



Trust and distrust in public governance settings: Conceptualising and testing the link in regulatory relations

Koen Verhoest, Dominika Latusek, Frédérique Six, Libby Maman, Yannis Papadopoulos, Rahel M. Schomaker & Jarle Trondal

To cite this article: Koen Verhoest, Dominika Latusek, Frédérique Six, Libby Maman, Yannis Papadopoulos, Rahel M. Schomaker & Jarle Trondal (02 Sep 2024): Trust and distrust in public governance settings: Conceptualising and testing the link in regulatory relations, Journal of Trust Research, DOI: [10.1080/21515581.2024.2383918](https://doi.org/10.1080/21515581.2024.2383918)

To link to this article: <https://doi.org/10.1080/21515581.2024.2383918>



© 2024 The Author(s). Published by Informa UK Limited, trading as Taylor & Francis Group



[View supplementary material](#)



Published online: 02 Sep 2024.



[Submit your article to this journal](#)








[View related articles](#)



[View Crossmark data](#)

Trust and distrust in public governance settings: Conceptualising and testing the link in regulatory relations

Koen Verhoest ^a, Dominika Latusek ^b, Frédérique Six^{c,d}, Libby Maman ^{e,f},
Yannis Papadopoulos^g, Rahel M. Schomaker ^{h,i} and Jarle Trondal ^{j,k}

^aDepartment of Political Science & GOVTRUST Centre of Excellence, University of Antwerp, Antwerp, Belgium; ^bCentre for Trust Studies, Kozminski University, Warsaw, Poland; ^chet Zijlstra Center, School of Business and Economics, Vrije Universiteit Amsterdam, Amsterdam, Netherlands; ^dGOVTRUST Centre of Excellence, University Antwerp, Antwerp, Belgium; ^eInstitut Barcelona d'Estudis Internacionals (IBEI), Barcelona, Spain; ^fThe Federmann School of Public Policy and Government, The Hebrew University, Jerusalem, Israel; ^gLaboratoire d'analyse de la gouvernance et de l'action publique en Europe (LAGAPE), Geopolis, Université de Lausanne, Lausanne, Switzerland; ^hGerman University of Administrative Sciences, Speyer, Germany; ⁱDepartment of Economics and Public Administration, Carinthia University of Applied Sciences, Villach, Austria; ^jARENA Centre for European Studies, Oslo, Norway; ^kDepartment of Political Science and Management, Agder University, Kristiansand, Norway

ABSTRACT

The relationship between trust and distrust in public governance is still an open question. In the literature, three different perspectives on how trust and distrust are related are intensively debated: (1) trust and distrust as two ends of the same conceptual continuum; (2) trust and distrust as opposites, but with neutral ground in between; and (3) trust and distrust as related, yet distinct concepts. Employing a new measure for distrust and by using perceptual data on trust and distrust in regulatory agencies from multiple types of stakeholders in nine countries and three sectors, this article shows that high trust and high distrust can co-exist at the same time, and that trust and distrust are negatively correlated only to a limited extent. Moreover, while trustworthiness correlates strongly with trust, trustworthiness does not or only weakly correlate with distrust in a negative way. These findings are robust even when controlling for respondents' characteristics, different types of stakeholders, sectors and countries. This suggests that in public governance settings trust and distrust should be considered as distinct concepts, and the article calls for more research into the distinctiveness of the measurement, causes and effects of distrust, compared to trust.

ARTICLE HISTORY

Received 8 August 2023
Accepted 19 July 2024


KEYWORDS

Trust; distrust; watchfulness;
public governance;
regulatory regimes;
regulatory agency

1. Introduction

This study aims to clarify the conceptual relation between trust and distrust in public governance using empirical data on stakeholder trust and distrust in regulatory agencies. Trust refers to the willingness to accept vulnerability based on positive

CONTACT Koen Verhoest  koen.verhoest@uantwerpen.be  Department of Political Science & GOVTRUST Centre of Excellence, University of Antwerp, Stadscampus Meerminne Building, Sint-Jacobstraat 2, Antwerp 2000, Belgium

 Supplemental data for this article can be accessed online at <https://doi.org/10.1080/21515581.2024.2383918>.

© 2024 The Author(s). Published by Informa UK Limited, trading as Taylor & Francis Group

This is an Open Access article distributed under the terms of the Creative Commons Attribution-NonCommercial-NoDerivatives License (<http://creativecommons.org/licenses/by-nc-nd/4.0/>), which permits non-commercial re-use, distribution, and reproduction in any medium, provided the original work is properly cited, and is not altered, transformed, or built upon in any way. The terms on which this article has been published allow the posting of the Accepted Manuscript in a repository by the author(s) or with their consent.

expectations regarding another's intentions or conduct (Lewicki et al., 1998, p. 439), while distrust indicates the refusal to accept vulnerability based on negative expectations regarding another's intention or conduct (Lewicki et al., 1998; cf. Guo et al., 2017). While their definitions appear as each other's opposites, the conceptual relation between trust and distrust remains an open question (Bijlsma-Frankema et al., 2015; Gustafsson et al., 2021; Hamm et al., 2023; Mayer & Mussweiler, 2011; Six & Latusek, 2023). Although traditionally distrust was conceptualised as the opposite of trust, recent studies posit that despite their naturally polarised definitions, they are in fact separable and distinct concepts (Dimoka, 2010; Komiak & Benbasat, 2008; Moody et al., 2014; Mthombeni & Chizema, 2022; Saunders et al., 2014). In the trust literature, three different perspectives on how trust and distrust relate to each other can be found (Guo et al., 2017): (1) trust and distrust as two ends of the same conceptual continuum with overlapping range (i.e. high trust implies low distrust and vice versa), which we will refer to as Perspective 1; (2) trust and distrust as two ends of the same conceptual continuum, but with neutral ground in between and no overlapping range (Perspective 2 in this article); and (3) trust and distrust as related, yet distinct concepts (Perspective 3 in this article). The conceptual discussion about which of the three perspectives is correct, is still ongoing.

Research on trust and distrust in public governance reflects this broader conceptual ambiguity. In the relations between citizens and the public sector, distrust has been mostly seen as the inverse or absence of trust (OECD, 2022; Osuna et al., 2021; Peeters & Dussauge Laguna, 2021). Recently, researchers have increasingly highlighted that this conceptualisation may be inaccurate and problematic (Bertsou, 2019; Bunting et al., 2021; Six & Latusek, 2023; Uslaner, 2015; Van De Walle & Six, 2014) and that trust and distrust may be better conceptualised as separate yet related concepts (e.g. Bertsou, 2019; Catala, 2015; Guo et al., 2017; Hardin, 2004; Krishnamurthy, 2015; Oomsels et al., 2019; Raaphorst & Van de Walle, 2018; Six & Verhoest, 2017; Van De Walle & Six, 2014). These contributions include empirical studies investigating the functions of trust and distrust in interorganisational relations within the public sector (Callens & Bouckaert, 2019; Oomsels et al., 2019) and studies of distrust in regulation research (Gunningham & Sinclair, 2009a, 2009b). Recent research also recognises limits and risks in trusting in the context of public governance and calls for a more balanced approach to acknowledge functionalities as well as dysfunctions of trust and distrust. In the relation between citizens and the government (Bertsou, 2019; Bunting et al., 2021; Devine et al., 2020a, 2020b), but also between public governance actors (Oomsels et al., 2019; Verhoest et al., 2024), the importance of distrust is seen as equal to that of trust (Hardin, 2004).

In line with the debate in the general trust literature, the discussion about the conceptual relation of trust and distrust in public governance is still ongoing and unresolved. This study seeks to assess how trust and distrust relate in public governance, and which one of the three dominant perspectives is best supported when confronted with new data on trust and distrust between actors in public governance settings. We do this in two ways. First, we study the direct relation between trust and distrust. Second, considering that trustworthiness is a crucial antecedent of trust and hence should relate closely to trust, we also assess its relationship with trust and distrust. This provides additional evidence as to which one of the three perspectives fits best with the empirical reality.

The paper seeks to contribute to the debate regarding how trust and distrust relate in public governance settings and by doing so it addresses four gaps in the literature.

First, although some studies have begun to explore distrust (e.g. Bunting et al., 2021; Hamm et al., 2023; Lee & Dodge, 2019), the field still lacks appropriate measurements. Existing surveys often fail to differentiate between trust and distrust and instead simply interpret low scores on trust questions as distrust (Cho, 2006; Schul et al., 2008; Uslaner, 2015). This study tests a newly developed one-item measure of distrust, enabling the study of distrust in a public governance setting in a way that is analogous to the study of trust, which is useful for both academic and policy-oriented purposes.

Second, there is an empirically backed consensus that trust largely (although not entirely, e.g. Bradford et al., 2022; Hamm et al., 2017) results from the assessment of the target's trustworthiness, being its ability, benevolence and integrity (Dietz, 2011; Tomlinson & Schnackenberg, 2022). Nonetheless, there is a lack of research on the relation between trustworthiness and distrust. This study, therefore, tests empirically not only how trust relates to distrust, but also how assessments of trustworthiness relate to both trust and distrust.

Third, to make conceptual progress, researchers need to move beyond focusing on citizens' trust in generic governance institutions (e.g. 'government', 'public administration') to more specific trust targets. Studies like Grimmelikhuijsen et al. (2020) have begun this, however they measure trust exhibited by citizens who do not necessarily interact with the target institution. Moreover, existing studies do not recognise that most citizens occupy professional roles and might evaluate trust and distrust in public institutions from the perspective of those roles. Our research fills this gap, offering a relational, experience-based view on trust in public governance settings, focusing on specific public organisations as trustees and specific public and private trustors who interact with these organisations in their professional role (i.e. some form of elite trust, instead of public trust) (Verhoest et al., *in press*).

Fourth, while the number of empirical studies of trust is growing, most research focuses on single countries and sectors and taking the perspective of citizens or one stakeholder group. This is even more the case for the still-rare distrust studies. These limitations pose severe challenges as to the generalisation of findings. Our study is unique as it uses data from multiple stakeholder groups, countries and sectors to study the relation between trust and distrust.

In order to empirically test how trust and distrust are conceptually related in public governance settings (directly and through their connection with trustworthiness), we use data from a recent survey that measured trust and distrust from different public and private stakeholders towards regulatory agencies across three sectors (financial sector regulation, food safety regulation, and data protection regulation) in nine European countries with different politico-administrative cultures and traditions (Kappler et al., 2024; Verhoest et al., 2024). Regulatory agencies are public bodies which supervise and enforce regulations towards private actors, and therefore have some autonomy towards both their political and administrative principals as well as towards the regulated sectors. Examples are the food safety regulators or financial market regulators as they exist in most countries. The stakeholders who were surveyed involve all the different actors who need to interact and collaborate with the regulatory agencies. This includes public actors like legislative politicians and civil servants from ministries and other

executive bodies, regulatory intermediaries and private actors including the regulated companies and their interest groups, and consumer associations that represent the consumers of the regulated products and services.

To study trust and distrust relations in public governance, regulated sectors provide a meaningful context, because many stakeholders in regulated markets are locked-in with the regulatory agencies (Verhoest et al., [in press](#)). Thus, there is mutual vulnerability: The stakeholders are dependent on the regulatory agencies and the latter create various risks for the stakeholders. Furthermore, regulatory agencies exhibit characteristics, which are typical for many public organisations. They have to balance different demands and objectives that often compete for prioritisation. Their performance is hard to compare with fixed norms, and to assess in general, because of the indirect effect through changing behaviour of affected stakeholders, the conflating influence of other contextual factors, the difficulty of attribution and temporal difference between actions and outcomes, and the fact that there are other actors involved in the regulatory chain (Coglianese, 2012; Verhoest et al., 2023).

