1. Trust in regulatory regimes: scoping the field

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This edited volume is the first endeavour to systematically investigate the role of trust in the different relations within regulatory regimes. Academics as far back as John Locke have argued that trust is the bond of society or a lubricant for social relations. So it would seem logical to assume that it also plays this role within regulatory regimes. But within public administration and political science in general, trust is a concept whose role is contested. Authors such as Rosanvallon (2008) argue that a democracy involves mechanisms grown from distrust for those in power, while others show the beneficial effects of trust in government. The role of trust between regulator and regulated actor is also contested, with some authors showing empirically how trust improves public safety (e.g., Gunningham and Sinclair, 2009b), while others focus on the detrimental societal effects of regulatory capture. The aim of this book is to scope the field, with a review of the literature and a selected set of more detailed contributions; and to set the agenda for further research.

In this introductory chapter we map the different relations within regulatory regimes and review empirical research into the role of trust within these different relations. Our literature review reveals several themes that we address either in the different empirical chapters or in the research agenda formulated in the concluding chapter. The chapter is structured as follows: first we provide a brief overview of the two central concepts regulation and trust. Then we map the different trust relations within regulatory regimes. Next we present the results of a semi-systematic literature review of empirical research into regulation and trust. We conclude by introducing the contributions to this edited volume.

REGULATION AND TRUST

Conceptualizing Regulation

Regulation is a concept that has many different meanings in the English language and definitions of regulation vary widely (see Black, 2002, for an overview). This variation seems to centre on the actors involved and their mandates (Black, 2002; Grabosky, 2013; Hood et al., 2001). Traditionally, regulation was a state activity performed in a strictly hierarchical relation with only one actor involved as the regulator: the state. The limits of this approach have been recognized for many decades, which led to the study of the role of non-state actors, such as public interest groups and market actors (e.g., Ayres & Braithwaite, 1992; Black, 2008; Braithwaite, 2008; Grabosky, 2013; Hood et al., 2001). There is less variation in the activities that regulation consists of: standard-setting, information-gathering, judging whether standards have been met and, where necessary, behaviour-modification through sanctions (e.g., Black, 2002; Braithwaite, 2008; Hood et al., 2001). This approach comes from the cybernetics literature where no attention is paid to the role of rewards in stimulating and reinforcing desired behaviour. However, in social systems rewards are relevant in regulating behaviour. This expands the last activity of behaviour-modification to behaviour-influencing.

In this edited volume we focus on what the OECD has defined as “regulatory enforcement”, “covering all activities of state structures (or structures delegated by the state) aimed at promoting compliance and reaching regulations’ outcomes” (OECD, 2014, p.11), but extend the analysis to include private regulation as well. There is an important difference between public and private regulation, which is relevant for trust. Normally, regulation by public actors is nonvoluntary, while private regulation is voluntary. And where certification (a form of private regulation) is obligatory, for example in the Dutch asbestos removal sector, the regulated actor has a choice which certifying institution to hire. In other words, regulated actors may select the regulator that they trust most.¹

In terms of actors involved, traditionally the state was in the central command and control role. It was assumed that the state had the capacity to command and control and was the only controller (Black, 2002). Over time, as the central role of government receded, other actors are acknowledged to also perform roles in regulatory regimes. Sometimes non-state actors only play a role in information gathering or participate in standard setting and states still have the central role in judgment and enforcement. But increasingly non-state actors are seen to also participate in forming the judgment and have a role in the enforcement of rules through their capac-

ity to impose sanctions on perpetrators (e.g., Grabosky, 2013). But to play an effective role, the actor involved in information gathering has to have a mandate to collect relevant information, while the regulated actor is often not keen to provide that information, either because it is sensitive information for its reputation or competitive position, or because it is expensive to collect the information. The actor involved in behaviour influencing often, but not always, needs a mandate to punish a regulated actor who is found to be in violation. An interesting development in this context is the role of activist groups towards business firms: without such an official mandate activist groups have devised many tactics to influence the behaviour of firms whom they believe are not operating in a socially responsible way; these tactics include, for example, demonstrations, shareholder activism, negative publicity, boycotts and buycotts (e.g., Den Hond et al., 2010).

Conceptualizing Trust

Trust has been studied in many different academic disciplines and this has resulted in many different definitions. Dietz (2011) provides a useful overview of the trust process distinguishing between (1) trustworthiness: the beliefs, (2) trust decision and (3) trust-informed actions (see also Dietz & Den Hartog, 2006). “[T]here is *always* an assessment (however thorough) of the other party’s trustworthiness which informs a preparedness to be vulnerable that, in genuine cases of trust, leads to a risk-taking act” (Dietz, 2011, p. 215). Authors place different emphasis on different phases of the universal trust process depending on whether they define trust as an attitude or belief, or as an action. A definition that is widely accepted only focuses on one step of the trust process, “trust is a psychological state comprising the intention to accept vulnerability based upon the positive expectations of the intentions or behavior of another” (Rousseau et al., 1998, p. 395). Trust implies that there is uncertainty about the trustee’s future behaviour. Möllering’s key point regarding trust is that none of the three bases that he identifies – reasons, routines/roles or reflexivity – can ever provide certainty about the trusted party’s future actions and therefore, trust inevitably involves a leap of faith in which the “irreducible social vulnerability and uncertainty [are suspended] *as if* they were favourably resolved” (Möllering, 2006b, p. 111).

Trust is a relational concept: an actor trusts another actor with respect to a certain future behaviour (Hardin, 2002; Nooteboom, 2002). The relatively simple trust relationship is that between two persons: John trusts Beth. Usually there is a reverse relationship as well: Beth may also trust John. But usually what the trust is about differs in a relationship. The uncertainty an inspector faces when inspecting a regulated actor is

different from the uncertainty the director of the regulated actor faces because of that inspection. So inspector John may trust director Beth if she provides all the information he needs for his inspection, while director Beth trusts inspector John if he is fair and procedurally just in his judgment (cf Murphy et al., 2009).

Important in trust is that it is not simply the more trust the better it is. Trust is not always justified. But at the same time, generic distrust is also not justified (Hardin, 1993). The key question is: how well do I know the other so that I can trust the other to do what I need her to do (Gabarro, 1978)? Trust and distrust are both selective: how well can the trustworthy be distinguished from the not trustworthy? How much tolerance for errors in the judgment is acceptable? The answer to the last question will depend on the risks involved in making errors. This may be different in regulating hospital operating rooms compared with regulating higher education or tax.

In this volume we focus on regulated actors that are organizations, and since regulators are also organizations operating within regulatory regimes, we are not only interested in trust in organizations but also in trust in systems.

Trust in Organizations and Systems

Both trust in organizations and trust in systems are multilevel constructs (cf Kroeger, 2012; Kroeger & Bachmann, 2013; Möllering, 2006a; Sydow, 2006): trust exists at the interpersonal level, where the “face work” (cf Giddens, 1990) takes place and at the organizational or system level that is independent of specific individuals. How these two levels – interpersonal and organizational/system level – connect and interact is still an outstanding issue.

As Möllering (2006a) notes in his review of the literature on trust in institutions, both Simmel and Luhmann suggest that trust in systems is not much more than an assumption that a system is functioning, and a willingness to place trust in that system without placing trust in people. Luhmann (1979) adds that system trust includes the assumption that everybody else also trusts the system. In his conceptualization experts play the role of controlling the system to ensure its proper functioning. Giddens (1990) also gives experts a central role to play in system trust, but in his conceptualization they are the representatives of the system at the “access points” where the trustor experiences the system. It is not clear, however, how exactly trust in these experts and trust in the abstract system connect and interact.

