Responsive regulation in practice

A review of the international academic literature

Professor Jeroen van der Heijden
Chair in Regulatory Practice
Victoria University of Wellington

VICTORIA UNIVERSITY OF
WELLINGTON
TE HERENGA WAKA
1897

WELLINGTON SCHOOL OF BUSINESS AND GOVERNMENT

GOVERNMENT
REGULATORY
PRACTICE
INITIATIVE

Responsive regulation in practice:
A review of the international academic literature

Professor Jeroen van der Heijden

July 2020

VICTORIA UNIVERSITY OF
WELLINGTON
TE HERENGA WAKA

GOVERNMENT
REGULATORY
PRACTICE
INITIATIVE

Disclaimer

The Chair in Regulatory Practice in the School of Government, Victoria University of Wellington, is part of the Government Regulatory Practice Initiative (G-REG). G-REG is a network of central and local government regulatory agencies and has been established to lead and contribute to regulatory practice initiatives. It works on actions that improve leadership, culture, regulatory practice and workforce capability in regulatory organisations and systems. The Chair is sponsored by ten agencies within G-REG, the Treasury, and the Victoria University of Wellington.

Through world-leading research on regulatory practice and active engagement with the G-REG community, and by contributing to the training of those involved in regulatory issues, the Chair aims to help improve New Zealand's regulations and their impact on economic and social performance. The Chair defines regulation broadly as the institutions, processes and instruments put in place to steer the behaviour of individuals and collectives towards desirable societal ends.

The State of the Art in Regulatory Governance Research Paper Series seeks to inform those involved in regulatory issues in New Zealand and elsewhere on developments in the regulatory literature. Papers in the series review the international academic literature and distil key insights for an audience of regulatory professionals in government and other sectors.

All opinions expressed in this paper are the author's and are not necessarily shared by G-REG or its supporting agencies, the Treasury, or the Victoria University of Wellington.

To cite this research paper:

Earlier publications in the State of the Art in Regulatory Governance Research Paper series:

- Pelin; Kale, Wendy; Manch, Keith; McGirr, Nick; Mumford, Peter; Raj, Sanjai; and, van der Heijden, Jeroen (2020). *Professionalising regulatory practice: Lessons from the New Zealand G-REG Initiative. State of the Art in Regulatory Governance Research Paper – 2020.05.* Wellington: Victoria University of Wellington/Government Regulatory Practice Initiative.
- van der Heijden, Jeroen (2020). *Systems thinking and regulatory governance: A review of the international academic literature. State of the Art in Regulatory Governance Research Paper – 2020.04.* Wellington: Victoria University of Wellington/Government Regulatory Practice Initiative.
- van der Heijden, Jeroen (2019). *Regulatory philosophy, theory and practice: Ka mua, ka muri. State of the Art in Regulatory Governance Research Paper – 2019.03.* Wellington: Victoria University of Wellington/Government Regulatory Practice Initiative.
- van der Heijden, Jeroen (2019). *Risk governance and risk-based regulation: A review of the international academic literature. State of the Art in Regulatory Governance Research Paper – 2019.02.* Wellington: Victoria University of Wellington/Government Regulatory Practice Initiative.
- van der Heijden, Jeroen (2019). *Behavioural insights and regulatory practice: A review of the international academic literature. State of the Art in Regulatory Governance Research Paper – 2019.01.* Wellington: Victoria University of Wellington/Government Regulatory Practice Initiative.

Abstract

This research paper presents findings from a broad scoping of the international academic literature on responsive regulation. It builds on a systematic evidence review of peer-reviewed articles published since 1992. The aim of the research paper is to assist executives, managers and frontline workers in regulatory organisations and units who are interested in responsive regulation. It addresses five themes: (1) the evolution of responsive regulation, (2) practical examples of responsive regulation in practice, (3) evidence of the performance of responsive regulation, and (4) the epistemic challenges and (5) ethical challenges that come with this approach to regulatory governance and practice.

Contents

1   Introduction

Published in 1992, the book *Responsive Regulation: Transcending the Deregulation Debate* has become a central work in the canon of regulatory scholarship. The book is a collaboration between Professors Ian Ayres (Yale University) and John Braithwaite (Australian National University), and builds on Braithwaite's earlier studies on regulation, enforcement and compliance.

Responsive regulation is probably best known for the different 'enforcement pyramids' it introduces. One of these illustrates the targeting of individual citizens or firms. It shows how a regulator can engage with a citizen or firm through a set of escalating regulatory interventions: from explaining the purpose of the regulation to seek compliance (persuasion), via warning letters or civil penalties (deterrence), to criminal penalties or licence revocations (the full force of the law). The enforcement pyramid is a heuristic that seeks to illustrate how compliance is likely to be achieved through 'soft' regulatory interventions, so long as the regulator can escalate to a severe response *and* is willing to use the most critical intervention.

The staged approach of enforcement pyramids is just one of the examples of responsive regulation introduced by Ayres and Braithwaite (they refer to it as 'tit-for-tat'). Other approaches presented are tripartism, enforced self-regulation, and partial-industry regulation.[1] *Tripartism* introduces the idea of empowering citizens' associations, to overcome the risk of capture and corruption in the traditional two-way interactions between government and regulated industry. *Enforced self-regulation* requires firms to write their own sets of corporate rules, which are then publicly ratified and enforced. *Partial-industry regulation* seeks to gain leverage from the competitive conduct of an entire industry by regulating some, but not other, firms.

When *Responsive Regulation* was published in the early 1990s, it filled a gap by suggesting a 'third way' between intrusive government regulation and laissez-faire policies. Over time, that specific aspect of the book seems to have become somewhat lost. In engaging with responsive regulation, most scholars, policymakers and regulatory practitioners focus on enforcement pyramids (the tit-for-tat example), and often take these as a prescription for how regulators should work (Parker, 2013). In addition, little empirical work appears to be available that gives insight into the opportunities and constraints of responsive regulation in regulatory practice (J. Braithwaite, 2002; Lehmann Nielsen & Parker, 2009; Simpson, 2013; Zhu & Chertow, 2019). Therefore, the Advisory Board of the Chair in Regulatory Practice has asked the Chair in Regulatory Practice to review the academic literature on the application of responsive regulation in practice.

This research paper is the result of a review of that literature, carried out between January and June 2020. It presents the main findings from a systematic evidence synthesis that started with over a thousand peer-reviewed articles. The aim of the paper is to introduce those working in a regulatory environment to the key concepts of responsive regulation, and to discuss the present state of knowledge on this theory and approach to regulatory governance.

---

[1] John Braithwaite later introduced *restorative justice* as another approach to responsive regulation.

Responsive regulation in a nutshell

Ayres and Braithwaite argue that strict, government-led, command-and-control regulatory policies are often not the best way to address societal problems. Still, neither are laissez-faire policies that rely on market competition. Ayres and Braithwaite introduce responsive regulation as a general regulatory strategy that seeks to build on the strengths of both these approaches and overcome their weaknesses.[2] Before zooming in on responsive regulation, it is essential to keep in mind that Ayres and Braithwaite introduce responsive regulation as "an attitude that enables the blossoming of a wide variety of regulatory approaches" and not "a clearly defined program or a set of prescriptions concerning the best way to regulate" (Ayres & Braithwaite, 1992, 5).

Elsewhere, Braithwaite explains:

> The basic idea of responsive regulation is that governments should be responsive to the conduct of those they seek to regulate in deciding whether a more or less interventionist response is needed (J. Braithwaite, 2002, 29).

Responsive regulation assumes a general willingness of citizens and firms to regulate themselves. The challenge is to find those regulatory interventions that provide the best mix of government intervention and self-regulation. Ayres and Braithwaite argue that meeting this challenge is possible. Governments must have in place a set of escalating forms of government intervention that come into force if delegated forms of market regulation or less intrusive ways of government regulation do not yield desirable outcomes.

Boundaries and roadmap of this paper

Responsive regulation, as conceptualised by Ayres and Braithwaite, is one of the most widely discussed regulatory theories and approaches to regulation discussed in the academic literature. It is also widely followed in regulatory practice around the world (J. Braithwaite, 2011; Parker, 2013). However, it is still not known:

- Whether (on average) responsive regulation outperforms the (counterfactual) regulatory strategies it replaces (i.e., traditional government-led command-and-control regulation, or laissez-faire market competition); and
- Under what circumstances responsive regulation works best.

This *State of the Art in Regulatory Governance Research Paper* presents an evidence synthesis of the empirical literature on responsive regulation. An evidence synthesis:

> extends the analysis of the characteristics of individual research studies … to [an] analysis of the *results* of studies – individual and in combination – to investigate what they mean as a *collective* body of knowledge. (…) Synthesis is an analytic activity that generates new

---

[2] Ideas on responsive regulation were, according to Ian Ayres, largely developed by John Braithwaite (Ayres, 2013).

knowledge and understanding in response to the review research question; new knowledge that is grounded in the information gleaned from the individual research studies included in the review. While grounded in the studies that it contains, [an evidence] synthesis is often more than simply the sum of its parts (Gough, Oliver, & Thomas, 2012, 182).

The aim of this evidence synthesis is to evaluate the effectiveness (and lack thereof) of responsive regulation applied to real-world situations. To this end, this evidence synthesis will answer the following questions:

1. What is the breadth, purpose and extent of research activity on responsive regulation?
2. Compared to the (counterfactual) regulatory strategies that responsive regulation replaces (i.e., traditional government-led command-and-control regulation, or laissez-faire market competition), what is the (average) comparative effectiveness of responsive regulation in achieving regulatory goals?
3. What are the advantages and limitations of responsive regulation compared to the strategies it replaces (i.e., traditional government-led command-and-control regulation, or laissez-faire market competition)?
4. For questions 2 and 3, if heterogeneity is found in studies on responsive regulation, under what circumstances, in what situations, and for whom does responsive regulation provide better outcomes than the strategies it replaces (i.e., traditional government-led command-and-control regulation, or laissez-faire market competition)?

The challenge of an evidence synthesis of responsive regulation: selecting source material

Perhaps the most challenging task of an evidence synthesis is the selection of the individual research studies that go into the collective body of knowledge that is analysed. The book *Responsive Regulation* has been cited more than 5,000 times since its publication.[3] It goes without saying that it is impossible to analyse *all* the publications that cite the book. A meaningful sample must be drawn from this set.