Important for the delineation of the paper is that its aim is not to explain levels of trust and distrust in regulatory agencies by referring to individual, organisational, sector or country factors. We do not seek to explain trust and distrust perceptions by referring to differences between agencies, sectors or countries, or even respondents. We do, however, control for as many of these factors as possible. The aim of the paper is thus to use novel empirical data to gauge how trust and distrust are related to each other in public governance, both directly, and indirectly through their connection with trustworthiness, while controlling for potential confounding factors. In so doing, we test which of the three dominant perspectives on the relation between trust and distrust are supported.

The remainder of the article is structured as follows. First, we lay out a theoretical framework to clarify the differences among the three perspectives and to formulate expectations. Next, we bring in trustworthiness and use the three perspectives to theorise how trustworthiness would relate to distrust. We formulate expectations on how the link between trustworthiness and distrust would translate empirically in the three perspectives in order to be able to test them. The methods and data section follow thereafter. The results section reports the findings from our analyses, using the data from an international research project on trust and distrust between actors within regulatory regimes. We conclude by discussing the main implications of the results of our study.

2. Theoretical-analytical framework: conceptual relations between trust, distrust and trustworthiness

2.1. How do trust and distrust relate? Conceptual relations and expected empirical patterns

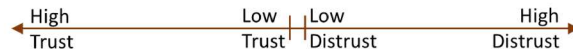
2.1.1. Conceptual relation between trust and distrust

The relation between trust and distrust has been conceptually approached from three perspectives, as shown in [Figure 1](#) (Based on Guo et al., 2017; Sitkin & Bijlsma-Frankema, 2018; Six & Latusek, 2023).

Perspective 1: Trust and distrust are the two ends of the same conceptual spectrum with overlapping range ('low-distrust-as-high-trust')



Perspective 2: Trust and distrust are two ends of the same conceptual spectrum with neutral state in-between ('dyadic')



Perspective 3: Trust and distrust are different concepts ('distrust as different from trust')



Figure 1. Conceptual relations of trust and distrust: three perspectives (based on: Guo et al., 2017).

First, in the *Perspective 1*, 'low-distrust-as-high-trust', trust and distrust are two ends of the same continuum (Schoorman et al., 2007), with high trust being equal to low distrust, and high distrust being equal to low trust. Trust and distrust are therefore basically part of the same judgement (Guo et al., 2017; Sitkin & Bijlsma-Frankema, 2018).

Second, in the 'dyadic' *Perspective 2*, trust and distrust are opposites on the same continuum, but with a neutral position in between and no overlapping range (see e.g. Guo et al., 2017). In this second perspective, whenever there is a moderate or high degree of distrust, trust is lacking, and any degree of trust above zero precludes the existence of distrust. In this perspective, however, trust and distrust can both be lacking, for example between actors who are basically indifferent towards each other because there are no dependencies between them or when they are ignorant about each others' existence. In these two perspectives, high distrust obviates the possibility of high trust (Lewicki & Tomlinson, 2003).

Third, in the 'distrust-as-different-from-trust' *Perspective 3*, trust and distrust are qualitatively distinct phenomena that can co-exist and can have high or low intensity simultaneously (Kostis et al., 2022; Lee & Dodge, 2019; Lewicki et al., 1998; Lumineau, 2017; Oomsels et al., 2019; Sitkin & Bijlsma-Frankema, 2018; Sitkin & Roth, 1993). In this view, the decisions of whether to trust and whether to distrust are two separate judgements, instead of two potential outcomes of the same decision (Guo et al., 2017).

Empirical studies increasingly provide evidence that trust and distrust differ in many aspects. This indicates that trust and distrust are potentially different constructs and is in line with the *Perspective 3*. Trust and distrust are characterised by different emotions and thought patterns: While trust is characterised by calm, assurance, and security, distrust is generally associated with fear, anger, paranoia, worry, fear of loss, suspicion and wariness (Deutsch, 1958; Dimoka, 2010; McKnight & Chervany, 2002; McKnight et al., 2004). The experience of distrust tends to be more intense and emotionally charged compared to trust, often manifesting as a heightened state of vigilance and negative emotions, making it more impactful than the generally calmer experience of trust (McKnight & Chervany, 2001b, 2001c). Furthermore, trust and distrust exhibit different processual patterns: Trust usually builds up gradually

over time, while distrust may be a consequence of single action (Six, 2005) and appear abruptly (Lane & Bachmann, 1998). This ‘catastrophic’ view of distrust is reinforced by the finding that while trust may be domain-specific (Ferrin et al., 2007; Mayer et al., 1995), distrust more often pervades across domains (Bies et al., 2018; Bijlsma-Frankema et al., 2015; Sitkin & Roth, 1993) although distrust can also be domain specific (Six & Latusek, 2023).¹ Processes of trust and distrust also differ because the elements that reduce distrust do not necessarily build trust (Cook et al., 2005; Guo et al., 2017; Lumineau, 2017). Furthermore, trust may be falsified in action, while the same is difficult in the case of distrust because people avoid forming relations with those they distrust and, by default, doubt information they receive from the distrusted parties (Gambetta, 1988; Luhmann, 1979; Nooteboom, 2002; Sztompka, 1999). Trust and distrust also have different behavioural consequences. Distrust on the individual level results in risk-averse behaviour, watchfulness, and vigilance (Cho, 2006; Kramer, 1994, 1996; Lewicki et al., 1998; McKnight et al., 2004; Sitkin & Roth, 1993; Sitkin & Stickel, 1996) and on the inter-group level results in diminished cooperation and, where possible, avoidance of interaction with the other group (Bijlsma-Frankema et al., 2015).² Despite these important findings, however, empirical efforts to study the complex relation between trust and distrust are still limited, and their results remain inconclusive (Hamm et al., 2023; Kostis et al., 2022; Oomsels et al., 2019; Saunders & Thornhill, 2004).

In the Perspective 3 in which trust and distrust are distinct concepts, an influential concept of trust–distrust relations was put forward by Lewicki et al. (1998), who claim that it is possible to have both trust and distrust within the same relationship. The co-existence of trust and distrust can be depicted in four quadrants in a two-axis scheme as depicted in Figure 2: low trust/high distrust (quadrant Q1), low trust/low

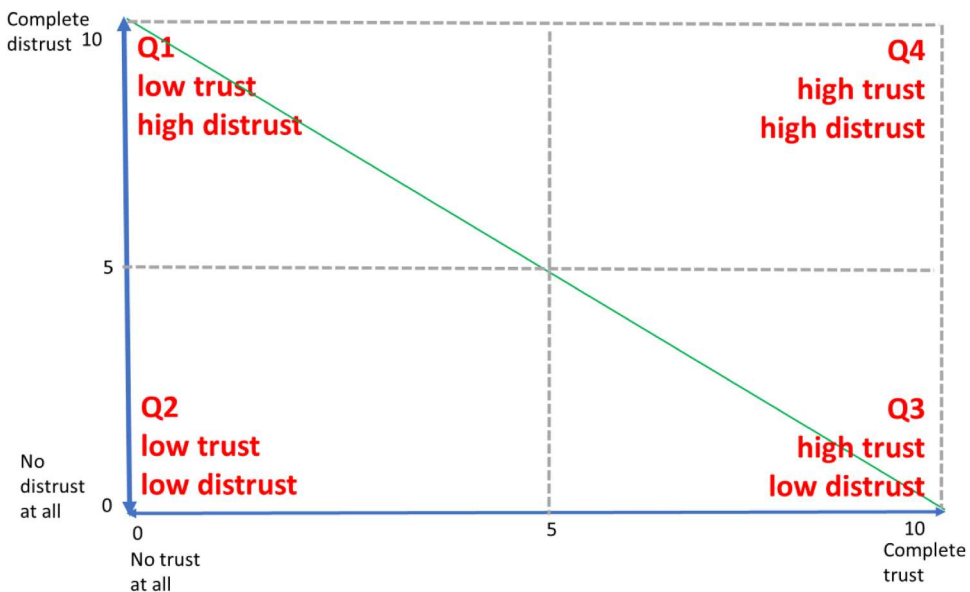


Figure 2. Trust–distrust quadrants (based upon Lewicki et al., 1998; Oomsels, 2016; Saunders & Thornhill, 2004).

distrust (quadrant Q2), high trust/low distrust (quadrant Q3) and high trust/high distrust (quadrant Q4).

Whereas the quadrants of low trust/high distrust (Q1) and of high trust/low distrust (Q3) are easily imaginable, and the quadrant of low trust/low distrust (Q2) mainly refers to interactions between non-interdependent actors, the quadrant of high trust/high distrust (Q4) may appear counter-intuitive. In the view of Lewicki et al. (1998), such interactions arise between actors who perceive high levels of interdependencies. The high trust/high distrust combination is manifested in segmented relationships, in which opportunities are pursued for some joint goals while vulnerabilities on other aspects are continuously monitored. Guo et al. (2017) relate the coexistence of trust and distrust to relational ambivalence, indicating four situations in which trust and distrust can coexist: (a) 'multiplex' relationships covering different domains with high trust existing on some domains and high distrust on other domains; (b) trust and distrust judgements involving different dimensions; (c) judgements involving different persons or units within the trustor and/or trustee (e.g. trusting one division but distrusting another division within an organisation); and (d) judgements involving different moments in the relationship.³

In the public governance field, the study of trust and distrust relations has been impeded by an 'optimistic bias' such that more trust is assumed to always be better (Gargiulo & Ertug, 2006; Oomsels et al., 2019). Focusing solely on positive aspects of trust may obstruct debates about functional expressions of low trust and distrust in the public sector, such as oversight, accountability and administration of checks and balances (Bouckaert, 2012). Noticing this, academics have recently begun to emphasise that a more balanced approach is needed to see both functionalities and dysfunctions of trust and distrust. Specific contributions have indicated that trust and distrust merit equal attention in the context of public administration in general (Van De Walle & Six, 2014) and in regulation in particular (Six & Verhoest, 2017). In a recent empirical study, Callens and Bouckaert (2019) concluded that a balance of trust and distrust is needed for successful information transfer between judicial governmental agencies (see also Verhoest et al., 2024). Similarly, Oomsels et al. (2019) explorative field study illustrated that both interorganisational trust and distrust can be functional or dysfunctional in interorganisational interactions in the public sector.

2.1.2. *Expected empirical relation between trust and distrust*

Depending on which of the three perspectives on trust and distrust in a specific actor are correct, we expect to observe specific empirical patterns when analysing empirical data on separately measured indicators of perceived trust and distrust. First, when plotting the data graphically on a trust–distrust two-axis scheme, as shown in Figure 2, the extent to which observations are plotted in the different quadrants helps us to identify which of the three perspectives is supported. In Table 1 we specify how the distribution of trust–distrust observations would look in each of the three perspectives.

As specified and graphically presented in Table 1, observations in along the diagonal line crossing Q1 and Q3 in Figure 2 are compatible with trust and distrust being opposite sides of a continuum (*the 'low-distrust-as-high-trust' Perspective 1*). If trust and distrust were opposite sides of a continuum but with a neutral position in-between (*the 'dyadic' Perspective 2*), then we would expect to see only observations on (or very close to) the X-axis, the Y-axis, and the zero -point on both axes in Figure 2. Following



Table 1. Expectation of empirical patterns for each perspective on (A) the relation between trust and distrust and (B) the relation between trustworthiness and trust/distrust.