Kroeger (2012; Kroeger & Bachmann 2013) has begun to formulate a theory about possible institutionalization processes to explain this inter-

action for trust in organizations. Trusting organizations occurs when “an actor who trusts an organization makes themselves vulnerable to the actions of others who are guided by the organization, based on what the actor knows about the regularities of organizational behaviour and about the behavioural incentives and norms as set by the organization” (Kroeger, 2012, p. 747). Effective face work by the boundary spanner, i.e. the person interacting on behalf of the organization with the outside world (cf Williams, 2002), leads to trust in that individual, but as they represent the organization, it is also role-based trust: “a transference from interpersonal to organizational trust can occur if the representative’s conduct is viewed as typical of the organization” (Kroeger, 2012, p. 747). And the other way around, organizational characteristics will help facilitate the trust in the individual representative when that individual is not yet known to the outside world.

For the first phase in the trust process (cf Dietz, 2011), trustworthiness judgements, many different categorizations for dimensions of trustworthiness have been proposed, with Mayer et al.’s (1995) Ability, Benevolence and Integrity (ABI) model as possibly the most often cited. A common distinction appears to be two dimensions of trustworthiness: competence, which concerns expectations of the abilities of the organization, and goodwill, which relates to expectations of integrity and non-harmful behaviour (Dekker, 2004; Sako, 1998; Searle et al., 2011). Benevolence and integrity are taken together in this second categorization, as empirically there is often not a clear distinction between these two dimensions, especially in organizational or system trust. Dietz (2011) argues that in almost all situations people use multiple sources of evidence for their assessment of the other party’s trustworthiness, the most common sources being institutional and interactional. In interpersonal trust relations the interactional source is most directly relevant, with the institutional source operating more in the background. When assessing an organization’s trustworthiness, however, both may be equally relevant but this remains an underexplored area. Giddens (1990, p. 34) relates trust in organizations to “reliability and faith in the correctness of abstract principles”, while Maguire and Phillips (2008: 372) define organizational trust as “an individual’s expectation that some organized system will act with predictability and goodwill”.

Individuals trust, but is it possible for organizations to trust as well? Researchers have different views on that. Janowicz-Panjaitan and Krishnan (2009) argue that only individuals can trust and not organizations. Kroeger (2012) used institutionalization theory to propose that individuals’ trusting behaviours may be institutionalized within their organization as they get replicated and habitualized “due to the economy of effort this affords the

actors” (p. 751), which would in turn make it more likely that other individuals that are guided by the organization, i.e. work there, will trust as well.

Trust between organizations in a collaboration has been studied extensively in business research and relatively more recently in public administration research. Much of the literature on public collaboration points at trust as a key success factor, but does not delve deeply into processes of trust building, maintenance or repair (e.g., Ansell & Gash, 2008; Isett et al., 2011; Klijn et al., 2010; Klijn et al., 2016; Klijn & Eshuis 2013; McGuire, 2006; Thomson & Perry, 2006; Vangen & Huxham, 2003; Weber & Khademan, 2008; Weber et al., 2007; Williams, 2002). In the business literature inter-organizational collaborations are assumed to occur between two (or more) organizations that choose to collaborate. In most public collaborations this assumption does not hold. Most public collaborations are geographically determined. The Dutch tax office cannot choose to collaborate with the German Food Authority, because the relationship is better; it has to collaborate with the Dutch Food Authority. How this obligatory relationship affects trust building and cooperation is as yet unclear.

Trust and Related Concepts

When researching trust in regulatory regimes, the relations between trust and distrust, confidence and control need to be reviewed.

Trust and distrust

In the public debate and some academic literature it is often assumed that low trust equals distrust, but that is incorrect; trust and distrust are best conceptualized as distinct concepts (Lewicki et al., 1998; Oomsels, 2016; Van de Walle & Six, 2014). Also, many trust researchers focus on the positive side of trust, assuming that the higher the trust the better it is, and they see distrust as dysfunctional, assuming that broken trust always needs to be repaired. But as Luhmann (1979, 1988) argues conceptually, trust and distrust are functional equivalents. Oomsels, Callens, Vanschoenwinkel & Bouckaert (2016) empirically investigate the functional and dysfunctional aspects of both trust and distrust in interorganizational relations in the public sector, and find that distrust can be functional in such relations.

However, even though distrust can be functional when the context warrants it, in the long run functional trust has more benefits in a democracy, or possibly more precisely absence of active distrust. Hardin (2004) argues that active trust in government involves knowledge about how government operates that goes beyond what can be expected of normal citizens. He introduces the concept of active distrust as he argues that we should not strive for citizen trust but work towards avoiding that citizens actively

distrust government. For citizens to actively distrust, they need to have enough information to form such an informed judgement, which is often lacking.

Trust and confidence

Luhmann (1988) distinguishes trust from confidence, a distinction that many trust researchers nowadays seem to disregard. Confidence is the normal everyday situation: “you are confident that your expectations will not be disappointed” (p. 97). You not only disregard the possibility of disappointment because you think it is unlikely, but also “because you do not know what else to do”, i.e., you experience a situation where you cannot see an alternative. Trust, on the other hand, “presupposes a situation of risk” (p. 97) and you can avoid taking this risk. Luhmann adds an interesting requirement for trust: “trust is only required if a bad outcome would make you regret your action” (1988, p. 98), because you had a choice between alternatives and would with hindsight choose another alternative. This would imply that much of what we now call trust in institutions or systems is really confidence.

A distinction between trust and confidence is also made by Earle et al. (2007) in their Trust, Confidence and Cooperation (TCC) model, which sees two principal pathways to cooperation. One path is via social trust and is based on morality information, while the second path is via confidence and is based on performance information, “*trust* is social and relational; *confidence* is instrumental and calculative” (Earle, 2009, p. 786). Earle et al. (2007) see the two concepts as connected. The bases for confidence “are justified and accepted only within the group or community of trust that generated them. Also, any judgment of trust presupposes judgements of confidence” (Earle et al., 2007, p. 4). And “loss of confidence makes trust necessary for establishing a new record of experience or past performance, allowing the replacement of trust by confidence” (p. 5). The implications are, they claim, that in times of low social uncertainty, when morality information is not relevant, social trust does not play the dominant role in cooperation. Social trust becomes more important in times of uncertainty, when morality information is relevant. They refer to a long list of often cited sources to claim the “ubiquity of [their] two core concepts: trust [. . .] and confidence” (p. 11), even though these sources do not use the concept of confidence, but only trust (e.g., Das & Teng, 1998; Kramer, 1999; Lewicki & Bunker, 1995; Rousseau et al., 1998; Sitkin & Roth, 1993; Zucker, 1986).

Our position is that Earle et al. (2007) push Luhmann’s distinction between trust and confidence too far by making all competence-related bases about confidence and all system- and institution-based trust to

them is really about confidence. We call for a proper comparative study into these different conceptualizations in our agenda for future research in the concluding chapter. For clarity's sake, we choose to talk only of trust unless in our review of the literature authors make the distinction between trust and confidence when they apply the TCC model.

Trust and control

The different perspectives found in both the academic literature and the public debate about the relationship between trust and control are relevant to regulation, since regulation may be viewed as a form of control. After all, regulation is about setting standards, gathering information, judging and intervening (Black, 2002) and so is control (e.g., Weibel, 2007). The dominant perspective on the relation between trust and control is that they are substitutes (for an overview of perspectives see Das & Teng, 2001; Weibel, 2007); the dominant regulation theory, responsive regulation theory fits in that perspective (Ayres & Braithwaite, 1992). More generally in the literature on democracy (e.g., Rosanvallon, 2008) this is also the dominant perspective; when you trust, you cannot control and when you control, you do not trust, as control is done from distrust. This makes trust blind. In this perspective, it is almost impossible to get the regulatory relationship between regulator and regulatee to be a trusting relationship.

