates – most likely in these cross-country studies, such drivers/causes will be important. Could also include perception of features of the country (as a whole or of the society.
If 1	What is the trustor related driver?	1. Personal traits 2. Status 3. Disposition towards other persons and institutions (and not the trustee) 4. Beliefs, values 5. Information sources used (traditional media versus new/social media) 6. Expectations, motivations, emotion, cognition 7. Exposure to media/information 8. Other	**Personal traits:** ▪ Knowledge ▪ Gender ▪ Age ▪ Income (includes also personal economic stability) ▪ Race / Ethnicity ▪ Place of residence (includes also type of residence (urban or rural) **Status:** ▪ Education/Qualification ▪ Employment status (also includes hours working in a week and time spent in office) ▪ Marital status (married or single) ▪ Family composition ▪ Housing status, including rental status (homeowner or renter) **Disposition towards other persons and institutions:** ▪ General predisposition to trust others (social/generalized trust, individual propensity to trust others)

			▪ Attitudes towards the trustee (e.g. attitude towards government size and power, politicians) ▪ Satisfaction with the government ▪ Attitude towards government intervention in society/markets ▪ Support (for government, for regulation) ▪ Other: … **Beliefs, values:** ▪ Religion ▪ Political ideology/political preferences (left-right ideology, voting behaviour, interest in politics, political participation) ▪ Civic values ▪ Prosocial values **Information sources used (traditional media versus new/social media)** **Expectations, motivations, emotion, cognition** **Exposure to media/information** (media consumption, exposure to information)
	Elaborate if needed	Open	
If 2	What is the trustee-related driver?	1. (Perceived) trustworthiness of the trustee (includes benevolence, competence, and integrity) 2. (perceived) proximity to the trustee 3. (perceived) performance/effectiveness of the trustee 4. (perceived) transparency of the trustee 5. (perceived) procedural fairness/procedural justice (also includes perceived justification of decisions) of the trustee 6. (perceived) credibility of the trustee 7. (perceived) independence/neutrality/impartiality of the trustee 8. (perceived) expertise of the trustee 9. (perceived) capacity of the trustee 10. (perceived) quality of the trustee 11. (perceived) reliability of the trustee	

		12. (perceived) predictability of the trustee 13. (perceived) value-congruence of the trustee with the trustor (trustee holds similar values as trustee) 14. History of poor past performance, scandals and controversies of the trustee 15. (perceived) corruption 16. Organizational reputation of the trustee 17. Communication/Information exchange (by the trustee with the trustor) 18. Size of the trustee 19. Other
If 3	What is the issue/sector-related driver?	1. Media saliency (media coverage of issue) 2. Availability of (performance) information in the sector/on the issue 3. Risk perception associated with the sector/issue (e.g. perception of food safety) 4. Institutional norms and rules 5. Issue/sector-related rules on cooperation (mandatory/voluntary) 6. Regulatory style applied in sector/issue 7. Other
If 4	What is the **c**ountry-related driver?	1. (perceived) country's economic development 2. (perceived) quality of democracy 3. Years of democratic development 4. Political stability 5. Regime type (parliamentary vs presidential) 6. Federal vs unitary state structure 7. Crime rate (includes also level of arrests in a country) 8. Public satisfaction with government 9. Public satisfaction with democracy 10. Immigration and ethnic diversity 11. (civic) Culture 12. Social capital 13. Level of corruption in a country 14. Level of socio-economic inequality 15. Legal system in a country 16. Mass media system 17. Other

Driver Finding	Did the article find effect of the driver on trust?	1. Yes, positive effect 2. Yes, negative effect 3. Weak positive effect 4. Weak negative effect 5. No effect found

<u>If trust is the independent variable (or one of them):</u>

1. What is **the effect of trust** that the article is investigating (data to be retrieved from the introduction/ methodology section)

Effect group	What is the main effect the article is investigating?	1. Cooperation/Collaboration/Information sharing 2. Transaction costs 3. Legitimacy 4. Compliance 5. Support: please add support for what? 6. Acceptance 7. Satisfaction 8. Attitude(s): please add which attitude is studied 9. Behaviour (including voting behaviour) 10. Risk perception 11. Approval/consent 12. Effectiveness/Efficiency 13. Performance 14. Participation 15. Other:	
	Elaboration	Open	We need more detail about cooperation between whom? Legitimacy of what? Acceptance of what? Transparency of what? Etc.
Effect finding	Did the article find effect of trust?	1. Yes, positive effect 2. Yes, negative effect 3. Weak positive effect 4. Weak negative effect 5. No effect found	

Descriptive codes – DONE - NO NEED TO CODE

1. Year
2. Source title
3. Volume Issue
4. Page start
5. Page end
6. Abstract
7. Author Keywords
8. Cited by
9. Document Type
10. Publication Stage
11. DOI
12. Scopus Link
13. WoS ID

Appendix 3: Figures

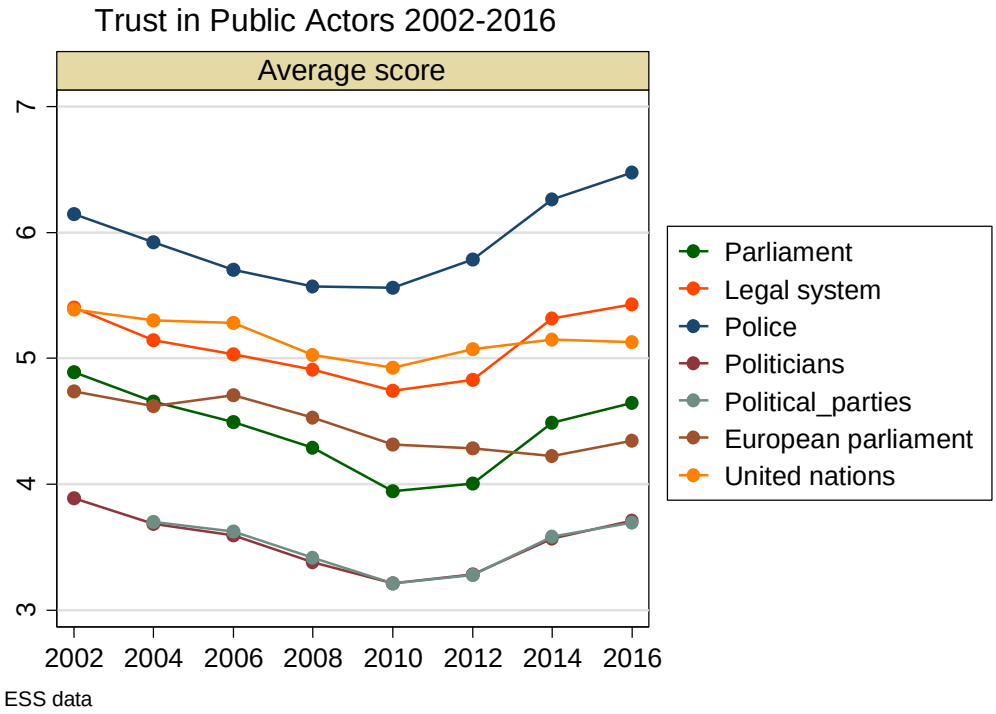

Figure 6: Average level of trust in all participating countries, ESS[18]

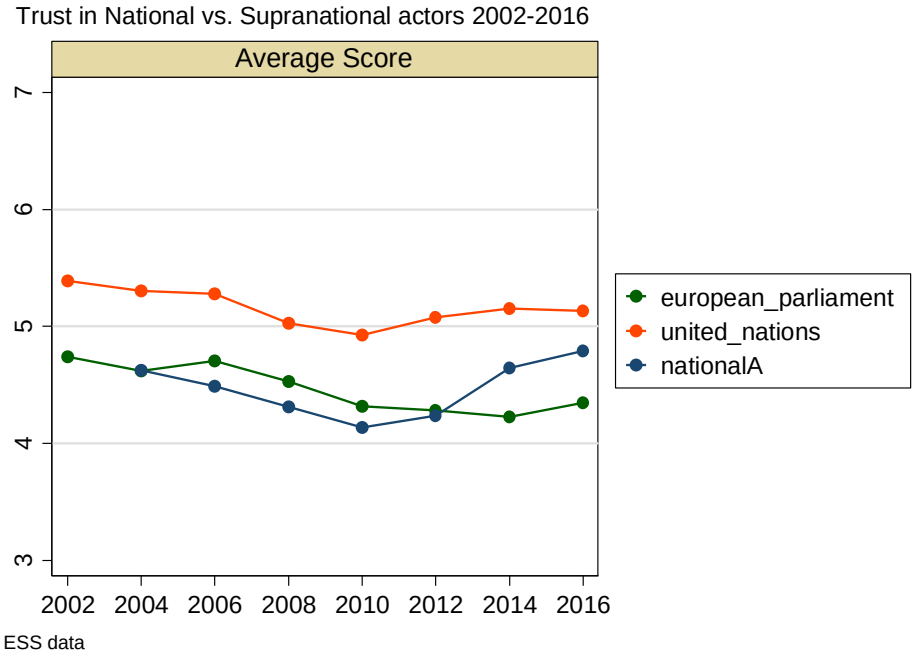

Figure 7: Average level of trust toward national vs. supranational actors, in all participating countries, ESS

[18] The countries that participated in the ESS are: Albania, Austria, Belgium, Bulgaria, Croatia, Cyprus, Czechia, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Israel, Italy, Kosovo, Latvia, Lithuania, Luxembourg, Montenegro, Netherlands, Norway, Poland, Portugal, Romania, Russian Federation, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey, Ukraine and the United Kingdom.