Empirical test*	Perspective	Method	Expected empirical pattern	How to recognise the empirical pattern?
Test _{trust} P1s	(A) Conceptual relation between trust and distrust Perspective 1: Two ends of the same conceptual spectrum with overlapping range ('low-distrust-as-high-trust').	Graphical representation with trust/distrust quadrants	Solely observations on or very close to the diagonal line from no trust (0 for trust) and maximum distrust (10 for distrust) to maximum trust (10 for trust) and no distrust (0 for distrust) (i.e. cutting diagonally through Q1 and Q3 in Figure 2). There should be no observations in Q2 (low trust and low distrust) or Q4 (high trust and high distrust) and no observations which are not positioned on or very close to the diagonal line. To be recognised as the green marked diagonal line on the graph in the next column.	
	Perspective 2: Two ends of the same conceptual spectrum with non-overlapping range ('dyadic').	Graphical representation with trust/distrust quadrants	Solely observations in Q1, Q2 and Q3, and more specifically on (or very close) to the X-axis, the Y-axis, and the zero-point on both axes. There can be no observations in Q4 (high trust and high distrust). To be recognised as the green marked area on (or very close) to the X-axis, the Y-axis and the zero-point on both axes on the graph in the next column.	
	Perspective 3: Separate concepts on different dimensions ('distrust-as-different-from-trust').	Graphical representation with trust/distrust quadrants	There are potentially observations across all four quadrants, showing potentially all combinations of levels of trust and distrust, including observations in Q4 (high trust and high distrust). Please see the green marked areas in the graph in the next column, covering all four quadrants (Q1, Q2, Q3 and Q4).	
Test _{trust} P1c	Perspective 1: Two ends of the same conceptual spectrum with overlapping midrange ('low-distrust-as-high-trust').	Partial correlation	A quasi perfect negative and significant relation between the trust and distrust variables.	Partial correlation coefficient is equal to, or very close to, a perfect negative correlation (−1)

(Continued)

Table 1. Continued.

Empirical test*	Perspective	Method	Expected empirical pattern	How to recognise the empirical pattern?
Test _{trust} P2c	Perspective 2: Two ends of the same conceptual spectrum with non-overlapping range ('dyadic').	Partial correlation	A negative and strong-to-moderate statistically significant (partial) correlation between trust and distrust (i.e. high values of distrust can only go with very low or zero values of trust and vice versa; however, observations with low trust and low distrust are possible).	Partial correlation coefficient is negative and moderate to strong, but not a perfect negative correlation (> -1)
Test _{trust} P3c	Perspective 3: Separate concepts on different dimensions ('distrust-as-different-from-trust').	Partial correlation	No significant or only a weak statistically negative significant (partial) correlation between the trust and distrust variables	Partial correlation coefficient is negative and weak, or even close to or equal to zero
(B) Conceptual relation between trustworthiness and trust/distrust				
Test _{trustworthiness} P1c	Perspective 1: Two ends of the same conceptual spectrum with overlapping range ('low-distrust-as-high-trust').	Partial correlation	A strong positive (partial) correlation of trustworthiness (and its dimensions) with trust, and a strong negative statistically (partial) correlation of trustworthiness (and its dimensions) with distrust.	Partial correlation coefficient of trustworthiness (and its dimensions) with trust is a strong positive correlation Partial correlation coefficient of trustworthiness (and its dimensions) with distrust is a strong negative correlation
Test _{trustworthiness} P2c	Perspective 2: Two ends of the same conceptual spectrum with non-overlapping range ('dyadic').	Partial correlation	A strong positive (partial) correlation of trustworthiness (and its dimensions) with trust, but a moderate negative (partial) correlation of trustworthiness (and its dimensions) with distrust.	Partial correlation coefficient of trustworthiness (and its dimensions) with trust is a strong positive correlation Partial correlation coefficient of trustworthiness (and its dimensions) with distrust is a moderate negative correlation
Test _{trustworthiness} P3c	Perspective 3: Separate concepts on different dimensions ('distrust-as-different-from-trust').	Partial correlation	A strong and positive (partial) correlation of trustworthiness (and its dimensions) with trust, but no or a weak negative (partial) correlation of trustworthiness (and its dimensions) with distrust	Partial correlation coefficient of trustworthiness (and its dimensions) with trust is a strong positive correlation Partial correlation coefficient of trustworthiness (and its dimensions) with distrust is a weak negative or no correlation

*Note regarding Table 1 (first column): The name of the tests refers to the perspective they focus on by referring to P1, P2 or P3. The notation 's' refers to the use of scatterplots to see patterns. The notation 'c' refers to the use of partial correlations in the empirical test.

this dyadic perspective, when there is a certain level of (e.g. high) trust, there is no distrust, and vice versa. There could also be relations in which both trust and distrust are very low or not present at all. However, if trust and distrust are different concepts (i.e. the ‘*distrust-as-different-from-trust*’ Perspective 3), one might be able to find observations in all four quadrants in Figure 2. In particular, observations in Quadrant Q4, representing responses which indicate both high trust and high distrust, are only possible if trust and distrust are indeed different concepts. The expectations about the empirical patterns to be found in support of each perspective are shown in Table 1 in which we also visualise what we would expect to see as patterns on the graphical representations (i.e. scatterplots plotting observations on trust and distrust, see $\text{Test}_{\text{trust}} \text{P1s}$; $\text{Test}_{\text{trust}} \text{P2s}$; $\text{Test}_{\text{trust}} \text{P3s}$ with the number in these tests refer to the perspective being tested).

The relation between trust and distrust can also be assessed by analysing the statistical correlation between both variables. However, the association between trust and distrust might be biased by (over- or underrepresentation of specific) socio-demographic features of the respondents, by country-specific variables like culture, and by the actor types to which the respondents belong. Therefore, we can formulate competing expectations about the empirical relation between trust and distrust using partial correlations, as shown in Table 1, in the lowest rows of part A (see $\text{Test}_{\text{trust}} \text{P1c}$; $\text{Test}_{\text{trust}} \text{P2c}$; $\text{Test}_{\text{trust}} \text{P3c}$ with the number in these tests refer to the perspective being tested).

2.2. How can we study the relation between trust and distrust through their connection with trustworthiness? Conceptual relations and expected empirical patterns

2.2.1. Conceptual relations of trustworthiness with trust and distrust

We can study the conceptual relation between trust and distrust not only by looking at their direct and mutual relation, but also by studying their link through their connection with trustworthiness as the main antecedent of trust. We know from the literature that trust is proximally influenced by trustworthiness and its dimensions (Dietz, 2011; Mayer et al., 1995). However, depending on the perspective one takes regarding how trust and distrust relate to each other, the expectations about how trustworthiness and its dimensions relate to distrust will also differ. If trust and distrust are different concepts, we would expect the trustworthiness dimensions to have strong correlations with trust but to have no or only marginally significant relations with distrust. In this section, we first develop this theoretically and then translate this into expectations which we can test empirically.

The extant literature has provided evidence that trust is predominantly based upon the perceived trustworthiness of the target (Dietz, 2011), with the target’s perceived characteristics being what matters, not their objective qualities (Grimmelikhuisen & Knies, 2017; Mayer et al., 1995). Trustworthiness has indeed been identified as one of two key antecedents to trust, alongside the psychological individual trust propensity of the trustor (Baer & Colquitt, 2018; Mayer et al., 1995). Trustworthiness consists of three dimensions: ability, benevolence, and integrity (Mayer et al., 1995; McEvily & Tortoriello, 2011). Ability refers to the expectation that the other party has the competence to successfully complete a given task, benevolence refers to the expectation that the other party cares about the trustor’s interests and needs, and integrity refers to the expectation that the other party will adhere

to principles that are acceptable to the trustor. The three-dimensional nature of trustworthiness has been validated empirically (e.g. Cummings & Bromily, 1996; Mayer & Davis, 1999; McKnight & Chervany, 2002), and specifically in a public administration context by Grimmelikhuisen and Knies (2017).

Following this, if trust is strongly positively influenced by trustworthiness and the three trustworthiness dimensions, while distrust is strongly but negatively influenced by trustworthiness and its three dimensions, this would support the argument that trust and distrust are opposites (in Perspective 1). In Perspective 2, the relation between trustworthiness and distrust would be attenuated in comparison with Perspective 1. In contrast, if trust and distrust are separate concepts (Perspective 3), trustworthiness and its three dimensions would be strongly related to trust but unrelated or only marginally and negatively related to distrust.

2.2.2. Expected empirical relations of trustworthiness with trust and distrust

If we assume that all trustworthiness dimensions will have equal value when affecting trust, we can formulate three competing expectations about the empirical relations of trustworthiness with trust and distrust that follow from the three perspectives on how trust and distrust are related to each other. These three competing expectations are shown in part B of Table 1. Perspective 1 posits that trustworthiness will exhibit a strong positive correlation with trust and a strong negative correlation with distrust, indicating that trust and distrust are two extremes of the same continuum with overlapping ranges. In Perspective 2, trustworthiness is expected to have a strong positive correlation with trust but only a moderate negative correlation with distrust, suggesting that while trust and distrust are part of the same spectrum, their ranges do not overlap. Finally, Perspective 3 asserts that trustworthiness will be strongly positively correlated with trust, but will have either a weak negative or no significant correlation with distrust, supporting the idea that trust and distrust are distinct constructs.

3. Data and methodology

3.1. Data

This study utilises data from an online survey conducted between December 2020 and March 2021 in nine countries: Belgium, Denmark, Germany, Israel, the Netherlands, Norway, Poland, Spain, and Switzerland (see for full details on this survey: Bach et al., 2021). These countries belong to different politico-administrative cultures and geographical areas, include both EU members and associated countries (Norway, Switzerland, and Israel), and differ in their levels of societal and political trust (OECD, 2022).

The dataset used for this study constitutes a subset of the survey and includes respondents who are stakeholders in three regulatory sectors: finance, food safety and data protection. The respondents reflect a wide scope of stakeholders in these regulatory regimes (see for more detail Table 2) and include public organisations involved in the regulatory processes (legislative bodies, executive bodies, regulatory intermediaries, non-judiciary arbitration bodies), regulated organisations, interest

Table 2. Respondents included in the analyses ($N = 752$).

Number of respondents per actor type	Financial sector	Food safety sector	Data protection Sector	Total
Legislative politicians and executive bodies	36	122	61	219
Regulatory intermediaries	25	43	11	79
Regulatees	61	67	74	202
Interest groups (representing regulatees, labour and consumers)	24	34	18	76
Ombudsman and non-judiciary arbitration bodies	51	66	59	176
Total	197	332	223	752

groups, and consumer associations. Hence, the survey measures not public trust, but rather elite trust.

The respondents were selected based on a guideline to target the people at the organisations with the most knowledge of the given sector. Regulated organisations were sampled, and within these organisations, the managers in charge of compliance or quality assurance was surveyed. Within the legislative bodies, all politicians in the involved parliamentary commissions were surveyed.

The selection of regulatory agencies as targets of trust/distrust relations is motivated by several considerations (see Verhoest et al., 2023; Verhoest et al., 2024). Regulatory agencies are highly discussed emanations of public governance. They are crucial for regulating societal sectors and markets, and they are highly influential. As their tasks are to regulate, supervise, and enforce, they impact actors and their activities evoke not only positive but also negative feelings. Moreover, their political salience and media coverage is quite high (Bach et al., 2022), not only in a positive but also a negative sense, which makes them focal points of trust and distrust relations. Our choice of regulatory agencies as the subject of trust and distrust also derives from the fact that these bodies have a clearly defined stakeholder regime, which includes a wide range of public and private actors like legislators, regulatees, and citizen interest groups. Stakeholders depend upon the agencies to achieve their goals and interests. Regulators also create risks for these stakeholders. Notably, regulatory agencies exist in the same sectors in different countries, providing opportunities for cross-country studies. In sum, recognisability and comparability, clearly defined stakeholder regime, dependencies, and risks make relations with regulatory agencies a suitable research focus to explore trust/distrust relations (Hamm et al., 2023; Verhoest et al., *in press*).

The TiGRE survey was conducted online, with 8195 respondents being targeted, yielding 1484 individual responses. The response rate is 18.1%. An alternative response rate, labelled 'organisational coverage', examines the total number of unique responding organisations. This response rate hence provides information on the representativeness of the dataset in terms of covering different organisations relative to the total population of organisations. This alternative response rate is 24.2%. As we need full responses on all variables, and as we exclude the respondents from the regulatory agencies themselves, as well as those respondents who are not familiar with the regulatory agency in their sector, we use 752 responses in this paper. This sample is quite representative for the targeted and full sample (for full details on the response rate and other elements of the survey, see Bach et al., 2021).