The other perspective on the relationship between trust and control is that they can complement each other. Control may strengthen trust and vice versa, if certain conditions are met. These conditions have been studied in manager-subordinate relationship and in business alliances and supplier-customer relationships (e.g., Das & Teng, 2001; Weibel, 2007). Six (2013) proposed that the same underlying theory appears to be applicable to regulatory relations and thus proposes that trust and control may also strengthen each other in regulatory relationships. This underlying theory is Self Determination Theory (Deci & Ryan, 2000; Ryan & Deci, 2000). Six identifies empirical studies that support her propositions. When the standards are set in dialogue between regulator and regulatee and when interpretation of information collected is done with input from regulatees, regulation is more likely to generate trust. Also the more regulatees experience procedural justice and restorative justice, the more likely it is that regulation generates trust. And finally, competence on the part of the regulatee to understand the regulations and comply with them is important (Six, 2013).

Figure 1.1 The regulatory trust triangle

MAPPING TRUST RELATIONS IN REGULATORY REGIMES

At the heart of a regulatory regime is the regulatory trust triangle (Figure 1.1) based on third-party trust.

Third-party Trust

Regulation exists because organizations who are providers of goods and services, or employers, may create social, economic or health risks for citizens or risks to the environment (Sparrow, 2000). This makes citizens vulnerable to the actions of those organizations. In principal–agent theory, citizens would be conceptualized as principals with the organization their agents and high vulnerability and risk would be acknowledged in this relationship. Principal–agent theory, however, then comes with several instrumental remedies to reduce the vulnerability. As Möllering (2006b) argued these will never be sufficient to create certainty and reduce all vulnerability. Trust helps to overcome situations of vulnerability as trust is based on positive expectations and then requires a leap of faith which the trustor is more likely to take when risks and vulnerability are deemed small enough and positive expectations high enough (cf Möllering, 2006b).

This creates the first relation in Figure 1.1: between citizens, in whatever role, and regulated organizations. To what degree may citizens trust organizations? Because individual citizens do not have the competencies or access to the information needed to make good judgements about the trustworthiness of these organizations to manage these risks appropriately,

regulators are created to provide assurance. Thus, regulators act as third-party providers of trust (cf Nooteboom, 1999) in the relationship between citizens and organizations. Third-party trust works as follows: A is not in a position to make a good judgment about the trustworthiness of B, but C is; and because A trusts C that makes it possible for A to trust C's judgment about B's trustworthiness. So, when C trusts B, A will also trust B. Also, when two actors (A and B) are connected by a mutual third party (C), this third party may exert sanctions that restrain the two actors in the dyad from behaving opportunistically or counter-normatively toward each other (Coleman, 1990). This is what regulators aim to do with regulated organizations. Yet, as Shapiro (1987, p. 648) rightly asks, "who guards the guardians [of trust]?" In most countries there are legal and democratic institutions accessible to both citizens and regulated organizations to challenge regulator actions (or inaction), although this may be costly.

In regulatory regimes, the provision of third-party trust by regulators is only useful as long as citizens trust regulators. "We trust that regulatory judgements are being made honestly by appropriately knowledgeable, motivated and qualified people, who are credibly representing the public for whom they act as proxies" (Downer, 2010, p. 94). When regulators have been "captured" by the regulated sector or organization, they may not be trusted by citizens anymore (Levine & Forrence, 1990).

On the other hand, some authors argue that for regulators to be trusted by citizens, the regulators should distrust the regulated organizations or regulatees (van Montfort, 2010). After all, the argument goes, if regulatees could be trusted, regulatory enforcement is not needed. And after each serious incident where citizens are put at risk, the call for more and stricter regulatory enforcement and more repression (distrust) is strong.

To explain these apparently contradictory perspectives we argue that the latter perspective – that regulators should distrust regulated organizations – is flawed. If indeed *all* regulatees could be trusted *all the time*, regulation would not be needed. When this is not the case, as it often is, this does not imply that *all* regulatees should now be distrusted *all the time*. It is therefore important for regulators to be responsive in their regulatory style to the regulatee's compliance ability and motivation. If regulators distrust regulatees, they should act upon that distrust until regulatees can be trusted to comply with regulation again or stop their activity (Braithwaite, 2008).

Regulators cannot supervise every regulated activity 24/7, so regulation cannot provide 100 per cent certainty; it encompasses irreducible uncertainty and risk. This is regardless of whether regulators trust or distrust regulatees. Below we present empirical evidence from prior research that suggests that trust in the relation between regulators and regulatees has

a positive effect on regulatee compliance and therefore helps safeguard public interests and control public risks, provided each performs their role. Interestingly, Näslund and Tamm Hallström (this volume) use a different line of reasoning when they argue that private regulators should communicate to customers that they distrust the businesses that they monitor and certify. We pick this up in the concluding chapter in our agenda for further research.

Polycentric Regulatory Regimes

These three relations form the basic trust triangle for regulation between citizen, regulated organization and regulator. However, this basic trust triangle needs to be further developed to properly encompass all the complexities of regulatory regimes. First, regulated organizations may be private/third sector or public. This distinction is relevant since public organizations are (ultimately) accountable to elected officials, such as members of parliament or local councillors; whereas private organizations are accountable to shareholders and third sector organizations are accountable to those who support them, financially or otherwise. Also, citizens often do not have a choice in which public organization to interact with, while they usually have a choice with which private or third sector organizations they want to be a client. This difference may be relevant for trust. This is why a distinction is made between citizen trust in private/third sector organizations (relation 1) and public organizations (relation 2) in Figure 1.2.

Figure 1.2 Role of trust in different relationships within regulatory regimes

Second, regulators may be public or private. In many situations private regulation is voluntary while public regulation is obligatory. Private regulation often works through private certification that regulates how a provider should interact with customers to take account of customers' interests (e.g., for e-commerce eTrust and Verisign; Bart et al., 2005) or it provides assurance to the consumer that products have the quality that sellers claim, for example sustainable products (see Näslund & Hallström, this volume). Providers pay to be allowed to use that certificate and the certifying company regularly audits the provider. If the provider fails to meet the conditions of the certificate, the provider should not be allowed to use the certificate. This third party trust mechanism works as long as customers trust the certifying company to withhold the certificate if the provider fails to meet the standards; which may be difficult given the commercial relation between private regulator and regulated organization. Hence the distinction between citizen trust in public regulators (relation 3) and citizen trust in private regulators (relation 4) in Figure 1.2.

The relation between regulator and regulated organization is also different when the regulator is public versus private. A public regulator is generally given for a regulated organization; in other words, the regulatee has no choice in the matter. A recent initiative in England, the Primary Authority, gives regulated organizations a choice which local regulator is its primary contact when it operates in many different locations with different local regulators.² Often, organizations have a choice between different private certificates or labels, each with their own distinctive criteria. And for each label or certificate there is often a choice among different certifying institutions. In sum, there is usually a choice in private regulator for regulated organizations seeking private regulation, while such a choice is generally lacking in public regulation. This choice is relevant for trust. Hence the distinction in Figure 1.2 between trust between private/third sector organizations and public regulators (relation 5) on the one hand, and trust between private/third sector organizations and private regulators (relation 6) on the other hand. Often, public organizations are also regulated, in particular when they provide public services or when they operate locally with national regulation (relation 7). It is relevant to distinguish this from private/third sector organizations, because the relation between public regulator and public regulatee is embedded within a wider network where the relationship is not necessarily hierarchical but horizontal (see for example, Six and Van Ees, this volume).

