Fostering regulator–innovator collaboration at the frontline: A case study of the UK’s regulatory sandbox for fintech

Lauren A. Fahy

Utrecht University School of Governance, Utrecht, The Netherlands

Correspondence
Lauren A. Fahy, Utrecht University School of Governance, 3511 ZC Utrecht, The Netherlands.
Email: l.a.fahy@uu.nl

Funding information
European Research Council

Abstract
When supervising emerging technologies, regulators are more effective when they collaborate with business. Yet, innovative businesses are often small, inexperienced, and mistrustful. How can regulators motivate them to collaborate? This study examines this question by applying responsive regulation theory to a case study of the United Kingdom’s regulatory sandbox for financial technology. This study illustrates how frontline regulatory interactions foster regulator–innovator collaboration, in ways that differ from how these interactions foster collaboration between regulators and the mature industries upon whose study responsive regulation is based. As one of the first academic studies to collect data from sandbox participants, this article offers unique insights into “what works” about the United Kingdom’s much-imitated model.

1 | INTRODUCTION

When supervising emerging technologies, regulatory agencies are more likely to succeed if they collaborate with their stakeholders. This is the consensus emerging among innovation governance and law scholars (Allen, 2019; Kuzma, 2013; Malloy, 2013; Mandel, 2013; Marjosola, 2019). Traditionally, stakeholder participation in the development and implementation of regulation has been relatively “passive” (Malloy, 2013, p. 129). Opportunities for input are limited to review and comment procedures, legal challenges, and advisory panels (Kuzma, 2013; Malloy, 2013). Scholars increasingly argue that such incidental, passive stakeholder participation is inadequate when developing regulatory responses to innovation
For several reasons, effective innovation regulation requires continuous, active stakeholder collaboration.

First, innovation is hard to effectively regulate. New products and services emerge and evolve rapidly. Innovations can be complex and highly uncertain (Mandel, 2013, pp. 254–255). An innovation's risks and benefits are rarely obvious and uncontroversial ex ante (Brownsword et al., 2017). To manage the risks that innovations pose, regulatory agencies need to gather as much information as possible early in the innovation process. To mitigate uncertainty, they need to experiment with, and regularly adapt, their rules. To manage controversies, they need to gradually build consensus (Mandel, 2013). Gathering information, experimenting, and building consensus necessitates active stakeholder collaboration that begins early and is maintained throughout the innovation process; from research and development to commercialization and diffusion (Kuzma, 2013, pp. 195–196; Malloy, 2013, 129).

Stakeholder collaboration is thus central, explicitly or implicitly, to many of the regulatory models that innovation law and governance scholars advocate (Allen, 2019; Huising & Silbey, 2011; Marjosola, 2019; Zetzche et al., 2017). Yet, these scholars rarely address whether or under what conditions stakeholders will be motivated to collaborate (Abbott, 2013, p. 11).

An exception is Mandel (2013). Regulators hoping to implement his “new governance” model, he says, will need to proactively facilitate participation by new start-up type firms, because they will otherwise lack the resources and knowledge to do so (Mandel, 2013, p. 60; see also Gray & Pelisse, 2019, p. 7; Kuzma, 2013, p. 196). In addition to lacking capacity, anecdotal evidence suggests that some firms may be unmotivated to collaborate for strategic or ideological reasons (e.g., Uber, which is known for its aggressive anti-regulation tactics). This argument is supported by regulatory scholarship, which has found that small businesses are often underinformed about the regulatory regime in which they operate, lack capacity to engage with that regime, and are unmotivated to do so (Gunningham & Sinclair, 2002, pp. 13–14). This article focuses on the young, innovative firms that Mandel argues are least likely to participate in the regulatory processes, and how regulators can motivate their collaboration.

This article draws on responsive regulation theory (Ayres & Braithwaite, 1995; J. Braithwaite, 2002, 2013). In this theory, collaboration between regulator and regulatee is often said to emerge from the frontline. Direct interactions between regulator and regulatee staff can motivate regulatees to collaborate with the agency in the future (Braithwaite et al., 1994; van Erp et al., 2020; Loyens et al., 2019; Mascini & van Wijk, 2009; Nielsen & Parker, 2009). Responsive regulation theory, however, was developed largely through studies of mature industries and has never before been applied to the context of innovation supervision. It has not been established that frontline interactions have the same effects on regulatee motivation, and in the same ways, when regulators are dealing with new, highly uncertain products whose legal status is unclear (Liu et al., 2018). This study aims to begin to address this gap by asking: How do frontline interactions build innovative firm motivation to collaborate with regulators?

This study employs an explanatory, embedded, single case study (Yin, 2014, pp. 220–226) of the UK Financial Conduct Authority’s (FCA) regulatory sandbox for emerging financial technology. The sandbox represents a formal attempt by a regulatory agency to create a space for collaborative interactions between regulator staff and innovative firms. Data were collected through a document study, questionnaire, and qualitative interviews with senior managers from 21 UK fintech firms. The analysis evaluates whether interactions in the sandbox were indeed collaborative and whether they had the positive influence on firm motivation that responsive regulation theory anticipates.

The study results contribute to responsive regulation theory by demonstrating how frontline interactions may play a more foundational role in fostering future collaboration in an innovation context than they do for more mature industries. Innovative industries are characterized by new products, new firms, and new, inexperienced managers. In the case study examined here,
this newness meant that regulatees were more dependent on regulator staff, but also more open to their influence. In an innovation context, frontline interactions might be able to shape innovations and firm attitudes and behaviors—at a pre-commercial, pre-enforcement stage—in ways that might not be as feasible once products are mature and firms more established. These initial findings imply that additional theory-building research on interactions in innovation supervisory contexts is warranted.

The FCA’s regulatory sandbox has now been imitated in nearly 50 jurisdictions. This is one of the first academic evaluations of a sandbox to collect data from participants, and the first to analyze the influence of sandbox participation on firm motivation to cooperate (Alaassar et al., 2020, 2021). Participants highlight certain features of the FCA’s sandbox design—like having a dedicated case officer—as vital to motivating their future collaboration. Some of these features, however, seem to be absent from many imitator sandboxes.

2 | THEORY

Responsive regulation theory argues that the way frontline regulatory staff treat regulatees affects regulatee compliance motivation. Regulator staff are ambassadors of their agencies (Braithwaite & Hong, 2015). How they treat regulatees in frontline interactions affects how regulatees think and feel about regulation and the regulator in general (Nielsen & Parker, 2009, p. 380). In this way, the quality of frontline interactions affects how willing regulatees are to comply with regulation and cooperate with regulators in the future (Ayres & Braithwaite, 1995).

In presenting expectations as to how precisely frontline interactions might affect motivation, this study draws more specifically on the “restorative justice” tradition of responsive regulation theory (J. Braithwaite, 2002; Nielsen & Parker, 2009, p. 381). Further, this study is focused on initial frontline interactions between regulatory staff and innovative firms. I examine regulatory interactions in terms of the tasks of outreach, education, pre-licensing discussions, and the licensing process. In regard to enforcement, responsive regulation theory has additional prescriptions about when and how staff should apply sanctions given the characteristics and behavior of the regulatee (Ayres & Braithwaite, 1995). Given the focus of this study, I exclusively discuss responsive regulation theory’s prescriptions in regard to initial interactions, and not interactions that may become necessary if regulatees later break the law.

According to responsive regulation theory, regulators should seek to ensure that initial interactions with a regulatee are cooperative. Interactions should focus on education, persuasion, assistance, and problem solving over threats (J. Braithwaite, 2002, p. 41). Staff should start from the assumption that regulatees are willing to voluntarily act in ways compliant with regulation, and should treat regulatees with trust and respect (J. Braithwaite, 2002, p. 29). Regulatees who are treated in this manner, this theory anticipates, will more easily learn how to comply (J. Braithwaite, 2002, p. 30) and feel more motivated to do so (Nielsen & Parker, 2009, p. 382) compared with regulatees who are treated with mistrust or threatened.