For this evidence synthesis, the *PICO* criteria (participants, interventions, comparators, outcomes) were used to select individual research studies.[4] In selecting the source material for the evidence synthesis, no restrictions were set by time, length, or repetitions on the studies that were included. No restrictions were set by the setting(s) of studies, but only articles reported in English were included. Only published peer-reviewed articles, including 'online first' and 'early access' publications, were included. The limitations of excluding non-published academic work and academic publications other than peer-reviewed articles are acknowledged (Vevea, Coburn, & Sutton, 2019).

The first selection of source material resulted in 1,012 unique peer-reviewed journal articles. After removing articles that were not empirical, were not explicitly engaging with responsive regulation, or were not assessing the performance of responsive regulation, we were left with 65 peer-reviewed articles that explicitly assessed the performance of responsive regulation. Of these, 30 articles

---

[3] Source: www.google.scholar.com (3 June 2020).
[4] These are well explained on: www.en.wikipedia.org/wiki/PICO_process (3 June 2020).

presented direct observations, and the remaining 35 articles presented indirect or counterfactual observations about the performance of responsive regulation. Appendix B provides an extensive discussion of the selection process.

In the chapters that follow, this set of 65 articles, and a series of publications on responsive regulation by Ayres and Braithwaite, are evaluated. Chapter 2 touches on the evolution of responsive regulation and seeks to understand why the book has become so successful over time; Chapter 3 presents practical examples of responsive regulation; Chapter 4 looks at the evidence base on the performance of responsive regulation; and Chapter 5 explores the ethical and epistemic challenges that come with this theory and approach to regulatory governance. Each chapter discusses key insights from the literature, and in the final chapter (Chapter 6) conclusions are drawn from the full review.

2 The evolution and success of responsive regulation

It is not easy to capture the essence of responsive regulation in a few words (J. Braithwaite, 2011), but this quote comes close:

> Responsive regulation is not a clearly defined program or a set of prescriptions concerning the best way to regulate. (…) Responsiveness is rather an attitude that enables the blossoming of a wide variety of regulatory approaches [none of which are *the*] optimal or best regulatory solutions, [but they are] just solutions that respond better than others to the plural configurations of support and opposition that exist at a particular moment in history (Ayres & Braithwaite, 1992, 5).

In a nutshell, Ayres and Braithwaite ask regulators to be flexible and to attune their regulatory reactions to the situations they face in practice. To them, good regulation is about meeting the spirit of the law, and good regulation "is that which advances freedom as non-domination" (J. Braithwaite, 2013, 128). Ayres and Braithwaite were, however, not the first to use this understanding of 'responsive regulation' in a socio-legal context.

Pre-*Responsive Regulation* ideas about regulatory responsiveness

For example, in 1978, Philippe Nonet and Philip Selznick discussed the notion of 'responsive law' and 'purposive regulation', ideas that have parallels with the responsive regulation of Ayres and Braithwaite (Nonet & Selznick, 2009 [1978]). Nonet and Selznick conceptualise responsive law as a stage in the evolution of the legal order. The first stage, they argue, was *repressive law*. This form of law allowed rulers to enforce social order, but it ultimately fell short in providing certainty, as rulers were not bound in their application of repressive law. The second stage of the legal order, *autonomous law*, sought to solve this problem. Autonomous law binds the rules as well as the rulers ('the rule of law'). This form of law ultimately falls short because the certainty it seeks to provide asks for ever more detailed forms of law, which eventually stifle economic and social development. The third stage of law, *responsive law*, may provide an answer to this challenge:

> [It] presumes a far wider and inclusive conception of the legal process. In that perspective law is a problem-solving, facilitative enterprise that can bring to bear a variety of powers and mobilize an array of intellectual and organizational resources (Nonet & Selznick, 2009 [1978], 110).

It did not take long for scholars to point out the risks of such a responsive approach to law and regulation. For example, in 1984, Susan Silbey argued that the then widely experienced failure of public regulation in the USA was a result of "the responsiveness of regulatory agencies to their public constituencies" (Silbey, 1984, 148). Silbey observed 'responsive regulation' (her terminology) at the level of individual regulators (where an inspector seeks compliance through cooperation with a regulatee), at the level of regulatory agencies (for example, where an agency seeks compliance through case-by-case consumer complaints), and even at the systemic level of regulatory governance in the USA.

Over time, however, responsive regulation at all levels has, so Silbey argued, resulted in a general move away from a flexible and cooperative stance by regulators (responsive regulation at the street level) towards an inflexible and legalistic one "as a result of [societal and political] demands for greater control of discretion [of street-level regulators]" (Silbey, 1984, 148) (see also: Bardach & Kagan, 1982). However, these early insights on a responsive approach to regulation did not gain much traction.[5] What, then, explains the success of Ayres and Braithwaite's take on responsive regulation?

Transcending the clash between proponents and opponents of regulation

In hindsight, the success of *Responsive Regulation* is easy to explain (see for example: J. Braithwaite, 2011, 2017; Mascini, 2013; Parker, 2013). At the time the book was published, discussions on regulatory governance were split between two broad camps. On the one hand, there were those who considered that regulation hampered economic progress. They called for drastic deregulation, the cutting of red tape, and a laissez-faire stance of government towards the economy (Decker, 2015; Dudley & Brito, 2012). On the other hand, there were those who considered that regulation had been captured by (big) industry and was ineffective because of how it was implemented. They called for more regulatory transparency, and a stricter monitoring and enforcement of non-compliant behaviour (Haines, 2011; Lodge & Wegrich, 2012).

Ayres and Braithwaite's book offered a way out of the 'stalemate' of these debates on (de)regulation. The subtitle of their book illustrates this ambition: *Transcending the Deregulation Debate*. The easy explanation of the success of the book, then, is that it supported both camps and provided a synthesis of their arguments rather than a deepening of the trenches they had dug for themselves. An additional appeal of the book is that it illustrates its normative (and sometimes prescriptive) arguments with hands-on solutions to the type of problems regulators (agencies and individuals) face on a day to day basis – largely inspired by Braithwaite's various (advisory) roles in (Australian) regulatory agencies and commissions in the late 1980s and early 1990s (J. Braithwaite, 2003; Lehmann Nielsen & Parker, 2009).

With these practical examples, *Responsive Regulation* not only transcended the deregulation debate among academics, but also provided a bridge to regulatory practice. The book was one of the first practical academic books for regulators at a time when governments around the world were seeking to reinvent themselves (Osborne & Gaebler, 1992).[6] Christine Parker sums this up well:

> Ayres and Braithwaite put a language, a rationale, and a frame around a particular set of practices that they had observed in everyday regulation, and hoped to expand and improve. In doing so, they invented a new theory and a new technique that was grounded enough in existing practice to not seem unrealistic, but was aspirational enough to be challenging (Parker, 2013, 3).

---

[5] For example, the book by Nonet and Selznick has attracted fewer than a hundred citations, as has Silbey's article (source: www.scholar.google.com, 3 July 2020).

[6] Another successful book for regulatory practitioners, Malcolm Sparrow's *The Regulatory Craft* (2000)*,* would soon follow.

Or, as Braithwaite puts it, responsive regulation is influential "because it formulate[s] a way of reconciling the clear empirical evidence that sometimes punishment works and sometimes it backfires – and likewise with persuasion" (J. Braithwaite, 2011, 484). However, there seems to be more at stake.

Responsive regulation as a set of heuristics

Another explanation of the success of *Responsive Regulation* (in contrast to the earlier takes on the topic) is that it is many things at once. The most succinct way to put this is that the book is both descriptive (explaining, through examples, how responsive regulation works in practice) *and* prescriptive (presenting an argument for how regulation ought to be implemented). While nowadays we are used to the mixing of evaluative and normative lines of reasoning in public administration, public policy, and socio-legal scholarship, this was fairly novel, but highly desirable, at the time Ayres and Braithwaite published their book (Raadschelders, 2011).

From a normative point of view, *Responsive Regulation* provides a set of heuristics or guidelines for the way in which regulators should organise regulatory governance at different levels. These heuristics include:

- *First-order regulation* (the direct interaction between regulators and the targets of regulation): seek compliance through the least intrusive response that is possible and acceptable. If that response does not yield the desired outcomes, the regulator should escalate upwards to a more intrusive response.
- *Second-order regulation* (the institutional arrangement of this interaction; or, if you wish, the regulation of regulatory interactions): seek compliance through institutional arrangements that provide as much plurality, industry and citizen participation, and forgiveness as is possible and acceptable. If these arrangements do not yield the desired outcomes, the regulator should escalate upwards to more restrictive (that is, more command-and-control like) institutional arrangements.
- *Third-order regulation* (the principles that guide this institutional arrangement; or, if you wish, the meta-rules of regulatory governance): seek compliance by providing the target of regulation with the largest amount of freedom (the lowest amount of 'domination') that is possible and acceptable. If the target of regulation does not show compliant behaviour within the freedom provided, the regulator should escalate upwards and reduce this freedom.

These heuristics (or guidelines) leave regulators with degrees of freedom within which to develop their own detailed understanding of responsive regulation and apply these heuristics in regulatory practice.

Responsive regulation as a set of (applied) strategies

From a practical point of view, *Responsive Regulation* provides a set of hands-on strategies (illustrated with examples and some evidence) for how regulators can operationalise the heuristics of regulatory practice. These include:

- *Tit-for-tat enforcement* (also referred to as 'the benign big gun'): "The regulatory design requirement we describe is for agencies to display two enforcement pyramids with a range of

interventions of ever-increasing intrusiveness (matched by ever-decreasing frequency of use). Regulators will do best by indicating a willingness to escalate intervention up those pyramids or to deregulate down the pyramids in response to the industry's performance in securing regulatory objectives" (Ayres & Braithwaite, 1992, 6).