The third direction in which the basic regulatory trust triangle needs further development is to acknowledge the different collaborative relations between regulators. Increasingly, regulatory regimes are characterized by multiple regulators. The first is the collaboration between public and

private regulators (relation 8). In some instances this is done when regulatory regimes are designed with roles for both private and public regulator (co-regulation) as Van der Voort's study (this volume) shows. In other situations public regulators acknowledge the presence of private regulation and take this into account in their own regulatory strategy, in particular in their risk analyses. In today's increasingly complex society, organizations are often regulated by more than one public regulator, sometimes even at multiple levels of government (e.g. tax, food safety, labour conditions, smoking ban, fire safety for restaurants and bars; or telecom, media and general competition regulators regulating telecom companies active in broadcasting) leading to calls for these regulators to collaborate in order to reduce the administrative burden for the regulated organizations (Jordana & Sancho Royo, 2004; Doern & Johnson, 2006; Aubin & Verhoest, 2014). Furthermore, regulators in different geographic regions need to collaborate when organizations cross jurisdictions (relation 9); examples are tax, food safety or shipping.

A final complication is the role of organizations that represent public interests within regulatory regimes. For example, Abbot (2012) concludes that

when designing a regulatory framework for new technology, special attention must be paid to the need to ensure that public trusts both technology being regulated and mode of regulation. Whilst a degree of government oversight can promote public trust in several ways, it can also diminish it. To counter this, regulatory controls must provide non-state actors with the tools necessary to hold industry and government to account. (Abbot, 2012, p. 357)

This resonates with Ayres and Braithwaite's (1992) proposal for tripartite regulation. Tripartism, according to Ayres and Braithwaite, gives Public Interest Groups (PIGs) three roles in the regulatory process. PIGs are groups that represent one or more public interests relevant to the regulated organizations, such as consumer interests, environmental interests, worker interests.

First, it grants the PIG and all its members access to all the information that is available to the regulator. Second, it gives the PIG a seat at the negotiating table with the firm and the agency when deals are done. Third, the policy grants the PIG the same standing to sue or prosecute under the regulatory statute as the regulator. (Ayres & Braithwaite, 1992, pp. 57–8)

The public interest group acts as a guardian to the regulatory arrangement, or as Ayres and Braithwaite call it "contestable guardianship", i.e., the performance of the regulator as the primary guardian may be contested by

the public interest group, who represents the vulnerable citizens, in whatever role as consumer, labourer or neighbour to a hazardous plant, that the regulation is meant to protect. We have not included this relation in Figure 1.2 for practical reasons only and will pick this up in our agenda for future research in the concluding chapter. We did not find any empirical studies that included public interest groups as formal actors in regulatory regimes in our semi-systematic search.

EMPIRICAL RESEARCH INTO TRUST IN REGULATORY REGIMES

In this section we report the results from a semi-systematic literature review for empirical research into the relation between trust and regulation in the different relationships that we have identified within regulatory regimes.

Empirical research into regulation and trust within regulatory relations is scattered across many different academic fields and, as a consequence, across many publication outlets. Core fields are law, political science, public administration and sociology, but sector-specific journals also publish research on regulation, for example in health care, environmental management, food, financial services, nano- or biotechnology. This makes it very difficult to do a proper systematic review of the literature, so we cannot and do not claim to be complete or exhaustive. We searched within the Web of Science database in the Social Science Citation Index between 2000 and 2015 on the search terms *Trust* and Regulat**; and focused on English language journal articles. This generated more than 1000 hits. Next, we selected research areas: law, public administration, sociology, health care, food/agriculture, environment/resource management, education, risky technologies. This generated 500–600 sources that were scanned by title and abstracts; when in doubt they were saved for the next step. The selection was based on whether the article was empirical and whether trust and regulation were the topic of the research or whether the words were just mentioned in passing. Also, the term trust was sometimes used in its legal form such as NHS trust. This selection step generated a list of 125 sources for which the pdfs were downloaded and searched in full on what was said about trust and regulation. When reference was made to another relevant article not captured in our search this article was added to our list. Some conceptual publications found in the search were used to strengthen the previous, conceptual section and the empirical findings.

LITERATURE REVIEW RESULTS

In total 33 empirical studies were found in the literature review. Table 1.1 provides a descriptive overview in terms of which trust relationships are covered, which method was used, and the industry/sector and region of the study. The results of the literature review fall into three main categories: research that focuses on (1) public regulatory trust triangles; (2) private regulatory trust triangles; and (3) collaboration between regulators. These main categories are sometimes further subdivided.

Public Regulatory Trust Triangle

Most studies fall within the public regulatory trust triangle. We first discuss studies that focus on regulator-regulatee relation, then studies that cover the whole triangle, and finally studies that focus on citizen trust in regulator or regulated organization.

Regulator–regulatee relations (relations 5, 6 and 7)

Trust between a public regulator and regulatees has received a fair amount of attention in research, especially with respect to its impact on compliance (e.g., Braithwaite & Makkai, 1994; Gunningham & Sinclair, 2009b; Heimer & Gazley, 2012; Murphy, 2004). These studies focus on the interaction between the individual inspector representing the regulator and the individual representing the regulated organization in the regulatory encounter, distinguishing inspector trust in the regulatee from regulatee trust in the inspector, and how these two trust relations interact. Overall, these studies suggest that regulator trust in regulatees and regulatee trust in the regulator have a positive effect on compliance and thus help safeguard public interests.

According to Heimer and Gazley (2012, p.853), who study regulatory encounters between health inspectors and HIV clinics,

as regulatory encounters unfold, clinics' carefully prepared performances sometimes change into more cooperative interactions where inspectors and regulatees hash out details about how rules will be applied and even work together on reports for the regulators' supervisors. By "performing together," regulatory inspectors gain access to the clinic's backstage where they can assess clinic workers' deeper conformity to ethical and scientific norms. But such joint performances are less likely where cultural divides and material scarcity make it difficult for clinic staff to gain inspectors' trust.

Braithwaite and Makkai's (1994) research shows that inspector trust has a positive effect on compliance. More precisely, they find that the more care

Table 1.1 Semi-systematic literature review: description of empirical studies found

Source	Trust relationship(s)	Method	Industry/sector	Region
Braithwaite & Makkai (1994)	Regulator–regulatee	Longitudinal survey	Care homes	Australia
Downer (2010)	Regulator–regulatee	Documents	Aviation	US
Heimer & Gazley (2012)	Regulator–regulatee	Ethnography	Health care	US, Thailand, Uganda, South Africa
Murphy (2004)	Regulator–regulatee	Survey	Tax	Australia
Murphy et al. (2009)	Regulator–regulatee	Survey	Taxation, social security and law enforcement	Australia
Gouldson (2004)	Whole public triangle	Interviews	Environmental regulation	UK
Gunningham & Sinclair (2009a)	Whole public triangle	Interviews	Occupational health and safety	Australian mines
Gunningham & Sinclair (2009b)	Whole public triangle	Interviews	Occupational health and safety	Australian mines
Holm & Halkier (2009)	Whole public triangle	Interviews, documents	Food	Europe
Thiers (2002)	Whole public triangle	Documents, interviews	Organic food	China
Gillespie & Hurley (2013)	Public–private triangle	Document study	Financial system	US
Nienaber et al. (2014)	Citizen–regulated company–regulation	Meta-analysis	Banking	Worldwide
Axelsson & Schroeder (2009)	Citizen–public regulation	Interviews, documents	Data sharing for research: eResearch, eScience	Sweden
Brabers et al. (2013)	Citizen–public regulator	Citizen survey	Health care	The Netherlands
Brown & Kuzma (2013)	Citizen–public regulator/regulation	Focus groups	Nanotechnology in food products	US