In the following sections, I translate responsive regulation theory into an analytical framework for the case study. I lay out conceptual definitions and theoretical expectations, and then I conclude by discussing how critiques of restorative justice responsive regulation are addressed in the analysis.

2.1 | Conceptualizing the nature of frontline regulatory interactions

Frontline regulatory interactions are instances of direct contact between regulator and regulatee staff members (e.g., meetings, calls, inspections) (Pautz & Wamsley, 2012, p. 872). Cooperative
interactions were traditionally defined by the behavior of the regulatory staff member. Interactions were seen as cooperative in instances in which the staff member proactively helped the regulatee come into compliance, forgave and de-escalated certain instances of non-compliance, listened and communicated positively, and was relatively informal, flexible, open-minded, fair, kind, and respectful (J. Braithwaite, 2002, p. 41). Responsive regulation theory, however, has increasingly acknowledged that “cooperation” by regulator staff does not guarantee “collaboration” on the part of regulatees (Mascini & van Wijk, 2009; see also Gray & Pelisse, 2019, p. 6).

Pautz and Wamsley (2012, p. 858) argue that the quality of interactions should be defined by how cooperatively the regulator and regulatee staff members behave. Cooperation, for Pautz and Wamsley (2012), means sharing information, communicating extensively, demonstrating a high degree of respect, and proactively seeking assistance from the other (p. 872). Their typology (see Table 1) uses the term “collaborative partnership” to describe interactions in which both parties are “cooperating, sharing information, relying on each other’s expertise, displaying confidence in the other’s actions, expecting fair treatment, and being responsive to each other “and in which they are” pleased with each other and see one another as partners, rather than adversaries, in achieving and sustaining . . . compliance” (Pautz & Wamsley, 2012, p. 868). When regulatees do not reciprocate the regulatory staff member’s cooperative efforts, this is “cautious compliance.” “Cautious cooperation” occurs when collaborative regulatees are confronted by uncooperative regulator staff. If neither cooperates, the interaction is “adversarial.”

Pautz and Wamsley’s typology, unlike some prominent alternatives (e.g., Gunningham et al., 2005), allows analysis of the quality of interactions independent of a firm’s substantive compliance with the law. The typology is thus useful for analyzing interactions regarding regulatory tasks surrounding innovation supervision—like education, outreach, and licensing—where no law has been violated and where, in many cases, the purpose of the interaction is to establish what the law states and how compliance would be achieved.

Responsive regulation theory contends that when regulatory interactions involve high regulator cooperation (collaborative partnership or cautious compliance), regulatees will become more motivated to comply than they would be in interactions with lower cooperation. This theory offers several expectations as to exactly how interactions should influence motivation to comply and cooperate.

2.2 | How do frontline interactions affect regulatee compliance motivation?

Compliance motivation is the extent to which one feels driven to fulfill the letter or spirit of the law (Nielsen & Parker, 2012). Responsive regulation theory distinguishes between a regulatee’s motivation to comply with regulation and their motivation to cooperate with regulators. Compliance with regulations refers to willingness to comply with, or go beyond, legal rules. Cooperation with regulators concerns how closely and constructively regulatees are willing to work with regulatory authorities (Braithwaite et al., 2007, p. 138). Regulatees can be motivated to follow regulation while being unmotivated to cooperate with the regulator (i.e., preferring a distant, minimal relationship).
The extent to which regulatees are motivated to comply and cooperate, and why, is complex, idiosyncratic, and changeable (Nielsen & Parker, 2012, p. 378). Different regulatees can be motivated for different kinds of reasons: economic (to avoid sanctions), social (to build and maintain respect and approval from others), or normative (to fulfill a moral duty) (Nielsen & Parker, 2012, p. 431). The same person will probably be motivated by a combination of reasons (J. Braithwaite, 2002, p. 41). As regulatees are motivated by a number of different reasons, cooperative and/or collaborative regulatory interactions can affect motivation in a number of different ways (for a summary, see Table 2).

### Table 2 Summary of theoretical expectations

| I. Cooperative interactions | Through cooperative interactions: |
|-----------------------------|---------------------------------|
| build firm capacity to comply and cooperate | i. Barriers to compliance are reduced. Regulatees receive help in addressing barriers to compliance. |
|                           | ii. Formal and informal learning is facilitated. Regulatees come to better understand the formal and informal requirements of regulatory compliance. |
|                           | iii (a). Compliance and cooperation become the norm. Regulatees intentionally internalize regulator expectations of their conduct through capacity-building efforts in the firm designed to increase compliance and cooperation. |

| II. Cooperative interactions | Through cooperative interactions: |
|-----------------------------|---------------------------------|
| improve firm attitudes toward regulators and regulation, increasing motivation | iii (b). Compliance and cooperation become the norm. Regulatees unconsciously internalize regulator expectations of their conduct through unintentional changes in attitude and behavior. |
|                           | iv. Regulation is legitimized. Regulatees come to see regulation as more legitimate. |
|                           | v. Regulator reputation improves. Regulatees develop more positive perceptions of the regulatory agency. |
|                           | vi. Trust is built. Regulatees become more trusting of either regulatory staff members or the agency as a whole. |

| III. Collaborative interactions, to a greater extent than cooperative ones, build firm capacity and improve firm attitudes toward regulators and regulation | Through cooperative interactions: |
|-------------------------------------------------------------------------------|---------------------------------|
|                                | vii. Collaboration deepens capacity-building and increases motivation further. |
|                                | Where regulatees proactively collaborate in regulatory interactions, effects on learning, reputation, legitimacy, trust, and norms may be more profound than when regulatees passively receive help from a cooperative regulatory staff member. |
|                                | viii. Regulation improves. Where regulatees collaborate, there is greater potential for the quality of regulation to improve. |

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#### 2.2.1 | Cooperative interactions build firm capacity to comply and cooperate

In more cooperative interactions, staff build regulatee capacity by, first, helping regulatees to reduce barriers to compliance and cooperation by, for instance, helping them to solve the practical problems preventing them from following the law (J. Braithwaite, 2002, p. 24). Second, cooperative staff facilitate formal and informal learning by firms. Formally, staff teach regulatees what the regulations are and how to comply (Liu et al., 2018). Informally, cooperative regulatory staff explain the “unwritten rules” of a regime, and regulatees gradually learn what is socially desirable in their regulatory context (Huising & Silbey, 2011; Black, 2002, p. 20). Third, and relatedly, cooperative interactions build capacity by normalizing compliance and cooperation (Ayres & Braithwaite, 1995, p. 93).

Firms have their own norms of regulatory conduct, which individual employees carry into their day-to-day behavior (Huising & Silbey, 2011). In frontline interactions, cooperative regulatory staff can shift these norms. In constructive, one-on-one conversations, regulatory staff explicitly teach firms about how regulatees are expected to behave (Ayres & Braithwaite, 1995,
p. 27; Black, 2002; Gray & Silbey, 2014). Further, the regulatory staff member’s behavior in the interaction implicitly signals how regulatees are to behave (and what behavior they can expect from the regulator). Cooperative interactions signal that future interactions will probably be cooperative, while coercive interactions signal that they will be adversarial (Ayres & Braithwaite, 1995, p. 20; Etienne, 2013). Once firm staff understand what is expected, they can intentionally internalize these norms by, for example, rewriting standard operating procedures (Huising & Silbey, 2011). Firm staff may also unintentionally internalize the regulator’s norms of conduct and spread these norms to others in their firm (Ayres & Braithwaite, 1995, p. 27; Carpenter, 2010; Heimer & Lynn Gazley, 2012).

2.2.2 | Cooperative interactions improve firm attitudes toward regulators and regulation, increasing motivation

Cooperative interactions can improve firm attitudes by, first, helping to legitimate regulation among firms. Cooperative staff take more time to explain regulation, helping firms to understand how and why it applies to them (J. Braithwaite, 2002, pp. 33–35). As a result, firms are more likely to come to accept regulation on the grounds that it is “desirable, proper, or appropriate” (Suchman, 1995, 574). Where regulation and its enforcement is legitimate, regulatees are generally more motivated to comply (Braun & Busuioc, 2020).