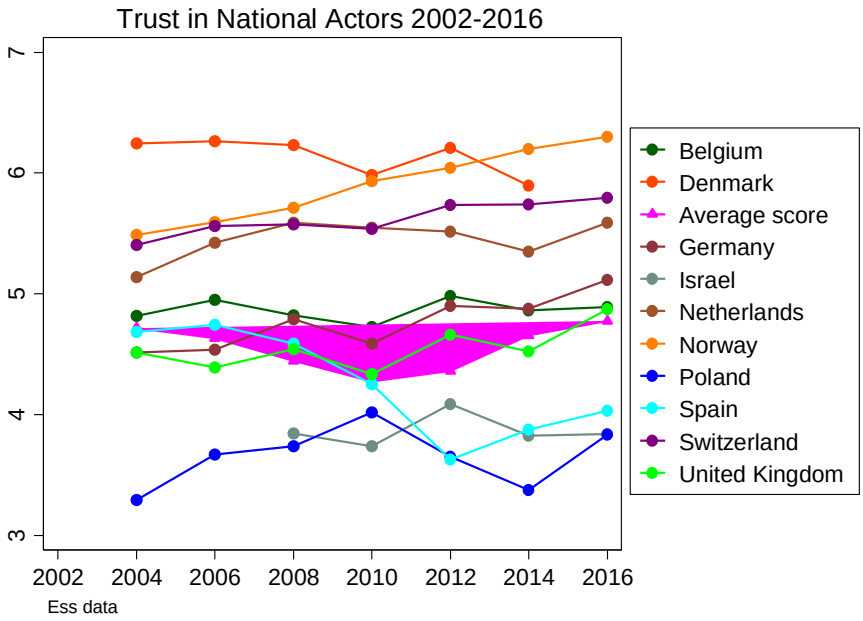

Figure 8: Trust in national actors– average score, sample countries, ESS

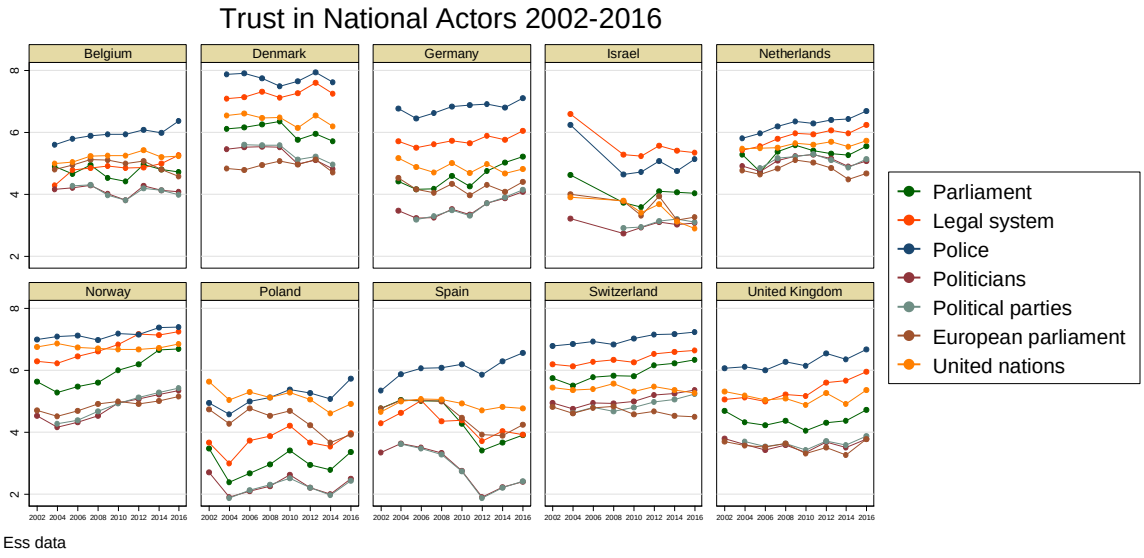

Figure 9: Trust in national actors– full scores, sample countries, ESS

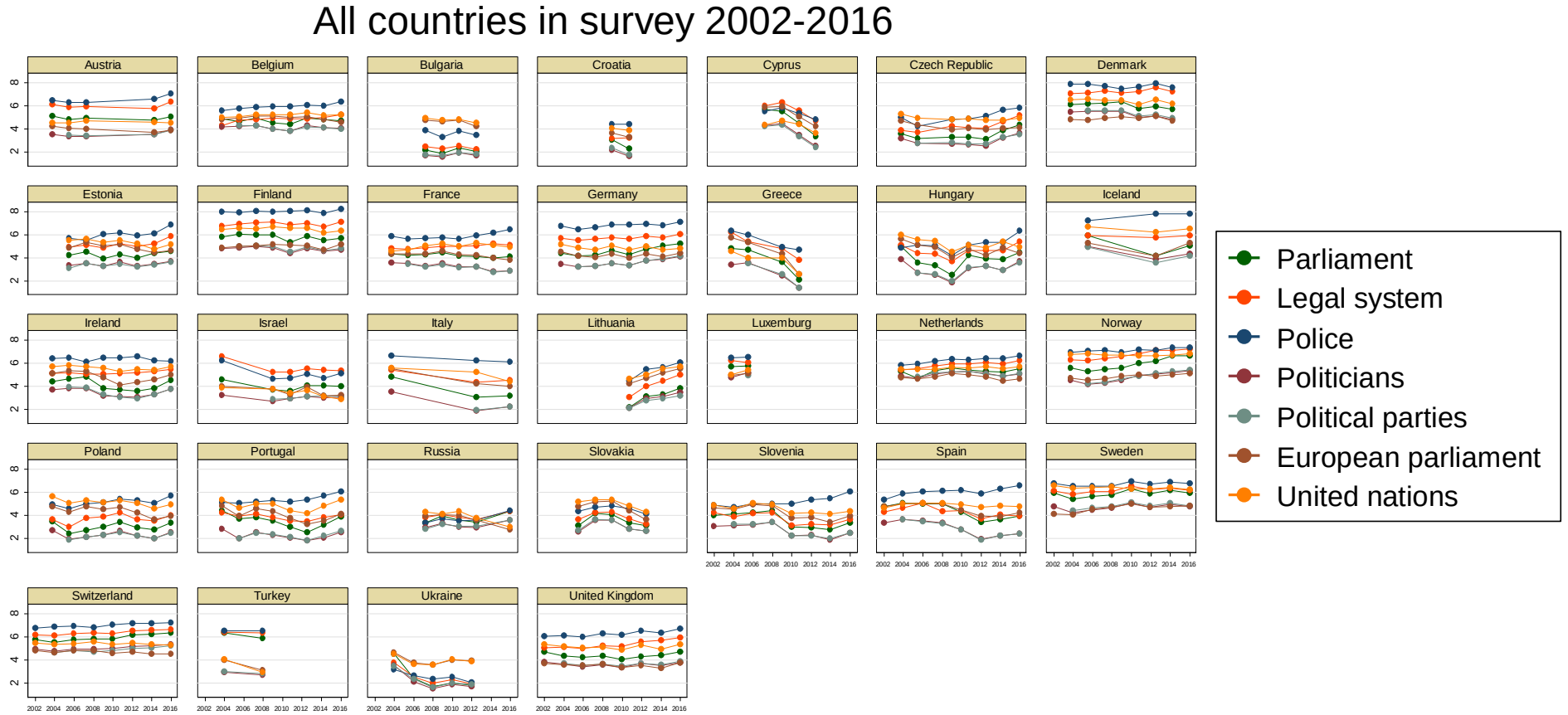

Figure 10: Trust in various institutions, all participating countries, ESS

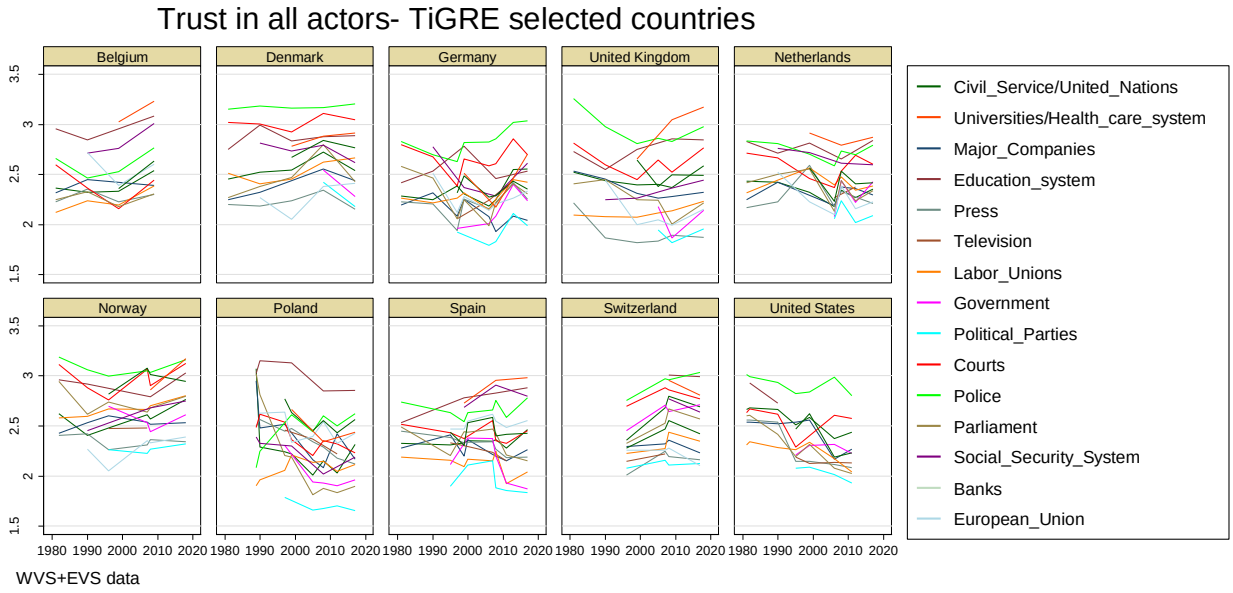

Figure 11: Trust in various actors – sample countries, WVS+EVS