3.2. Operationalisation and measures

The survey was drafted with the aim to keep the questionnaire as short as possible (duration of 15 min) and not too demanding for respondents. As the survey asked questions about several issues and actors, the trust, distrust, and trustworthiness questions needed to be as economical as possible, while ensuring that the items asked measure the underlying concept. Special care was taken to ensure accurate interpretation of the questionnaire items by respondents (see Bach et al., 2021 for full details). Initially written in English, the questionnaire was translated into local languages by country teams, who were instructed to stay true to the English version yet ensure local clarity and naturalness. Country partners collaborated with the coordinating team to ensure consistent and accurate translations in different iterations of translation back and forth. Each team piloted the questionnaire with experts, similar to the target respondents. Based on pilot feedback, modifications were made to the English version, prompting teams to update their translations and perform additional local cognitive tests. Overall, the survey was piloted with 37 respondents across nine countries, ensuring language sensitivity and relevance.

3.2.1. Trust in regulatory agencies

One-item questions about trust towards institutions are common practice in large cross-country surveys, such as the European Social Survey (ESS), European Values Surveys and the European Quality of Life Surveys (EQLS), and – although debated – are generally accepted as meeting standards of reliability and validity (OECD, 2017; Uslander, 2015, Bauer & Freitag, 2018, see also: Hooghe, 2011; Poznyak et al., 2014). To measure trust in regulatory agencies, we use the following item as recommended by the OECD Guidelines on Measuring Trust (2017):

Think of your experience in your organization. How much trust do you have in each of the following institutions? Please answer on a scale from '0' to '10', where '0' is no trust at all and '10' is complete trust.

We use a numerical 0–10 scale with verbal scale anchors, as this allows for a high degree of variance in responses, increases overall data quality, and facilitates translatability across languages (OECD, 2017, p. 97). The verbal scale anchors refer to absolute responses (e.g. not at all/completely), as recommended, in order to minimise acquiescence bias and socially desirable responding and to allow for the full spectrum of possible responses (OECD, 2017). The introductory phrase 'think of your experience in your organization' was included to anchor the question in the respondent's professional experience. The trust targets were the national regulatory agencies in each sector, and we only included responses from respondents who indicated that they are familiar with the national regulatory agency or agencies specified for their sector (see the list in Table S1 in the online supplemental information).

3.2.2. Distrust in regulatory agencies

Efforts to study distrust empirically are scarce, with contributions appearing in specific contexts or domains (Bijlsma-Frankema et al., 2015; Emborg et al., 2020; Guo et al., 2017; Hamm et al., 2023; Lee & Dodge, 2019; McKnight & Chervany, 2001a; Moody

et al., 2014). As such, there still are no generally accepted survey questions. Taking into account the need to minimise items in the survey questionnaire, we therefore ventured to formulate an original item.

As distrust is a sensitive research subject (Saunders & Thornhill, 2011), it is advisable not to ask the respondents about their level of distrust directly but, instead, to focus on the kind of behaviour that distrust triggers. Distrust often triggers intentional and behavioural avoidance to suspend vulnerability on the basis of negative expectations about a counterpart under conditions of risk, dependency and uncertainty (Guo et al., 2017; Oomsels et al., 2019). Despite the different reasons why an actor might be distrusted, a core element of distrust is that it evokes feelings of suspicion and expectations of harmful outcomes related to the target (Bertsou, 2019; Dimoka, 2010; Guo et al., 2017; McKnight & Chervany, 2002; McKnight et al., 2004; Ou & Sia, 2010), leading to risk-averse behaviour, watchfulness, and vigilance (Cho, 2006; Guo et al., 2017; Lewicki et al., 1998; McKnight et al., 2004; Oomsels et al., 2019; Sitkin & Stickel, 1996). Two recent studies, which proposed scales to measure distrust between organisations (Raza-Ullah & Kostis, 2020) and between individual buyers and shops in e-commerce (Rusk, 2018), refer to this crucial aspect of distrust: being watchful because of negative expectations of harmful actions from the actor who is being distrusted.

Hence, to measure distrust in regulatory agencies, we formulated the following item:

In your opinion, should your organization be watchful that the following institutions' actions do not negatively impact your organization? Please answer on a scale from '0' to '10', where '0' is not watchful at all and '10' is very watchful.

As confirmed during cognitive testing when piloting the survey before launch, this measure captures two key behavioural expressions of distrust: (a) *watchfulness in the sense of 'watching one's back'* because of suspicion and (b) *fear* due to expectations of actions having negative consequences. It also refers to actions that negatively impact the respondent's organisation to ensure (a) that respondents think of *conscious* deeds, not merely routine activities, and (b) that the question conveys the *vulnerability and dependency* on the other actor and the (c) *negative expectations of harmful actions* by the other actor.

The measures of trust and distrust employed in this study are designed to capture the critical elements of expectations inherent in the (dis)trust process, with trust being underpinned by positive expectations and distrust by negative ones. These measures are predicated on the concept that the essence of trust is the willingness to accept vulnerability (Mayer et al., 1995; Rousseau et al., 1998), which results from positive expectations (Dietz, 2011). Conversely, distrust is characterised by an unwillingness to accept vulnerability, based on negative expectations (Six & Latusek, 2023).

Note that the one-item measurements of trust and distrust (and of trustworthiness) were designed to make the domain clear. Given that each actor type has its own role in the regulatory regime, this was a crucial point of attention when we designed and tested the survey. In the introduction and in each section, the survey described the regulation of the sector and each actor's involvement. Also, and more importantly, we asked about trust in each of the different actor types *regarding their main task and role in the regulatory regime*. Thus, we asked about trust in the national regulatory agency specifically for its task of regulating that sector.

The same was done for the one-item question on distrust which was measured by asking about watchfulness: we made sure that respondents were thinking of their watchfulness in each of these different actor types *regarding their main task and role in the regulatory regime*. Specifically and relevant for the analyses in this paper, we asked about the respondent's watchfulness towards the national regulatory agency specifically for its task of regulating that sector as a behavioural manifestation of distrust.

In this way, we asked both the one-item on trust and the one-item measurement on distrust in relation to the core task of the regulatory agency, inducing respondents to think about the same thing when scoring their trust/distrust in the regulatory agency. We acknowledge that optimally we would have had a battery of more refined questions on even more specific behaviours or subtasks of these bodies, but the limitations on the length of the survey did not allow for this. Considering that the different regime actors (legislative politicians, ministries, regulatory intermediaries, regulatees, interest groups and consumer associations) each have their own interests and expect to get different things from the agency in terms of information and decisions, our measures did not require us to specify what trust and distrust would relate to in each of these bilateral relations with the regulatory agency. We are thus able to compare data across the different actors as the one-item trust question and the one-item distrust question allowed us to assure a sufficiently similar focus for all actors surveyed.

3.2.3. Trustworthiness of regulatory agencies

Organisational trustworthiness comprises three dimensions: ability, benevolence and integrity (Mayer et al., 1995; Nootboom, 2002; Schoorman et al., 2007). Our survey measured each dimension with one item (e.g. Grimmelikhuijsen et al., 2018; Grimmelikhuijsen et al., 2020; Grimmelikhuijsen & Knies, 2017; Han & Yan, 2016; Maersch et al., 2019; PytlikZillig et al., 2016). The following items were posed in a separate section of the survey, which was separated from the sections with the other variables by interlocutory sections:

The [name of core actor] is an important supervisory institution for [sector]. A main task of the [name of core actor] is therefore to assess compliance with existing rules for [sector].

On a scale from 0 (never) to 10 (always), to what degree do you think [name of core actor] will ...

... follow sound principles when interacting with others? (integrity)

... take the interests of organizations like mine into account? (benevolence)

... perform its tasks in a very competent way? (ability)

The integrity dimension refers to the belief that the trustee adheres to a set of principles that the trustor finds acceptable (Mayer et al., 1995). This formulation allowed the respondent to think of the principles they find acceptable and, at the same time, reduced social desirability bias by avoiding specific features like openness and honesty, for which there are strong social norms (Grimmelikhuijsen & Knies, 2017). The item on benevolence refers to categories of organisations ('organizations like mine') instead of specific organisations ('my organization'). In regulatory regimes, actors may not require the regulatory agency to

consider the interests of specific companies, but they can reasonably expect the agency to consider the interest of their subgroup within the regulated sector. The 'ability' dimension is measured by referring to competence of actors to handle their tasks well, which ensures respondents think about performance in terms of competence.

The variable 'trustworthiness' is a factor-based variable, which was calculated, based on a principal-component factor analysis on the variables 'ability', 'benevolence' and 'integrity'.

The descriptives for the different variables (trust, distrust, trustworthiness and its dimensions) and the control variables are shown in the online supplemental information (Tables S5 and S6, and Figures S8 to S13, showing the histograms).

3.3. Methods

The methodology applied to study the relation between trust and distrust involves graphical representations and partial correlations. For the graphical representations of how trust and distrust relate we use scatterplots, plotting the data for each respondent on trust and distrust in each regulatory agency. Table 1 makes explicit what we expect to see in the scatterplots by inserting simplified representations with marked areas where we expect to find observations under each of the three perspectives. This makes it easy to compare the actual data with what we expect.

When using partial correlations to study the relation of trust and distrust in empirical data, we also need to control for an extended set of control variables in order to avoid biases due to under- or overrepresentation of certain groups of respondents in our data. The control variables include socio-demographics (gender, age, and education), the organisational affiliation and tenure of the respondent, country dummies, and the actor type to which the respondent belongs. Partial correlations measure the correlation between Y and X , holding all other variables constant. That is, the relations with all other variables are partialled out, leaving only the contribution of X . A partial correlation is the relationship between X and Y once the shared variance between X and another variable has been removed from X and once the shared variance between Y and the other variable has been removed from Y . For studying the relation of trustworthiness (and its dimensions) with trust/distrust, we similarly conduct partial correlations to assess how the trustworthiness dimensions of ability, benevolence and integrity, and the underlying latent variable of trustworthiness relate to both trust and distrust, while controlling for the same variables. When interpreting the correlation values, we rely on Cohen's (1988) guidelines: weak correlation \Rightarrow 0.10; moderate correlation \Rightarrow 0.30; strong correlation \Rightarrow 0.50. We also provide the squared partial correlation, which tells us the unique contribution of X in explaining the total variation in Y . In other words, it gives the increase in R^2 when X is added.

We use partial correlations instead of regression analyses for two reasons. Firstly, when studying the relation between trust and distrust, one cannot assume an unidirectional influence from one of these variables on the other. It is unclear what the dependent and independent variables are in this relation, as both can be each other's cause. Therefore we use correlations because this is a measure of covariance without assuming that causality runs in a specific way (for example from trust to distrust). As we do not assume a clear direction of causality between trust and distrust, or between trustworthiness and distrust, we opted for partial correlations instead of regression analyses.

Secondly, partial correlation analyses basically use regression analyses. Partial correlations are correlations between residuals that are calculated using regression analyses in each direction. For example, first, by using STATA the regression of trust on distrust, including all control variables, is conducted. Next, on the basis of this regression analysis the residual for trust is calculated. Then, the regression analysis of distrust as independent variable on trust as a dependent variable, is conducted, again including all control variables. On the basis of this regression, the residual for distrust is calculated. The last step is the calculation of the correlation of these two residuals, which yields the partial correlation coefficient.