Second, cooperative interactions improve the regulatory agency’s reputation among firms (Heimer & Gazley, 2012; Huising & Silbey, 2011; May & Winter, 1999; May & Wood, 2003). When interactions with regulatory staff are cooperative, firms form more positive perceptions of the agency (Nielsen & Parker, 2009, p. 383). Where regulatees view the agency positively, this typically increases their willingness to collaborate (Capelos et al., 2016; Carpenter, 2010; J. Braithwaite, 2002, p. 41; Braithwaite et al., 1994).

Third, and relatedly, cooperative frontline interactions build trust (Six & Verhoest, 2017). Regulatees, particularly when inexperienced, often initially mistrust regulators. A lack of trust undermines motivation to comply and cooperate. For example: mistrustful regulatees may be less willing to share information out of fear that the regulator will use it to punish them (J. Braithwaite, 2002, p. 18; Huising & Silbey, 2011; Pautz & Rinfret, 2013). When frontline staff behave in trusting and trustworthy ways (i.e., more cooperatively), regulatees are more likely to trust them, increasing motivation (J. Braithwaite, 2002, p. 34).

2.2.3 | Collaborative interactions, to a greater extent than cooperative ones, build firm capacity and improve firm attitudes toward regulators and regulation

Logic dictates that collaborative interactions, where regulatees reciprocate the cooperation they receive from regulator staff, may deepen capacity-building and increase motivation further via the aforementioned mechanisms (Ford, 2008; Nielsen & Parker, 2009, p. 379). Collaborative interactions, further, may drive compliance because the quality of regulation improves. When regulatees collaborate with regulators at the frontline, this can act as a valuable channel of information (Allen, 2019; Huising & Silbey, 2011). This feedback can be used to refine enforcement strategies. Frontline collaboration can also facilitate regulators and regulatees co-constructing what rules will be or how they will be interpreted (Gray & Pelisse, 2019). Better informed, or co-constructed, regulation should increase motivation by making it more feasible for regulatees to comply, as well as being more legitimate from the perspective of regulatees (Black, 2002; Pautz & Wamsley, 2012, p. 686).
2.3 Conceptualizing changes in regulatee compliance motivation

The case study captures changes to regulatee motivation to comply with regulation and to cooperate with regulators. I conceptualize a regulatee’s motivation to comply with regulation as lying on a spectrum. Regulatees can be unmotivated to comply, motivated to comply, or motivated to comply beyond what the law requires (Braithwaite, 2003; Gunningham et al., 2005; Nielsen & Parker, 2012, p. 444). I conceptualize motivation to cooperate as the regulatees’ willingness to interact with the regulator in cooperative ways in the future—that is, the extent to which the regulatee says they want to share information with, communicate with, demonstrate respect toward, and seek and offer assistance to the regulatory agency (Pautz & Wamsley, 2012, p. 872). Again, this is treated as falling on a spectrum, from not at all willing to cooperate to very willing to cooperate.

In analyzing interview transcripts, I examine whether regulatees’ motivation to comply and cooperate changed before and after their licensing process (sandbox or non-sandbox), and whether changes in motivation arose specifically from regulatory interactions during licensing. I examine this by analyzing reported behavior and attitudes toward compliance and cooperation. I also consider explicit statements by regulatees as to whether their motivation had changed, and why. These conceptualizations are further detailed in Sections 4 and 5.

2.4 Risks and trade-offs of cooperative interactions

Regulatory “techniques” that encourage cooperative and collaborative interactions have been argued to present risks or trade-offs for effective supervision (Black, 2012).

First, it has been argued that firms are less motivated to comply with regulation than theories like responsive regulation suggest. The Global Financial Crisis challenged the idea, for example, that financial institutions are necessarily incentivized to manage risks to protect their long-term survival (Black, 2012). This raises questions about whether it is rational for regulatory staff to approach regulatees cooperatively on the basis that voluntary compliance is possible or common. Such a stance might be naïve, and fail to adequately intimidate those who would circumvent the law (Ford, 2017, pp. 43–44).

Second, cooperative interactions create conditions for regulatory capture. Repeated, trusting, and even friendly interactions make regulatory staff identify with regulatees and their perspectives. In an innovation governance context, Martin and Balestra (2019, p. 82) and Allen (2019, p. 632) agree that intensive innovator-regulator cooperation can lead to inappropriate social bonds with, and biases toward, regulatees. Regulatory capture in this sense is not a binary state. Regulatees and regulators are interdependent, and some degree of influence is inevitable. Influence becomes harmful capture where it makes regulators—consciously or not—prioritize the views and interests of regulatees over the public interest (Kwak, 2013). Ford (2017) argues that this kind of unchecked firm influence allowed the previous era of financial innovations of the 1980 and 90s to go under-supervised. Firms used their access to regulators to influence the policy agenda and the framing of regulatory risks and compliance standards. This contributed to a financial regulatory regime (in the United States and Canada, at least) “insulated from interrogation . . . , contestation and inquiry” by other stakeholders (p. 45).

Finally, and further to these critiques, responsive regulatory techniques can only be effective when enacted by highly trained and experienced staff members who can make nuanced judgments about a regulatee’s motivations. Thus, these techniques are risky for staff or agencies with limited capacity (Black, 2012, p. 1048).

In the analysis, I was sensitive to these critiques. I remained open to the possibility that cooperative interactions could undermine motivation. I analyzed the possibility that cooperative interactions might lead to trade-offs by, for example, motivating collaboration but
undermining compliance or facilitating harmful capture. Thus, I considered whether cooperative interactions might support certain innovation supervision tasks (education, outreach, consultation, and licensing) but undermine others (enforcement).

2.5 | Theoretical contribution: Frontline interactions with private, innovative firms

Responsive regulation theory was mostly developed through studies of interactions involved in inspections or sanctions of mature products and services. The validity of this theory in the context of innovative products and services has not been empirically established. Regulatory interactions may have different kinds of effects when regulators are dealing with regulatees dealing in new, highly uncertain products whose legal status is often not yet clear. Interactions here may function very differently and, if so, theory should account for these differences (Liu et al., 2018). This study aims to begin to address this gap by applying responsive regulation theory to a case study of collaborative regulatory interactions between a regulator and innovative firms.

3 | EMPIRICAL SETTING: THE FCA’S FINTECH SANDBOX

The post–Global Financial Crisis period was one of notable innovation in global finance, and this was especially the case in the United Kingdom, where “fintech” became increasingly prominent. Fintech refers to financial products and services utilizing twenty-first-century information technology, such as digital currencies and crowdfunding (Arner et al., 2015). While finance has long been intertwined with information technology, fintech specifically refers to technologies that first emerged in the twenty-first century such as smartphones, high-speed internet, Wi-Fi, platforms, artificial intelligence, algorithms, blockchain, and biometrics. Fintech is distinguished not only by prominent technologies associated with this latest wave of development but also by who is at the forefront of delivering these products. In this wave, technology companies have increasingly moved into the financial sector. More acutely than in previous eras, fintech products and services are delivered not by established players but by new entrants and start-ups (Arner et al., 2015, p. 44).

The FCA—the UK’s financial conduct regulator—wanted to promote the safe and legal commercialization of fintech. Yet, the agency observed that firms often struggled at the licensing stage. Firms could be mistrustful of regulators and reluctant to contact them for assistance. Firms feared being told their ideas were illegal or would be so heavily regulated that it would be impossible for a new company to manage (Barefoot, 2016).