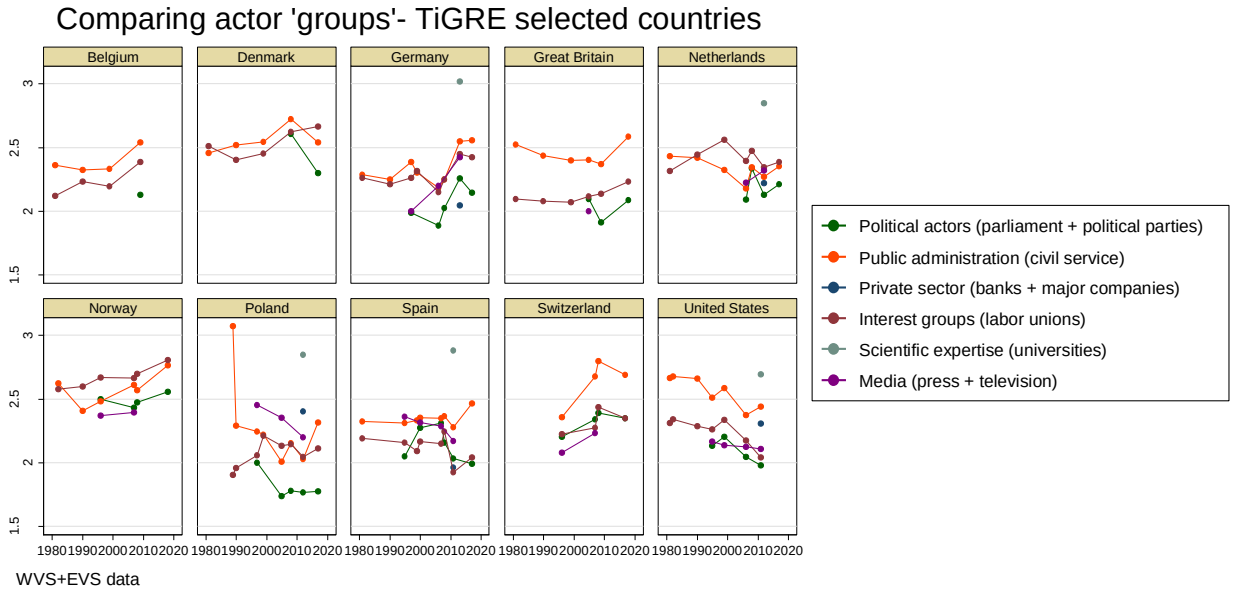

Figure 12: Comparing actor 'groups', sample countries, WVS+EVS

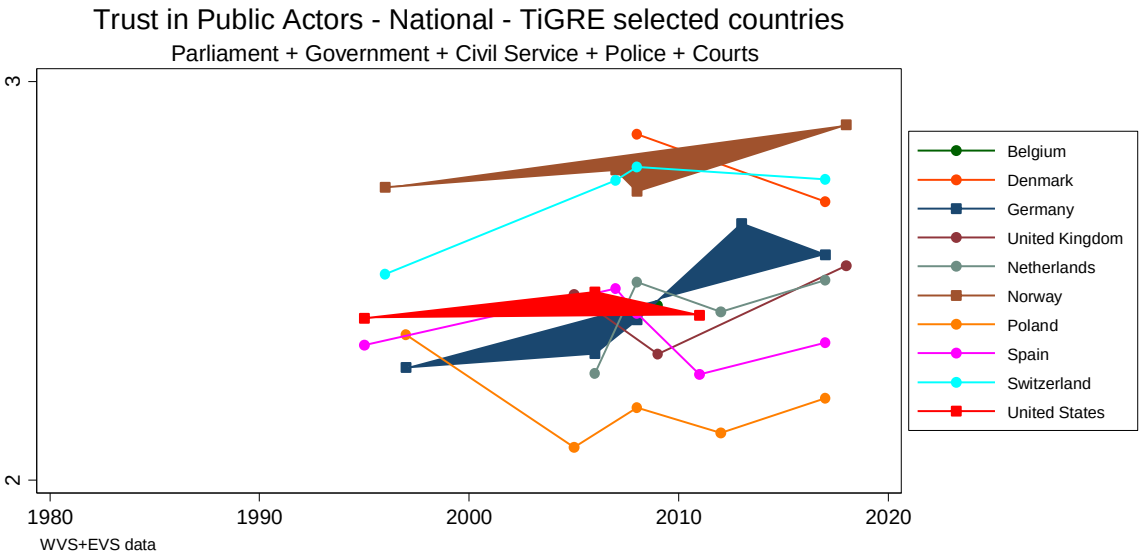

Figure 13: Trust in public-national actors, sample countries, WVS+EVS

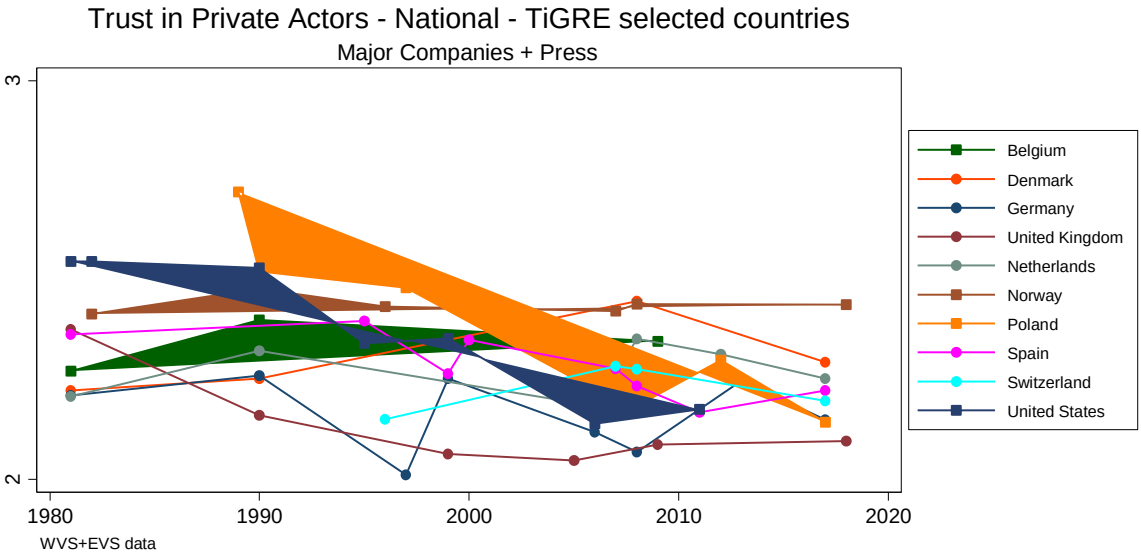

Figure 14: Trust in private actors, sample countries, WVS+EVS

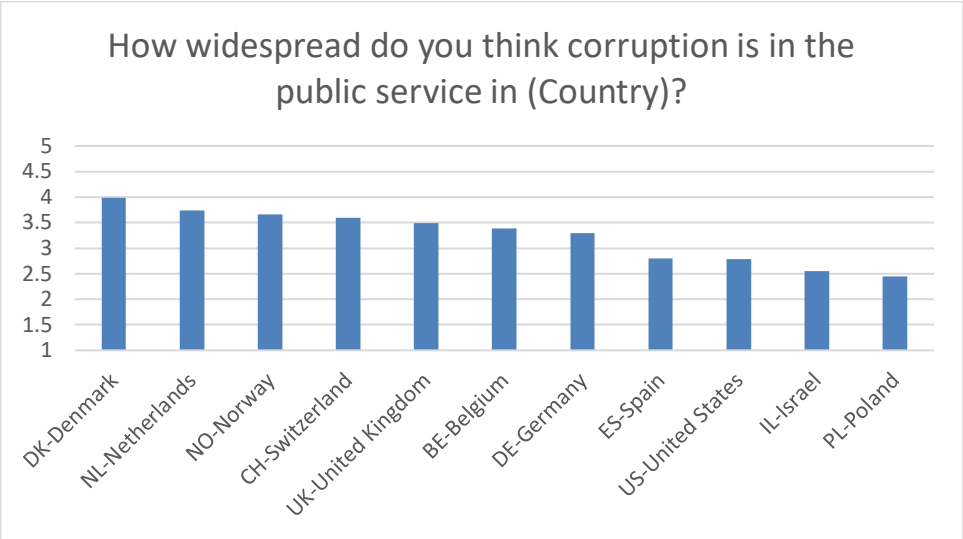

Figure 15: Perception of corruption "public service", sample countries, ISSP