Chou (2008)	Citizen–public regulator/ regulation	Documents, citizen survey	Food safety	Taiwan
Chou & Liou (2010)	Citizen–public regulator/ regulation	Survey	Food safety	EU, UK, Germany, Taiwan
Farrell (2012)	Citizen–public regulator/ regulation	Documents	Risk innovation and regulation in health technologies	EU
Harmon et al. (2013)	Citizen–public regulator/ regulation		Biobanks	
Phillimore et al. (2007)	Citizen–public regulator	Interviews	External safety, chemical plants	Scotland, Germany
Satterfield et al. (2013)	Citizen–public regulator/ regulation	Telephone survey	Nanotechnology	US
Sylvester et al. (2009)	Citizen–public regulator/ regulation	Essay	Nanotechnology	Worldwide
Walls et al. (2004)	Citizen–public regulator	Focus groups	Health and safety, and Railways	UK
Bart et al. (2005)	Private regulatory triangle	Survey	Inspectorate	
King & Lenox (2000)	Private regulatory triangle		eCommerce	Worldwide?
Coslovsky & Locke (2013)	Co-regulation	Audits and interviews	Chemical industry	
Delmas (2002)	Co-regulation	Survey	Sugar plants	Brazil
			Business firms	Compares US and Europe
Fernandez et al. (2010)	Co-regulation	Interviews	EU environmental policy	Spain, Portugal, Greece
Garcia Martinez et al. (2013)	Co-regulation		Food	Sweden
Larsson (2005)	Co-regulation		External auditor	US
Liu (2011)	Co-regulation		Organic food certificates	
Rommel & Verhoest (2014); Rommel (2012)	Public collaboration	Documents, interviews	Energy regulators	Flanders (Belgium)
Schmidt (2009)	Public collaboration	Essay	Single market for services in EU	EU

home directors perceive that inspectors trust them, the better their compliance at the next inspection. Inspector trust in regulatees has another effect as well, since “as long as [inspectors] believe a clinic is adhering to the spirit of the regulations, regulatory inspectors will join clinic staff in working around ‘inconsequential’ technical mistakes” (Heimer & Gazley, 2012, p. 882). This does not necessarily imply regulatory capture, because “a good monitor knows when and how to join the performance and therefore how to get backstage to see what is really happening” (Heimer & Gazley, 2012, p. 882).

Regulatee trust in inspectors is equally important and “an opportunity to correct mistakes only occurs when there is trust on both sides—when regulators believe the clinic staff is competent and good-willed and the staff in turn are willing to acknowledge errors because they expect to be treated fairly” (Heimer & Gazley, 2012, p. 882). Procedural justice, fair treatment, is a key antecedent to regulatee trust in inspectors and an important driver of regulatees’ intention to comply (Murphy, 2004, 2016; Murphy et al, 2009).

The studies reviewed here are all related to public regulators regulating private organizations. We found no empirical research on trust in relations where public regulators regulated public organizations. We present two such studies in this volume by Van Ees and Six, and Oomsels and Bouckaert.

Whole triangle

We found four studies in different sectors and on different continents that use all three parties in the public regulatory trust triangle as data sources (relations 1, 3 and 5) (Gouldson, 2004; Gunningham & Sinclair, 2009b; Holm & Halkier, 2009; Thiers, 2002) and one covering both public and private regulatory actors, but not gathering data directly from all actors (Gillespie & Hurley, 2013). In these studies the regulator’s challenge of being the go-between or trusted third-party between citizens’ interests on the one hand and the regulated business’ interests on the other hand is highlighted. Citizen perceptions of the regulator are very sensitive to whether the regulator is seen as independent to business or as too cosy with business. In all four studies regulators are seen by citizens, at least at some point in time, as being captured by the businesses they are supposed to inspect and as not paying enough attention to citizen concerns. For example, in Thiers’ (2002) study of organic agriculture in China, there is a structural problem since the Chinese government tries to be both the regulator and producer of organic foods. As a result, the Chinese government is not trusted in the role of regulator who safeguards citizen concerns.

Two empirical studies are longitudinal and show that, over time, a

collaborative regulatory style, seeking to build trust, is more effective in safeguarding citizen and employee interests than a repressive style, based on distrust. Gouldson's (2004) study of the UK's Environment Agency's regulatory strategy shows that giving the Environment Agency the discretion to be responsive in its approach of business firms had a positive effect on overall compliance and the willingness of regulated firms to provide the information that regulators need. But regulators are not always given this kind of discretion, since citizens do not always trust regulators enough, especially after a period where regulators have (appeared to have) been captured by business. Gunningham and Sinclair's research into Australian mine safety regulation looks simultaneously at the employees' and trade unions' perspective, the employers' and firm owners' perspective and the role of the regulator. They find that regulation and "instructions" change under successive governments, depending on the relative power and influence of unions versus mining companies. They conclude that a more collaborative regulatory strategy and style leads to safer working conditions than a more repressive strategy and style (Gunningham & Sinclair, 2009a, 2009b).

As we showed in the section on the role of trust in the regulator-regulatee relation, there is ample empirical evidence to suggest that a critical cooperative relation between regulator and regulatee has positive effects on compliance levels and the reduction of citizen vulnerabilities. However, such cooperation does not occur in isolation. The regulator also needs to take into account the position of the citizen. There are two possibilities here: either citizens trust the regulatory agency enough to allow it to exercise discretion in the regulatory relationship; or as Gouldson puts it, alternatively, "[stakeholders] have such limited influence that they are unable to disrupt cooperative approaches when they emerge" (Gouldson, 2004, p. 589). The latter option, the exclusion of citizens, we suggest, is not a viable long-term option in many (developed) countries today, and is not compliant with the OECD's best practice principles for regulation (OECD, 2014).

Gillespie and Hurley (2013) examine the breakdown of trust in the US financial system including the regulatory regime after the global financial crisis. They observe that trust failures occurred at multiple levels and by multiple agents, both public and private. They distinguish three groups of actors: financial institutions, the rating agencies – who may be seen as private regulators – as well as the government and its regulatory agencies. This analysis is valuable as it looks at the whole financial system, but stays rather superficial for our purposes: there is no empirical data gathering directly from actors involved, but rather from published reports and media stories. They conclude that increased (regulatory) control is central to rebuilding stakeholder – read mainly citizen – trust in financial organizations and institutions.

Citizen trust (relations 1, 2 and 3)

Empirical research into citizen trust in private and third sector organizations (relation 1) is scattered across many academic disciplines and journals and practice-oriented publications; and therefore difficult to find. Also, only some of this research is related to regulation. For example, Nienaber et al. (2014) perform a meta-analysis of factors that impacted on customer trust in business organizations and one of the factors was “regulation and control mechanisms”. They find a moderately high impact of this factor on citizen trust in all organizations ($r = 0.330$) and an even higher impact for financial organizations ($r = 0.638$). It remains, however, unclear to what degree the items in this factor refer entirely to public regulation, as they speak of “mechanisms such as binding contracts, web site security or privacy regulations” (Nienaber et al., 2014, p. 382). In this research regulation is seen as an institution in the background that influences citizen trust in the regulated business corporation (cf Zucker, 1986).

In our semi-systematic search we found only one study into citizen trust in public organizations that are regulated (relation 2): in Sweden a lot of personal data is stored by public organizations for research and science and citizens trust the privacy regulation that is involved with privacy concerns (Axelsson & Schroeder, 2009).