To address these issues, in 2014 the FCA launched “Project Innovate.” Project Innovate would “engage with the ecosystem and encourage firms to embrace new ways of doing things in the interests of consumers” (FCA, 2015a, p. 3). The sandbox would be part of this initiative, running out of “FCA Innovate,” a separate, dedicated unit. In the sandbox, firms could test the performance of innovative products, services, or models in live markets without automatically incurring the full gamut of regulation (FCA, 2015a). The instrument was designed to promote innovation and competition by making the licensing process easier for new innovative firms by providing direct support from regulator staff and reducing unnecessary regulatory barriers (FCA, 2015b).

The FCA has described the sandbox as regulators and regulatees “engaging constructively” (FCA, 2015a, p. 2), working closely/being in close contact (FCA, 2017, p. 4), and being in “dialogue” through an “open channel of communication” (Woolard, 2016). Anecdotally, ex-participants have suggested that it is a “collaborative endeavour” (EY, 2019, p. 2) and a
“mutual learning experience” (BBVA, 2017). This does not imply that collaboration was the only goal of the sandbox. Rather, these statements imply that regardless of the goals of the instrument, the FCA saw interactions within it as collaborative rather than merely cooperative or adversarial.

Innovation law and governance scholars concur that the sandbox is an example of a space for innovator-regulator collaboration. Allen (2019) argues that the FCA’s sandbox is “participatory” and “cooperative,” involving “ongoing deliberation” and “structured dialogue” between regulators and regulatees (p. 28). Other authors have described the sandbox as “inclusive” (Fenwick et al., 2018a, p. 172), built on mutual trust and respect (Marjosola, 2019, p. 12; Tsai & Peng, 2017, p. 126), and involving cooperative conversations about the meaning and application of rules in order to develop a shared understanding of what regulation will involve (Fenwick et al., 2018b, p. 92; Mangano, 2018, p. 730; Tsai, 2018, p. 1114).

The FCA’s sandbox, then, appears to be designed to encourage the kind of collaborative frontline regulatory interactions described by responsive regulation theory. Thus, it is a useful case study for confirming and building upon theory as to the influence of such collaborative regulatory interactions on regulatee compliance motivation in an innovation context.

To clarify the analysis, a few practical points about frontline interactions in FCA’s sandbox must be outlined. The sandbox caters to the early stages of product commercialization and to firms who need support (i.e., young and/or small firms). For most respondents, their interactions in the sandbox were some of the first they had had with the regulator as senior managers of a fintech firm. Most respondents had, however, interacted with the regulator in some capacity before, either by calling an advisory unit, previously seeking a license for a different product, or as an employee of another firm.

Respondents said that interactions in the sandbox were different, on a purely practical level, from both interactions with advisory units and interactions concerning traditional licensing. In contrast to advisory units, the sandbox provides firms with a dedicated case officer. The sandbox differs from traditional licensing in that it is voluntary and selective. Firms must apply and will not necessarily be accepted. If successful, they join a cohort of firms going through the sandbox at the same time. Further, the sandbox adds a “testing phase.” Similar to a clinical drug trial, firms in the sandbox test their products in a controlled environment before being licensed to sell them commercially. The firm and regulator agree on a testing plan, which includes test limits, goals, and metrics. Firms earn any necessary temporary licenses, which have lower regulatory requirements, to use during the test. In testing, firms sell or otherwise pilot products on the real market (EY, 2019, p. 11) and provide regular reports to the regulator. Testing helps establish whether products can be viably and legally commercialized. Afterward, firm and regulator define precise regulatory conditions that would apply if the firm were to sell the product on a commercial scale (Barefoot, 2017).

4 | METHODOLOGY AND DATA COLLECTION

This study uses an explanatory, embedded, single case study design (Yin, 2014, pp. 220–226) to examine how frontline interactions with regulator staff affect innovative firms’ motivation to collaborate with the regulator in the future. I selected the FCA’s sandbox because it is a critical case (Yin, 2014, p. 229). A critical case study does not aim to definitively prove a theory valid. Rather, the aim is to select a case where theoretical expectations—if they are valid for a given context—are very likely to be fulfilled. The sandbox appears to provide a textbook example of collaborative frontline regulatory interactions as described by theory. As evidenced in the preceding discussion, the FCA intended the sandbox to be collaborative and believes that it has succeeded in that goal, firms and industry groups describe the sandbox as involving collaborative interactions, and scholars writing on sandboxes describe the FCA’s as collaborative.
Interactions in the sandbox should, thus, drive compliance motivation via the explanations that theory proposes. If theoretical expectations are not confirmed, this would raise questions about whether there is something about innovation supervision that operates differently in ways that responsive regulation theory should account for.

This case study draws on exploratory interviews with FCA staff and industry stakeholders, a document study, a small-scale questionnaire, and—primarily—qualitative interviews with fintech firms (see detailed methodology in Appendix S1). I developed a population frame of 520 fintech firms in the UK. All were invited to interview. I also engaged in snowball sampling. Thirty-six respondents answered the questionnaire, and 21 were interviewed.

Fifteen of the interview respondents were current or ex-sandbox participants, and six were seeking or had sought licensing through traditional channels. The non-sandbox firms were included to provide some indication of whether sandbox interactions were substantially different from other kinds of interactions with the FCA that a fintech firm might experience.

Fifteen respondents from the sandbox represented approximately 10% of all current and former participants at the time of data collection. This sample size is small, likely explained by the nature of the population. These are private companies, the majority of which are young (mean = 7.4 years) and small (71% having fewer than 50 staff, and one-third having fewer than 11). Fintech firms have very rarely been approached as respondents for research. As this study confirms, they are a hard-to-reach population. This study also concerns the sensitive topic of regulatory compliance, likely further deterring responses. Thus, while the sample size is small, it offers a rare empirical insight into the sandbox from a fintech firm perspective. The sample is somewhat diverse in that respondents come from different sandbox cohorts, technology and financial sectors, and countries within the UK.

Interviews were semi-structured, conducted in person or online. Recordings were transcribed, then analyzed in NVIVO using qualitative, directed content analysis (Hsieh & Shannon, 2005). Each respondent was categorized as having experienced one of the four types of interactions: adversarial, cautious cooperation, cautious compliance, or collaborative partnership. Each respondent’s transcript was also analyzed to establish how motivated they were to comply with regulation and cooperate with the regulator before and after their licensing process. Analysis drew out both explicit statements about how motivated respondents felt and more implicit statements about their willingness to do certain activities (e.g., share information with the regulator).

The goals of the analysis were to determine (1) whether there were patterned links between the kinds of interactions firms experienced and changes in motivation, and (2) whether these changes were brought about in the ways that theory predicts (e.g., learning, trust) or for other reasons. To analyze interactions in the sandbox and whether the sandbox influenced motivation, I drew exclusively on interview data. To interpret the possible reasons why sandbox interactions may have influenced motivation, I additionally drew on questionnaire data.

5 | FINDINGS

This section begins by describing the nature of frontline regulatory interactions experienced by fintech firms in the FCA’s sandbox for fintech. Then, I analyze how interactions in the sandbox impact fintech firms. I evaluate the extent to which interactions in the sandbox impacted firms in the ways that theory anticipates (Table 2): learning, norms of regulatory behavior, perceptions of regulation and regulators, trust-building, and improved regulation. Finally, I address the extent to which sandbox interactions left participants motivated to collaborate with the regulatory agency in the future.
5.1  |  The nature of frontline regulatory interactions in the sandbox

The most common type of interaction experienced by respondents who went through the sandbox (11/15) was “collaborative partnership.” Respondents reported that their case officers “helped” them (SB6, SB7, SB15) and were “friendly” (SB10), “nice,” and “open” (SB4), creating a “relaxing atmosphere” (SB9). Many described regulator staff as going above and beyond to help them. Interactions were not just “needs-based conversation[s]” (SB10) but represented an “added-on service” (SB6). Conversely, firms were given a proactive role in interactions. Respondents described interactions as “collaborative” and “genuinely a regulatory exploration” (SB11), putting firms in a “position of dialogue” (SB15) where they were “involved in the decisions” (SB1). Four sandbox respondents, however, reported different kinds of interactions. Two sandbox respondents described “cautious cooperation” type interactions. Regulator staff were not adversarial, but they were not particularly helpful or open to discussing regulation (SB2, SB3). The other two sandbox respondents described “cautious compliance” type interactions. Respondents characterized interactions as respectful and professional, but also noted that their firm preferred to keep interactions relatively formal, distant, and transactional (SB12, SB14). In sum: sandbox interactions were typically collaborative, and only very rarely (two respondents) did interactions involve low cooperation by the regulatory staff member.