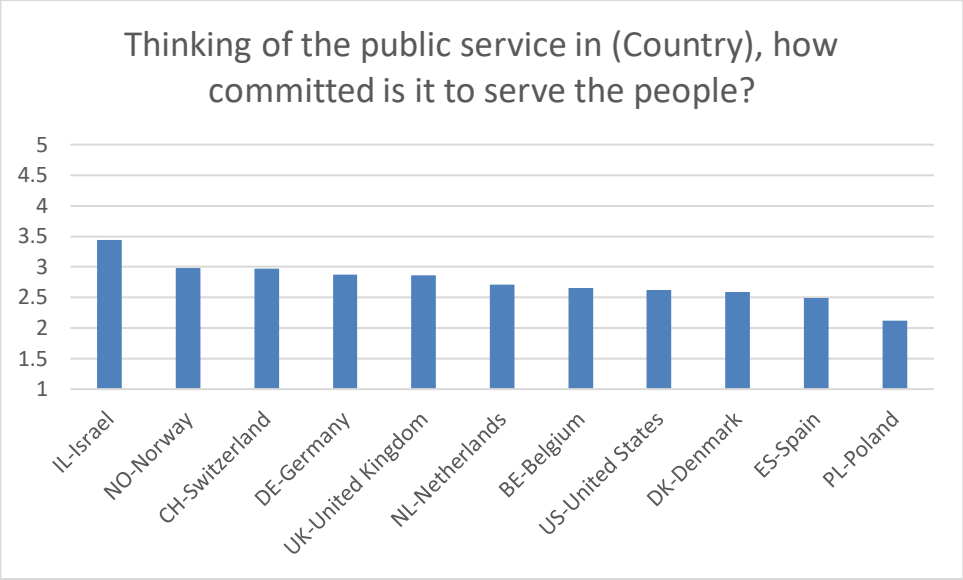

Figure 16: Commitment of the public sector, sample countries, ISSP

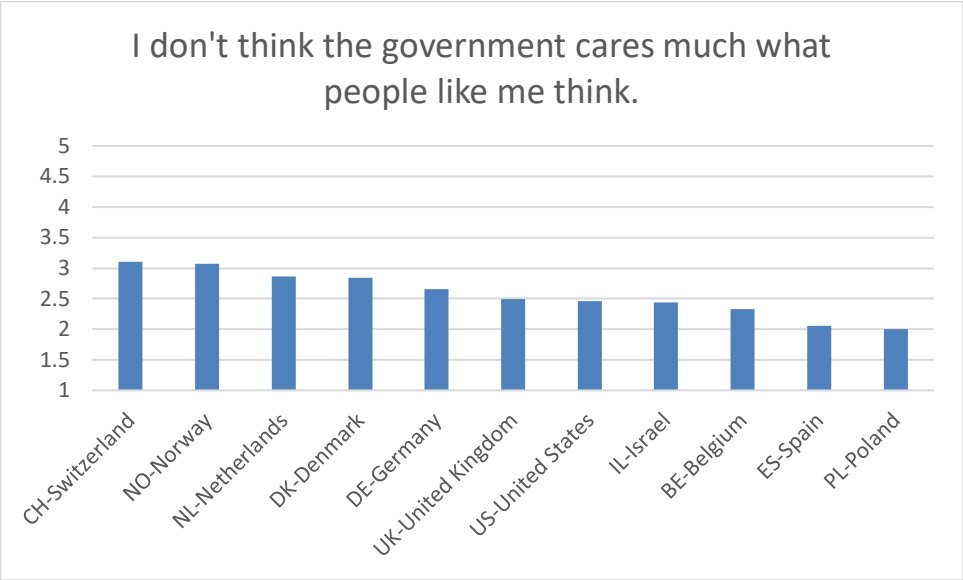

Figure 17: Government's benevolence, sample countries, ISSP

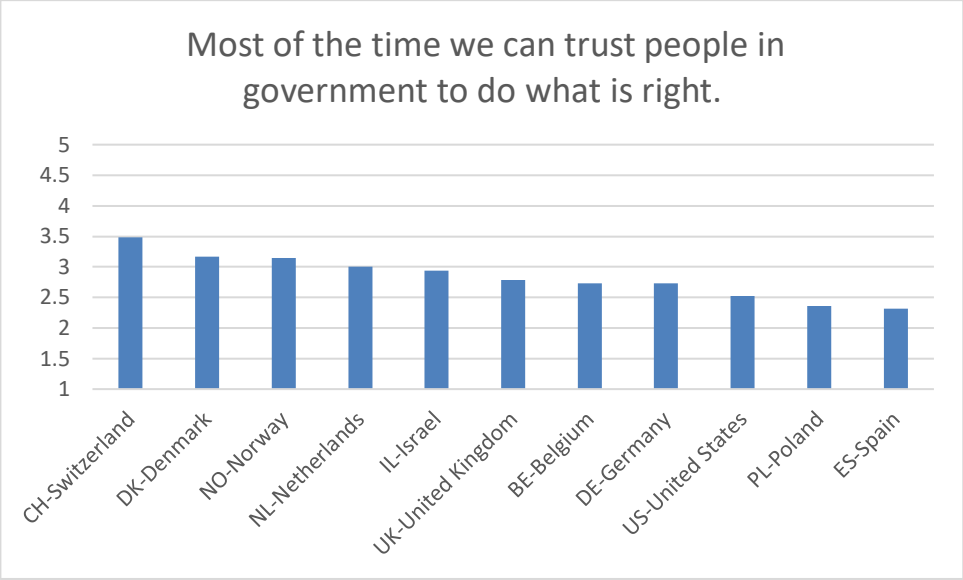

Figure 18: Trusting the government to do what is right, sample countries, ISSP

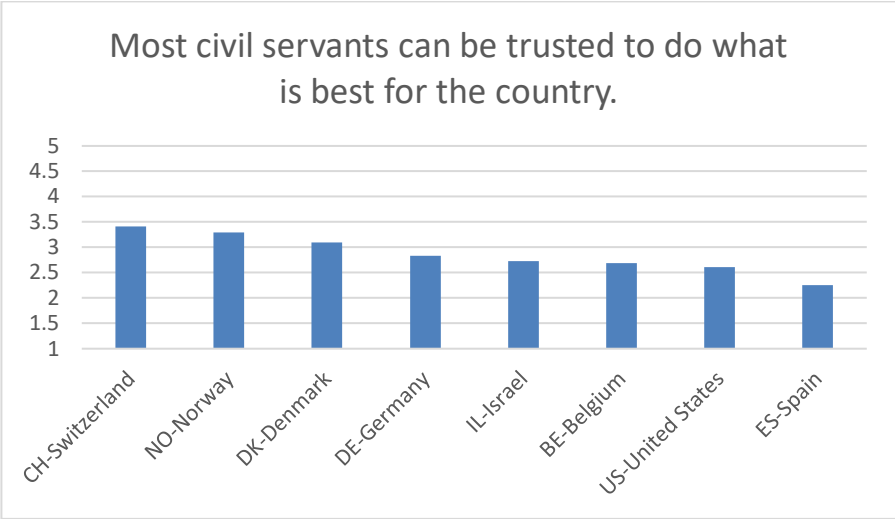

Figure 19: Civil servants do what is best for the country, sample countries, ISSP