- *Tripartism*: "[P]olicies that secure the advantages of an evolution of cooperation between regulatory agencies and industry are policies that also run the risk of an evolution of capture and corruption. Tripartism – empowering citizen associations – is advanced as a way of solving this dilemma" (Ayres & Braithwaite, 1992, 6).
- *Enforced self-regulation*: "[This is] one of the creative options available to escalate the interventionism of regulatory strategy to a middle path between self-regulation and command and control government regulation. This option is enforced self-regulation. It means that firms are required to write their own set of corporate rules, which are then publicly ratified. And when there is a failure of private enforcement of these privately written (and publicly ratified) rules, the rules are then publicly enforced" (Ayres & Braithwaite, 1992, 6).
- *Partial-industry intervention*: "[I]n some regulatory settings, regulating only an individual firm (or a subset of the firms) in an industry can promote efficiency by avoiding the costs associated with industry-wide intervention or laissez-faire. The existence of a single (or a few) competitive firm can have a dramatic effect on the competitive conduct and performance of an entire industry. (…) partial-industry regulation uses the spur of competition to affect the unregulated portion of the market. But unlike across-the-board industry regulation, if government decisions go awry, the mistakes do not need to affect adversely the unregulated firms" (Ayres & Braithwaite, 1992, 6).

As with the heuristics (or guidelines), these suggested strategies leave regulators with enough degrees of freedom to develop their own tailored strategies for the targets of regulation, and the regulatory contexts, that they deal with.

In sum, the book *Responsive Regulation* presents a set of strong ideas about how regulation ought to be implemented, illustrated with examples and strategies of how it can be implemented. The book appears to have presented these ideas in the right format (combining prescriptive and descriptive arguments), at the right time (when governments were actively 'reinventing' themselves), and to the right audiences (an interdisciplinary scholarly audience and an audience of regulatory practitioners).

3   Responsive regulation in practice: Examples

Since the publication of the book, Ayres and Braithwaite's ideas on responsive regulation have been applied in a wide variety of policy areas and in a wide variety of countries (Ivec, Braithwaite, Woods, & Job, 2015; Woods, Ivec, Job, & Braithwaite, 2010). Overall, scholars and practitioners appear to be supportive of the normative arguments (and the heuristics and strategies) presented in *Responsive Regulation*, but some of them question whether it is possible to apply these in regulatory practice.

Perhaps the best-known heuristic is the notion of escalation from less-intrusive to more-intrusive regulatory responses if non-compliance is found. Likewise, maybe the most renowned strategy is 'tit-for-tat enforcement', illustrated with a series of regulatory pyramids (J. Braithwaite, 2013; Mascini, 2013; Parker, 2013). This is not to say that *every* form of regulatory escalation or *every* use of tit-for-tat enforcement is an application of responsive regulation as conceptualised by Ayres and Braithwaite.

It is important to keep this in mind when assessing the performance of responsive regulation (which is the topic of the next chapter). What, then, does the application of these authors' ideas look like in regulatory practice? In this chapter we look at two examples.

The Australian Taxation Office's Compliance Model

One of the earliest 'pure' applications of responsive regulation is the Australian Taxation Office's (ATO) compliance model.[7] In the late 1990s, it had become clear in Australia that there was "widespread acceptance in the community that not paying tax on cash income was acceptable and that there was no certainty in the community that the ATO could detect tax evasion" (V. Braithwaite, 2000, 412). In 1997, the ATO appointed Valerie Braithwaite, an academic who has pioneered research on the motivational postures of targets of regulation (V. Braithwaite, 1995, 2009), to support it with the revision of its regulatory enforcement strategy and the development of what became the Compliance Model.

The ATO's Compliance Model effectively combines three regulatory pyramids:

- The first is a set of options for dealing with non-compliance, ranging from persuading and educating at the base to prosecuting and incapacitating at the top.
- The second is a set of regulatory encounters or styles in which tax officers might engage, ranging from self-regulation at the base to strict command-and-control at the top.
- The third is a set of motivational postures of taxpayers, ranging from accommodation at the base, via capture and resistance, to disengagement at the top.

The assumption of the Compliance Model is that these sets of options, encounters, and postures are aligned throughout the pyramid (J. Braithwaite, 2003). For example, most targets of tax regulation will have an accommodative posture, will be likely to comply when exposed to persuasion or education on why paying taxes matters, and can then be left to self-regulate. Only a small set of targets will be

---

[7] See further: www.ato.gov.au/About-ATO/Managing-the-tax-and-super-system/Strategic-direction/How-we-help-and-influence-taxpayers/Compliance-model/ (3 July 2020).

disengaged and will be likely only to comply when exposed to stringent enforcement and hefty fines requiring a traditional command-and-control approach.

The Compliance Model thus systematically links various factors that are considered necessary for compliance. The model is meant as a heuristic that can be (and has been) improved over time: "[it] requires staff to investigate these factors to gain insight into how they might engineer a more cooperative regulatory encounter" (V. Braithwaite, 2000, 414). In this manner, the Compliance Model helps to capture good practices, to build partnerships with taxpayers, and to identify areas and taxpayers with a high-risk profile. The ATO's Compliance Model has inspired tax regulation reforms around the globe (Job, Stout, & Smith, 2007).

US Environmental Protection Agency's Audit Policy

The US Environmental Protection Agency's (EPA) Audit Policy provides targets of regulation with incentives to discover violations of EPA regulations voluntarily, to disclose them to the EPA, to correct them, and to prevent their recurrence. If they do this, the EPA may significantly reduce its civil penalties, refrain from criminal prosecution, and reduce its requests for audit reports.[8] The EPA Audit Policy was introduced in 1995. It is one of several self-reporting programmes that have been introduced in the US since the 1980s (Short & Toffel, 2010; Toffel & Short, 2011) and is a typical example of the enforced self-regulation strategy described by Ayres and Braithwaite.

The Audit Policy of 1995 builds on an older EPA Policy of 1986 that encouraged self-auditing by regulatory targets but did not provide incentives for reporting self-discovered violations to the EPA (EPA, 1997). In response to several high-profile cases (in each of which a target of regulation discovered a violation, but was severely penalised by public regulators) the EPA developed the Audit Policy, building on, among other things, dialogue with industry stakeholders, civil society, and policymakers (Manewitz, Isler, & Westphal, 1996). To put it crudely, "the Audit Policy represents a bargain between the Agency and the businesses it regulates" (Culleen & Glazer, 2016, 3). To put it less crudely, it is a regulatory strategy, developed over decades, that seeks to give targets of regulation as much freedom as is possible and acceptable and to reduce the inspection burden on the EPA as much as possible.

Somewhat like the ATO's Compliance Model, the EPA's Audit Policy was built (and has been amended) carefully over time. The original 1995 Policy formalised practices that were already in place in a number of states in the US (Culleen & Glazer, 2016). Later amendments (sometimes introducing significant changes) were built on evaluations of the policy and sought to improve it on the basis of lessons learnt. The Policy has, however, not seen much replication outside the US (Stafford, 2017).

More examples

These are but two of many examples of responsive regulation applied in practice. Other examples have been documented in Canada, China, Great Britain, the Netherlands, New Zealand, Indonesia, South Africa, and elsewhere. The policy areas include consumer protection, finance, health and

---

[8] See further: www.epa.gov/compliance/epas-audit-policy/ (3 July 2020).

wellbeing, operational health and safety, philanthropy, and a range of others (for overviews, see: J. Braithwaite, 2016b; Ivec et al., 2015; Woods et al., 2010). That being said, it is not always clear from the documented examples whether the regulators have purposefully followed a responsive regulation heuristic or strategy (as was the case in the two examples discussed above), or whether those documenting the examples have forced them into a responsive regulation mould, so some care is warranted when drawing lessons from such examples.

In addition, scholars have mapped examples of alternative applications of responsive regulation. For example, Jungmin Zhu and Marian Chertow (2019) observe that local regulators in Jiangsu Province (China) set out to enforce a newly introduced energy efficiency regulation in a formal and coercive manner before switching to a more accommodative manner. Doing this made it clear to the targets of regulation that the energy efficiency requirements were in place, and reduced uncertainty about how compliance could be achieved. Once the regulators had got to know about firms' behaviours and attitudes, as well as obtaining information about their willingness to comply and their compliance plans, the regulators became more flexible and cooperative in their enforcement practice. In sum, the 'inverse' enforcement pyramid used by these regulators helped both the regulator and the targets of regulation to get used to the new energy efficiency requirements, and allowed for the de-escalation of regulatory enforcement once it became clear how the targets were responding to it.

Summing up

This chapter has put some meat on the theoretical bones of responsive regulation presented in Chapter 2. Over the last 25 years or so, governments around the globe have been inspired by responsive regulation (or have come to realize that for a long time they have been applying responsive regulation without realizing it). In sum, responsive regulation is much more than a theory. It is firmly based on and applied in regulatory practice. In the chapter that follows, we will zoom in further, and explore the evidence and findings that have resulted from the application of responsive regulation in practice.

4 The performance of responsive regulation in practice: Evidence and findings

We now have a good understanding of the breadth and depth of responsive regulation. We have seen that the theory provides a broad set of heuristics and hands-on strategies to improve regulatory practice – and that it is about much more than the famous regulatory pyramid. We have also seen that responsive regulation is applied in a large number of countries and a wide variety of policy areas. Thus, it is time to ask the hard question: *does responsive regulation perform better than other approaches to regulation?*

This is a difficult question and one that is not easily answered. This research paper builds on a systematic review of the application of responsive regulation in regulatory practice (see, further, Appendix B). The review identified more than a thousand academic journal articles that cite *Responsive Regulation.* From these, 30 articles were distilled that have directly 'measured' the performance of responsive regulation as an overall strategy in regulatory practice. In addition, 35 articles were traced that provide indirect observations of the performance of responsive regulation.

The two sets of articles allow two related questions to be answered:
- Does responsive regulation (on average) outperform alternative regulatory strategies (i.e., traditional government-led command-and-control regulation, or laissez-faire market competition)?
- Under what circumstances does responsive regulation work best?

This review in general, and these questions in particular, move well beyond the critique that John Braithwaite has made elsewhere of meta-reviews of the responsive regulation literature (J. Braithwaite, 2016a).[9] Rather than merely presenting a reductionist or positivist answer to a quantitative performance question, this chapter presents a realist synthesis that aims to understand how responsive regulation performs in regulatory practice (Heyvaert, Hannes, & Onghena, 2017; Pawson, 2002). In this way, the synthesis presented here is more in line with John Braithwaite's own attempts to synthesise the evidence on responsive regulation, albeit in a more transparent, replicable, and systematic manner (J. Braithwaite, 2016b).