We control in these partial correlation analyses for a number of potentially confounding factors which are potentially influencing both trust and distrust (or trustworthiness and distrust). We have listed the included control variables above. We control for *sector* by doing additionally the analyses separately per sector, of which we provide the results in the online supplemental information (see Figures S1 to S3 and Tables S2 to S4).⁴

4. Results

4.1. Relation between trust and distrust: empirical findings

What do we observe when we graphically plot the survey data regarding trust and distrust perceptions on the two axis scheme with trust/distrust quadrants? [Table 1](#) (part A) formulated our expectations of how we would recognise the three perspectives on such a scheme. In case that trust and distrust are opposite sides of the same concept in line with Perspective 1, then observations should appear along a diagonal line crossing Q1 and Q3 (Test_{trust} P1s, see [Table 1](#)). In case of Perspective 2, in which trust and distrust are related concepts with neutral ground in between, we expect that observations would appear on, or close to, the X-axis and the Y-axis as well as around the zero-point of the X- and Y-axes, and there should not be any observations in Q4 (Test_{trust} P2s, see [Table 1](#)). If Perspective 3 holds, with trust and distrust being indeed separate concepts, then we can expect to find in all kinds of combinations of low/high trust and low/high distrust. This would include combinations of high trust and high distrust, which would be impossible if trust and distrust are two opposites of the same context. Graphically (see part A in [Table 1](#)), Perspective 3, in which trust and distrust are separate concepts, would imply that we will see observations in all quadrants (I to IV), including in Quadrant IV (high trust–high distrust) on the trust–distrust two axis scheme (Test_{trust} P3s, see [Table 1](#)).

[Figure 3](#) plots the data on trust and distrust in national regulatory agencies by regime actors for the total sample on the trust–distrust axis scheme. We see indeed observations spread across all quadrants, and not only along the diagonal line crossing Q1 and Q3. We even see quite a large number of observations in Quadrant Q4 and where trust and distrust are both very high. [Figure 3](#) shows the data for the different countries in different colours, and high trust/high distrust observations are present in all countries. These high trust/high distrust observations also do not seem to be sector-specific: in all sectors under study, high trust/high distrust observations are prevalent (see [Figures S1, S2, and S3](#)). Hence, when plotting our survey data graphically, it appears that trust and distrust are different concepts (Perspective 3) as the combination of high trust and high distrust is prevalent across sectors and countries, irrespective of the kind of

trustor.⁵ These results support Perspective 3 (Test_{trust} P3s) and are inconsistent with Perspective 1 (Test_{trust} P1s) and Perspective 2 (Test_{trust} P2s).

Next, we turn to the analysis of the partial correlations to assess the relation of trust with distrust (see also Part A in Table 1), controlling for socio-demographic variables, country, and respondent type. Our analysis shows that in the overall sample, trust has a significant negative, but rather weak relation with distrust in the full sample, with -0.187 as partial correlation coefficient. Moreover, the square terms of the partial correlations show that trust only explains a marginal part of the variance of distrust (around 3%, more specifically 0.035).

Thus, the evidence presented so far aligns most closely with the Perspective 3, suggesting that, in the regulatory context, trust and distrust (measured as watchfulness) are indeed different concepts (Perspective 3). In the scatterplots, we find many observations in the high trust/high distrust quadrant. Moreover, the partial correlation between trust and distrust is negative but small.

4.2. Relationships between trust and distrust through their connection with trustworthiness

We next look at the partial correlations between trustworthiness and its three dimensions with trust, and then turn to the partial correlations between trustworthiness and its dimensions with distrust. The partial correlation results shown in Table 3 indicate that ability and integrity correlate strongly with trust, and benevolence correlates moderately to strong with trust, with trustworthiness as the underlying latent concept strongly relating to trust.

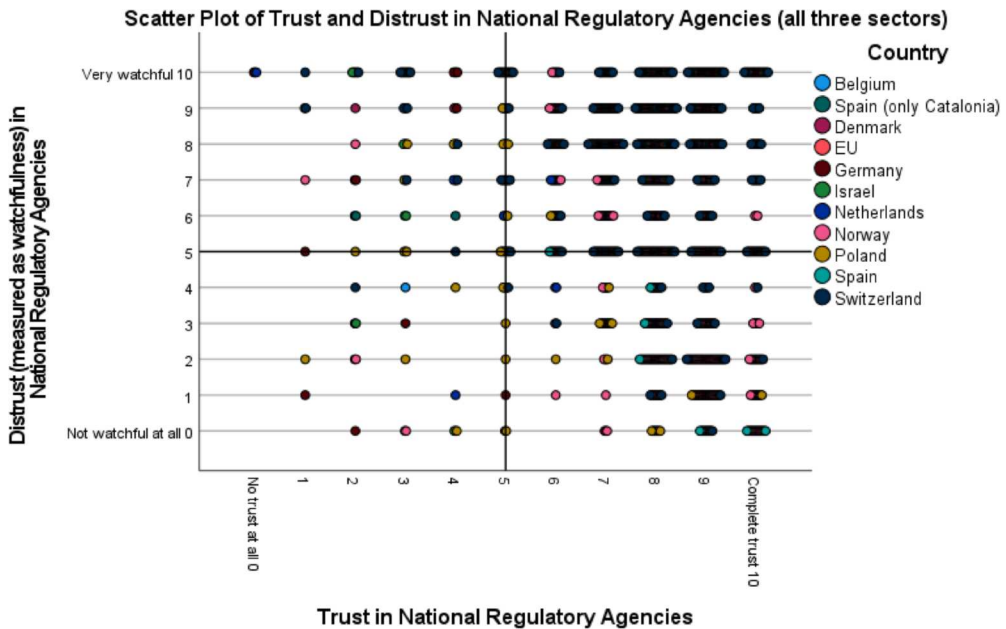


Figure 3. Trust–distrust quadrants for the whole sample.

Table 3. Partial correlations between trustworthiness (and its dimensions) and trust/distrust.

Trust (N = 752)	Partial correlation coefficient (square term of partial correlation)
Trustworthiness and Trust	Total: 0.571*** (0.327)
Ability and Trust	Total: 0.575*** (0.331)
Benevolence and Trust	Total: 0.417*** (0.174)
Integrity and Trust	Total: 0.543*** (0.295)
Trustworthiness and Distrust	Total: -0.114*** (0.013)
Ability and Distrust	Total: -0.102*** (0.010)
Benevolence and Distrust	Total: -0.104*** (0.011)
Integrity and Distrust	Total: -0.103*** (0.011)

*** $p < 0.01$; ** $p < 0.05$; * $p < 0.1$.

However, as shown in Table 3, the relation of trustworthiness and its dimensions with distrust is much less pronounced, with trustworthiness, as well as ability, benevolence and integrity, correlating to distrust only weakly with a very low partial correlation coefficient around -0.1 , and with marginal explanatory power (i.e. squared partial correlation of 0.01). Again, these results provide strong evidence for the Perspective 3, with trust and distrust being different concepts as trustworthiness affects distrust much less than it affects trust ($\text{Test}_{\text{trustworthiness}} \text{P3c}$). Our findings provide no clear support for Perspective 1 ($\text{Test}_{\text{trustworthiness}} \text{P1c}$) or Perspective 2 ($\text{Test}_{\text{trustworthiness}} \text{P2c}$).

5. Discussion and conclusion

Together, our results show that, in the public governance context, trust and distrust seem to be different concepts (Perspective 3). Hence, Perspective 3 is supported by our analyses. There are many observations recorded in the high trust/high distrust quadrant Q4 (cf. Figure 3). This suggests that trust and distrust can be very high at the same time.⁶ Similarly, when controlling for several control variables, trust and distrust are negatively correlated, but only to a very weak extent.

The finding that trust and distrust may be different concepts is reinforced by our analysis of the data on the relationship between trustworthiness and distrust. While trustworthiness and its three dimensions (ability, benevolence, integrity) clearly strongly correlate with trust, their relation with distrust is weak and negative. Hence, distrust, measured by being watchful for negative consequences of the actions of another actor, seems to be empirically hardly related to trust. These findings apply across countries, trustee, and type of trustor. However, there are some minor sectoral differences, which we discuss in the section on limitations.⁷

While the notion of trust and distrust being different concepts is in line with the literature, and while we find clear support for trustworthiness and its different dimensions as a strong predictor of trust, the findings regarding the marginal relation of the trustworthiness dimensions and distrust are more puzzling. Apparently, the co-existence of trust and distrust does not necessarily mean that the trustee is trusted on one or two of the trustworthiness dimensions and distrusted on another. Rather, we find observations that are simultaneously high on trust, high on distrust, and high on all three trustworthiness dimensions.

This suggests that respondents may use different bases for evaluation when reporting their trust and distrust in an actor and when assessing ability, benevolence and integrity. In line with Guo et al. (2017), this would mean that the relational ambivalence of

stakeholders with a regulatory agency does not necessarily stem from different ratings of the agency's trustworthiness dimensions. Instead, stakeholders may exhibit high levels of both trust and distrust towards the agency simultaneously, because they evaluate different aspects of the agency's performance. For example, stakeholders might trust the agency in certain domains, activities, or tasks where it has proven competence and reliability. However, they might distrust the agency in other areas where its actions or policies have raised concerns. This indicates that the high trust and distrust observed are likely due to stakeholders differentiating between various domains or functions of the regulatory agency, next to inconsistencies in the perceived dimensions of trustworthiness.

If that is the case, one could question whether the evidence we present actually excludes the possibility of Perspective 2 – the dyadic view on trust and distrust: If indeed trust and distrust co-exist because they are referring to different domains, tasks or parts of the organisation, then one might ask, if trust and distrust measures zoom in on a sufficiently specific domain, task, or part of the organisation, would then trust and distrust emerge as two opposites with neutral ground in between. This also relates to the question of what trust and distrust items are meant to measure: general trust or distrust across domains or domain-specific assessments. In our data, at least to some extent it is domain-specific trust and domain-specific distrust which seem to co-exist. This conflicts with Perspective 1 but cannot (yet) completely rule out Perspective 2.

Thus, it could be argued that consideration of our distrust item (using watchfulness based on suspicion and negative expectations of harmful actions as an indicator) in combination with different trust levels gives us information about the presence of general versus domain-specific trust or distrust. One could conceive that high watchfulness is a sign of across-the-board distrust, but only *in combination with low trust*. High trust without watchfulness is then indicative of the trustee being highly trusted 'across the board'. In contrast, high watchfulness *in combination with high trust* may then be a sign of domain-specific trust going together with distrust in other domains. This may manifest itself in some kind of 'watchful trust' or an attitude of 'trust but verify' (Möllering, 2006; Verhoest et al., 2024), or as Oomsels et al. (2019) put it, functional trust together with functional distrust. A combination of low trust and low watchfulness then refers to an attitude of an actor being indifferent in terms of perceived dependency or risks towards the other actor, because the former actor does not perceive any relevant or worthwhile dependencies towards or risks for harmful actions from this latter actor and hence has no need for trust or distrust.

6. Limitations and future research

This study has several limitations. The measure of distrust as watchfulness for actions negatively impacting the trustor's organisation as based in suspicion and negative expectations of harmful actions needs further testing and validation. Indeed, all single-item measures have limitations, although recent experimental and non-experimental research show that a single-item measure is in many instances sufficient to assess respondents' perceptions (e.g. Wright et al., 2016). However, multi-item measurements should be tested in future research and compared. Focusing on watchfulness based in suspicion and negative expectations of harmful actions as behavioural manifestation of distrust might well be sufficient in the specific context of regulatory relations, where actors

cannot opt to fully avoid interactions or step out of the relationship. Nevertheless, it may well be the case that in other contexts, other measures or even more fine-grained conceptualisations of the trust–distrust dichotomy may be more appropriate. For instance, in political science, a new conceptualisation of mistrust has recently been proposed to indicate citizens' attitude of alertness and vigilance towards the government in a situation where they have not yet decided to trust or distrust institutions (Bunting et al., 2021; Jennings et al., 2021). To us, this notion of mistrust (prior to the trust or distrust decision) is distinct from our measure of being watchful based in suspicion and fear because the trustor has negative expectations of harmful actions, which we use as the measurement for distrust. Nonetheless, further research in other fields and between other classes of actors is needed to determine whether (or how) distrust and related notions of suspicion and fear-based watchfulness should be more finely differentiated from and positioned in relation to this new notion of mistrust.