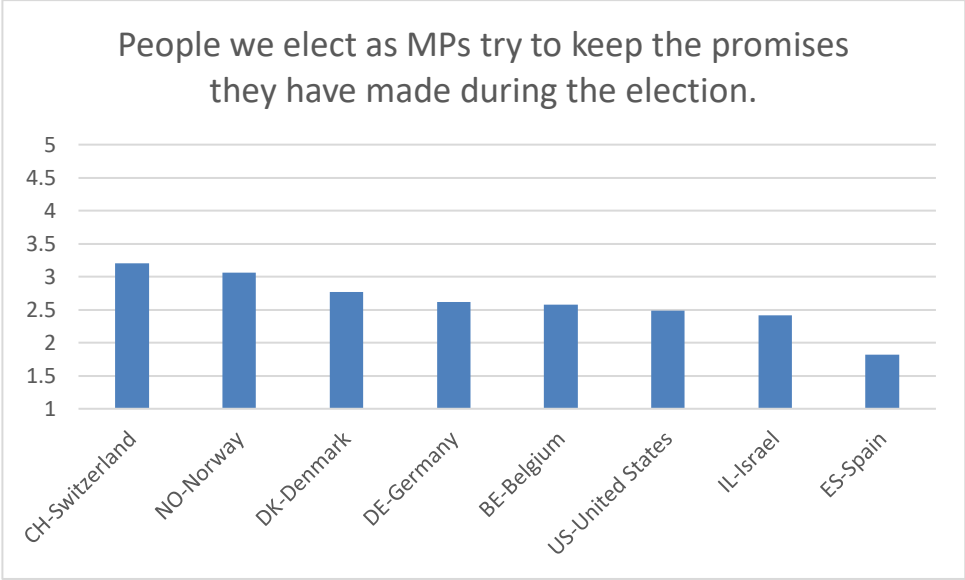

Figure 20: MPs try to keep their promises, sample countries, ISSP

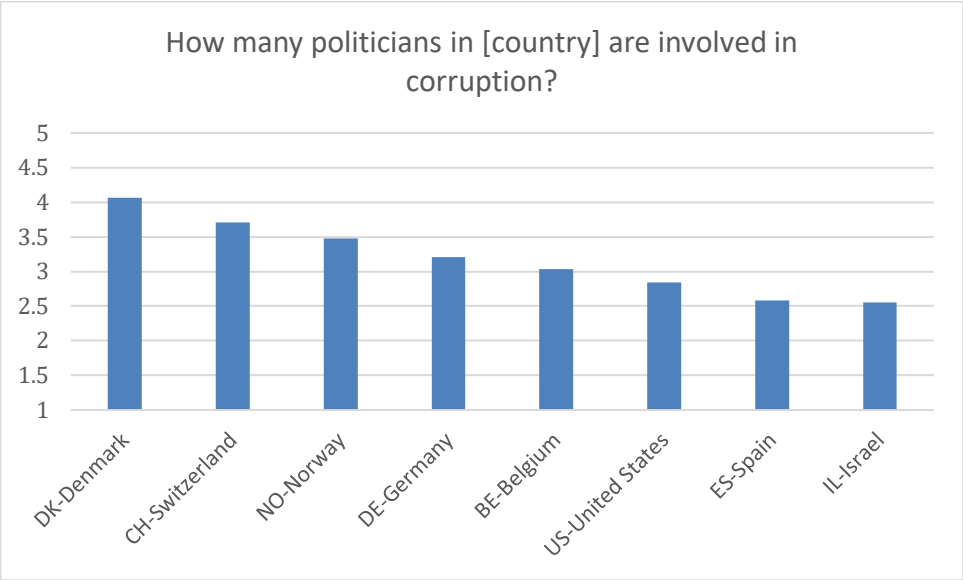

Figure 21: Perception of corruption "public officials", sample countries, ISSP

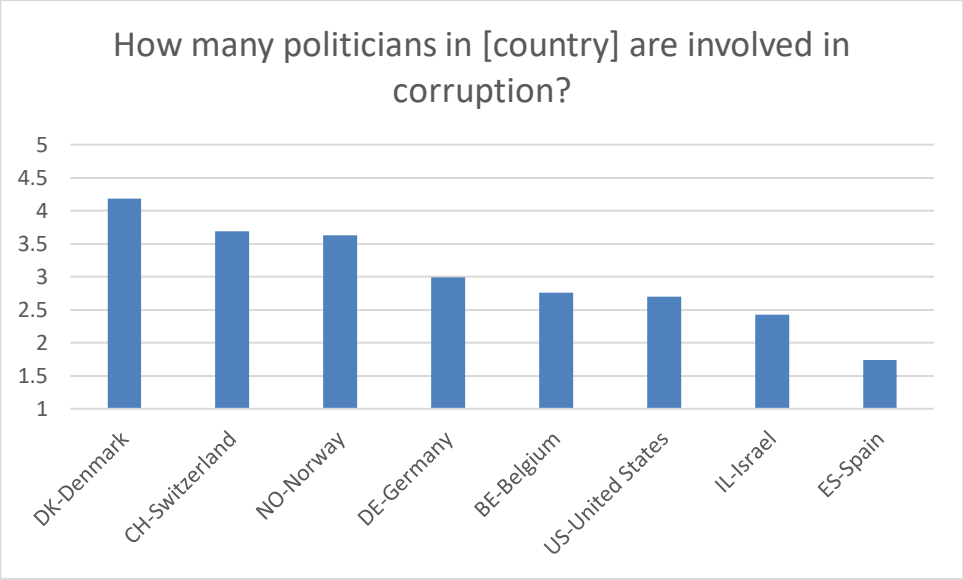

Figure 22: Perception of corruption "politicians", sample countries, ISSP

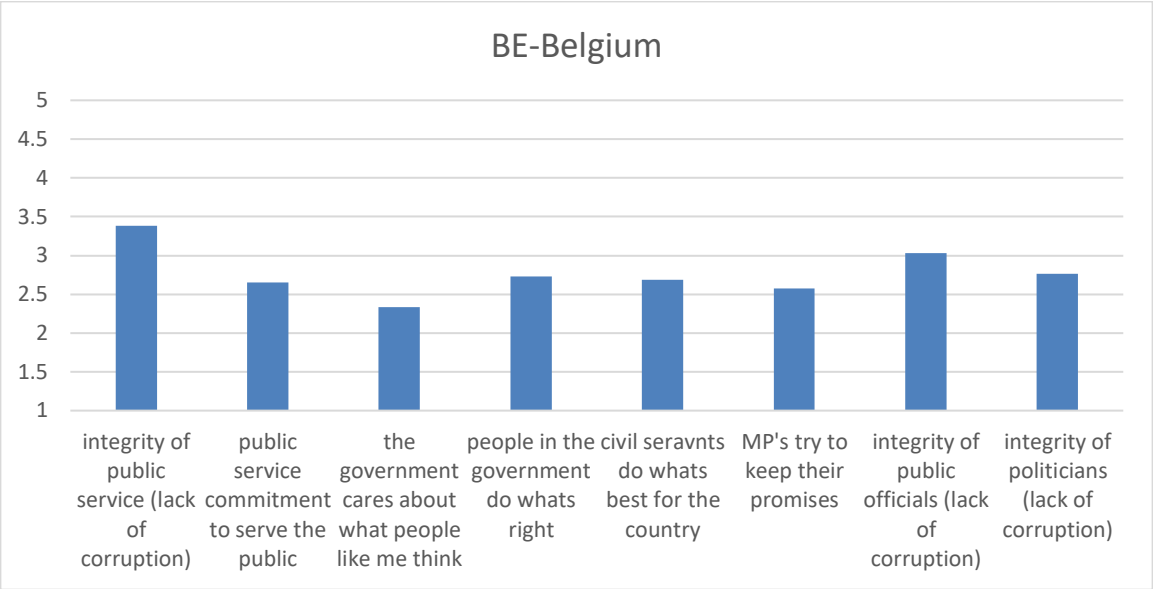

Figure 23: Belgium, comparing trust items, ISSP

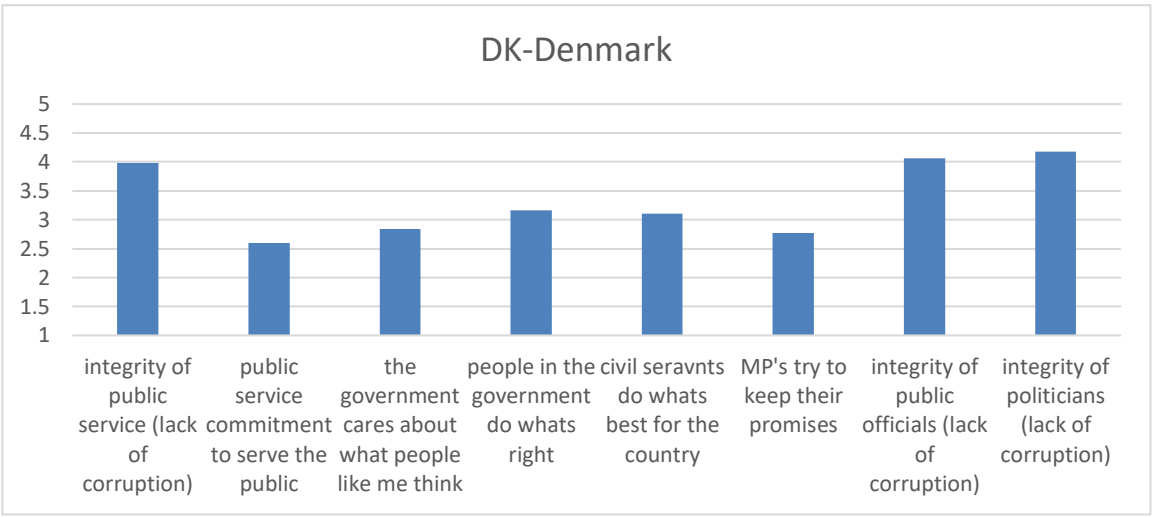

Figure 24: Denmark, comparing trust items, ISSP

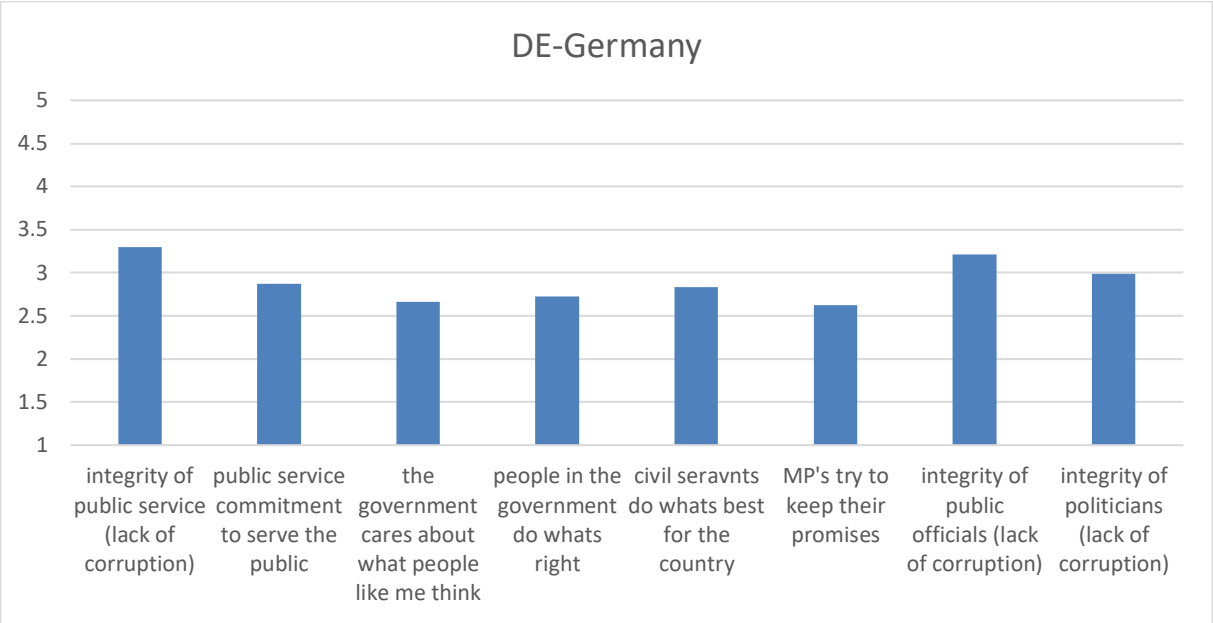