5.2  |  How did frontline interactions in the sandbox affect regulatee compliance motivation?

The case study shows that experiencing cooperative regulatory interactions in the sandbox impacted innovative firms in ways that theory argues will drive motivation. When regulator staff were cooperative, this built (1) firm capacity, by facilitating learning and reducing barriers to compliance; (2) trust; (3) the regulator’s reputation; and (4) positive regulatee norms of regulatory behavior. Further analysis elucidates differences in the impacts of interactions that are merely cooperative compared with those that are collaborative.

5.3  |  Facilitating formal and informal learning

Innovations in the sandbox are typically not yet well-defined by regulation. Time, effort, and expertise are required to establish what kinds of licenses and conditions may be required to commercialize the innovation. For most sandbox firms, a cooperative case officer was critical in helping firms to learn what formal regulatory rules existed and how they might apply. Officers acted as a “shepherd[s]” (SB7), “navigat[ors]” (SB13), and “translator[s]” (SB7). They took the time to understand the nuances of innovative products and explain how they interacted with the law. Respondents often highlighted that officers would discuss the licensing of products through conversations (SB10) rather than in formal email exchanges. Some officers met with firm staff so that firms could demonstrate a product prototype (SB15) or conduct a “walkthrough” (SB10). Such longer, personalized conversations were described as very useful (SB3) and as a “great learning experience for us and for the FCA” (SB13).

Respondents also described how cooperative case officers helped them to learn unofficial aspects of regulatory rules. They learned how, in practice, the FCA interprets rules as written, and which rules are malleable. Through conversations (SB13, SB14) with regulator staff, firms came to “understand the [regulatory] framework” and “how it is supervised” (SB9) in “reality” (SB15). Only through these conversations could firms understand regulation in meaningful detail (SB14) and truly appreciate what the FCA wanted and “wouldn’t want” (SB6)—what they “were looking for,” “what their requirements are” (SB13). In particular, several firms reported that they now better
understood the FCA’s “principles-based” approach (SB1, SB4, SB8, SB10). They learned, they said, that the FCA is focused on how well firms fulfill the spirit of regulation and that there is leeway about how that can be achieved. By the same token, firms came to understand that leeway was limited. While one can sometimes “push back at certain areas” (SB10), some issues or proposed solutions will “scare” (SB14) the FCA. Furthermore, they learned that the FCA does not, formally, give advice or endorse firm activities (SB1, SB3, SB4, SB6). Firms learned, rather, to interpret what they saw as the FCA’s use of “code” (SB4) to unofficially signal their level of agreement with a firm’s activities. For example, they came to understand that the questions FCA asked them about their compliance processes were carefully chosen to give implicit advice.

While most respondents discuss formal and informal learning, these effects were particularly pronounced among those whose interactions were collaborative and not just cooperative. Firms more engaged in dialogue and negotiation had more opportunities to demonstrate how they fit into the FCA’s approach for a given product or service. Discussions gave some respondents a legal “framework to translate my thoughts through” (SB15), allowing firms to “bat things off them [the FCA]” as a “sounding board” (SB6). In these respondents’ opinions, greater communication and information sharing on their part helped the FCA to “really understand what they were taking on” (SB7). Thus, cooperative and collaborative sandbox interactions facilitated informal and formal learning for firms and, in some cases, for the FCA.

5.3.1 | Reducing barriers to compliance

Most respondents said that having a cooperative case officer helped them to address the barriers that could have prevented them from earning a license to operate legally. In discussions about such barriers, the case officer was often characterized as “pragmatic” (SB4), “open minded” (SB11), and “flexible” (SB7, SB10, SB11). Three respondents described, for instance, officers giving them extra time or choosing to interpret rules in ways that made it easier for them to complete their sandbox test successfully. Had their officer more strictly applied the rules, these firms would have failed out of the sandbox (SB10, SB4, SB8). Case officers also offered bespoke support and resources to overcome regulatory barriers. Critically, case officers connected firm staff to FCA experts in legal and policy areas. Indeed, the large majority of sandbox respondents said that their case officer acted as a “liaison” (SB11), “go-between” (SB1), and an “access point” (SB8) for the rest of the organization. This direct contact helped regulatees to clarify their legal position, and sometimes to challenge that position through “access to decision makers” (SB10). This benefit extended even post-sandbox, because participating firms now had a network of professional contacts within the regulator whom they could contact relatively informally.

Cooperative case officers also helped many sandbox participants to address the barriers to legal market entry typically faced by small innovative firms. For example, several respondents describe a “chicken and egg” (SB11, SB8, SB4) dilemma whereby they could not be licensed until they had an institutional partner (e.g., a bank or an insurer), and partners were reluctant to work with an unlicensed firm selling an untested innovation. Respondents gave examples where their case officer reassured potential partner organizations that the FCA considered their innovation acceptable, and therefore that this should be no barrier to the partnership (SB4, SB5, SB9, SB10, SB13). In short, collaborative and cooperative frontline interactions removed barriers to operating in a manner compliant with regulation.

5.3.2 | Normalizing compliance and cooperation

Through cooperative and collaborative interactions, some respondents reported that their time in the sandbox impacted day-to-day norms of regulatory behavior within their firm. For some
respondents, working with their case officer helped them to “translate” (SB15) and “formalize . . . on paper” (SB2) how their products would operate in compliant ways. For others, frontline interactions helped them to “take a more proportionate” (SB10) and “feasible” (SB15) approach to compliance and to prove to their partners and compliance staff that this was legal and appropriate. Several firms said that these interactions affected their norms of behavior not just on a technical level but also on a moral level, with one respondent saying that the sandbox helped firm staff to internalize regulatory principles “in our bone marrow” (SB9).

More striking, however, is that cooperative or collaborative interactions affected norms of regulatory behavior in terms of how staff interacted with the FCA. Regulatee staff, a number of respondents stated, became “a lot more confident in dealing with the regulator [now that they had] dealt with the regulator” (SB12). Most sandbox respondents said that, far more than in their previous regulatory encounters, sandbox staff were “open-minded” and “flexible” (SB11), “willing to listen and try . . . foster[ing] an environment of experimentation critical to unleashing innovative businesses” (SB7). Staff were helpful and kind, showing “empathy” (SB1) and applying more “handholding” (SB2). These interactions changed firm expectations about what regulatory interactions could and should be like. Some respondents said they had come from different regulatory cultures (e.g., North America), and this experience showed them that regulation could be more cooperative than adversarial. Others, from the UK, said the sandbox offered a more constructive model than the one they had encountered in previous interactions with the FCA (e.g., enforcement actions). For many respondents, then, collaborative or cooperative interactions positively shifted what was considered normal and desirable behavior when interacting with regulation and regulators.

5.3.3 | Building trust

Respondents who experienced cooperative or collaborative interactions commonly reported that the experience built trust between their firm and the regulator. Several respondents explicitly stated that they felt trusted by their case officer in ways that they had not previously experienced. Firms tended to favorably compare their sandbox case officer’s trust to the skepticism they had experienced from people whom they had cold called in the advice or enforcement unit. Enforcement staff were described as “cops” who take a “stance” that all financial services firms are untrustworthy (SB9). Such a stance negatively “influences the relationship” with firms (SB1). By contrast, firms typically reciprocated the trust they received from their case officer. For example, one respondent remarked that their officer’s flexibility and kindness “gave that confidence you could be open with them and not feel that they were going to mark you down for saying the wrong thing” (SB7). Another said that without his consistent and trustworthy case officer, “I wouldn’t have spoken to the FCA half as many times as I have done over the last six months” (SB6).