Relatedly, further research on measures will be crucial to effectively capture acceptance of vulnerability, central to the concept of trust (Hamm et al., 2023; Hamm & Banner, *in press*; Mayer et al., 1995; Rousseau et al., 1998). There has been a recent call within the field to shift the focus of mainstream trust research towards vulnerability (Hamm et al., 2023; Hamm & Banner, *in press*; Schafheitle et al., 2023). Our study utilised measures that primarily focus on expectations as the basis for deciding whether to accept vulnerability. Future research should endeavour to develop measures capable of capturing the element of (un)willingness to accept vulnerability in surveys. Initial efforts in this direction have so far been limited to conceptual and qualitative explorations (Hamm et al., 2023; Hamm & Banner, *in press*; Nienaber et al., 2015; Siegrist, 2021; Tsui-Auch & Möllering, 2010).

Another limitation of our argument is that this cross-country, cross-sector study shows the relations between trust, distrust, and trustworthiness in relation to different stakeholders' perceptions of the national regulatory agencies in the studied sectors. Can observations about many different trustors but only one trustee make a sufficient case for trust and distrust being different concepts in public governance? Developing these empirical tests only for one kind of trustee (i.e. the regulatory agency) might indeed not be considered as compelling evidence. However, additional analyses on the same dataset for different stakeholders' trust in other trustees, like legislative politicians and courts, not shown in this article, point to similar empirical patterns. Naturally, this study is also limited by sample size and selection, which is typical for large-scale cross-national studies. Future studies with different samples, including other sectors and countries, in particular other public governance settings, are needed to validate these results.

Another limitation of our approach is that our study provides a relational, experience-based view of trust and distrust in public governance by focusing on specific public organisations and individual trustors who interact with these organisations in their professional roles. While this perspective offers valuable insights, it also introduces potential issues of particularisation and raises the risk for findings that are not easily generalisable. As our empirical data focuses on relations of different kinds of actors (legislative politicians, administrators, regulatory intermediaries, regulatees, business interest groups, and consumer associations) with the regulatory agency, our findings allow for some generalisation to different kinds of public governance relations. But our findings may still be to some extent relation-specific, depending on individual experiences with a particular person within the organisation rather than the organisation itself. This relation-specificity

of trust and distrust dynamics could limit the generalisability of our results. Future research should explore the extent to which trust and distrust in public organisations are influenced by individual interactions versus broader organisational characteristics, and how these dynamics impact general perceptions of public governance. Moreover, further research should study whether our findings are observed when dealing with more impersonal trust in public governance institutions, where such personalised relationship would not exist.

Our findings on the relationship between trustworthiness and trust and distrust present intriguing puzzles, opening avenues for further research. In the literature, distrustworthiness (sometimes termed also untrustworthiness) has been predominantly viewed as the opposite of trustworthiness, a notion recently challenged (cf. Hamm et al., 2023; Six & Latusek, 2023). Consequently, the conceptual debate is nascent, and empirical evidence varies. Authors like McKnight et al. (2004), Moody et al. (2014, 2017) have suggested that distrust arises from incompetence, malevolence, and deceit. Incompetence (or inability) and malevolence are clearly antithetical to ability and benevolence. Yet, Six and Latusek's recent contribution (2023) posits that deceit might not be necessary for distrust, as Mayer et al.'s (1995) original formulation framed integrity in terms of value congruence rather than intentional misinformation. Empirically, scholars argue that distrust can stem from a lack of ability, integrity, or goodwill (Lewicki et al., 1998; Oomsels et al., 2019; Van De Walle & Six, 2014). Conversely, Sitkin and Roth (1993) suggest trust is built on expectations of ability in task execution, while distrust hinges on perceived value incongruence. Thus, while incompetence (or inability) may diminish trust, distrust primarily arises from perceived value mismatch (Chambers & Melnyk, 2006; Lewicki et al., 2006; Sitkin & Roth, 1993; Sitkin & Stickel, 1996). Supporting this, experimental studies indicate that breaches of trust related to ability are more readily mended than those involving integrity and malevolence (Kim, 2018; Tomlinson & Mayer, 2009). However, the issue is far from settled⁸ and calls for more systematic empirical exploration.

This study can also offer a point of departure for more fine-grained studies into the relations between trust and distrust in regulatory regimes (see e.g. Verhoest et al., 2024; Verhoest et al., *in press*). Our study did not delve into the differences in trust and distrust perceptions between agencies, sectors or countries, or even respondents. Our study did not explain levels of trust and distrust in regulatory agencies by referring to individual, organisational, sector or country factors, as this was not its objective. For example, the sector-specific analyses shown in the online supplemental information (Figures S1 to S3 and Tables S2 to S4) render somewhat different results for the data protection sector as compared to the finance and food safety sector. In data protection, there was more evidence of a negative relation between distrust and both trust and trustworthiness while in the other two sectors these relations are much weaker. This may be because, in the data protection sector, respondents express positions with less nuance, like attitudes of pervasive distrust where low trust is combined with high watchfulness, and less often express domain-specific trust and distrust. This might in turn be explained by data protection being a regulatory regime that is less mature and more in flux especially given the recent adoption of the GDPR. The less mature character of the sector implies that national regulatory agencies may be generally less well-known and less predictable for actors in the regime which may lead to less nuance and less domain-specific

judgements of trust and watchfulness by these other actors. Data protection is also a more intangible outcome for stakeholders to assess. Hence, stakeholders in data protection may report relatively more trust and watchfulness perceptions which are, themselves, negatively correlated. Exploring such sector-related, but also individual, organisational, and country factors can be an important extension of this work in the future. Future work should address above-mentioned challenges to bring more fine-tuned knowledge on the characteristics of trust and distrust (Verhoest et al., *in press*).

The findings also have practical relevance. This study is timely as declining trust, or growing distrust, in the public sector is likely to have a profound impact on public governance (Peeters & Dussauge Laguna, 2021; Raaphorst & Van de Walle, 2018). Differentiation between trust and distrust has important policy implications, as people who have positive expectations towards target organisations and people who have negative expectations may respond very differently to actions initiated by these organisations (Peeters & Dussauge Laguna, 2021). Specifically in regulated markets, the interplay of trust and distrust constitutes a major societal issue as we do not know what mix of trust and distrust would be best for effective and efficient functioning of regulatory regimes (Jordana & Levi-Faur, 2004; Six & Verhoest, 2017; but see Verhoest et al., 2024). Moreover, this study makes the case for a newly developed one-item measure of distrust enabling the study of distrust in a public governance setting, which is useful both for academic and policy-oriented purposes (see the OECD multi-country and single-country studies and recommendations on trust in public governance, cf. OECD, 2022).

Notes

1. Domain-specificity in trust refers to the concept that trust is not uniformly applied across all aspects of the relationship but it is confined to specific areas or contexts within a relationship. Trust's domain-specificity means that positive expectations about the trustee's behavior are confined to particular contexts, reflecting the trustor's differentiated evaluation based on past interactions and relevant expertise in those domains.
2. Note that this avoidance of interaction is not possible in our research setting, where actors are obliged to interact.
3. Note that Saunders and Thornhill (2004) indicate that trust and distrust can only co-exist to a certain extent and that extremely high trust cannot be combined with an extremely high distrust (see also Oomsels, 2016; Oomsels et al., 2019). Therefore, they propose a truncated quadrant of high trust/high distrust to accurately represent the relationship between trust and distrust. This is shown in Figure S4 in the online supplement information. It is clear that this perspective would show differently graphically compared to the three basic perspectives we study in this paper (see part A of Table 1, last column).
4. The use of partial correlations assumes that the relations between the variables are linear. In the online supplemental information we check this (see Figures S5, S6, S7).
5. One might ask whether these high trust/high distrust observations stem from one specific trustor, implying for example that only regulatees would report high trust/high distrust. However, when checking what patterns we see for each kind of trustor, we observed that in all three sectors, public actors also report high trust/high distrust combinations when assessing their trust/distrust in the national regulatory agencies. We also checked whether high trust/high distrust perceptions might be dependent on the kind of trustee that one is observing. However, similar high trust/high distrust observations are found when considering legislative politicians from the national parliament or courts as trustee. Thus, high trust/high distrust observations also do not seem to be trustee-specific.

6. Thus, in our data, this quadrant is not truncated as suggested by Saunders and Thornhill (2004, see Figure S4 in the online supplemental information), indicating that extremely high trust cannot be combined with an extremely high distrust.
7. In the online supplemental information, extra analyses, both in terms of graphical representations (Figure S1, Figure S2, Figure S3) and partial correlations (Table S2, Table S3, Table S4) are shown which show that these empirical patterns also hold in the three studied sectors, being financial sector, food safety sector and the data protection sector, but with some differences.
8. For example, Cho (2006) actually formulates opposite expectations, suggesting that benevolence fosters trust more strongly than it reduces distrust, whereas ability reduces distrust more strongly than it strengthens trust.

Acknowledgements

This article would not have been possible without the data gathering done through the WP2 survey within TiGRE. Many thanks to all researchers involved and to Tobias Bach and Anne Gaspers for this data gathering effort and making the data available for analysis.

Disclosure statement

No potential conflict of interest was reported by the author(s).

Funding

This work was supported by the TiGRE project funded by the European Union Horizon 2020 research and innovation program [grant agreement No. 870722] (TiGRE), by the HORIZON ERC 2022 Advanced Grant [grant agreement No. 101097835] (RegTrust) administered by the European Research Council Executive Agency (ERCEA), and the Flemish Research Fund (FWO) SBO project [grant Number: S004124N] as well as the FWO fundamental project G085719N. This document reflects only the view of the authors. None of the funding agencies are responsible for any use that may be made of the information it contains.

Notes on contributors

Koen Verhoest is full research professor in public governance and coordinator of the GOVTRUST Centre of Excellence as well as of the Politics & Public Governance research group at the University of Antwerp. His research focuses on public governance relations involving autonomy, control, coordination and collaboration and their implications for trust, reputation and innovation.

Dominika Latusek is Head of the Department of Management and the Center for Trust Research at Kozminski University in Poland. In her research, she focuses on researching management practices in inter-organizational relations, the theory of social networks, trust and distrust, and conducts qualitative field studies of organizations.

Frédérique Six is associate professor in public governance at the Vrije Universiteit Amsterdam (the Netherlands) and visiting professor at the GOVTRUST Centre of Excellence at the University of Antwerp (Belgium). Her research interests revolve around trust-based public governance, researching trust, distrust, different forms of control.

Libby Maman is a post-doctoral researcher at IBEI (Instituto Barcelona d'Estudis Internacionals). She has published research on measurement and trust in the context of governance, democracy and regulation.

Yannis Papadopoulos is a professor of public policy at the Institute of Political Studies of the University of Lausanne. His current work focuses on the impact of governance transformations on

democracy and accountability. His most recent book is *Understanding Accountability in Democratic Governance* (Cambridge University Press, 2023).

Rahel M. Schomaker is a professor for economics and public administration at CUAS Villach, an adjunct professor at Speyer University and a senior fellow at the German Research Institute for Public Administration. Her research interests concern administrative change, formal and informal public sector cooperations and networks, crisis governance and trust.

Jarle Trondal is Professor at the University of Agder and the University of Oslo, at the ARENA Centre for European Studies, as well as Senior Fellow at the University of California, Berkeley. He has published widely on public policy and administration, organizational theory, international organizations, European integration and multilevel governance, and studies of crisis and turbulence.