Figure 25: Germany, comparing trust items, ISSP

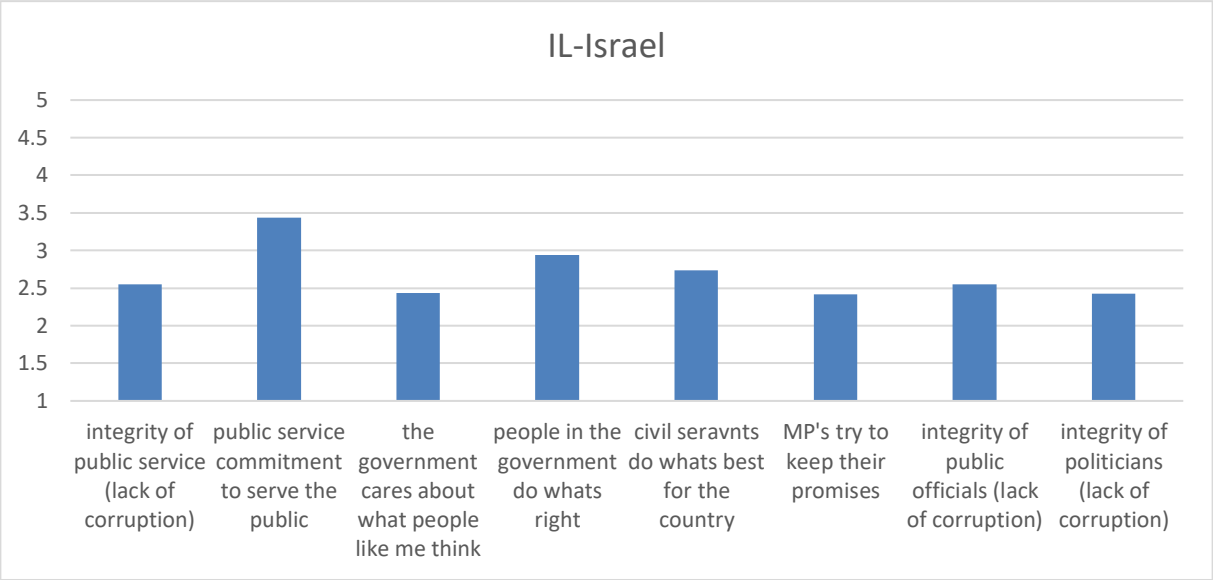

Figure 26: Israel, comparing trust items, ISSP

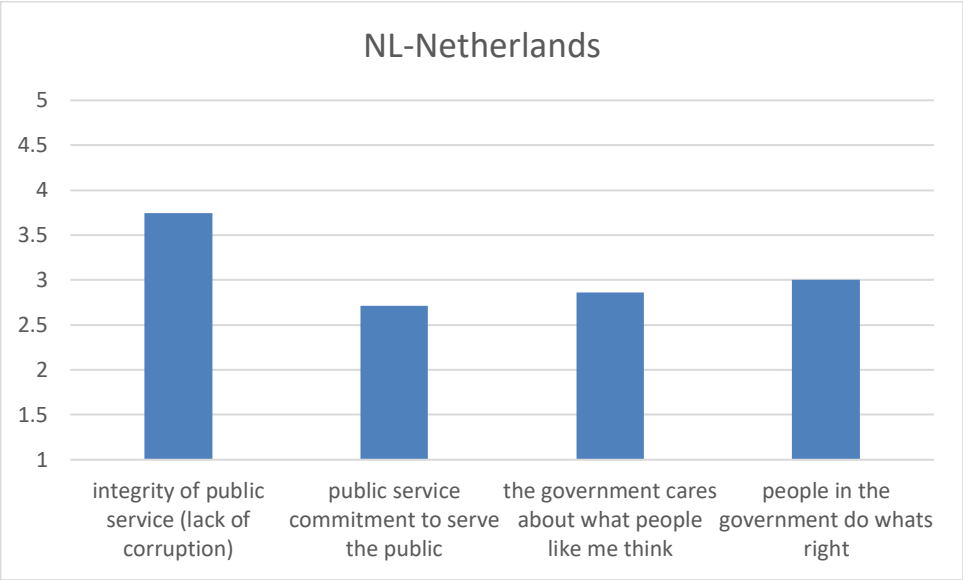

Figure 27: Netherlands, comparing trust items, ISSP

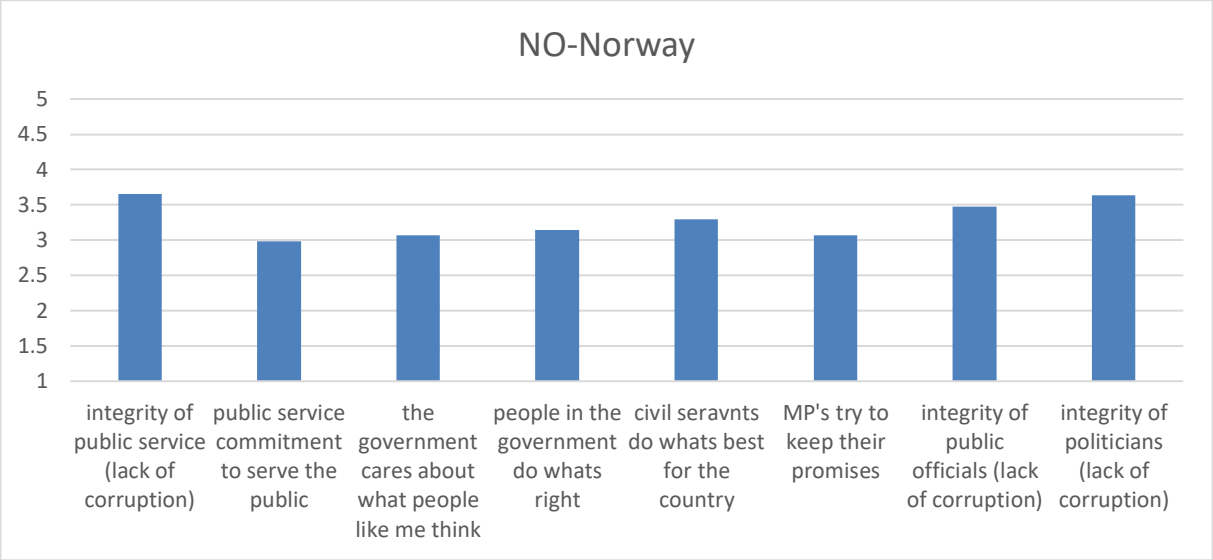

Figure 28: Norway, comparing trust items, ISSP

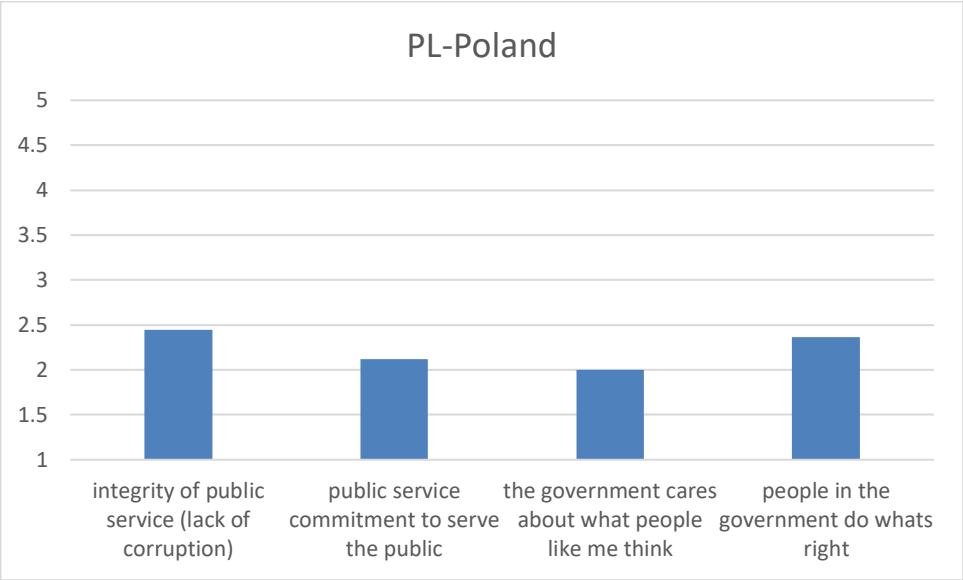

Figure 29: Poland, comparing trust items, ISSP

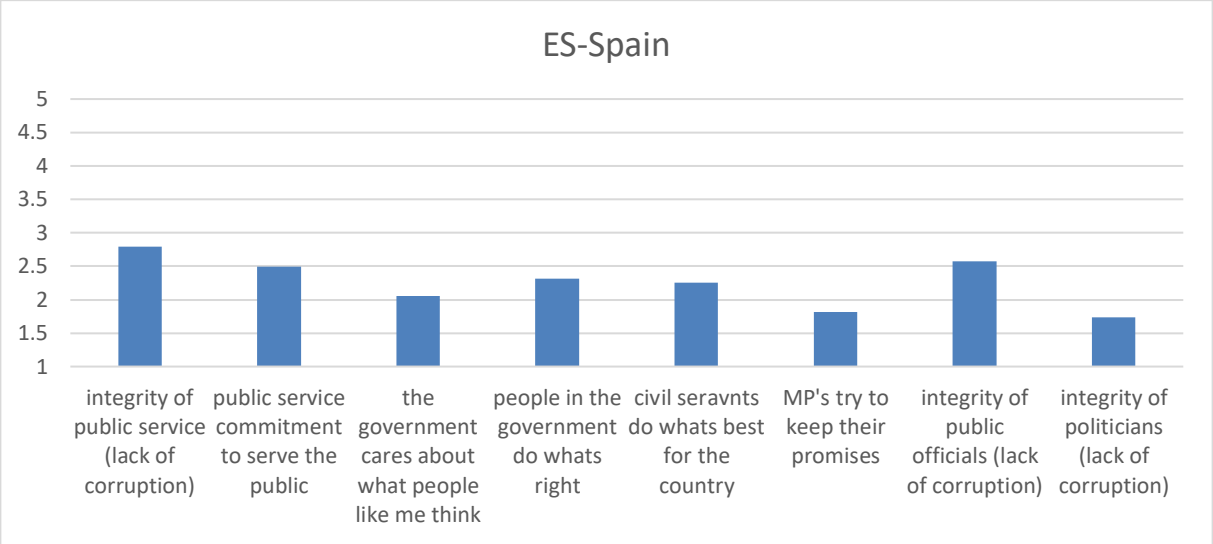

Figure 30: Spain, comparing trust items, ISSP

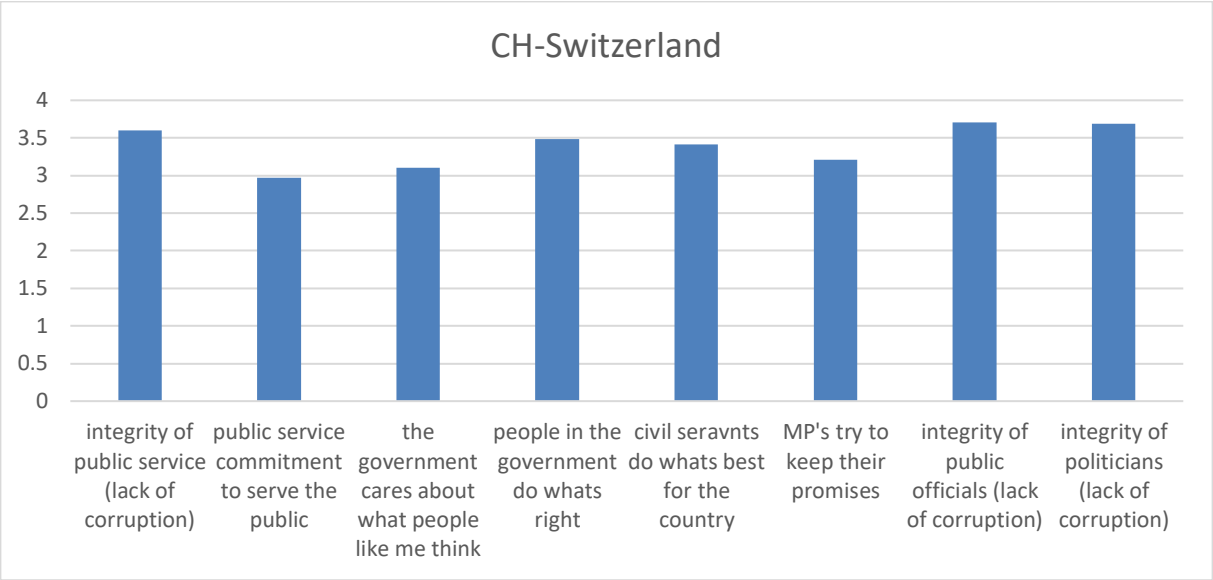

Figure 31: Switzerland, comparing trust items, ISSP