At first glance: it depends

The 30 articles that have directly observed the performance of responsive regulation in practice report on 24 unique examples (some articles discuss the same example). Of these, 19 examples are a form of tit-for-tat (often with a focus on enforcement pyramids), five a form of enforced self-regulation, two a form of tripartism, and one an application of restorative justice (some examples combine different responsive regulation strategies). When considering these 24 unique examples, responsive regulation is found to outperform alternative strategies in eight cases and to perform weaker than the alternatives in six cases. In addition, in ten cases the authors report that the performance of responsive regulation is highly dependent on how the regulation was implemented by (individual)

---

[9] The current review is nevertheless limited by its focus on peer-reviewed journal articles written in English.

regulators and how it was experienced by (individual) targets of regulation, and how it interacted with other regulatory reforms that were implemented in parallel. Some of the authors conclude that responsive regulation did not perform better or worse than the alternative strategies.

The positive performance reported ranges from being substantial (e.g., increased tax revenue for the Florida Department of Revenue, Christian, 2017; increased energy savings by Chinese firms, Zhu & Chertow, 2019) to being only modestly better (e.g., increased compliance with human right standards by global garment manufacturers, Islam & McPhail, 2011). However, the increased performance is often not quantified (this is the case in half of the positive performance observations[10]). This also holds for cases with negative or unclear performance: the observed performance is only reported in qualitative terms. This finding is, of course, not surprising. Scholars of regulation often find it very difficult to measure the exact performance of a regulatory strategy – as do governments – which makes one-on-one quantitative comparisons of regulatory strategies virtually impossible.[11]

To cut a long story short, when overviewing the evidence base, the answer to the question of whether responsive regulation (on average) outperforms alternative regulatory strategies is best summarised as: 'it depends'. Given that it is 25 years after the publication of *Responsive Regulation*, and given the ongoing arguments for and against its use in practice, this is anything but a satisfactory answer. That being said, looking beyond these direct performance observations, the set of 30 articles provides a wealth of insights about the factors that affect the performance of responsive regulation.

At second glance: we know a lot about how to make responsive regulation work well

While the evidence base falls short of making a one-size-fits-all argument for or against responsive regulation, it does provide us with a wealth of information about how to best implement this approach.

Train your staff in being responsive

A recurring observation is that responsive regulation requires careful implementation. Street-level bureaucrats, in particular, need guidance documents, training, or both, to be able to deal with the increase in discretionary space that comes with responsive regulation, and specifically with the tit-for-tat strategy (Blanc, 2018). If this is not done, there is a risk of inconsistency in enforcement (Mascini & van Wijk, 2009), favouritism (Zhu & Chertow, 2019), abuse of process (Lewis, Crawford, & Traynor, 2017), uneven application of the law (O'Neill, 2018), or rule ambiguity (Quilter & McNamara, 2015). Inconsistent enforcement by and between street-level bureaucrats may undermine the knowledge of the targets of regulation (May & Wood, 2003).[12]

---

[10] The performance of responsive regulation is mainly quantified in studies of tax regulation (J. Braithwaite, 2003; Job et al., 2007). Looking beyond mere cost-effectiveness, other scholars have, however, questioned how well responsive regulation can be applied in this area (Leviner, 2008; Waller, 2007).

[11] In addition, many studies were carried out only a few years (typically fewer than five) after a responsive regulation was introduced. It could be that a formal change of a regulatory regime needs more time to settle before its anticipated results are achieved.

[12] An innovative approach to increase consistency across street-level bureaucrats is to introduce a peer review system and ask them to reflect on each other's and their own enforcement practices. There is evidence that such a system makes the enforcement process less arbitrary, more transparent, and more accountable (Ho, 2017).

These findings hold not only at the level of street-level bureaucrats but also at organisational and supra-organisational levels: differences in the application of responsive regulation between regulatory agencies within a country, or even between countries as a whole, may undermine the performance of regulatory regimes (Sampson & Bloor, 2007). In sum, in applying regulatory pyramids, the main challenge is the shifting between different regulatory actors: "Attractive as the theory of responsive regulation is at the primary, interactional level … it does not get us as far when we consider the effects of shared and interlocking jurisdictions in multi-level regulatory systems. The elements of responsiveness, difficult to produce at the primary level [street level], are even more difficult to produce at secondary [entities and activities that create and maintain infrastructure (the rating and certification bodies) and entities such as courts that hear appeals] and tertiary [policy making] levels" (Heimer, 2011, 691) (see also Lehmann Nielsen & Parker, 2009).

Explain to your targets what your responsiveness means

A second recurring observation considers the transparency and clarity of the responsive regulation process and the regulatory dialogues involved – put simply, improved or simply more communication between regulators and their targets is by no means a guarantee of enhanced compliance (Curtis et al., 2016; Eungkyoon, Jung, & Kwak, 2016; Lehmann Nielsen & Parker, 2009; O'Neill, 2018). Targets of regulation do not always understand or appreciate that the purpose of a responsive regulation approach is to seek compliance in collaboration with the regulators. For example, those who are less knowledgeable of the regulations to which they are subject are likely to regard escalation up a regulatory pyramid as threatening or even bullying (Winter & May, 2001), or, as a communication process, responsive regulation may simply be too demanding for (some) targets (Tränkle, 2007). Targets are also likely to misinterpret the regulators and to consider them, in general, to be harsher than the regulators intend to be (Mascini & van Wijk, 2009).

Responsive regulation is expected to be more effective if the regulated sector knows that the regulator will follow through on its escalation strategy (Short & Toffel, 2010; Toffel & Short, 2011); likewise, if the regulator is known to be 'soft', this is likely to undermine overall compliance in the industry (van Erp, 2011). In a nutshell, it may be helpful for a regulator to explain the responsive regulation strategy to its targets at the start of the regulatory relationship, and to have in place transparent public procedures and other measures that help to prevent the relationship between regulator and target from becoming too intimate (de Boer & Eshuis, 2018). For example, when bringing third parties into a regulatory regime, regulators may have to explain exactly why it is in their interests to be involved (Kingsford Smith, 2011).

Time the start and escalation of the responsive regulation dialogue well

A third recurring observation builds on these insights. Responsive regulation is expected to be more effective when regulators and their targets have multiple interactions (rather than a one-off engagement), and when the targets of regulation have (or are reminded of) a long-term time horizon (van Duin, Dekker, Wielhouwer, & Mendoza, 2018). The start of a responsive regulatory dialogue may set the tone for these interactions, and sometimes a penalty or fine at the start of this dialogue may have significant symbolic value, showing that the regulator is severe and has the power to *enforce* compliance (Pires, 2008). Also, without explaining what a responsive process entails, there is a risk of a 'vicious circle of antagonism' if regulators follow responsive regulation to the letter: harsh

enforcement of regulations against already sceptical targets of regulation is likely to make them even more sceptical (Mascini & van Wijk, 2009).

Indeed, the escalation to a more formal stance can easily "backfire once a certain threshold of formalism has been reached" (May & Winter, 1999, 627). Besides, in contexts where the rule of law is weak, targets of regulation may be regulator-driven rather than regulation-driven. In such contexts, the "more reasonable and regulatee-friendly approach" suggested by responsive regulation may backfire, as the targets of regulation may see the regulator as weak and easy to manipulate (Yee, Tang, & Lo, 2016, 109). In such contexts, regulators may need to 'go hard, go early' when escalating to more intrusive responses. Last but not least, responsive regulation may yield different results across age and socio-demographic groups (Muehlbacher, Kirchler, & Schwarzenberger, 2011).

Avoid stepping into the obvious traps of responsive regulation

A final set of recurring observations highlights the risks of responsive regulation. When the focus of a regulatory strategy is on escalation, regulators may choose to pursue the 'easy cases' and avoid the 'hard' ones (O'Neill, 2018). This could simply be because less effort is needed to enforce the easy cases (more bang for one's buck), but it may also be because there are legitimacy and accountability risks in more complex cases – that is, the regulators know that they are more likely to slip up in such cases (Parker, 2006). Also, regulators may face severe political or societal criticism if an incident is linked to a 'soft and facilitative' approach to regulatory enforcement. They may then be expected to move to harder and more formalistic enforcement. Such a change in regulatory practice may result in a rapid breakdown of trust between regulators and their targets (Gunningham & Sinclair, 2009).

Another risk of responsive regulation (particularly enforced self-regulation and other forms of delegated regulation) is that targets of regulation have systems, rules and procedures demanded by regulatory law in place but do not apply them, or do not have staff who understand how and why to apply them (Hutter, 2001). In such situations, it is not enforcement (the use of the benign big gun) but monitoring that keeps the targets of regulation on their toes (Short & Toffel, 2010). Finally, tripartism may backfire when third parties are biased towards reporting some violations and not others. For third parties, highly visible but low-risk violations are likely to be easier to observe than invisible but high-risk violations. As a result, a regulatory agency finds that it has to process (more) low-risk violations at the expense of processing high-risk violations (Lochner, Apollonio, & Tatum, 2008; Lochner & Cain, 1999).

Lessons for regulatory policymakers and practitioners

The findings summarised here are insightful, but they fall short of providing a clear-cut answer to the question of whether responsive regulation performs better than other approaches to regulation. What has become clear from this evidence synthesis is that a commitment to responsive regulation should not be made lightly. Ideally, responsive regulation is implemented at all levels of a regulatory regime or system, and resources are allocated to train managers, staff, and targets of regulation on what it means to be a responsive regulator.

5   Ethical and epistemic challenges

To conclude this evidence synthesis of the responsive regulation literature, we zoom in on ethical and epistemic challenges. In other words, is it proper for governments to base their regulatory responses on the actions of their targets? Is this not violating the assumption that like cases should be treated alike? To what extent (and how) can regulators and their representatives know which regulatory response will achieve the best outcome in an individual situation? These questions are relevant if we wish to make responsive regulation a meaningful regulatory practice.

Ethical challenges

Most of the ethical challenges discussed in the literature can be summarised as: "To be responsive to one stakeholder is to be potentially unresponsive to another" (Bryer, 2007, 482).