ORCID

Koen Verhoest  <http://orcid.org/0000-0002-5467-3820>

Dominika Latusek  <http://orcid.org/0000-0003-3317-0084>

Libby Maman  <http://orcid.org/0000-0003-2911-3191>

Rahel M. Schomaker  <http://orcid.org/0000-0003-0054-094X>

Jarle Trondal  <http://orcid.org/0000-0002-6723-7761>

References

- Bach, T., Gaspers, A., Verhoest, K., Latusek-Jurczak, D., Glavina, M., Six, F., Kappler, M., Schomaker, R., Houlberg Salomonsen, H., & Munk-Hansen, A. (2021). *Methodological report on the TiGRE project expert survey* (Arena Report Vol. 4). University of Oslo. <https://www.sv.uio.no/arena/english/research/publications/arena-reports/2021/report-4-2021-%282%29.pdf>
- Bach, T., Jugl, M., Köhler, D., & Wegrich, K. (2022). Regulatory agencies, reputational threats, and communicative responses. *Regulation & Governance*, 16(4), 1042–1057. <https://doi.org/10.1111/rego.12421>
- Baer, M. D., & Colquitt, J. A. (2018). Why do people trust? Moving toward a more comprehensive consideration of the antecedents of trust. In R. H. Searle, A.-M. I. Nienaber, & S. B. Sitkin (Eds.), *The Routledge companion to trust* (pp. 163–182). Routledge.
- Bauer, P. C., & Freitag, M. (2018). Measuring trust. In E. M. Uslaner (Ed.), *The Oxford handbook of social and political trust* (pp. 15–36). Oxford University Press.
- Bertsou, E. (2019). Rethinking political distrust. *European Political Science Review*, 11(2), 213–230. <https://doi.org/10.1017/S1755773919000080>
- Bies, R. J., Barclay, L. J., Saldanha, M. F., Kay, A. A., & Tripp, T. M. (2018). Trust and distrust: Their interplay with forgiveness in organizations. In R. H. Searle, A.-M. I. Nienaber, & S. B. Sitkin (Eds.), *The Routledge companion to trust* (pp. 203–326). Routledge.
- Bijlsma-Frankema, K., Sitkin, S. B., & Weibel, A. (2015). Distrust in the balance: The emergence and development of intergroup distrust in a court of law. *Organization Science*, 26(4), 1018–1039. <https://doi.org/10.1287/orsc.2015.0977>
- Bouckaert, G. (2012). Trust and public administration. *Administration*, 60(1), 91–115.
- Bradford, B., Jackson, J., Murphy, K., & Sargeant, E. (2022). The space between: Trustworthiness and trust in the police among three immigrant groups in Australia. *Journal of Trust Research*, 12(2), 125–152. <https://doi.org/10.1080/21515581.2022.2155659>
- Bunting, H., Gaskell, J., & Stoker, G. (2021). Trust, mistrust and distrust: A gendered perspective on meanings and measurements. *Frontiers in Political Science*, 3, Article 642129. <https://doi.org/10.3389/fpos.2021.642129>
- Callens, M., & Bouckaert, G. (2019). Trustworthiness and information disclosure among judicial governmental agencies. *Public Performance and Management Review*, 42(5), 1112–1137. <https://doi.org/10.1080/15309576.2019.1572019>

- Catala, A. (2015). Democracy, trust, and epistemic justice. *The Monist*, 98(4), 424–440. <https://doi.org/10.1093/monist/onv022>
- Chambers, J. R., & Melnyk, D. (2006). Why do I hate thee? Conflict misperceptions and intergroup mistrust. *Personality and Social Psychology Bulletin*, 32(10), 1295–1311. <https://doi.org/10.1177/0146167206289979>
- Cho, J. (2006). The mechanism of trust and distrust formation and their relational outcomes. *Journal of Retailing*, 82(1), 25–35. <https://doi.org/10.1016/j.jretai.2005.11.002>
- Coglianesi, C. (2012). *Measuring regulatory performance: Evaluating the impact of regulation and regulatory policy* (OECD Working Papers, 2012/1). OECD.
- Cohen, J. (1988). *Statistical power analysis for the behavioral sciences* (2nd ed.). Erlbaum.
- Cook, K. S., Hardin, R., & Levi, M. (2005). *Cooperation without trust?* Russell Sage Foundation.
- Cummings, L. L., & Bromily, P. (1996). The organizational trust inventory: Development and validation. In R. M. Kramer & T. R. Tyler (Eds.), *Trust in organizations: Frontiers of theory and research* (pp. 302–329). Sage.
- Deutsch, M. (1958). Trust and suspicion. *Journal of Conflict Resolution*, 2(4), 265–279. <https://doi.org/10.1177/002200275800200401>
- Devine, D., Gaskell, J., Jennings, W., & Stoker, G. (2020a). *Exploring trust, mistrust and distrust* (TrustGov Working Paper Series).
- Devine, D., Gaskell, J., Jennings, W., & Stoker, G. (2020b). Trust and the coronavirus pandemic: What are the consequences of and for trust? An early review of the literature. *Political Studies Review*, 19(2), 274–285. <https://doi.org/10.1177/1478929920948684>
- Dietz, G. (2011). Going back to the source: Why do people trust each other? *Journal of Trust Research*, 1(2), 215–222. <https://doi.org/10.1080/21515581.2011.603514>
- Dimoka, A. (2010). What does the brain tell us about trust and distrust? Evidence from a functional neuroimaging study. *MIS Quarterly*, 34(2), 373–396. <https://doi.org/10.2307/20721433>
- Emborg, J., Daniels, S. E., & Walker, G. B. (2020). A framework for exploring trust and distrust in natural resource management. *Frontiers in Communication*, 5, 13. <https://doi.org/10.3389/fcomm.2020.00013>
- Ferrin, D. L., Kim, P. H., Cooper, C. D., & Dirks, K. T. (2007). Silence speaks volumes: The effectiveness of reticence in comparison to apology and denial for repairing integrity- and competence-based trust violations. *Journal of Applied Psychology*, 92(4), 893–908. <https://doi.org/10.1037/0021-9010.92.4.893>
- Gambetta, D. (Ed.). (1988). *Trust: Making and breaking cooperative relations*. Blackwell.
- Gargiulo, M., & Ertug, G. (2006). The dark side of trust. In R. Bachmann & A. Zaheer (Eds.), *Handbook of trust research* (pp. 165–186). Edward Elgar.
- Grimmelikhuijsen, S., De Vries, F., & Zijlstra, W. (2018). Breaking bad news without breaking trust: The effects of a press release and newspaper coverage on perceived trustworthiness. *Journal of Behavioral Public Administration*, 1(1), 1–10. <https://doi.org/10.30636/jbpa.11.16>
- Grimmelikhuijsen, S. G., Piotrowski, S. J., & Van Ryzin, G. G. (2020). Latent transparency and trust in government: Unexpected findings from two survey experiments. *Government Information Quarterly*, 37(4), Article 101497. <https://doi.org/10.1016/j.giq.2020.101497>
- Grimmelikhuijsen, S., & Knies, E. (2017). Validating a scale for citizen trust in government organizations. *International Review of Administrative Sciences*, 83(3), 583–601. <https://doi.org/10.1177/0020852315585950>
- Gunningham, N., & Sinclair, D. (2009a). Organizational trust and the limits of management-based regulation. *Law & Society Review*, 43(4), 865–900. <https://doi.org/10.1111/j.1540-5893.2009.00391.x>
- Gunningham, N., & Sinclair, D. (2009b). Regulation and the role of trust: Reflections from the mining industry. *Journal of Law and Society*, 36(2), 167–194. <https://doi.org/10.1111/j.1467-6478.2009.00462.x>
- Guo, S.-L., Lumineau, F., & Lewicki, R. J. (2017). Revisiting the foundations of organizational distrust. *Foundations and Trends® in Management*, 1(1), 1–88. <https://doi.org/10.1561/3400000001>
- Gustafsson, S., Gillespie, N., Searle, R., Hailey, V. H., & Dietz, G. (2021). Preserving organizational trust during disruption. *Organization Studies*, 42(9), 1409–1433. <https://doi.org/10.1177/0170840620912705>

- Hamm, J. A., & Banner, F. (in press). Vulnerability: The active ingredient of trust in public governance. In F. Six, J. Hamm, D. Latusek, E. Van Zimmeren, & K. Verhoest (Eds.), *Handbook of trust in public governance*. Edward Elgar .
- Hamm, J. A., Carrera, J. S., Van Fossen, J. A., Key, K. D., Woolford, S. J., Bailey, S. B., & Calhoun, K. D. (2023). Conceptualizing trust and distrust as alternative stable states: Lessons from the Flint water crisis. *Ecology and Society*, 28(3), 14. <https://doi.org/10.5751/ES-14410-280314>
- Hamm, J. A., Trinkner, R., & Carr, J. D. (2017). Fair process, trust, and cooperation: Moving toward an integrated framework of police legitimacy. *Criminal Justice and Behavior*, 44(9), 1183–1212. <https://doi.org/10.1177/0093854817710058>
- Han, G., & Yan, S. (2016). Does food safety risk perception affect the public's trust in their government? An empirical study on a national survey in China. *International Journal of Environmental Research and Public Health*, 16(11), 1847.
- Hardin, R. (2004). *Distrust*. Russell Sage Foundation.
- Hooghe, M. (2011). Why there is basically only one form of political trust. *The British Journal of Politics and International Relations*, 13(2), 269–275. <https://doi.org/10.1111/j.1467-856X.2010.00447.x>
- Jennings, W., Stoker, G., Valgarðsson, V., Devine, D., & Gaskell, J. (2021). How trust, mistrust and distrust shape the governance of the COVID-19 crisis. *Journal of European Public Policy*, 28(8), 1174–1196. <https://doi.org/10.1080/13501763.2021.1942151>
- Jordana, J., & Levi-Faur, D. (Eds.). (2004). *The politics of regulation: Institutions and regulatory reforms for the age of governance*. Edward Elgar Publishing.
- Kappler, M., Verhoest, K., Bach, T., Maman, L., & Schomaker, R. (2024). What drives trust in regulatory agencies? Probing the relevance of governmental level and performance through a cross-national elite experiment on EU regulation. *European Political Science Review*, 1–18. <https://doi.org/10.1017/S1755773924000080>
- Kim, P. H. (2018). An interactive perspective on trust repair. In R. H. Searle, A.-M. I. Nienaber, & S. B. Sitkin (Eds.), *The Routledge companion to trust* (pp. 269–283). Routledge.
- Kostis, A., Bengtsson, M., & Näsholm, M. H. (2022). Mechanisms and dynamics in the interplay of trust and distrust: Insights from project-based collaboration. *Organization Studies*, 43(8), 1173–1196. <https://doi.org/10.1177/01708406211040215>
- Kramer, R. M. (1994). The sinister attribution error: Paranoid cognition and collective distrust in organizations. *Motivation and Emotion*, 18(2), 199–230. <https://doi.org/10.1007/BF02249399>
- Kramer, R. M. (1996). Divergent realities and convergent disappointments in the hierarchic relation: Trust and the intuitive auditor at work. In R. M. Kramer & T. R. Tyler (Eds.), *Trust in organizations: Frontiers of theory and research* (pp. 216–245). Sage.
- Krishnamurthy, M. (2015). Tyranny and the democratic value of distrust. *The Monist*, 98(4), 391–406. <https://doi.org/10.1093/monist/onv020>
- Lane, C., & Bachmann, R. (1998). *Trust within and between organizations: Conceptual issues and empirical applications*. Oxford University Press.
- Lee, J., & Dodge, J. (2019). Keeping your enemies close: The role of distrust in structuring a local hydraulic fracturing policy network in New York. *Journal of Public Administration Research and Theory*, 29(2), 175–192. <https://doi.org/10.1093/jopart/muy074>
- Lewicki, R. J., McAllister, D. J., & Bies, R. J. (1998). Trust and distrust: New relationships and realities. *Academy of Management Review*, 23(3), 438–458. <https://doi.org/10.2307/259288>
- Lewicki, R. J., & Tomlinson, E. C. (2003). Trust and trust building. In G. Burgess & H. Burgess (Eds.), *Beyond intractability knowledge base project* (pp. 305–315). Conflict Research Consortium, University of Colorado.
- Lewicki, R. J., Tomlinson, E. C., & Gillespie, N. (2006). Models of interpersonal trust development: Theoretical approaches, empirical evidence, and future directions. *Journal of Management*, 32(6), 991–1022. <https://doi.org/10.1177/0149206306294405>
- Luhmann, N. (1979). *Trust and power*. John Wiley & Sons.
- Lumineau, F. (2017). How contracts influence trust and distrust. *Journal of Management*, 43(5), 1553–1577. <https://doi.org/10.1177/0149206314556656>