In some cases, building interpersonal trust with the case officer translated to greater trust in the agency as a whole (for example, one respondent said that these interactions restored his “faith” in the FCA [SB7]). Several respondents said that, due to the sandbox, they built a relationship with the FCA (SB4, SB7, SB10), with one even saying they became “almost old friends with the FCA” (SB11). For others, the sandbox only emphasized that other areas of the agency could not be trusted, an attitude summarized by one respondent, who said, “There’s the innovation team and everyone else, as far as I’m concerned” (SB1).

I interpret these remarks, and those earlier about receiving practical help from the case officer, as reflecting that trust is deepened when interactions are collaborative rather than merely cooperative. The sandbox puts innovative firms in a vulnerable position. The regulator scrutinizes the fine details of products whose legality is questionable. Where regulatees collaborated, they chose to put themselves in a vulnerable position. Reading how pleased they were with how
well their case officer treated them in response, my interpretation is that collaboration—in which vulnerability is rewarded—may have been essential to building trust.

5.3.4 | Improving regulator reputation

Pre-sandbox, many respondents held perceptions of the FCA gleaned not from their own contact with the agency but from “stereotypical” views expressed by peers (SB6) or the media (SB3, SB13, SB14). Most respondents saw the FCA as a basically good financial regulator. Yet, the FCA was still a regulator, and regulators—among fintech firms—have a somewhat negative reputation. Financial regulators, the FCA included, were described in general as “faceless organization[s]” (SB6), “people in a castle,” “intimidating” (SB8), “bureaucratic and cold” (SB15), “rigid” (SB11), and “difficult to deal with, difficult to please” (SB13).

Cooperative and collaborative frontline interactions seem to have dispelled some of these stereotypes. Firms were generally surprised by how helpful, open, and flexible the FCA proved to be. Many firms unexpectedly found the FCA to be an advocate. One respondent said that when he and his partner had been fund managers in the past, “It didn’t really occur to us that the FCA could be a driver for innovation. We never really thought that we should be talking to them. In our old business, you talk to the FCA when you have a problem, so you want to avoid it as much as you can” (SB11). Another said that his impressions of the FCA changed “100 percent [in part due to] the fact that they have got smart people, some newer blood. There were a lot of young kids [who] knew exactly what was going on, they were very switched on” (SB7). Several respondents explicitly attributed this change to interactions with a cooperative case officer. One respondent said, “The sandbox put a face to [the FCA], which is my [case officer]. That point of contact [has disrupted] the stereotypical view of any regulator, which is, ‘Oh you know, regulators, who wants to deal with them . . . ‘” (SB6).

To further examine the impact of interactions on regulator reputation, I drew on the questionnaire data. I systematically examined differences between perceptions of the FCA held by sandbox and non-sandbox respondents. I looked, first, to the results of a questionnaire sent to 36 fintech firms, of whom 33 were non-sandbox firms (for methodological details, see Appendix S1). The most striking difference is that, on average, questionnaire respondents were more likely to perceive the regulator as formal, rules-oriented, inflexible, and bureaucratic. These differences are reflected in the interview study. The six non-sandbox interview respondents were more likely to continue to see the FCA as “another thing that hinders [start-ups] . . . [and] could kill them” (NSB4), describing it as “bureaucratic” (NSB3; 6), saying that it was “difficult to make an appointment” (NSB5), and saying that interacting with them was like “hanging by paper weight” (i.e., being buried in red tape) (NSB1). As reflected in the comments above, it was these kinds of perceptions that tended to change during licensing for the sandbox participants. This comparison is obviously too small-scale to be definitive, but the differences support the claim that experiencing collaborative or cooperative interactions in the sandbox improves the FCA’s reputation with firms.

5.3.5 | Legitimizing regulation

When asked directly whether their attitudes toward regulation had changed, the majority of respondents said no. Some did say that closer involvement in the regulatory process had shown them “how the sausage is made,” which in some ways had made them “more cynical” (SB3) about regulation (SB2, SB10). Others said that they had previously thought that regulation was needlessly burdensome and prescriptive (SB12, SB15) but that the sandbox had shown them that this is not the case. A few firms implied that they had come to see regulation, and the regulatory process, as more legitimate because they now understood why the FCA is sometimes
slow and bureaucratic. One respondent, for instance, said that he now recognizes that the FCA “cannot act overnight or in a heartbeat because [regulation] has wide-reaching implications” (SB8). Thus, although it remains somewhat unclear, it seems possible that frontline interactions affected firm perceptions of regulation.

5.3.6 | Improving regulation

Finally, we can address the question of whether regulation improved through collaborative frontline interaction. In regard to whether regulation changed at all, only a minority of sandbox firms say they had engaged in meaningful negotiation on regulatory rules. Respondents said that FCA “don’t tend to accept compromises” on actual rules (SB10), that a fintech firm’s “arguments don’t matter” (SB2), and that it is futile for firms to “try to change the regulation” (SB9). Yet, there was some benefit to collaborative dialogue when it came to refining how, precisely, rules would be applied to innovative technologies. One firm, for instance, said that they had “[the FCA] that the legal framework, regulatory framework, does not need to change, but best practices can change, and [it] is safe to change them, and they accepted that argument,” noting further that “you can now do [that practice] with any major UK institution” (SB9). Respondents relayed many similar examples in which collaboration at the frontline led to a positive “shared understanding” (SB13) and “compromise” (SB10) on specific license conditions.

An unexpected finding was that collaborative interactions facilitated negotiations over the nature of the innovative product being licensed. During testing, the majority of firms took insights from their case officer and used them to adjust the product they were offering. As one respondent reported, “We convinced the insurer [business partner] to change [the product] to fit what the regs looked like [to reduce the risk of] gaming the product” (SB4). Upon learning how strict some regulatory requirements were, some firms simplified products so that they would not trigger regulation, avoiding burdensome requirements that the firms could not yet handle. One respondent recalled having a realization along these lines: “If we tweak our business model slightly, then we’re not going to fall under that [and therefore] avoid being hit with a capital adequacy of x” (SB3).

Most respondents, then, said that the sandbox led to a better set of regulatory requirements from the firm’s perspective. Either regulations came to be interpreted and applied in ways that were more appropriate to the product, or the firm changed the product after they learned from the regulator what rules would otherwise apply. This, of course, does not necessarily mean that regulation “improved” in an objective, public interest sense. What this finding does imply, however, is that interacting with the regulator in the sandbox contributed to firms facing regulatory requirements with which they felt they could realistically comply.

Thus, analysis of the case study reveals that cooperative and collaborative frontline interactions in the FCA’s sandbox had many of the impacts anticipated by theory: learning, reducing barriers to compliance, shifting firm norms of behavior around compliance, building trust, and improving perceptions of regulators and regulation. The next section will discuss whether these impacts affected firm motivation to collaborate with the FCA post-sandbox. I will also discuss the minority of sandbox participants who did not experience cooperative and collaborative interactions, and how their interactions affected their motivation.

5.4 | Changes in regulatee compliance motivation post-sandbox

5.4.1 | Motivation to cooperate with regulators

Consistent with expectations, collaborative and cooperative regulatory interactions drove firm motivation to cooperate with the regulator in the future. The two respondents who experienced
cautious compliance-type interactions—where their case officer cooperated but they did little to collaborate—were either as or more motivated to cooperate. All but one firm among those that experienced collaborative interactions demonstrated higher motivation to cooperate once the sandbox was complete.