Discretionary ethics
A cluster of ethical issues concerns inconsistencies in the application of responsive regulation; this was discussed in a previous blog post. From a discretionary ethics point of view (Bryer, 2007), such inconsistencies are particularly problematic because the way in which regulators respond to a target's behaviour is often largely outside the control of that target (von Holderstein Holterman, 2009). Besides, external parties may seek to play the ambiguities of responsive regulation and to influence the relationship between regulators and their targets (Simpson, 2013). This introduces a risk that the response of the regulator is, for example, influenced by external societal or political pressures and not by the behaviour of the target (Almond & Esbester, 2018; Baldwin & Black, 2008; Parker, 2006).

Control-centred ethics
From a control-centred ethics point of view (responsiveness to the institutional setting within which responsive regulation operates, see further Bryer, 2007), responsive regulation may be problematic because regulators may too quickly embrace it as a rational, utilitarian tool[13] (Baldwin & Black, 2008). The presentation of a tit-for-tat strategy and the related regulatory pyramids, in particular, builds on the idea that targets of regulation will respond 'rationally' (and predictably) to the escalation or de-escalation of the regulator (von Holderstein Holterman, 2009). Likewise, responsive regulation assumes that regulators will respond 'rationally' (and predictably) to their targets. However, such assumptions of rationality have long been debated (van der Heijden, 2019a). In a similar vein, while responsive regulation aims to achieve compliance through non-domination, it leaves in place a power imbalance: the regulator is always more potent than its target, and can always fall back on using the benign big gun (Daniels, 2012; O'Neill, 2018).

Deliberative ethics
A final ethical issue that is argued by some scholars and is worth mentioning here is that responsive regulation plays a high-stake game with trust (which aligns with the notion of deliberative ethics, see Bryer, 2007). Responsive regulation may crowd out trust throughout the regulatory system. If the targets of regulation lose trust in the regulator early on in the regulatory dialogue, when the regulator

---

[13] Which comes with an additional ethical issue: the downshifting of responsibilities from the top of regulatory agencies to frontline workers by expanding their discretionary space (Waller, 2007).

takes a facilitative stance, they are unlikely to trust the regulator later in the regulatory dialogue once it escalates to a more formal position (Benkler, 2012).[14] In a somewhat related manner, punishing a target with 'soft instruments' may have unintended spill-over effects. For example, the staff at all levels of a 'named and shamed' firm may also feel stigmatised as violators, which is unlikely to happen with 'traditional' punishments such as a fine imposed on the firm (which is likely only to affect staff in the higher echelons of the firm – if it affects any of them). Such staff may be less trusting of the regulator in a future interaction (Parker, 2006; van Erp, 2011).

Epistemic challenges

Many of the epistemic challenges discussed in the literature address the limits of and differences in knowing what it means to be responsive (Baldwin & Black, 2008; Lehmann Nielsen & Parker, 2009; McKay, Murray, & MacIntyre, 2015; Sheehy & Feaver, 2015). Such challenges are identified at the level of both individuals (actor-centred responsiveness) and regulatory systems as a whole (institution-centred responsiveness).

Actor-centred responsiveness

For example, Vibeke Lehmann Nielsen (2006) observed five different types of responsiveness in inspectors. The first is short-term responsiveness: when observing a violation, inspectors base their response on the gravity and number of violations discovered at the same time. The second is long-term responsiveness: the average severity and the number of previous breaches also affect this response. The third is attitude responsiveness: besides these objective markers, inspectors are influenced by how willing they think their target is to improve its behaviour. The fourth is dialogic responsiveness: inspectors' responses are affected by the average number of engagements they have with their targets every year. The fifth and final type is subjective performance responsiveness: inspectors are swayed by their overall, but often individual, assessment of their target's standard of compliance.

These different types of responsiveness amplify the inconsistencies in the implementation of responsive regulation that were observed in other studies (Lehmann Nielsen, 2006). Insights like these only stress the need for training and institutional guidance when embracing responsive regulation as a heuristic (or philosophy) in regulatory practice.

Institution-centred responsiveness

It is relevant to recall that responsive regulation, as conceptualised by Ian Ayres and John Braithwaite, builds on a republican political philosophy, or even a republican ideal. This ideal centres on citizen participation, a desire of those in power to reduce the domination of those not in power and to encourage each target of regulation to be "a responsible citizen, to be law abiding" (Ayres & Braithwaite, 1992, 17; J. Braithwaite, 2013; also, J. Braithwaite, 2017). This political undertone makes it challenging to give a value-neutral answer to the question of whether responsive regulation helps to achieve desirable regulatory ends at the institutional level.

---

[14] Likewise, if a regulator loses trust in its target early on in the regulatory dialogue when seeking compliance through collaboration, the regulator is unlikely to trust the target later on in the dialogue when it has escalated to a more formal and stricter interaction.

Those in favour of the republican ideal can readily find positive results for responsive regulation, even if there are no measurable results in terms of, for example, increased compliance or reduced efforts in achieving compliance. That is, it is easy to argue that most cases of responsive regulation that we have met in this review have reduced the domination of the targets of regulation. Nevertheless, those who are less favourable (or agnostic) towards the republican ideal can easily argue that, after close to 30 years of research on responsive regulation, we lack clear evidence that, as a practice, responsive regulation outperforms its alternatives.[15]

---

[15] The only area where we have a strong evidence base for the success of responsive regulation is taxation (see the wide variety of research into responsive regulation and taxation on http://regnet.anu.edu.au/research/publications). That being said, taxation is, in general, considered to be a highly efficient way of regulating the public good, and one in which modest efforts made by governments are likely to yield large results (Smith, 2015).

6   Conclusion

This research paper has reviewed a large collection of academic literature on responsive regulation. It has addressed the following: the evolution of responsive regulation and the success of the book underpinning it, *Responsive Regulation: Transcending the Deregulation Debate* (Chapter 2); examples of responsive regulation in practice (Chapter 3); evidence for and findings on the performance of responsive regulation (Chapter 4); and the ethical and epistemic challenges that come with applying responsive regulation to regulatory governance and practice (Chapter 5). Each chapter has discussed key insights from the literature.

I acknowledge that the level of detail presented in this research paper may have overwhelmed some readers. Still, I hope that the review has driven home at least the following insights:

- Responsive regulation is about much more than merely visualising enforcement as a set of pyramids. The pyramids are just one of the many ways of operationalising a central heuristic underpinning the theory: to begin a regulatory interaction with the least intrusive interventions possible and only escalate to more intrusive interventions if the first interventions do not result in the desired outcomes.
- At the same time, not every form of regulation that responds to (or claims to respond to) a target's behaviour is responsive regulation – it is not the case that anything goes. Responsive regulation asks regulators *what* it means to be responsive at different levels of the regulatory system, and *how* to be responsive.
- Thus, responsive regulation, as conceptualised by Ayres and Braithwaite, can be seen as a sliding scale of regulatory heuristics and strategies bounded by a set of (public) values: flexibility, non-domination, and participation.

Seeing the wood for the trees

Beyond these high-level conclusions, five major lessons stand out that help us to see the wood for the trees.

First, just having responsive regulation strategies in place (for example, a regulatory pyramid) is no guarantee that these strategies are used in regulatory practice, let alone that they are used well (Bird & Gilligan, 2016; Hedges, Bird, Gilligan, Godwin, & Ramsay, 2017; Welsh, 2009). Staff need training, targets of regulation need explanation, and agencies need alignment to enable responsive regulation to be operationalised in practice.

Second, just cherry-picking responsive elements will not result in a satisfactory regulatory regime (Moss, 2019). While *Responsive Regulation* provides hands-on strategies, these need to be implemented within the larger philosophy of the theory – a flexible and context-sensitive approach to regulation that seeks compliance through the least intrusive intervention possible.

Third, a static responsive regulation regime may lose its effectiveness over time when staff at regulatory agencies change, or when targets learn to roll with the punches of the regime (Szejnwald Brown, Angel, Broszkiewicz, & Krzyśków, 2001). Ideally, as with any approach to regulation, a

responsive regulation regime needs to involve an element of learning and updating based on lessons learnt (Baldwin & Black, 2008).

Fourth, because of its flexibility, the language of responsive regulation can easily be abused to push a neo-liberal deregulation agenda (Tombs & Whyte, 2013) or a repressive regulation agenda (Yee et al., 2016). Regulators and their targets need to keep asking questions about *what* exactly their responsive regulation implies.

Fifth, and following on from all of the above, responsive regulation should ideally be introduced as part of a suite of regulatory reforms (Blanc, 2018). Without additional staff training, transparent and accountable public procedures, and ongoing learning and improvement, it is unlikely that the real-world application of responsive regulation will live up to its theoretical promises (Lehmann Nielsen, 2006).

Final words

Throughout this research paper, I have aimed to make it clear that there is a great intuitive appeal to apply responsive regulation to regulatory problems and challenges. However, we do not have many examples of how responsive regulation performs in day-to-day practice, and there is a serious lack of findings from comparative research. In short, we do not have access to a strong (peer-reviewed) evidence base of the performance of responsive regulation in improving regulatory governance.

This evidence synthesis indicates that a good dose of realism and reflexivity is required when deciding to apply responsive regulation in practice.[16] Being a responsive regulator is less easy than it appears to be at first glance. It is critical to be exceptionally clear about what you mean when talking about regulatory responsiveness, and it is critical to keep assessing the performance of your responsive regulatory regime or system. At the end of the day, responsive regulation is a dynamic approach to regulatory practice *par excellence*: not only does it ask regulators to respond to the behaviour of their targets, but it also asks regulators to respond to their own behaviour.

---

[16] Which will likely come as little surprise to the readers of the *State of the Art in Regulatory Governance Research Papers:* I have drawn similar conclusion about the use of insights from behavioural science in regulatory practice (van der Heijden, 2019a), about risk governance and risk-based thinking (van der Heijden, 2019b), and about applying systems thinking to regulatory governance (van der Heijden, 2020).

Appendix A – Suggestions for further reading

Despite responsive regulation being such a prominent regulatory theory, there are not many books dedicated to it. Readers interested in learning more about it may wish to follow up on the books and dedicated special issues in peer-reviewed journals that are discussed here.

Responsive regulation: Transcending the Deregulation Debate (Ayres & Braithwaite, 1992)

It goes without saying that this book is the point of reference for anyone interested in the theory, the heuristics, and the strategies discussed in this evidence synthesis. The book does not need further introduction here.