The empirical research focusing on citizen trust in specific regulators or a regulatory regime (relation 3) relies on various methods of data collection, such as interviews, document analyses, focus groups or surveys. Some studies focus on citizen trust in regulators or regulatory regimes in general (Brabers et al., 2013; Walls et al., 2004), while other studies focus on citizen trust in regulators or regulatory regimes after an incident (Chou, 2008; Chou & Liou, 2010) and still others focus on citizen trust for regulating new risks (Brown & Kuzma, 2013; Farrell, 2012; Harmon et al., 2013; Satterfield et al., 2013; Sylvester et al., 2009) or risks more generally (Pollak, 1996). They identify factors that influence the degree of trust citizens have in regulators or regulatory regimes. Some may easily be addressed by regulators while others are more challenging.

Citizen trust in regulators in general In 2007 the Dutch Health Care Inspectorate introduced its mission statement “for a justified trust in responsible health care”, in which it acknowledged relation 1, citizen trust in health care providers, as its *raison d'être* and also acknowledged the need for citizen trust in the inspectorate (Paauw-Fikkert et al., 2014). It has since commissioned research into how much citizens trust the Inspectorate (Brabers et al., 2013), but these data are difficult to interpret and analyse without further context, such as either longitudinal or comparative scores of citizen trust in regulators.

Walls et al.'s (2004) study, however, compares two regulators and combines focus group discussions with a short questionnaire among focus group participants ($n = 201$) about their trust ratings in specific public regulators. With this combination of methods they are able to probe into how ratings of citizen trust in particular regulatory agencies were formed; in other words how citizens assess a regulator's trustworthiness, the first phase in Dietz's (2011) trust process. Participants used different modes of reasoning to come to their judgments, largely because only a few actually had had direct experience with the regulator. Walls et al. (2004, p.133) conclude that "views of participants are the outcome of a reconciliation of diverse perceptions concerning the role of the organisation, structural factors and the nature of the regulated risks". The Health and Safety Executive (HSE) received higher trust ratings ($m = 2.5$; $SD = 0.78$) than the Railways Inspectorate ($m = 1.7$; $SD = 0.70$), even though the latter is formally part of the former. Participants more often knew of HSE and "it was perceived to be independent of the legislature and seen to be acting in the public interest, although some concerns were expressed [about adequate funding]" (p. 138). The Railways Inspectorate was almost completely invisible to the public and the negative public debates about rail safety had a negative impact on the trust ratings: "a negative perception of the UK rail system as a whole emerged . . . Perceptions of the regulator thus seemed to suffer by association" (p. 144).

Citizen trust in regulators or regulatory regimes after incidents The impact of incidents, such as dioxins found in food, on citizen trust in regulators and regulatory regimes is studied by Chou in two studies (Chou, 2008; Chou & Liou, 2010). In both cases governments used technical performance information to address citizen concerns after an incident (e.g., when dioxins were found in food), but this did not help citizens to trust the technology or organizations. If anything the use of technical performance information led to lower trust in government as the regulating actor. As Chou (2008, p.181) concludes, the impact of a technocratic approach to risk assessment as the basis for risk regulation has "systematically destroy[ed] public trust in regulators". He critically investigates how a newly industrialized country like Taiwan has responded to dioxin in food crises and compares it with how EU countries have dealt with them. He observes that in both cases the first response had been one where communication to the public was delayed due to "technocrats risk assessments in terms of positivistic regulatory science, which hides and delays risk and ignores risk communication" (Chou, 2008, p.181), because of the need for accuracy. He goes on to show how the delayed and hidden risk governance structure alters public perception and systematically destroys public trust in regulators' risk

governance. EU countries then moved to a new risk governance paradigm (Chou & Liou, 2010), while he wonders whether this will also happen in newly industrialized countries like Taiwan. Taiwan's tradition and culture of authoritarian technological decision-making and positivistic risk assessment makes it harder to move towards more open risk governance and risk communication to the public (Chou, 2008). More generally, Pollak (1996, p. 25) concludes that "inadequacy of scientific knowledge, coupled with lack of public trust in government make risk assessment based on experts inadequate".

Citizen trust in regulating emerging risks Similar observations are made in empirical studies into how regulatory regimes may take into account citizen concerns about emerging risks due to new technologies, such as nanotechnology or biotechnology. In their study of the GMO regulation debate, Sylvester et al. (2009, p. 172) observe that, whereas the US government did not take strong regulatory action, leading to declining public trust in the regulatory agencies, the UK government did react in support of GMO's benefits and safety. However, this behaviour of the UK government also led to declining public trust as the public "viewed government and industry to be in cahoots." They furthermore observe that at the heart of the GMO "debacle" was the public perception of risks, not of scientific facts. This suggests that moral information was dominant and the scientific technical information was not accepted, because it did not come from trusted experts with shared values (cf Earle, 2010).

Satterfield et al. (2013, p. 254) point to the dramatic effects on public opinion whenever regulators and scientists presume that new technologies are safe and are then not found to be so. They conclude that, from a policy point of view, "it is best to foresee unexpected harm to human and environmental health, or at least to recognize that unfounded promises of safety are unwise", because "trust in regulation, once lost, is difficult to recover". What is needed are

governance frameworks that are capable of simultaneously managing risk, coping with uncertainty, combatting ambivalence, and building trust, all the while encouraging the delivery of those instrumental outputs that we value/demand (better health, new technologies, commercial reward). This multi-dimensional task makes the design and delivery of good governance frameworks (ones that are effective, efficient, responsive, and proportionate) extremely difficult. (Harmon et al., 2013, p. 31)

Farrell (2012, p. 473) comes to a similar observation when she concludes that

the political context brings complexity to EU regulatory processes, which in turn may lead to messiness and unpredictability in relation to managing the relationship between risk and innovation. This may be particularly apparent in politically sensitive areas of EU governance where public trust may be at issue, such as those involving health technologies.

Public engagement exercises are important in helping to shape public risk perceptions in a responsible way, but Harmon et al. (2013, p. 31) also argue that the challenge facing regulators and policy makers is “how to push public engagement results up into a policy framework paralleled with a need to make regulation more socially receptive and reflexive”. In conclusion, policy makers and regulators are continuously looking for approaches that allow for the public to have trust in regulators’ ability in keeping them safe and protected while at the same time facilitating innovation by businesses.

Private Regulatory Trust Triangle (Relations 1, 4 and 6)

Empirical research into private regulation is relatively new, especially in regulation literature. In the business literature, trust in private certificates and labels has received more attention, because a certificate will only be effective if it is trusted by its consumers (e.g., for e-commerce eTrust and Verisign; Bart et al., 2005). Our semi-systematic search, using the search terms trust and regulation, did not find most of these sources, probably because they do not use the term regulation. Our chapter on private regulation covers more of this literature (Näslund & Hallström, this volume).

Proponents of industry self-regulation in environmental protection argue that the establishment of self-regulatory structures may institutionalize environmental improvement, and critics suggest that without explicit sanctions, such structures will fall victim to opportunistic behaviour. King and Lenox’s (2000, p.698) study of the Chemical Manufacturers Association’s Responsible Care Program finds that opportunistic tendencies were strong and that “effective industry self-regulation is difficult to maintain without explicit sanctions”. Hence the need for regulatory regimes with roles for both state and non-state actors and co-regulation (see relation 8 below).

Regulatory Collaboration

Regulatory collaboration may occur between private and public regulators in a mixed regulatory regime (co-regulation; relation 8), or between public regulators (relation 9).