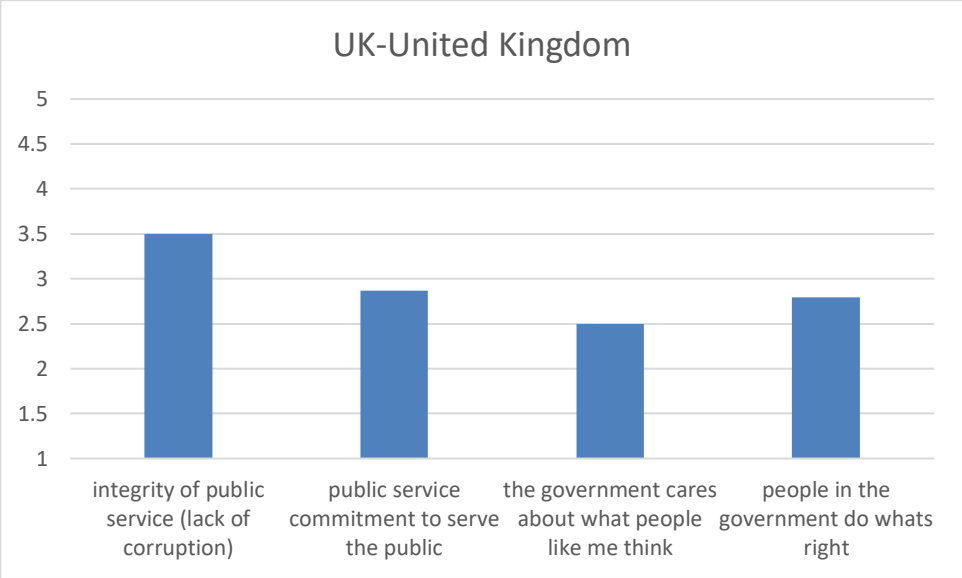

Figure 32: United Kingdom, comparing trust items, ISSP

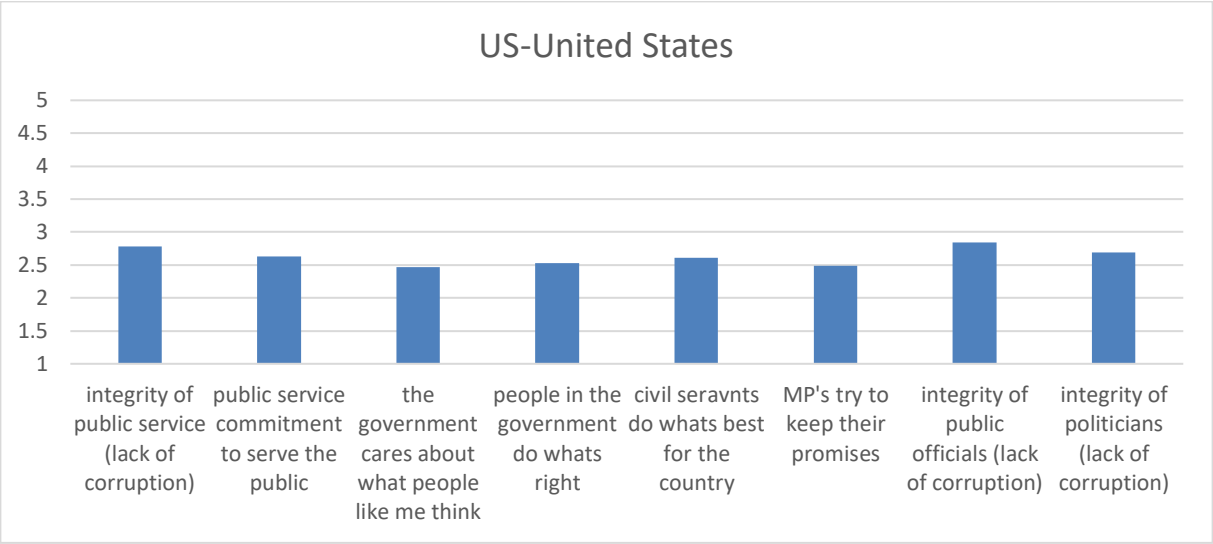

Figure 33: United States, comparing trust items, ISSP

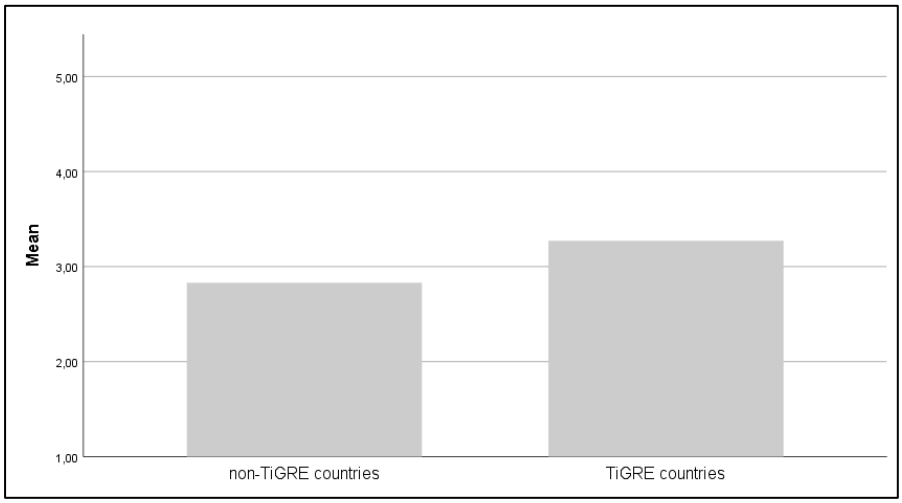

Figure 34: How widespread do you think corruption is in the public service in [country]? ISSP

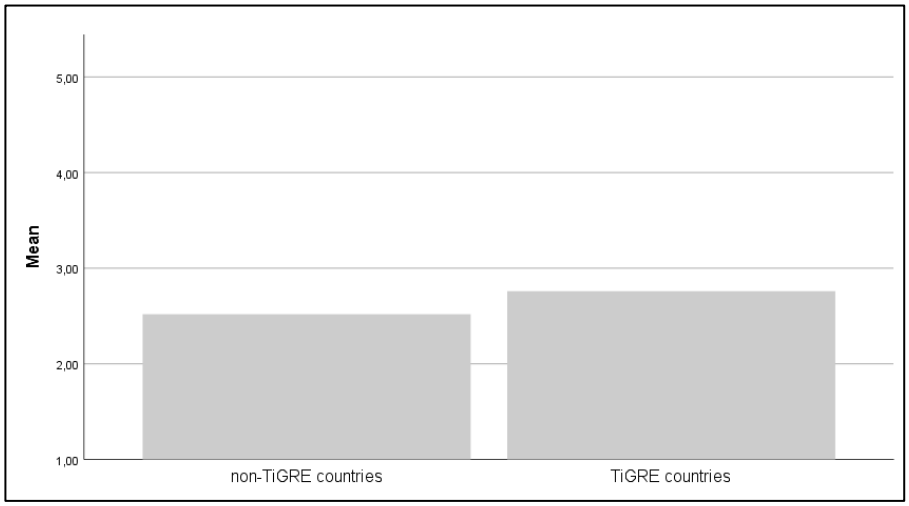

Figure 35: Thinking of the public service in [country], how committed is it to serve the people? ISSP

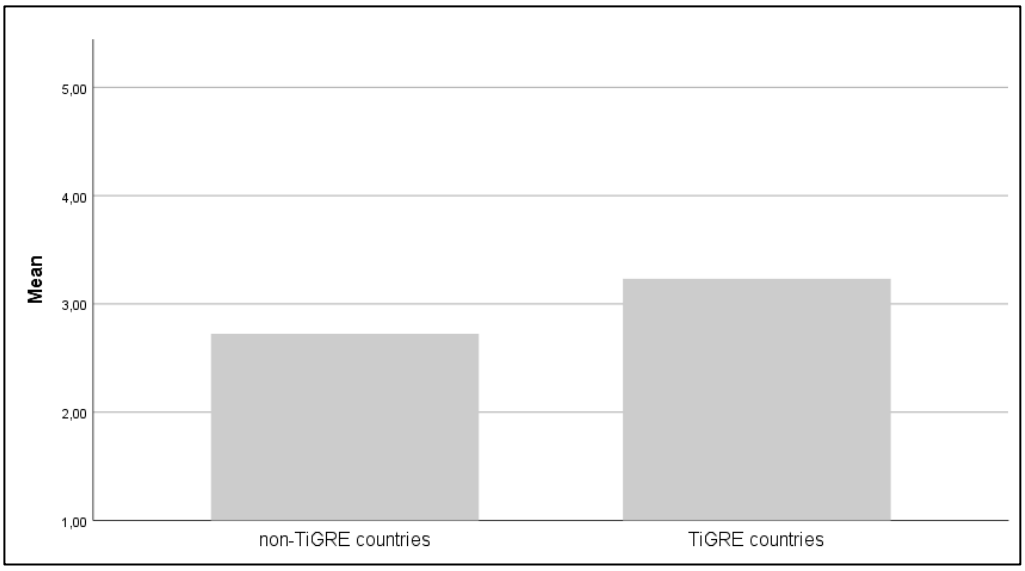

Figure 36: How many public officials in [country] are involved in corruption? ISSP