Restorative justice and responsive regulation (J. Braithwaite, 2002)

In *Restorative justice and responsive regulation* John Braithwaite situates restorative justice within the broader responsive regulation theory. Braithwaite argues that restorative justice will only achieve desirable results if it is part of a responsive regulation strategy. Restorative justice needs to be backed by the possibility of escalation in sanctions or interventions. While some may say that this ultimate threat of a sanction goes against the internal (voluntary/ethical) motivation of offenders to join a restorative justice process, Braithwaite holds that most of those participating in a restorative justice process will not do so entirely voluntarily at the outset, but are more likely to participate as an alternative to a more severe penalty. Within the responsive regulation theory, restorative justice is operationalised at the bottom of the regulatory pyramids: "At the base of the pyramid is the most restorative dialogue-based approach we can craft for securing compliance with a just law. (…) [H]owever serious the crime, our normal response is to try dialogue first for dealing with it, to override the presumption only if there are compelling reasons for doing so." (J. Braithwaite, 2002, 30).

Special issue: Law and Policy (volume 29, issue 1, 2007)

The nine articles of this special issue of the journal *Law and Policy* explore the implementation of responsive regulation in taxation. "Responsive regulation and regulatory formalism are pitted against each other in this issue on responsive regulation and taxation. Normative and explanatory arguments in favor of responsive regulation are explored by data collected in taxation contexts; and institutional obstacles are identified that limit effective implementation" (V. Braithwaite, 2007, 3).

Special issue: University of British Columbia Law Review (volume 44, issue 3, 2011)

This special issue of the *University of British Columbia Law Review* is the result of a conference held at the University of British Columbia in 2010. Acknowledging that the book *Responsive Regulation* had been published nearly 20 years earlier, the organisers of the conference drew lessons on responsive regulation across subject areas and across disciplines (Ford & Affolder, 2011). The special issue involves 11 articles, and includes a transcript of John Braithwaite's Fasken lecture, *The essence of responsive regulation*, in which he looks back at the development and application of responsive regulation over time (J. Braithwaite, 2011).

Special issue: Regulation & Governance (volume 7, issue 1, 2013)

This special issue of *Regulation & Governance* celebrates the 20th anniversary of the book *Responsive Regulation.* The 10 articles in this special issue explore the theoretical breadth and depth of responsive regulation, its application in regulatory practice, and the opportunities and limitations for its future use and study. The editorial by Christine Parker (2013) is an excellent and critical discussion of the development and application of responsive regulation over time for those who are interested in hearing the story from someone other than John Braithwaite himself.

Appendix B – Methodology

The evidence synthesis presented in this research paper builds on a broad reading of the academic literature on responsive regulation published in English since the book *Responsive Regulation* was published (1992). For the evidence synthesis, a protocol was developed and followed for sourcing and coding peer-reviewed journal articles.[17] This protocol builds on four (partly overlapping) tools, standards, and protocols that are conventional for the type of research presented here:

- AMSTAR 2, A MeaSurement Tool to Assess systematic Reviews version 2 (Shea et al., 2017);
- MARS, American Psychological Association (APA) Meta-Analysis Reporting Standards (essentially the MARS protocol is modified from Cooper, 2017);
- MMRS, Mixed Methods Research Synthesis protocol (Heyvaert et al., 2017); and
- PRISMA-P, Preferred Reporting Items for Systematic Meta-Analysis (Shamseer et al., 2015).

Sourcing articles

In selecting the source material for the evidence synthesis, no restrictions were set by time, length, or repetitions on the studies that were to be included in the evidence synthesis. No restrictions were set by the setting(s) of studies; however, only articles written in English were included. Also, only published peer-reviewed articles, including 'online first' and 'early access' publications, were included. The limitations of excluding non-published academic work and academic publications other than peer-reviewed articles are acknowledged (Vevea et al., 2019).

The articles included in the evidence synthesis were systematically sourced in four rounds from different databases: WorldCat, Scopus, and Web of Science. In the first step, these databases were explored to identify articles that were likely to engage with Ayres and Braithwaite's ideas on responsive regulation:

- From WorldCat, all articles with the words 'responsive regulation' in their keywords, published in English since 1992 in the subject areas 'business and economics', 'law', 'sociology', and 'political science', were included. This search resulted in 132 documents.
- From Scopus, all articles with the words 'responsive regulation' in their titles, abstracts or keywords, published in English since 1992 in the subject areas 'social science', 'business, management and accounting', and 'economics, econometrics and finance' were included. This search resulted in 105 documents.
- From Web of Science, all articles with the words 'responsive regulation' in any searchable field and all articles citing the book *Responsive Regulation* using the 'cited reference search' tool for the combination ayr* (cited author) AND res* (cited work), published in English since 1992 in the disciplines 'business', 'criminology', 'law', 'economics', 'management', 'political science', 'public administration', 'public policy', 'social sciences interdisciplinary', and 'sociology' were included. This combination of search terms for the cited reference search is likely to overcome the most common typographical errors in citations of the book. These searches resulted in 94 and 807 documents, respectively.

---

[17] Protocols are available from: https://jeroenvanderheijden.net/?p=333 (6 July 2020).

This set of documents was supplemented with all articles from three special issues on responsive regulation: volume 7, issue 1 of *Regulation and Governance* (2013); volume 44, issue 3 of the *University of British Columbia Law Review* (2011); and volume 29, issue 1 of *Law and Policy* (2007). In addition to these documents, all peer-reviewed English language articles from the 'review' sections of earlier publications that sought to draw general lessons from empirical research on responsive regulation were included (Baldwin & Black, 2008, 62-64; J. Braithwaite, 2016b, 8-18; Mascini, 2013, 50-53; Simpson, 2013, 324-325; Walker-Munro, 2019, 118). This search resulted in 86 documents. After removing duplicates, this initial search resulted in a set of 1,012 peer-reviewed journal articles.

In the second step, article titles, abstracts, and keywords were screened to exclude articles that were unlikely to deal with a responsive regulation approach or that were explicitly not empirical, or both. For this, the following scores were used: yes (include), no (exclude), unsure (include). The screening was carried out by two coders. Of the full set of set of 1,012 articles, three articles were not accessible. Of the remaining 1,009 articles, 586 were included in the next round. The agreement percentage between the two coders was 75%, with a Cohen's Kappa of 0.51 (representing fair agreement, Heyvaert et al., 2017). In this step, a liberal approach to inclusion was taken: if one of the coders used the score 'yes' or 'unsure', the article was included for screening in the next step.

In the third step, the research design sections (or similar) of the articles were read to exclude articles that did not deal with a responsive regulation approach, and method sections (or similar) of the articles were read to exclude articles that were explicitly not empirical. For this, the following scores were used: yes (include), no (exclude), unsure (include). Of the 586 articles, 123 were included in the final round. The agreement percentage between the two coders was 95%, with a Cohen's Kappa of 0.82 (representing excellent agreement, Heyvaert et al., 2017). In this step, the coders resolved all discrepancies where one coder used the score 'yes' and the other 'no'.

In the fourth step, the articles were read in full to exclude articles that did not deal with a responsive regulation approach or that were explicitly not empirical, or both. To come to a final decision on articles to include in the review, all disagreements between the coders were discussed and resolved. In this step, 65 articles were included for further analysis: 30 articles were identified as providing direct insights on the performance of responsive regulation, and 35 articles were identified as providing relevant insights on the working of responsive regulation, but not explicitly evaluating its performance. In a final step, the 30 articles providing direct insights were assessed to cluster those thar reported on the same study (to prevent the 'double counting' of individual studies or study settings). In this step, 24 unique study settings were observed.

Data abstraction

From the 65 articles, data were abstracted following the *PICO* criteria (participants, interventions, comparators, outcomes):[18]

- *Study designs:* There were no a priori restrictions set on the study design or the type of data used. Of the 30 articles that provided direct insights on the performance of responsive

---

[18] These are well explained at www.en.wikipedia.org/wiki/PICO_process (3 June 2020).

regulation, 13 articles used qualitative data, 14 quantitative data, and the remaining three a mixed set of data. Of the 35 articles that provided additional insights on the performance of responsive regulation, 15 used qualitative data, 19 quantitative data, and the remaining one a mixed set of data.

- *Participants:* There were no a priori restrictions set on the background, type or number of the participants (including, but not limited to, people, firms, regulators, and jurisdictions) in the studies. Most studies come from western countries (n=62), with Australia (n=20) and the United States (n=16) being the dominant research settings. The articles addressed a range of policy areas, with none being dominant. These areas included: business regulation, consumer protection and public safety, environmental sustainability, finance, operational health and safety, and taxation.

- *Interventions:* There were no a priori restrictions set on the type of responsive regulation heuristic or strategy. In the 30 articles that provided direct insights on the performance of responsive regulation there were 23 examples of a tit-for-tat or pyramidal approach to regulation, seven of enforced self-regulation, three of tripartism and one of restorative justice (some articles studied more than one form of responsive regulation, which explain why the total is larger than 30). In the 35 articles that provided additional insights, there were 18 examples of a tit-for-tat or pyramidal approach to regulation, two of tripartism, one of restorative justice, and 14 situations where an 'ideal type' form of responsive regulation was contrasted with the empirically observed setting.

- *Comparators:* There were no a priori restrictions set on the type of comparators used in the assessment of responsive regulation. The majority of articles (n=39) directly compared a current responsive regulation situation with an earlier or external situation (e.g., traditional government-led command-and-control regulation, or laissez-faire market competition). The remaining articles (n=26) explained the effects of responsive regulation without making such comparisons. None of the articles used counterfactual observations.

- *Outcomes:* The following outcome indicators were set (a priori) to evaluate the observed performance of responsive regulation across the set of 30 articles that provided direct insights: changes in compliance level, compliance costs (for the regulator and regulatee), and compliance achievement time (for the regulator and regulatee). These indicators were scored as 'positive', 'no effect', and 'negative' when explicit data on effects were provided; or, as 'it depends' when the observed effect was explained in qualified and context-specific terms. The research was open to uncovering additional indicators, including improved relationships between regulators and regulatees, spill-over effects (higher levels of compliance because regulatees become aware of the new approach to regulation), and improved working conditions for regulatory staff. Across the set of 24 unique study settings, scholars observed a positive effect of responsive regulation in eight settings, no effect in one setting, a negative effect in six settings, and in the remaining nine setting observed effects were explained in qualified and context-specific terms.