Among respondents who experienced cooperative or collaborative partnership type interactions, several explicitly stated that they were more motivated to collaborate with the regulator on, for example, regulatory policy than they were before their licensing process. Respondents said that they wanted to “get more involved in conversations” (SB6) and “debates” (SB10). Respondents wanted regulators to hear the views of the fintech sector, and especially start-ups, rather than the conversation being dominated by large incumbents. One respondent said the firm hoped to “bring that knowledge of [finance] and tech together . . . and interpret [proposed regulation] to our world” (SB10). Another said they were “helping [the FCA] to understand just what to do next, not keeping this constant and static, but understanding if there is something we can improve, are they tackling the right issues? Is the model right? How do start-ups feel?” (SB11).

More implicitly, respondents generally expressed a greater willingness to engage in cooperative behaviors when interacting with the regulator post-sandbox. Respondents said they were now willing to communicate regularly and voluntarily (SB6, SB9, SB13, SB15). Some respondents cited an increased willingness to share sensitive information with the regulator in general (e.g., “We’re very open to sharing things with them. . . . The more knowledge sharing, the better” [SB13]), whether in regard to regulatory non-compliance in their technology sector or even in regard to their own possible non-compliance. One respondent said that he “would be much more open to going to them ahead of time rather than sort of waiting for it to become an issue, and I think that is what a lot of people do” (SB4). Finally, several respondents gave examples where they went out of their way to assist the regulator by, for instance, “writing internal papers” (SB13), inviting FCA staff to industry events (SB7), “working with them” (SB11) on specific projects, and even serving as guest speakers discussing the FCA and sandbox at international fintech events (SB1, SB7).

The two firms in the cautious cooperation category demonstrated either the same or reduced motivation to cooperate with the regulator. They explicitly described their current relationships with the FCA as “cold, transactional” (SB3), saying that they only contact the FCA “if there’s a bill to pay” (SB2). In their interviews, both respondents implied that the lack of a helpful frontline regulatory staff member undermined their motivation to cooperate in the future. Both respondents said that during their sandbox, FCA staff lacked the resources to help any one individual “start-up” because they “were overwhelmed with the number of start-ups and fintech companies they were dealing with” (SB3). Both of these firms had case officers who changed several times during testing. Contact was “peaky” (SB3); they would hear “nothing” (SB3) from their officer for a time, and then would “[have] to repeat again . . . all of the paperwork and where we stood” (SB2). For both of these respondents, at least one of their multiple case officers was “junior” (SB2, SB3), inadequately skilled, did not know how the “system” (SB2) worked, and lacked autonomy, “clout,” and “authority” (SB3), making them a poor firm advocate. My interpretation is that, in addition to the factors listed above, their time with each case officer was too short for a personal, trusting connection to develop. On the organizational level, because their case officer kept changing (with substitutes being more junior), this signaled that their firms were “obviously not a priority for [the FCA]” (SB2). They interpreted this to mean that the FCA did not respect them or take them seriously, fomenting lingering mistrust and negative perceptions of the regulator. These two respondents also reported that they had little opportunity to discuss and negotiate regulation with their case officer. One respondent said that his arguments did not “matter” because his case officer was not open to them, “effectively pushing us in [a] direction” that the firm thought was a legal misinterpretation (SB2).
Similar patterns are apparent among the non-sandbox respondents, all of whom were either in the cautious compliance or cautious collaboration categories. As they were often dealing with a different staff member for each interaction, some felt “disenfranchised” and unable to “have a human and honest conversation” (NSB3), reporting that they felt “scared that if you say something to a regulator then it’s written down in a record, and there it is used against you in the future” (NSB3), or that “they might take [information we share with them], they’ll come to your office and investigate something” (NSB1). There is some indication that non-sandbox respondents had not experienced the same quality of informal learning, with one respondent saying that he did not voluntarily share information with the FCA simply because “I don’t know what they would be looking for” (NSB1). While these comparisons are too small-scale to be definitive, they do support theoretical expectations about the relationship between cooperative interactions and motivation to cooperate with the regulator in the future.

5.4.2 | Motivation to comply with regulation

Finally, and contrary to expectations, respondents in this study do not appear to have become more or less motivated to comply with regulation based on the kind of frontline interactions they experienced at the licensing stage. When asked directly, respondents tended to say that their attitude and approach to complying with regulation had not changed. The most common answer was that they were always, and remain, motivated to comply: “I don’t think [my already high motivation has] changed dramatically” (SB4); “I’ve always operated compliantly” (SB8); “We will always find a way to make sure we comply” (SB10); “I’ve always had the motto of taking it more seriously than the regulator” (SB14). An analysis of the more implicit compliance motivation that respondents demonstrated before and after their licensing process supports this conclusion, as there is no patterned difference arising from the kinds of interactions firms experienced. This finding is supported by the questionnaire data. There, non-sandbox participating firms also generally demonstrated a similarly high degree of willingness to comply with regulation.

The implications of these findings for responsive regulation theory, and innovation governance practice, will now be discussed.

6 | DISCUSSION

In this article, I examine the role of frontline regulatory interactions in motivating innovative firms to collaborate with regulatory agencies. This study is the first to evaluate how well responsive regulation theory describes and explains outcomes in a previously unexamined context: the supervision of innovative private firms. This study offers two key theoretical contributions to the literature on responsive regulation.

First, this study provides empirical evidence suggesting that responsive regulation does indeed describe and explain outcomes in the supervision of innovative firms (J. Braithwaite, 2002; Nielsen & Parker, 2009). The case study finds that firms that experience cooperative or collaborative interactions are more motivated to cooperate with the regulator in the future than those that experience non-cooperative interactions. Responsive regulation theory predicts that cooperative and collaborative interactions motivate firms to collaborate in the future for several reasons, including learning, trust building, and shifting norms of regulatory behavior. More fundamentally, this study’s findings reaffirm that cooperative or collaborative frontline interactions foster future collaboration by increasing the regulatee’s normative motivations to cooperate (Gunningham et al., 2005; Nielsen & Parker, 2012). Firms in the case study became more motivated to cooperate when they came to see cooperation with regulators as
both morally good and as socially expected “normal” behavior (March & Olsen, 1989). Through explicit regulatory conversations (Black, 2002; Heimer & Gazley, 2012) and implicitly, by modeling preferred behavior through the interaction (Etienne, 2013), frontline interactions shaped firm attitudes about how one should interact with a regulator.

This case study provides further evidence, more specifically, that regulators should behave in cooperative ways toward regulatees in frontline interactions (J. Braithwaite, 2002). Cooperative regulatory staff foster collaboration for technical reasons. Educating and assisting regulatees helps to overcome practical barriers to compliance and cooperation (J. Braithwaite, 2002, p. 20). Cooperative regulatory staff also foster collaboration for relational reasons. Such behavior shapes regulatee attitudes toward, and perceptions of, regulators in ways that drive more constructive future encounters (J. Braithwaite, 2002, pp. 33–35). While largely conforming with the expectations of responsive regulation theory, this case study also identifies some dynamics that may be unique to the supervision of innovative private firms.

The second contribution of this case study is that it builds on existing theory by illustrating how frontline interactions may motivate firm cooperation in ways other than those described by responsive regulation theory. In the case study, young, innovative firms faced acute technical barriers to compliance with the law, collaboration with the regulator, and even market participation. Firms often had few resources, inexperienced senior managers, unproven products, and no industry partnerships. Firms were thus acutely reliant on cooperative regulatory staff to assist them in addressing these barriers. Regulatory staff assisted firms in ways not reported in earlier responsive regulation research, such as by acting as advocates for firms within the FCA and with incumbent institutions. The newness of these firms, however, also provided greater malleability. On a technical level, products and how they were regulated were still malleable. Cooperative and collaborative interactions were vital for the regulator and firms to agree on how products could be adjusted to be safely and legally commercialized. On a relational level, interactions shaped how firm senior managers perceived regulation, the regulator, and what kind of relationship with the regulator was possible and desirable. Thus, this case study implies that frontline interactions may play a more foundational role in fostering future collaboration with innovative firms than they do with firms in mature industries. Frontline interactions have the potential to shape innovations and innovative firms at a pre-commercial, pre-enforcement stage in ways that create the conditions for cooperative regulator–innovator relationships (J. Braithwaite, 2002, pp. 33–35).

