# Appendix 1. Detailed Methodology

## I. QUESTIONNAIRE

### 1. Questionnaire design

Initial exploratory interviews were first conducted with UK industry and regulatory experts. Informed by these interviews, and literature, the questionnaire was designed. The questionnaire and schedule for the interviews addressed the same topics: reputational beliefs about the FCA, motivations to apply (or not) to the sandbox program, and contextual, control questions.

 Questions on reputational beliefs about the regulator were based on Lee and van Ryzin’s [[1]](#footnote-1) Bureaucratic Reputation Scale survey instrument. The Scale conceptualizes reputation as made up of five dimensions: performative, moral, technical, procedural, and ‘general esteem’. More specific questions on beliefs of reputation relevant to regulatory authorities were wherever possible taken directly or adapted from previous studies on beliefs about regulatory agencies (see Table 1).

TABLE 1 - Variable operationalization (Question wording)

| Variable | Question wording | Source |
| --- | --- | --- |
| Motivation to apply to the regulatory sandbox (level) | Assuming your company was eligible, and had the capacity to apply and participate, how likely would it be to apply for the sandbox in future? (Almost certain would not – Almost certainly would) | NA |
| Motivation to apply to the regulatory sandbox (type) | Why does your company want to apply for the sandbox? Please select the most relevant reasons (up to three) from the list:To make the authorization process cheaper, easier, and/or quicker (EXPEDIENCE).To improve our public image with investors, customers etc (CORPORATE REPUTATION).To improve our relationship with the FCA (INFLUENCE).To influence fintech regulation so it doesn’t disadvantage us (INFLUENCE).To minimize risks to our customers and investors (COMPLY WITH LAW).To learn more about financial laws and how they apply to us (COMPLY WITH LAW).To make sure we’re compliant with the law (COMPLY WITH LAW).Other [specify] | Adapted from Nielsen & Parker.[[2]](#footnote-2) |
| *Reputational beliefs* |
| Performative – Agency is a tough regulatory enforcer | If my company did not follow financial regulations, the FCA would probably catch us. | Adapted from Peace, Galletta, and Thong.[[3]](#footnote-3) |
| Performative - Agency can help firms achieve their goals | The FCA is capable of assisting companies like mine to achieve our goals. | Questions original, but adapted from dimensions of perception that regulators are ‘facilitative’ derived from May and Wood.[[4]](#footnote-4) |
| Moral – Agency generally aims to help firms achieve their goals | The FCA aims to help companies like mine achieve our goals. | As above. |
| Procedural – Agency is procedurally correct | The FCA treats people fairly.The FCA is politically neutral. | Lee & van Ryzin.[[5]](#footnote-5) |
| Procedural – Agency is procedurally flexible | The FCA applies rules rigidly. | Questions original, but adapted from dimensions of perception that regulators are ‘formal’ from May and Wood.[[6]](#footnote-6)  |
| Technical – Agency is an expert on a given sector | The FCA bases its decisions on evidence.The FCA has the skill to deal with complex situations. | Lee & van Ryzin.[[7]](#footnote-7) |

*Notes:* With the exception about the motivation (type), all questions were measured using a 5-Point Likert scale. All reputation belief questions ranged from Strongly Disagree – Strongly Agree with a ‘don’t know’ option.

Motivation to apply for the sandbox was measured in regard to: 1) the extent to which firm were motivated to apply, and 2) the nature of that motivation. In interviews, additional, open questions and probes were used to identify whether, and through what mechanisms, these motivations were linked to beliefs about the regulator. Questions operationalizing kinds of motivation were adapted from Nielsen and Parker’s 2012 study.

Controls and dependencies were identified through literature review. Due to the design of this study, some categories of variables do not need to be included. All firm responses are collected at roughly the same point in time, all firms are in the UK, and all are in the fintech sector. Therefore, variables related to formal and informal institutions at the national or sectoral level are controlled, as are the effects (broadly) of events or trends. Prior research has found myriad factors which affect willingness to (beyond) comply with the law and authorities. Many of these, however, are captured by reputational beliefs e.g. many studies are about perceptions of procedural correctness. Further, many studies are strictly about individual level factors e.g. race. These are not considered relevant here, as the unit of analysis is the firm. Relevant controls are presented in Table 2.

The questionnaire was piloted by a dozen academics in multiple rounds. It was then sent to several volunteer fintech company employees in the Netherlands who were then interviewed for their feedback.