Co-regulation (relation 8)

As regulatory regimes are increasingly (re)designed in negotiations between industry and government with attention to reducing industry's regulatory burden, more and more examples of co-regulation emerge. In co-regulation both private and public regulators play a role in the regulatory regime. Sometimes private regulation is obligatory, for example in the Dutch asbestos removal sector, while in other situations private regulation is voluntary. Recently empirical research into this relation is emerging (Coslovsky & Locke, 2013; Fernandez et al., 2010; Garcia Martinez et al., 2013; Larsson, 2005). Coslovsky and Locke (2013) study the Brazilian sugar sector's regulatory regime with both private and public regulators. They find that "although private and public agents rarely communicate, let alone coordinate with one another, they nevertheless reinforce each other's actions" (Coslovsky & Locke, 2013, p.497).

In their comparative study of EU regulatory influence on southern European member states, Fernandez et al. (2010) observe the critical role of trust between state and non-state actors in their collaboration within regulatory regimes. EU environmental policy stimulates the involvement of non-state actors such as private certification institutes, while in some Southern European member states (Spain, Portugal and Greece) such involvement is not commonplace. In Greece they find high distrust between public and private actors in general (all of society), which makes cooperation in environmental regulation more difficult than in Spain, where overall there was more trust and as a consequence better collaboration in environmental regulation, with clear regional variations. In their study of co-regulation in the European food industry, Garcia Martinez et al. (2013, p.1117) conclude that "co-regulation is thus most likely to appear where related public and private objectives and interests are aligned and compatible with each other".

Liu's (2011) study into the trustworthiness of the US Department of Agriculture organic certification process shows the importance of correctly understanding how system trust works. He concludes "that the current regulatory framework is not only inadequate to the task of regulating domestic organics, but also incapable of ensuring the integrity of imported organics. Thus, the 'USDA Organic' seal misleads customers" (Liu, 2011, p.333). The certification is performed by private certifying agents and the USDA officials do not have enough capacity to supervise these agents, according to Liu. According to Luhmann (1988) people have system trust if they believe the system is functioning and assume others also trust the system. Liu's conclusion that the USDA is not able to perform enough inspections to ensure the integrity of the products and therefore should not be trusted is in Luhmann's conceptualization irrelevant. Only when

citizens hear about the number of USDA inspections *and* judge that to be inadequate for a judgment that the system is functioning, may citizens' trust in the USDA Organic system disappear.

In sum, the results of co-regulation research have so far shown that co-regulation is facing challenges in terms of achieving improved compliance or higher trust. The jury is still out whether the basic idea of co-regulation is flawed, because interests vary too widely; or whether it is just very difficult to get the collaboration to work effectively and we have not yet figured out how to achieve this.

Public collaboration (relation 9)

In general, research into public collaborations emphasizes the importance of trust (e.g., Ansell & Gash, 2008; Isett et al., 2011; Thomson & Perry, 2006; Weber & Khademanian, 2008), but we found only a few studies that specifically focus on trust in the collaboration between different regulators within one jurisdiction, or on trust in the international collaboration between regulators. One more recent phenomenon is that regulatory agencies increasingly collaborate across national borders, e.g. through European regulatory networks (Levi-Faur, 2011; Maggetti, 2014), or across sectors (e.g. collaboration between telecom and media regulators, see Aubin and Verhoest, 2014). Schmidt (2009) investigates trust of European Union member states in each other's regulatory systems with regards to the implementation and enforcement of the Service Directive from 2004. She observes that mutual recognition was much more controversial in developing a single market for services than it was for goods. "Old" member states distrusted whether "new" member states (from Eastern Europe) would abide by the rules given the high levels of unemployment in many of the latter countries. Her analysis shows why a single market for services generated distrust while a single market for goods did not:

For goods, in general, governments only have to trust each other to maintain sufficient regulation and control of product standards. This is supported by the interest of governments in the well-being of their own populations, and the interest of manufacturers in their reputation, which extends to exported goods. In the case of services, however, process standards have to be controlled which only in part affect the quality of services. Where services are being exported using the competitive advantage of lower wages, this requires a higher degree of trust. Governments have to trust that their counterparts behave altruistically and [that these latter actors] control service providers simply for the sake of other member states. (pp. 855–6)

Rommel and Verhoest (2014) call for a "relational perspective" on regulatory agency autonomy as they find that "de facto discretion of regulators

can be increased or reduced by other public regulators besides the parent minister”, with whom they need to coordinate. They assert that trust is a key variable in the relationship between public regulators (Rommel & Verhoest, 2014, p.298). First, regulatory agencies can increase their de facto autonomy towards the responsible minister by using reputation as a trust building mechanism. One important way in which regulatory agencies can build reputation towards their minister is by accumulating technical expertise and reputational power through the interaction with other regulatory agencies in the context of European regulatory networks or cross-sectoral collaborations (Rommel, 2012; Verhoest et al., 2015). Second, Rommel (2012) shows in case studies of labour and social inspections as well as energy regulation in the multi-level context of federal Belgium that the emergence of deeper forms of collaboration between regulators within and between levels of government depends upon trust between them and the extent to which one regulator can signal its trustworthiness to other regulators.

CONCLUSIONS AND INTRODUCTION TO CHAPTERS

Our scoping of the field in terms of the different trust relations within regulatory regimes and our semi-systematic literature review show the current state of knowledge. We identify five themes, the first four of which are gaps in the literature. First, not all relations are studied to the same extent in the context of trust in regulatory regimes. In particular relation 7, the relation between a public regulator and a public regulated organization, is heavily understudied. This is why we have two chapters in this volume that explicitly address relation 7 (Six & Van Ees, and Oomsels & Bouckaert).

Second, even though a fair amount of studies look at the interactions between trust relations within regulatory regimes, few studies collect data from different actors involved in the different relations so that different perspectives are included and several trust relations may be studied in relation to one another. Many chapters in this volume collect data from more than one actor and some look at the interaction between several relations.

The third gap we identify is that little attention is paid to the dynamics of processes of trust building and repair and the role of distrust in such processes. For example, Responsive Regulation theory (Ayres & Braithwaite, 1992), a dominant theory in regulation research, has cooperation and trust at its heart. Braithwaite and Makkai recommend “a dynamic regulatory strategy of dialogue and trust as a first choice followed by escalation to more punitive regulation when trust is abused”

(Braithwaite & Makkai, 1994, p.1). They do, however, underplay the importance of processes of trust building and repair. We have two chapters that focus on trust processes and interactions in detail (Six & Van Ees, and Oomsels & Bouckaert).

Fourth, there are still outstanding conceptual issues around trust and related concepts that need further study: trust and confidence, trust and distrust and trust and control; all in the context of trust in regulatory regimes. The chapters in this volume sometimes address these issues but do not resolve them, if they can actually be resolved.

A final, fifth, theme is that the methods used to date vary widely, with an emphasis on exploratory qualitative research (see Table 1.1). There is relatively little systematic theory building or hypothesis testing research and little comparative or integrative research. This makes sense given the phase in the development of research in this field, but we feel that it is time to start more theory building and hypothesis testing research, given the amount of knowledge we have gathered in all these rather dispersed studies. In the concluding chapter to this volume we elaborate on these conclusions, together with the contributions that the chapters in this volume make.

Contributions in this Volume

The chapters in this volume make a substantial contribution in addressing the gaps identified and also highlight the dilemmas regulators face as they work to perform their role in regulatory regimes: gaining and maintaining the trust of citizens while at the same time keeping regulatory burdens on responsible regulatees within reasonable limits; yet being firm on irresponsible regulatees. Further research, however, is needed to formalize and validate the emerging theoretical insights.