Data coding

To gain a rich understanding of the performance of responsive regulation, and particularly an understanding of the circumstances under which responsive regulation was found to perform best, all

65 articles were read closely and coded in Atlas.ti using the codes presented in table B.1. These coded data were explored and analysed using Atlas.ti.

Table B.1 – Coding of the literature sources

Codes used			
(R)CT (randomised control trial) /(quasi-) experiment	direct finding	international/transnatio nal setting	repeat interaction
agriculture	discretionary space	Ireland	republican political philosophy
alternative application of RR	empirical research (first hand)	irrational behaviour	requirement for success
Australia	empirical research (secondary finding)	laissez-faire	review (narrative or partial) of RR literature
basis of RR assumptions	empirical support (for RR thesis/theses)	market failure	risk (regulation of)
BBG (benign big gun)	enforcement style(s)	mixed interventions/strategies/ styles	RJ (restorative justice)
Britain	environmental protection	multiple selves	RR as attitude
business	equifinality	Netherlands	RR as delegation
call for empirical research	escalation	networked/nodal regulation	RR as heuristic
Canada	ESR (enforced self-regulation)	New Zealand	RR as strategy/system/process
capture	evidence (of RR performance)	normative	South Africa
China	evolution (of RR)	novel insight (on RR)	South Korea
citizen participation	examples (of RR application)	OHS (operational health and safety)	speaking softly
compliance motivation/attitude	explanatory	one-off interaction	standardization required (of RR application)
consumer protection	failure (of RR)	partial-industry intervention/regulation	success (of RR)
cooperation/collaboratio n	finance	persuasion	suggestion to improve RR
corruption	flexibility	Poland	suggestion to use RR
cost-effectiveness	France	policy areas (where RR is applied)	taxation
countries (where RR is applied)	game theory	prisoner dilemma	TFT (tit for tat)
critique to RR as practice	Germany	process	tripartism
critique to RR as theory	hypothesis	pyramid	trust (building/developing/nu rturing/…)
definition	ideal-type RR (contrasted with actual situation)	pyramid of supports	UK
Denmark	indirect finding	rational choice	undesired outcome
deterrent	Indonesia	really RR	USA
developing economies (RR in)	industry association	regulatory failure	utilitarian

Limitations

As with any approach to systematic research, the approach chosen here comes with limitations. There is a risk of bias because only peer-reviewed articles, including 'online first' and 'early access' publications, were included. First, not all research on responsive regulation makes it through the journal peer-review process, and not all research on responsive regulation from around the world is carried out by academics. The exclusion of non-published academic work, academic publications other than peer-reviewed articles, and non-academic publications logically limits the number of observed applications of responsive regulation in real-world settings (Mahood, Van Eerd, & Irvin, 2014). Second, there is a risk that positive experiences with responsive regulation are over-represented in the academic literature (a selective reporting bias) and thus in the set of 65 articles distilled from this literature (Vevea et al., 2019). Unfortunately, because of the types of study designs and types of data used in the included articles (predominantly single-n or small-n studies), it was not possible to run tests for sample biases (cf., Hardwicke et al., 2020).

Appendix C – References

Almond, P., & Esbester, M. (2018). Regulatory inspection and the changing legitimacy of health and safety. *Regulation & Governance, 12*(1), 46-63.

Ayres, I. (2013). Responsive regulation: A co-author's appreciation. *Regulation & Governance, 7*(1), 145-151.

Ayres, I., & Braithwaite, J. (1992). *Responsive Regulation. Transcending the Deregulation Debate*. New York: Oxford University Press.

Baldwin, R., & Black, J. (2008). Really Responsive Regulation. *Modern Law Review, 71*(1), 59-94.

Bardach, E., & Kagan, R. A. (1982). *Going by the book: the problem of regulatory unreasonableness*. Philadelphia: Temple University Press.

Benkler, Y. (2012). Law, Policy and Cooperation. In E. J. Balleisen & D. Moss (Eds.), *Government and Markets: Toward a New Theory of Regulation* (pp. 299-332). Cambridge: Cambridge University Press.

Bird, H., & Gilligan, G. (2016). Deterring corporate wrongdoing: Penalties, financial services misconduct and the Corporations Act 2001 (Cth). *Company and Securities Journal, 34*(5), 332-359.

Blanc, F. (2018). Tools for Effective Regulation: Is "More" Always "Better"? *European Journal of Risk Regulation, 9*(3), 465-482.

Braithwaite, J. (2002). *Restorative Justice and Responsive Regulation*. Oxford: Oxford University Press.

Braithwaite, J. (2003). Meta risk management and responsive regulation for tax system integrity. *Law & Policy, 25*(1), 1-16.

Braithwaite, J. (2011). The Essence of Responsive Regulation. *University of British Columbia law review., 44*(3), 475-520.

Braithwaite, J. (2013). Relational Republicanism. *Regulation & Governance, 7*(1), 124-144.

Braithwaite, J. (2016a). In Search of Donald Campbell: Mix and Multimethods. *Criminology and Public Policy, 15*(2), 2.

Braithwaite, J. (2016b). *Restorative justice and responsive regulation: the question of evidence. RegNet Research Papers 2016 No. 51*. Canberra: RegNet Australian National University.

Braithwaite, J. (2017). Types of responsiveness. In P. Drahos (Ed.), *Regulatory Theory: Foundations and applications* (pp. 117-132). Canberra: ANU Press.

Braithwaite, V. (1995). Games of engagement: Postures within the regulatory community. *Law & Policy, 17*(3), 225-256.

Braithwaite, V. (2000). An Evolving Compliance Model for Tax Enforcement. In N. Shover & J. P. Wright (Eds.), *Crimes of Privilege: Readings in White-Collar Crime* (pp. 405-418). Oxford: Oxford University Press.

Braithwaite, V. (2007). Responsive Regulation and Taxation: Introduction. *Law & Policy, 29*(1), 3-10.

Braithwaite, V. (2009). *Defiance in taxation and governance: Resisting and dismissing authority in a democracy*. Cheltenham: Edward Elgar.

Bryer, T. (2007). Toward a Relevant Agenda for a Responsive Public Administration. *JPART, 17*(3), 479-500.

Christian, C. (2017). Enhanced enforcement outcomes through a responsive regulation approach to sales tax enforcement. *Journal of Public Budgeting, Accounting & Financial Management, 29*(4), 464-497.

Cooper, H. (2017). *Research synthesis and meta-analysis: A step-by-step approach* (5th ed.). Los Angeles: SAGE.

Culleen, L., & Glazer, T. (2016). Let's make deal: Twenty years of EPA's audit policy. *Natural Resources & Environment, 30*(3), 3-6.

Curtis, A., Miller, P., Droste, N., McFarlane, E., Martino, F., & Palmer, D. (2016). 'The ones that turn up are the ones that are responsible': Key stakeholders perspectives on liquor accords. *Drug and Alcohol Review, 35*(3), 273-279.

Daniels, B. (2012). When Agencies Go Nuclear: A Game Theoretic Approach to the Biggest Sticks in an Agency's Arsenal. *George Washington Law Review, 80*(2), 442-504.

de Boer, N., & Eshuis, J. (2018). A street-level perspective on government transparency and regulatory performance: Does relational distance matter? *Public Administration, 96*(3), 452-467.

Decker, C. (2015). *Modern economic regulation: An introduction to theory and practice*. Cambridge: Cambridge University Press.

Dudley, S. E., & Brito, J. (2012). *Regulation: A Primer*. Arlington/Washington: Nervatus Center/The George Washington University Regulatory Studies Center.

EPA. (1997). *Audit Policy Interpretive Guidance*. Washington, D.C.: U.S. Environmental Protection Agency.

Eungkyoon, L., Jung, C. S., & Kwak, J. (2016). The Role of Trade Associations in Environmental Compliance Under Limited Enforcement: The case of small businesses. *Environmental Policy and Governance, 26*(5), 442-436.

Ford, C., & Affolder, N. (2011). Responsive regulation in context, circa 2011. *British Columbia Law Review, 44*(3), 463.

Gough, D., Oliver, S., & Thomas, J. (2012). *An introduction to systematic reviews*. London: Sage.

Gunningham, N., & Sinclair, D. (2009). Regulation and the Role of Trust: Reflections from the Mining Industry. *Journal of Law and Society, 36*(2), 167-194.

Haines, F. (2011). *The paradox of regulation: What regulation can achieve and what it cannot*. Cheltenham: Edward Elgar.

Hardwicke, T. E., Serghiou, S., Janiaud, P., Danchev, V., Crüwell, S., Goodman, S., & Ioannidis, J. (2020). Calibrating the Scientific Ecosystem Through Meta-Research. *Annual Review of Statistics and Its Application, 7*(1), 1-27 (early view).

Hedges, J., Bird, H., Gilligan, G., Godwin, A., & Ramsay, I. (2017). The policy and practice of enforcement of directors' duties by statutory agencies in Australia: An empirical analysis. *Melbourne University Law Review, 40*(3), 905-966.

Heimer, C. (2011). Disarticulated Responsiveness: The Theory and Practice of Responsive Regulation in Multi-Layered Systems. *University of British Columbia Law Review, 44*(2), 663-.

Heyvaert, M., Hannes, K., & Onghena, P. (2017). *Using mixed methods research synthesis for literature reviews*. Los Angeles: SAGE.

Ho, D. (2017). Does peer review work? An experiment of experimentalism. *Stanford Law Review, 69*(1), 1-119.

Hutter, B. (2001). Is Enforced Self-regulation a Form of Risk Taking?: The Case of Railway Health and Safety. *International Journal of the Sociology of Law, 29*(4), 379-400.

Islam, M. A., & McPhail, M. (2011). Regulating for corporate human rights abuses: The emergence of corporate reporting on the ILO's human rights standards within the global garment manufacturing and retail industry. *Critical Perspectives on Accounting, 22*(8), 790-810.

Ivec, M., Braithwaite, V., Woods, C., & Job, J. (2015). *Applications of responsive regulation theory in Australia and overseas: Update. Regulatory Institutions Network Occasional Paper 23*. Canberra: Regulatory Institutions Network.