- Maersch, D., Aschauer, E., & Fink, M. (2019). Competence trust, goodwill trust and negotiation power in auditor-client relationships. *Accounting, Auditing & Accountability Journal*, 33(2), 335–355. <https://doi.org/10.1108/AAAJ-02-2017-2865>
- Mayer, J., & Mussweiler, T. (2011). Suspicious spirits, flexible minds: When distrust enhances creativity. *Journal of Personality and Social Psychology*, 101(6), 1262–1277. <https://doi.org/10.1037/a0024407>
- Mayer, R. C., & Davis, J. H. (1999). The effect of the performance appraisal system on trust for management: A field quasi-experiment. *Journal of Applied Psychology*, 84(1), 123–136. <https://doi.org/10.1037/0021-9010.84.1.123>
- Mayer, R. C., Davis, J. H., & Schoorman, F. D. (1995). An integrative model of organizational trust. *Academy of Management Review*, 20(3), 709–734. <https://doi.org/10.2307/258792>
- McEvily, B., & Tortoriello, M. (2011). Measuring trust in organizational research: Review and recommendations. *Journal of Trust Research*, 1(1), 23–63. <https://doi.org/10.1080/21515581.2011.552424>
- McKnight, H. D., & Chervany, N. L. (2001a). What trust means in e-commerce customer relationships: An interdisciplinary conceptual typology. *International Journal of Electronic Commerce*, 6(2), 35–59. <https://doi.org/10.1080/10864415.2001.11044235>
- McKnight, H. D., & Chervany, N. L. (2001b). Trust and distrust definitions: One bite at a time. In R. Falcone, M. Singh, & Y.-H. Tan (Eds.), *Trust in cyber-societies* (pp. 27–54). Springer.
- McKnight, H. D., & Chervany, N. L. (2001c). While trust is cool and collected, distrust is fiery and frenzied: A model of distrust concepts. In M. Chung (Ed.), *Proceedings of the Americas Conference on Information Systems* (pp. 883–888). Association for Information Systems.
- McKnight, D. H., & Chervany, N. L. (2002). What trust means in e-commerce customer relationships: An interdisciplinary conceptual typology. *International Journal of Electronic Commerce*, 6(2), 35–59.
- McKnight, H. D., Kacmar, C. J., & Choudhury, V. (2004). Dispositional trust and distrust distinctions in predicting high- and low-risk internet expert advice site perceptions. *e-Service Journal*, 3(2), 85–109. <https://doi.org/10.2979/esj.2004.3.2.35>
- Möllering, G. (2006). *Trust: Reason, routine, reflexivity*. Elsevier.
- Moody, G. D., Galletta, D. F., & Lowry, P. B. (2014). When trust and distrust collide online: The engenderment and role of consumer ambivalence in online consumer behavior. *Electronic Commerce Research and Applications*, 13(4), 266–282. <https://doi.org/10.1016/j.elerap.2014.05.001>
- Moody, G. D., Lowry, P. B., & Galletta, D. F. (2017). It's complicated: Explaining the relationship between trust, distrust, and ambivalence in online transaction relationships using polynomial regression analysis and response surface analysis. *European Journal of Information Systems*, 26(4), 379–413. <https://doi.org/10.1057/s41303-016-0027-9>
- Mthombeni, M., & Chizema, A. (2022). Recasting trust and distrust in the boardroom. *Corporate Governance: The International Journal of Business in Society*, 22(5), 1004–1025. <https://doi.org/10.1108/CG-06-2021-0235>
- Nienaber, A. M., Hofeditz, M., & Romeike, P. D. (2015). Vulnerability and trust in leader-follower relationships. *Personnel Review*, 44(4), 567–591. <https://doi.org/10.1108/PR-09-2013-0162>
- Nooteboom, B. (2002). *Trust: Forms, foundations, functions, failures and figures*. Edward Elgar.
- OECD. (2017). *OECD guidelines on measuring trust*. OECD Publishing.
- OECD. (2022). *Building trust to reinforce democracy: Main findings from the 2021 OECD survey on drivers of trust in public institutions, building trust in public institutions*. OECD Publishing.
- Oomsels, P. (2016). *Administrational trust: An empirical examination of interorganizational trust and distrust in the Flemish administration* [PhD thesis]. KULeuven, Faculteit Sociale Wetenschappen – KULeuven Instituut voor de Overheid.
- Oomsels, P., Callens, M., Vanschoenwinkel, J., & Bouckaert, G. (2019). Functions and dysfunctions of interorganizational trust and distrust in the public sector. *Administration & Society*, 51(4), 516–544. <https://doi.org/10.1177/0095399716667973>
- Osuna, O., Javier, J., Kiefel, M., & Katsouyanni, K. G. (2021). Place matters: Analyzing the roots of political distrust and Brexit narratives at a local level. *Governance*, 34(4), 1019–1038. <https://doi.org/10.1111/gove.12545>

- Ou, C. X., & Sia, C. L. (2010). Consumer trust and distrust: An issue of website design. *International Journal of Human Computer Studies*, 68(12), 913–934. <https://doi.org/10.1016/j.ijhcs.2010.08.003>
- Peeters, R., & Dussauge Laguna, M. I. (2021). Acting out or playing along: A typology of citizens' low trust responses to public organizations. *Governance*, 34(4), 965–981. <https://doi.org/10.1111/gove.12631>
- Poznyak, D., Meuleman, B., Abts, K., & Bishop, G. F. (2014). Trust in American government: Longitudinal measurement equivalence in the ANES, 1964–2008. *Social Indicators Research*, 118(2), 741–758. <https://doi.org/10.1007/s11205-013-0441-5>
- PytlikZillig, L. M., Hamm, J. A., Shockley, E., Herian, M. N., Neal, T. M. S., Kimbrough, C. D., Tomkins, A. J., & Bornstein, B. H. (2016). The dimensionality of trust-relevant constructs in four institutional domains: Results from confirmatory factor analyses. *Journal of Trust Research*, 6(2), 111–150. <https://doi.org/10.1080/21515581.2016.1151359>
- Raaphorst, N., & Van de Walle, S. (2018). Trust in and by the public sector. In R. H. Searle, A.-M. I. Nienaber, & S. B. Sitkin (Eds.), *The Routledge companion to trust* (pp. 469–482). Routledge.
- Raza-Ullah, T., & Kostis, A. (2020). Do trust and distrust in coopetition matter to performance? *European Management Journal*, 38(3), 367–376. <https://doi.org/10.1016/j.emj.2019.10.004>
- Rousseau, D., Sitkin, S. B., Burt, R. S., & Camerer, C. (1998). Not so different after all: A cross-discipline view of trust. *Academy of Management Review*, 23(3), 393–404.
- Rusk, J. D. (2018). *Trust and distrust scale development: Operationalization and instrument validation* [PhD thesis]. Kennesaw State University.
- Saunders, M., Dietz, G., & Thornhill, A. (2014). Trust and distrust: Polar opposites, or independent but co-existing? *Human Relations*, 67(6), 639–665. <https://doi.org/10.1177/0018726713500831>
- Saunders, M., & Thornhill, A. (2004). Trust and mistrust in organizations: An exploration using an organizational justice framework. *European Journal of Work and Organizational Psychology*, 13(4), 493–515. <https://doi.org/10.1080/13594320444000182>
- Saunders, M., & Thornhill, A. (2011). Researching sensitively without sensitizing: Using a card sort in a concurrent mixed methods design to research trust and distrust. *International Journal of Multiple Research Approaches*, 5(3), 334–350. <https://doi.org/10.5172/mra.2011.5.3.334>
- Schafheitle, S., Weibel, A., & Möllering, G. (2023). Inviting submissions to the special issue on trust and vulnerability. *Journal of Trust Research*, 13(2), 252–254. <https://doi.org/10.1080/21515581.2023.2246837>
- Schoorman, F. D., Mayer, R. C., & Davis, J. H. (2007). An integrative model of organizational trust: Past, present, and future. *Academy of Management Review*, 32(2), 344–354. <https://doi.org/10.5465/amr.2007.24348410>
- Schul, Y., Mayo, R., & Burnstein, E. (2008). The value of distrust. *Journal of Experimental Social Psychology*, 44(5), 1293–1302. <https://doi.org/10.1016/j.jesp.2008.05.003>
- Siegrist, M. (2021). Trust and risk perception: A critical review of the literature. *Risk Analysis*, 41(3), 480–490. <https://doi.org/10.1111/risa.13325>
- Sitkin, S. B., & Bijlsma-Frankema, K. M. (2018). Distrust. In R. H. Searle, A.-M. I. Nienaber, & S. B. Sitkin (Eds.), *The Routledge companion to trust* (pp. 50–61). Routledge.
- Sitkin, S. B., & Roth, N. L. (1993). Explaining the limited effectiveness of legalistic 'remedies' for trust/distrust. *Organization Science*, 4(3), 367–392. <https://doi.org/10.1287/orsc.4.3.367>
- Sitkin, S. B., & Stickel, D. (1996). The road to hell: The dynamics of distrust in an era of quality. In R. M. Kramer & T. R. Tyler (Eds.), *Trust in organizations: Frontiers of theory and research* (pp. 196–215). Sage.
- Six, F. (2005). *The trouble with trust: The dynamics of interpersonal trust building*. Edward Elgar.
- Six, F., & Latusek, D. (2023). Distrust: A critical review exploring a universal distrust sequence. *Journal of Trust Research*, 13(1), 1–23. <https://doi.org/10.1080/21515581.2023.2184376>
- Six, F., & Verhoest, K. (2017). *Trust in regulatory regimes*. Edward Elgar.
- Sztompka, P. (1999). *Trust: A sociological theory*. Cambridge University Press.
- Tomlinson, E. C., & Mayer, R. C. (2009). The role of causal attribution dimensions in trust repair. *Academy of Management Review*, 34(1), 85–104. <https://doi.org/10.5465/amr.2009.35713291>
- Tomlinson, E. C., & Schnackenberg, A. (2022). The effects of transparency perceptions on trust-worthiness perceptions and trust. *Journal of Trust Research*, 12(1), 1–23. <https://doi.org/10.1080/21515581.2022.2060245>

- Tsui-Auch, L. S., & Möllering, G. (2010). Wary managers: Unfavorable environments, perceived vulnerability, and the development of trust in foreign enterprises in China. *Journal of International Business Studies*, 41(6), 1016–1035. <https://doi.org/10.1057/jibs.2009.28>
- Uslaner, E. M. (2015). Measuring generalized trust: In defense of the ‘standard’ question’. In F. Lyon, G. Möllering, & M. Saunders (Eds.), *Handbook of research methods on trust* (pp. 97–106). Edward Elgar Publishing.
- Van De Walle, S., & Six, F. (2014). Trust and distrust as distinct concepts: Why studying distrust in institutions is important. *Journal of Comparative Policy Analysis: Research and Practice*, 16(2), 158–174. <https://doi.org/10.1080/13876988.2013.785146>
- Verhoest, K., Boon, J., Boye, S., & Salomonsen, H. H. (2023). How does organizational task matter for the reputation of public agencies? *Regulation & Governance*, 17(1), 158–176. <https://doi.org/10.1111/rego.12441>
- Verhoest, K., Maggetti, M., Wynen, J., & Guaschino, E. (2024). How trust matters for the performance and legitimacy of regulatory regimes: The differential impact of watchful trust and good-faith trust. *Regulation & Governance*. <https://doi.org/10.1111/rego.12596>
- Verhoest, K., Redert, B., Maggetti, M., Levi-Faur, D., & Jordana, J. (in press). Trust and regulation. In F. Six, J. Hamm, E. van Zimmeren, D. Latusek, & K. Verhoest (Eds.), *Edward Elgar handbook on trust in public governance*. Edward Elgar.
- Wright, B. E., Hassan, S., & Park, J. (2016). Does a public service ethic encourage ethical behaviour? Public service motivation, ethical leadership and the willingness to report ethical problems. *Public Administration*, 94(3), 647–663. <https://doi.org/10.1111/padm.12248>