Russell W. Mills and Dorit Rubinstein Reiss, in their chapter *The role of trust in the regulation of complex and high-risk industries: the case of the U.S. Federal Aviation Administration's voluntary disclosure programs*, study relationship 5 between aviation companies and the public regulator. They examine the evolution of the role of trust in the Federal Aviation Administration's Voluntary Disclosure Programs by developing case studies of two voluntary disclosure programs: the Aviation Safety Action Program (ASAP) and the Voluntary Disclosure Reporting Program (VDRP). Using interview, document and observational data from both parties, they examine how the level of trust between the FAA and air carriers varies across regions and how the level of trust is often contingent upon the enforcement style of the regulator and on institutional arrangements to enhance trustworthiness and confidentiality.

In Chapter 3, *When the going gets tough: exploring processes of trust building and repair in regulatory relations*, Six and Van Ees focus on the dynamics of processes for trust building and repair that are underplayed in current regulation theory. They reconstruct and analyse the interaction process between a public regulator (water board in charge of licensing and enforcement for water management) and a public regulatee (local authority developing new housing district) in the Netherlands; in other words relation 7. Even though (dis)trust was not often explicitly mentioned, processes of trust building and repair provide a fruitful conceptual lens through which they could understand and explain what happened. Their micro-level study shows how trust is built and what happens after trouble occurs and conflict erupts. They tentatively formulate propositions on processes of trust building and repair at individual and organizational level.

In Chapter 4, *Interorganizational trust in Flemish public administration: comparing trusted and distrusted interactions between public regulatees and public regulators*, Peter Oomsels and Geert Bouckaert study in detail the interactions between the boundary spanners from public regulators and public regulatees (relation 7). They include in their analysis how system-level (in their terminology macro-level) characteristics impact on the interaction and the resulting trust perceptions. Findings from a nested mixed-method analysis of trusted and distrusted interorganizational interactions with horizontal departments in Flemish public administration show that macro- and meso-level interaction aspects affect the trust process through various direct and indirect mechanisms, that both extent and form of these interaction aspects are important to understand how they affect the trust process, and that macro- and meso-level interaction aspects shape each other in neo-institutional structuration processes. On the basis of these findings, they suggest that any due understanding of interorganizational trust must acknowledge that no single group of institutional, rational, or social exchange theories can provide a full understanding of interorganizational trust. They conclude that a model that allows interdependent macro- and meso-level interaction characteristics to affect the trust process may be required to achieve a comprehensive understanding of interorganizational trust.

In Chapter 5, *In vino veritas? The development of producer trust and its market effects in regulated French and Italian quality wine markets*, Betsy Carter uses extensive interviews with many actors in the regulatory regime to study the challenge of building trust in luxury markets and the role of public regulation to facilitate that trust. She studies the consumer trust in the government mark (certificate) in the luxury wine market in France and Italy, and finds that this trust as well as the prices obtained differ substantially despite similar volumes of wine available. France manages

to obtain higher prices as well as higher consumer trust than Italy. She finds that the differences in price premium obtained and in consumer trust may be explained by the administrative heritage, business/citizen trust in government, the market structure and trust among supply chain actors. This in turn leads to differences in business trust in the government mark (certificate) and citizen trust in the government mark and this results in different price premiums that may be obtained. In France, trust of citizens in public regulation (relation 3) clearly evokes trust of citizens in producers (relation 1) and fosters producers' trust in the public regulator (relation 5); while in Italy, lack of citizen trust in public regulation leads to lack of citizen trust in producers and leads to lack of producers' trust in the public regulator. Hence this chapter sheds light on the positive reinforcing mutual influence from trust relations between citizens (consumers), organizations (producers) and the public regulator.

Lovisa Näslund and Kristina Tamm Hallström study the position of private regulators and how they operate in relations 4 and 6; and what that implies for relation 1. In the chapter *Being everybody's accomplice: trust and control in eco-labelling*, they study the emergence of ecolabels, that promise to control the means of production of the goods marked with their labels, thus increasing these products' trustworthiness in the eyes of the consumers. These labelling organizations act as guardians of trust, creating a chain of trust that enables consumers to trust the products, even if they are not in a position to trust the producers. On closer inspection, however, it would seem that this solution gives rise to new problems, as the labelling organization is unlikely to get the desired compliance of the producer solely by means of control and distrust – especially since adhering to these standards is voluntary. The relationship between labelling organizations and producers thus has to be able to harbour contradictory notions of trust and distrust, of control and customer relations and of independence and dependence. Empirically, the study is based on case studies of three eco-labels available on the Swedish market: Bra Miljöval (Good Environmental Choice), Svanen (Svan) and KRAV ("Requirement"). They show that the labelling organization is able to combine independent control and trusting collaboration by separating the different tasks necessary to create an eco-label, namely the writing of criteria, the monitoring and the communication of the worth of the label to consumers and producers. The study also demonstrates how processes of trust creation may run parallel to and separate to each other. The chapter does so by combining interviews with document analysis.

In his chapter *Trust and cooperation over the public–private divide: an empirical study on trust evolving in co-regulation*, Haiko Van der Voort studies two examples of co-regulation in the Netherlands, using interviews

with all parties involved in the co-regulation regimes and document analysis. The focus is on relation 8, with attention also paid to relations 5 and 6. Both examples of co-regulation start by announcing trust among collaborators, yet in only one case is the trust actually built and maintained, while in the other case trust among collaborators collapsed – if it ever truly existed. The cases confirm that on an operational level, trust is both an enabler and a result of cooperation. However, this mutual reinforcement process of trust and cooperation needs to be supported by actors on a political level. This support includes emphasizing the importance of cooperation, but also allowing for problem solving on an operational level. The latter is of significant importance, because co-regulation provides incentives to government to over-organize the cooperation process by organizing institutional arrangements upfront. This blocks trust to grow within cooperation and vice versa. Cooperation and trust prove to be dependent on the way they are embedded in institutional arrangements of co-regulation. At the same time, these institutional arrangements may also be artefacts of distrust.

In the final empirical chapter Erik Baekkeskov empirically investigates the trust building efforts that an expert agency, charged with monitoring, engages in with other agencies in the regulatory regime (relationship 9). In *Deliberate trust-building by autonomous government agencies: evidence from responses to the 2009 H1N1 swine flu pandemic* the research question is, do independent agencies tasked with expert regulatory roles act deliberately to gain and maintain trust among policy stakeholders? Baekkeskov explores the question through a study of influenza pandemic response processes in an anonymized European public health agency (EPHA). In particular, he asks whether seeking a reputation for trustworthiness could shape the agency's 2009 "swine" flu pandemic responses. In doing so, the analysis shows whether reputation-seeking behaviours discovered in US federal agencies are useful in discovering trust building by agencies in Europe. The chapter also breaks new methodological ground: where previous analyses of agencies' reputation-seeking have relied on retrospective studies, this analysis uses a unique, first-hand participant-observer record and interviews collected within EPHA.

In the concluding chapter Six and Verhoest present *An agenda for further research into the role of trust in regulatory regimes*. This agenda follows the five themes identified in the introductory chapter: 1) there are outstanding issues for most trust relations within regulatory regimes that need further research; 2) the interactional dynamics between the different trust relationships within regulatory regimes needs more systematic research; 3) the dynamics of processes of trust building and repair within regulatory relationships are understudied; 4) there are still unresolved conceptual issues

around trust and related concepts that need further study; and 5) the field is ready to move to more theory building and hypothesis testing research.

NOTES

1. Strictly speaking citizens and companies can choose their public regulator by choosing their residence, but this is a more invasive choice than choosing your private regulator.
2. <https://primaryauthorityregister.info/par/index.php/home>.

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