Job, J., Stout, A., & Smith, R. (2007). Culture change in three taxation administrations: From command-and-control to responsive regulation. *Law & Policy, 29*(1), 84-101.

Kingsford Smith, D. (2011). A Harder Nut to Crack? Responsive Regulation in the Financial Services Sector. *University of British Columbia Law Review, 44*(3), 695-.

Lehmann Nielsen, V. (2006). Are Regulators Responsive? *Law & Policy, 28*(3), 395-416.

Lehmann Nielsen, V., & Parker, C. (2009). Testing responsive regulation in regulatory enforcement. *Regulation & Governance, 3*(4), 376-399.

Leviner, S. (2008). An overview: A new era of tax enforcement - from "big stick" to responsive regulation. *Regulation & Governance, 2*(3), 360-380.

Lewis, S., Crawford, A., & Traynor, P. (2017). Nipping Crime in the Bud? The Use of Antisocial Behaviour Interventions with Young People in England and Wales. *British Journal of Criminology, 57*(5), 1230-1248.

Lochner, T., Apollonio, D., & Tatum, R. (2008). Wheat from chaff: Third-party monitoring and FEC enforcement actions. *Regulation & Governance, 2*(2), 216-233.

Lochner, T., & Cain, B. (1999). Equity and efficacy in the enforcement of campaign finance laws. *Texas Law Review, 77*(7), 1891-1942.

Lodge, M., & Wegrich, K. (2012). *Managing Regulation: Regulatory Analysis, Politics and Policy*. New York: Palgrave Macmillan.

Mahood, Q., Van Eerd, D., & Irvin, E. (2014). Searching for grey literature for systematic reviews: challenges and benefits. *Research Synthesis Methods, 5*(3), 221-234.

Manewitz, M., Isler, V., & Westphal, N. (1996). Environmental Audit Policy. *Fordham Environmental Law Journal, 7*(3), 775-794.

Mascini, P. (2013). Why was the enforcement pyramid so influential? And what price was paid? *Regulation & Governance, 7*(1), 48-60.

Mascini, P., & van Wijk, E. (2009). Responsive regulation at the Dutch Food and Consumer Product Safety Authority: An empirical assessment of assumptions underlying the theory. *Regulation & Governance, 3*(1), 27-47.

May, P., & Winter, S. (1999). Regulatory enforcement and compliance: Examining Danish agro-environmental policy. *Journal of Policy Analysis and Management, 18*(4), 625-651.

May, P., & Wood, R. S. (2003). At the Regulatory Front Lines: Inspectors' Enforcement Styles and Regulatory Compliance. *Journal of Public Administration Research and Theory, 13*(2), 117-139.

McKay, S., Murray, M., & MacIntyre, S. (2015). Pitfalls in Protection: How Theory Can Enrich Our Understanding of Regulatory Compliance Problems in Planning Practice. *International Planning Studies, 20*(3), 270-291.

Moss, B. (2019). Pyramids or sandcastles? Regulating police conduct in Ireland. *Policing and Society, Early online publication*, 1-17.

Muehlbacher, S., Kirchler, E., & Schwarzenberger, H. (2011). Voluntary versus enforced tax compliance: empirical evidence for the "slippery slope" framework. *European Journal of Law and Economics, 32*(1), 89-97.

Nonet, P., & Selznick, P. (2009 [1978]). *Law & Society in Transition: Toward Responsive Law*. Transaction Publishers: New Brunswick.

O'Neill, B. (2018). Corporate Crime and Regulatory Discretion: Rethinking the Use of Criminal, Civil and Administrative Penalties. *Criminal Law Journal, 42*(5), 322-336.

Osborne, D., & Gaebler, T. (1992). *Reinventing government: how the entrepreneurial spirit is transforming the public sector*. Reading: Addison-Wesley Publishers.

Parker, C. (2006). The "Compliance" Trap: The Moral Message in Responsive Regulatory Enforcement. *Law & Society Review, 40*(3), 591-622.

Parker, C. (2013). Twenty Years of Responsive Regulation: An Appreciation and Appraisal. *Regulation & Governance, 7*(1), 1-151.

Pawson, R. (2002). Evidence-based Policy: The Promise of 'Realist Synthesis'. *Evaluation, 8*(3), 340-358.

Pires, R. (2008). Promoting sustainable compliance: Styles of labour inspection and compliance outcomes in Brazil. *International Labour Review, 147*(2-3), 199-229.

Quilter, J., & McNamara, L. (2015). 'Long may the buskers carry on busking' : street music and the law in Melbourne and Sydney. *Melbourne University Law Review, 39*(2), 539-591.

Raadschelders, J. (2011). *Public Administration: The Interdisciplinary Study of Government*. Oxford: Oxford University Press.

Sampson, H., & Bloor, M. (2007). When Jack Gets out of the Box: The Problems of Regulating a Global Industry. *Sociology, 41*(3), 551-569.

Shamseer, L., Moher, D., Clarke, M., Ghersi, D., Liberati, A., Petticrew, M., . . . Stewart, L. (2015). Preferred reporting items for systematic review and meta-analysis protocols (PRISMA-P) 2015: elaboration and explanation. *BMJ, 350*(g7647), 1-25.

Shea, B., Reeves, B., Wells, G., Thuku, M., Hamel, C., Moran, J., . . . Henry, D. (2017). AMSTAR 2: a critical appraisal tool for systematic reviews that include randomised or non-randomised studies of healthcare interventions, or both. *BMJ, 358*(j4008), 1-.

Sheehy, B., & Feaver, D. (2015). Designing Effective Regulation: A Normative Theory. *UNSW Law Journal, 38*(1), 392-425.

Short, J., & Toffel, M. W. (2010). Making Self-Regulation More Than Merely Symbolic: The Critical Role of the Legal Environment. *Administrative Science Quarterly, 55*(2), 361-396.

Silbey, S. (1984). The Consequences of Responsive Regulation. In K. Hawkins & J. M. Thomas (Eds.), *Enforcing Regulation* (pp. 147-170). Boston: Kluwer Nijhodd.

Simpson, S. (2013). White-Collar Crime: A Review of Recent Developments and Promising Directions for Future Research. *Annual Review of Sociology, 39*(1), 309-331.

Smith, S. (2015). *Taxation: A Very Short Introduction*. Oxford: Oxford University Press.

Sparrow, M. K. (2000). *The Regulatory Craft. Controlling Risks, Solving Problems, and Managing Compliance*. Washington: Brookings Institution.

Stafford, S. (2017). Voluntary self-policing and the US Audit Policy. In M. Faure (Ed.), *Elgar Encyclopedia of Environmental Law: Volume IV* (pp. 21-32). Cheltenham: Edward Elgar.

Szejnwald Brown, H., Angel, D., Broszkiewicz, R., & Krzyśków, B. (2001). Occupational safety and health in Poland in the 1990s: A regulatory system adapting to societal transformation. *Policy Sciences, 34*(3/4), 247-271.

Toffel, M. W., & Short, J. (2011). Coming Clean and Cleaning Up: Does Voluntary Self-Reporting Indicate Effective Self-Policing? *Journal of Law and Economics, 54*(4), 609-649.

Tombs, S., & Whyte, D. (2013). Transcending the deregulation debate? Regulation, risk, and the enforcement of health and safety law in the UK. *Regulation & Governance, 7*(1), 61-79.

Tränkle, S. (2007). In the shadow of penal law: Victim–offender mediation in Germany and France. *Punishment & Society, 9*(4), 395-415.

van der Heijden, J. (2019a). *Behavioural insights and regulatory practice: A review of the international academic literature*. Wellington: Victoria University of Wellington/Government Regulatory Practice Initiative (G-REG).

van der Heijden, J. (2019b). *Risk governance and risk-based regulation: A review of the international academic literature*. Wellington: Victoria University of Wellington/Government Regulatory Practice Initiative (G-REG).

van der Heijden, J. (2020). *Systems thinking and regulatory governance: A review of the international academic literature*. Wellington: Victoria University of Wellington/Government Regulatory Practice Initiative (G-REG).

van Duin, S., Dekker, H., Wielhouwer, J., & Mendoza, J. (2018). The Tone from Above: The Effect of Communicating a Supportive Regulatory Strategy on Reporting Quality. *Journal of Accounting Research, 56*(2), 467-519.

van Erp, J. (2011). Naming without shaming: The publication of sanctions in the Dutch financial market. *Regulation & Governance, 5*(3), 287–308.

Vevea, J., Coburn, K., & Sutton, A. (2019). Publication bias. In H. Cooper, L. Hedges, & J. Valentine (Eds.), *The handbook of research synthesis and meta-analysis* (3rd ed., pp. 383-429). New York: Russel Sage Foundation.

von Holderstein Holterman, J. (2009). Outlining the Shadow of the axe - On restorative justice and the use of trial and punishment. *Criminal Law and Philosophy, 3*(2), 187-207.

Walker-Munro, B. (2019). Regulating disruption and development of the disruption calculus. *University of Western Australia Law Review, 46*(1), 111-143.

Waller, V. (2007). The Challenge of Institutional Integrity in Responsive Regulation: Field Inspections by the Australian Taxation Office. *Law & Policy, 29*(1), 67-83.

Welsh, M. (2009). Civil penalties and responsive regulation: The gap between theory and practice. *Melbourne University Law Review, 33*(3), 908-933.

Winter, S., & May, P. (2001). Motivation for Compliance with Environmental Regulations. *Journal of Policy Analysis and Management, 20*(4), 675-698.

Woods, C., Ivec, M., Job, J., & Braithwaite, V. (2010). *Applications of responsive regulation theory in Australia and overseas. Regulatory Institutions Network Occasional Paper 15*. Canberra: Regulatory Institutions Network.

Yee, W.-H., Tang, S.-Y., & Lo, C. W.-H. (2016). Regulatory Compliance when the Rule of Law Is Weak: Evidence from China's Environmental Reform. *Journal of Public Administration Research and Theory, 26*(1), 95-112.

Zhu, J., & Chertow, M. R. (2019). Authoritarian but responsive: Local regulation of industrial energy efficiency in Jiangsu, China. *Regulation & Governance, 13*(3), 384-404.