TABLE 2 - Controls for motivation to apply to the sandbox

| Control | Explanation |
| --- | --- |
| Head office location (UK/non-UK)Head office location (EU/non-EU) | While only firms in the UK will be included in this study, there may be differences arising from companies which are not originally from the UK or from within the EU e.g. influence of different national/regional cultures of compliance. |
| Company city (Edinburgh or London/other) | Being geographically further from cities where regulators are based reduces perceived likelihood of detection, influencing motivations to comply and cooperate with regulators.[[8]](#footnote-8)  |
| Firm size and age | Research suggests both affect motivation to comply and cooperate with regulators, though the direction of the relationship varies between studies.[[9]](#footnote-9)  |
| Firm autonomy | Not all firms have equal autonomy to make decisions, for instance due to their ownership structure.[[10]](#footnote-10) This might lead to differences in motivation to cooperate with regulators. For example, in questions about firm willingness to – say – participate in the sandbox it may be that it is not that the firm is unmotivated, but that such a move would not be allowed by their parent company. |
| Firm financial sub-sectorFirm technological sub-sector | While the firms in this study would experience broadly similar regimes, there will be differences based on firm financial sub-sector (e.g. insurance versus advice) and firm technological sub-sector. That is, the regime for insuretech is different to biometrics and therefore some differences in motivation to comply and cooperate are probably thereby explained.[[11]](#footnote-11) |
| (Subjectively reported) good knowledge of regulation | Knowledge of regulation has been correlated with motivation to comply and cooperate with regulators.[[12]](#footnote-12) There is evidence from experiments that having more information about a policy increases motivation to voluntarily cooperate. [[13]](#footnote-13) |
| Hearing about or experiencing inspection, audit, or sanctions | Whether firms have heard about or experienced inspections, audits, or sanctions recently effects their motivation.[[14]](#footnote-14) |
| Network participation | Greater ‘network participation’ (i.e. talking more to others about compliance) generally increases knowledge of new laws. The attitudes of those with whom you are in contact affects compliance attitudes e.g. guilt. Where you perceive others to have pro-compliance attitudes this increases the likelihood that you too will report such attitudes.[[15]](#footnote-15) Denser social connections generally facilitate information flows and enhance social control unless non-compliance is embedded in one’s network.[[16]](#footnote-16)  |
| Intrinsic motivation | Some firms (and some firms to some extent) are intrinsically motivated i.e. doing good out of a sense of duty. Intrinsic motivation is positively associated with having a greater level of motivation.[[17]](#footnote-17) We would expect intrinsically motivated firms to have higher beyond compliance motivation, and therefore that some portion of beyond compliance motivation to be explained by intrinsic motivation (independent of perceptions of the regulator). |
| Belief that sanctions are reasonable | The belief that sanctions in a legal or regulatory regime are unreasonable has been widely found to reduce motivation.[[18]](#footnote-18) |
| Belief that others following the law most of the time | A belief that others in a regime are breaking the law or ‘getting away’ with bad behavior reduces motivation.[[19]](#footnote-19) |

### 2. Administration

Firms for the population frame were found using a key word search on LinkedIn company pages.[[20]](#footnote-20) Firms were included if they: described themselves as a fintech firm or as working extensively with a technology the FCA has included in its description of fintech; are registered with Companies House (the UK’s business registry); are active i.e. not dormant or dissolved; are engaged in activities which would feasibly be subject to financial conduct regulation e.g. excluding software companies; and have a public email address.

The questionnaire was administered using the Total Design Method. [[21]](#footnote-21)[[22]](#footnote-22) Despite these efforts, a low response rate (29) justified additional snowball sampling. At that point, I had begun the interview portion of the study. I would ask respondents from interviews to recommend other contacts, leading to the recruitment of eight more respondents (37). Two were from the same firm, thus the final number of firms was 36.

### 3. Data cleaning and analysis

There was some missing data on reputational questions. Three responses which were completely missing reputational data were excluded. Where respondents were missing one or two questions in the Bureaucratic Reputation Scale, multiple forms of imputation were tested. Analysis found no significant difference in means. Seven respondents did not answer the question about willingness to apply. These were excluded from analysis about potential effects of reputation on motivation (as it was deemed that no reasonable imputation could be conducted). An additional data cleaning step was to combine two responses from the same company, using an additive aggregation method.

I compared the makeup of the sample to the characteristics of the population frame. Not all details known about firms in the sample are publicly available and cannot be compared. Some characteristics are comparable between population and sample: firm age (*M =*7.4/7.1 years), ownership model (majority private limited companies), and location (majority English). The proportion of firms with fewer than 50 employees in the sample mirrors the proportion in the population. However, the sample slightly overrepresents very small firms (under 11 employees) and includes no large firms and few older firms (see Table 3). After producing descriptive statistics of all variables, I compared differences in willingness to apply among different groups in the sample (Table 4).