In regard to innovation governance and law scholarship, the case study findings reflect Mandel’s (2013) argument that dialogue, negotiation, and “soft” law early in the innovation process is a key strategy of effective governance. As Mandel (2013) writes: “The emergent stage in particular, with a high degree of uncertainty and a low degree of attachment to any status quo, can present a unique opportunity [to] produce a collaborative governance process rather than a resource-draining adversarial battle” (p. 45).

These findings have practical implications for sandbox design and innovation governance more broadly. Since the FCA invented the regulatory sandbox, more than 50 programs called sandboxes have been established around the world. Their designs vary greatly. Some “sandboxes” are essentially a dedicated advice phoneline. Some offer blanket regulatory relief for innovative firms meeting certain pre-determined conditions (Zetzsche et al., 2017). These sandboxes may be well designed to address technical barriers to compliance and cooperation, but they exclude the parts of the FCA’s sandbox design that encourage frontline collaboration. Responsive regulation theory implies, and this study supports, that it is the relational character of the FCA’s sandbox that may be most critical to motivating future regulatee collaboration. Further, because the motivational benefits arise from this relational character, sandboxes and similar interventions need to be well-resourced with enough skilled staff for benefits to arise and endure (J. Braithwaite, 2013, p. 137).
While this study finds that cooperative or collaborative frontline interactions drive motivation to cooperate with the regulator, they were not found to have a discernible effect on motivation to comply with regulation. This finding could have arisen from limitations in the study design, discussed below. Alternatively, this result could be said to indicate that cooperative frontline interactions foster harmful regulatory capture. Firms are left motivated to continue their cozy relationship with the FCA, but not any more motivated to comply. One could further critique “dialogue” and “negotiation” in sandbox interactions as indicative of firms capturing the process of defining compliance standards for new products (Edelman & Talesh, 2011).

The case study certainly finds that, through cooperative interactions, firms were able to influence the regulator (for example, on the regulator’s interpretation of compliance standards). Yet, the results do not suggest that this influence led to harmful capture (Kwak, 2013). Most firms reported high compliance motivation, and most reported improvements in their level of trust in, and positive perceptions of, regulators in ways that prior theory states are associated with higher compliance. Firms did not express a belief that it is possible or desirable to change the FCA’s position on substantive rules. Respondents, of course, may have misrepresented their true intentions, and future research should seek to gather further data to question these accounts. This study, additionally, only examines initial interactions in regard to the regulatory tasks of education, outreach, and licensing; different dynamics may emerge in regard to subsequent inspection and enforcement tasks. This is a limitation of this study that could be addressed in future research.

Future research should consider the capture risk of collaborative instruments like the sandbox alongside the accountability structures surrounding those instruments. As Allen (2019, p. 632) argues, “the awkward reality is that many of the potential benefits” of collaboration “can only be realized if such a close relationship exists.” Close and collaborative interactions may well be a valuable part of innovation supervision. Yet, avoiding harmful capture means that collaboration must occur within strong institutional structures and norms of regulator transparency and accountability. As Ford (2017) argues, firms need to be included in regulatory governance of financial innovations, but accompanied by “a new kind of state action that locates deliberation, polycentricity, and anti-domination sentiment at its core” (p. 128).

6.1 Study limitations and future research

The FCA’s regulatory sandbox for fintech represents a critical case study for an initial evaluation of the validity of responsive regulation theory in the context of innovation. While this study’s results provide support to responsive regulation theory, the study does not—nor was it intended to—definitively prove its validity. Data were only collected from respondents at one point in time, and changes to compliance motivation may well take many years to manifest. Due to the nature of the study and the respondents, interviews rarely addressed the question of how interactions in the sandbox influenced behavior in future interactions in regard to very different regulatory tasks, notably inspections and enforcement. The sample of respondents is small and may not be perfectly representative of the population. This study’s respondents also likely have higher compliance motivation than the general fintech firm population because they were willing to respond to such a research request (Nielsen & Parker, 2009, p. 396). Further, without interviewing a broader range of stakeholders, this study can only make conclusions from the firm perspective. Finally, UK fintech represents a specific context, and one cannot necessarily generalize its results to represent all “innovation supervision.” To further build on and validate responsive regulation theory in the innovation context, future research is required.

Future studies could evaluate responsive regulation theory as an explanation for the outcomes of innovation supervision efforts in various geographic, technological, and regulatory contexts. There would be particular value in comparative studies describing differences in the nature of frontline interactions in various contexts and examining impacts on innovative firm
compliance motivation. This study, further, reaffirms the empirical value of examining regulatee, and not just regulator, perspectives on interactions (Gray & Silbey, 2014; Mascini & van Wijk, 2009). Future research could continue to build on this by capturing the perspectives of regulated organizations and individuals on regulator–innovator interactions in diverse contexts. Future studies could also seek to interrogate firm accounts through the use of ethnography or other methods to examine actual compliance behavior over time (e.g., Gunningham et al., 2003).

Analytically, these findings support Black’s (2002) argument that frontline regulatory conversations are not just an instrument to enforce regulation, but are a kind of regulatory governance in themselves. In an innovation context, regulatory interactions are part of the day-to-day negotiations over which new technologies are permissible and valuable, what rules exist, and what constitutes compliance. This political dimension of regulatory interactions raises important normative questions about democratic legitimacy and equity, such as whether instruments like the sandbox privilege businesses over other potential stakeholder voices in innovation policy. A productive avenue for future scholarship could be to consider how normative regulatory theoretical prescriptions for avoiding capture and broadening stakeholder input (e.g., Ayres & Braithwaite, 1995, on tripartism) might be applied to innovation supervision.

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ENDNOTES

1 Innovation here refers to the process by which inventions are commercialized and diffused. Inventions are “the first occurrence(s) of an idea for a new product or practice” (Fagerberg, 2009, p. 4). Regulation is “the intentional use of authority to affect behavior of a different party according to set standards, involving instruments of information-gathering and behavior modification” (Black, 2001).

2 There are prominent alterative perspectives on this question, notably the “tit for tat” tradition. This study does not seek to compare the validity of restorative justice versus other perspectives. Rather, restorative justice is simply more suitable for examining interactions in this particular case study.

3 Reputation here refers to “a set of symbolic beliefs about the unique or separable capacities, roles, and obligations of an organization where those beliefs are embedded in audience networks . . . ” (Carpenter, 2010, p. 45).

4 There are exceptions. A few well-established companies have taken part (e.g., Barclays), and a few firms have gone through multiple “cohorts.”

5 The frame was developed through a systematic search of LinkedIn, cross-referenced with Companies House data. A detailed explanation is provided in Fahy (2021).

6 As some respondents both answered the questionnaire and were interviewed, I gathered data from a total of 52 unique firms.

7 The questionnaire included items measuring perceived regulator formalism drawing on conceptualizations from May and Winter (1999), May and Wood (2003), and Nielsen and Parker (2009). Questionnaire respondents tended to agree that the FCA “applies rules rigidly” (M = 3.85, median = 4, SD = 0.651), “is very bureaucratic” (M = 3.440, median = 3, SD = 0.821), and “is more likely to send a letter or email than talk things over” (M = 3.215, median = 3, SD = 1.03).

8 The questionnaire included items taken from Braithwaite (2003). These were reverse coded as measures of willingness to follow the law, and all showed that, on average, respondents were motivated to follow the law: “We don’t care if we’re doing the right thing by the FCA” (M = 4.66, median = 5, SD = 0.483); “We don’t really know what the FCA expects of us, and we’re not about to ask” (M = 4.31, median = 4, SD = 0.644). See Fahy (2021) for methodological details on the questionnaire.

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**AUTHOR BIOGRAPHY**

Lauren A. Fahy is a postdoctoral researcher at the Utrecht School of Governance. Her research concerns regulation and regulatory agencies, reputation, and successful organizations.

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