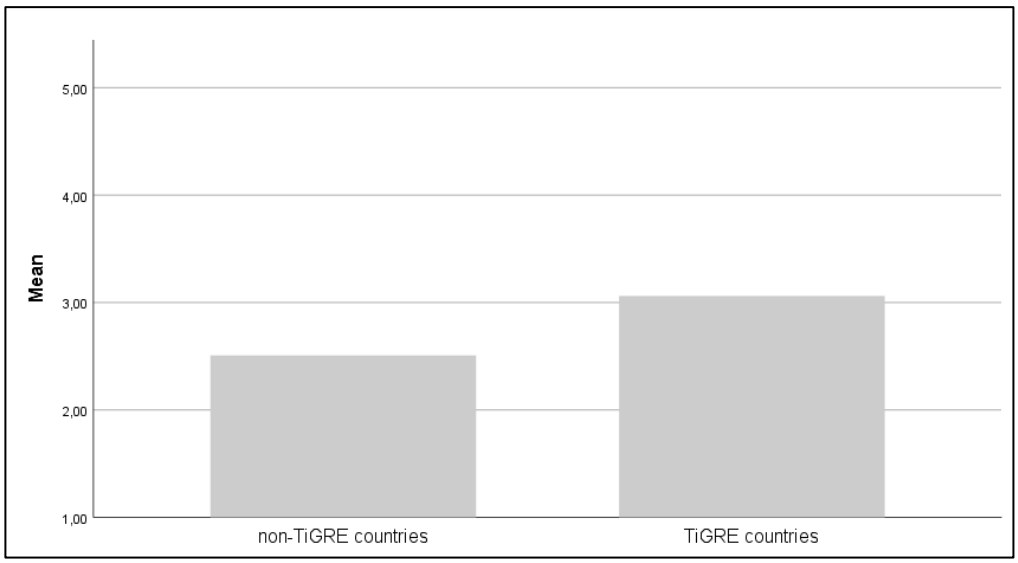

Figure 37: How many politicians in [country] are involved in corruption? ISSP

Appendix 4: Tables

Table 12: Correlation matrix for trust different between actors – ESS

Correlations								
		parliament	legal_system	police	politicians	political_parties	european_parliament	united_nations
parliament	Pearson Correlation	1	,914**	,793**	,929**	,931**	,470**	,618**
	N	203	203	203	203	180	203	203
legal_system	Pearson Correlation	,914**	1	,877**	,865**	,878**	,367**	,588**
	N	203	203	203	203	180	203	203
police	Pearson Correlation	,793**	,877**	1	,733**	,729**	,336**	,675**
	N	203	203	203	203	180	203	203
politicians	Pearson Correlation	,929**	,865**	,733**	1	,995**	,525**	,682**
	N	203	203	203	203	180	203	203
political_parties	Pearson Correlation	,931**	,878**	,729**	,995**	1	,533**	,693**
	N	180	180	180	180	180	180	180
european_parliament	Pearson Correlation	,470**	,367**	,336**	,525**	,533**	1	,632**
	N	203	203	203	203	180	203	203
united_nations	Pearson Correlation	,618**	,588**	,675**	,682**	,693**	,632**	1
	N	203	203	203	203	180	203	203

**. Correlation is significant at the 0.01 level (2-tailed).

Table 13: Non-parametric correlation matrix for trust between different actors

Correlations

			parliament	legal_system	police	politicians	political_parties	european_parliament	united_nations
Kendall's tau_b	parliament	Correlation Coefficient	1,000	,727**	,596**	,787**	,798**	,341**	,435**
		N	203	203	203	203	180	203	203
	legal_system	Correlation Coefficient	,727**	1,000	,705**	,665**	,687**	,255**	,427**
		N	203	203	203	203	180	203	203
	police	Correlation Coefficient	,596**	,705**	1,000	,551**	,553**	,216**	,471**
		N	203	203	203	203	180	203	203
	politicians	Correlation Coefficient	,787**	,665**	,551**	1,000	,939**	,374**	,490**
		N	203	203	203	203	180	203	203
	political_parties	Correlation Coefficient	,798**	,687**	,553**	,939**	1,000	,374**	,496**
		N	180	180	180	180	180	180	180
	european_parliament	Correlation Coefficient	,341**	,255**	,216**	,374**	,374**	1,000	,485**
		N	203	203	203	203	180	203	203
	united_nations	Correlation Coefficient	,435**	,427**	,471**	,490**	,496**	,485**	1,000
		N	203	203	203	203	180	203	203

**. Correlation is significant at the 0.01 level (2-tailed).

Table 14: Correlation matrix for trust different between actors - WVS/EVS

Correlations

		Civil_Service	Universities	Major_Companies	Education_system	Press	Television	Labor_Unions	Government	Political_PartiesEVS	Courts	PoliceEVS	ParliamentEVS	Social_Security_System	Banks	European_Union	United_NationsEVS	Health_care_system
Civil_Service	Pearson	1	,559**	,596**	,547**	,532**	,624**	,771**	,685**	,725**	,715**	,549**	,760**	,633**	,655**	,085	,461**	,596**
Universities	Pearson	,559**	1	,719**	.b	,564**	,529**	,561**	,582**	,572**	,532**	,398**	,622**	.b	,540**	,264	,677**	.b
Major_Companies	Pearson	,596**	,719**	1	,560**	,525**	,578**	,568**	,607**	,562**	,494**	,301**	,549**	,417**	,807**	,270**	,489**	,507**
Education_system	Pearson	,547**	.b	,560**	1	,367**	,548	,569**	,473**	,543**	,518**	,373**	,476**	,494**	.b	-,076	,279**	,700**
Press	Pearson	,532**	,564**	,525**	,367**	1	,894**	,630**	,630**	,652**	,433**	,096	,569**	,296**	,631**	,254**	,431**	,174
Television	Pearson	,624**	,529**	,578**	,548	,894**	1	,711**	,642**	,668**	,521**	,269**	,666**	,383	,671**	,351**	,429**	.b
Labor_Unions	Pearson	,771**	,561**	,568**	,569**	,630**	,711**	1	,658**	,748**	,712**	,527**	,713**	,645**	,703**	,015	,487**	,578**
Government	Pearson	,685**	,582**	,607**	,473**	,630**	,642**	,658**	1	,813**	,682**	,467**	,859**	,532**	,594**	,030	,295**	,465**
Political_PartiesEVS	Pearson	,725**	,572**	,562**	,543**	,652**	,668**	,748**	,813**	1	,657**	,375**	,905**	,588**	,622**	,022	,468**	,548**
Courts	Pearson	,715**	,532**	,494**	,518**	,433**	,521**	,712**	,682**	,657**	1	,721**	,750**	,624**	,605**	-,121	,272**	,683**
PoliceEVS	Pearson	,549**	,398**	,301**	,373**	,096	,269**	,527**	,467**	,375**	,721**	1	,543**	,484**	,316*	-,026	,213**	,629**
ParliamentEVS	Pearson	,760**	,622**	,549**	,476**	,569**	,666**	,713**	,859**	,905**	,750**	,543**	1	,589**	,576**	,097	,422**	,621**
Social_Security_System	Pearson	,633**	.b	,417**	,494**	,296**	,383	,645**	,532**	,588**	,624**	,484**	,589**	1	.b	,118	,304**	,741**
Banks	Pearson	,655**	,540**	,807**	.b	,631**	,671**	,703**	,594**	,622**	,605**	,316*	,576**	.b	1	,024	,492**	.b
European_Union	Pearson	,085	,264	,270**	-,076	,254**	,351**	,015	,030	,022	-,121	-,026	,097	,118	,024	1	,717**	-,098
United_NationsEVS	Pearson	,461**	,677**	,489**	,279**	,431**	,429**	,487**	,295**	,468**	,272**	,213**	,422**	,304**	,492**	,717**	1	,319**
Health_care_system	Pearson	,596**	.b	,507**	,700**	,174	.b	,578**	,465**	,548**	,683**	,629**	,621**	,741**	.b	-,098	,319**	1

**. Correlation is significant at the 0.01 level (2-tailed).

*. Correlation is significant at the 0.05 level (2-tailed).

b. Cannot be computed because at least one of the variables is constant.

Table 15: Correlations: How widespread do you think corruption is in the public service in [country]? Citizenship 2, 2013-2016

Independent Samples Test										
		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
avgv61	Equal variances assumed	,113	,739	-2,228	32	,033	-,443	,199	-,848	-,038
	Equal variances not assumed			-2,122	13,031	,054	-,443	,209	-,893	,008

Table 16: Correlations: Thinking of the public service in [country], how committed is it to serve the people?

Independent Samples Test										
		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
avgv60	Equal variances assumed	,744	,395	-2,117	31	,042	-,241	,114	-,473	-,009
	Equal variances not assumed			-1,803	11,112	,099	-,241	,134	-,534	,053

Table 17: Correlations: How many public officials in [country] are involved in corruption?

Independent Samples Test										
		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
avgv59	Equal variances assumed	,380	,542	-2,524	33	,017	-,508	,201	-,918	-,099
	Equal variances not assumed			-2,211	8,060	,058	-,508	,230	-1,038	,021

Table 18: Correlations: How many politicians in [country] are involved in corruption? The Role of Government 5, 2015-2018

Independent Samples Test										
		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
avgv58	Equal variances assumed	3,172	,084	-2,215	33	,034	-,55280	,24954	-1,06049	-,04511
	Equal variances not assumed			-1,665	7,190	,139	-,55280	,33195	-1,33355	,22795