The sample size of the questionnaire, however, is too small to draw robust inferences. It does not provide adequate power for models with several controls. Survey results were, therefore, only used descriptively in reporting findings.

TABLE 3 – Representativeness of sample

|  |  |  |
| --- | --- | --- |
| Firm staff0-5050+NA | Sample71%11%17% | Population72%28%- |
| Firm countryEnglandScotlandWalesNorthern IrelandIsle of ManNA | 71%6%0%0%0%23% | 96.9%1.5%1.2%0.2%0.2%- |
| Located in city with FCA office  (London or Edinburgh?)yesnoNA | 66%11%23% | 73.2%26.8%- |
| Ownership modelprivatelimited partnershipotherNA | 77%6%0%22% | 92%3%2%3% |

TABLE 4 – Differences in motivation to apply by sample characteristics

|  | N | % | Difference in DV mean by group |
| --- | --- | --- | --- |
| Current or former sandbox participant |  |  |  |
| yes  | 6 | 17% | Welch Two Sample t-test  |
| noNA | 227 | 88%20% | p = .0012 |
| Firm turnoverless than one millionone million or moreNA | 2087 | 57%23%20% | Welch Two Sample t-test p=.08622 |
| Firm staff0-56-5050+NA | 121346 | 34%37%11%17% | One-way ANOVAp=.836 |
| Firm countryEnglandScotlandWalesNorthern IrelandNA | 252008 | 71%6%0%0%23% | Welch Two Sample t-test p= .8694 |
| Located in city with FCA office yesnoNA | 2348 | 66%11%23% | Welch Two Sample t-test p= .47 |
| Ownership modelprivatelimited partnershippublic but unlistedpublicly listedotherNA | 2720006 | 77%6%0%0%0%1% | Welch Two Sample t-test p= < 0.0005 |
| Financial sectorbanking or paymentsinvestmentlendingotherNA | 910367 | 26%29%9%17%20% | One-way ANOVAp=.555 |
| Technological sectoronline platformsotherNA | 2096 | 57%26%17% | Welch Two Sample t-test p= .7196 |
| Member of more than one professional networkyesnoNA | 12320 | 34%9%57% | Welch Two Sample t-test p= .044 |
| Frequency of network participation 1-4 times a year5-9 times a year10 or more times a yearNA | 55510 | 14%14%14%29% | One-way ANOVAp=.562 |
| Frequency of political participationneverinfrequentlythree or more times a yearNA | 81647 | 23%46%11%20% | One-way ANOVAp=.782 |
| N | 35 |  |  |

## II. INTERVIEWS

### 1. Schedule

The interview schedule was developed to, as much as possible, replicate the questions from the questionnaire, while allowing respondents to provide more narrative explanation as to what motivated them to apply (or not) to the sandbox. Interviews were semi-structured. The same questions were asked, and similar probes used. Questions, however, were mostly open and prompts were improvised at times with the aim to get greater detail. Transcripts for both versions of the interview schedule are provided below.

### 2. Administration

Interview respondents were sought via the survey and through snowball sampling. Twenty-one senior managers agreed to be interviewed. The companies who agreed were typically seven years old or younger. The group likely overrepresents sandbox participants. Snowball sampling probably played a role here (where ex-sandbox participants sometimes knew one another through professional networks). The final group of respondents, however, is diverse in terms of technological and financial sector. There is a mix of companies from the UK and from abroad. Firms had different levels of prior experience with the FCA and were in different stages of business development and authorization. Interviews were, on average, 45 minutes long. Two-thirds were conducted in person, and one-third online. Audio was recorded and transcribed.

### 3. Codebook design

A detailed codebook was developed prior to interview. This is available on request, but I will summarize key points. Questions and answers from the survey regarding the sandbox and motivation to apply were able to be essentially recreated for the interview codebook. Additional codes were added to categorize different reasons raised by respondents explaining why they had or did not have certain kinds of motivation. In regard to reputation, questionnaire questions from the Bureaucratic Reputation Scale and specific beliefs were also recreated as codes. Some additional specific beliefs were added inductively to the codebook where unanticipated perceptions were repeatedly raised by multiple respondents.

In coding, any subjective, generalized statement about the regulator was considered to be reputational (e.g. The FCA is so helpful). Statements characterizing one-off, specific interactions with the regulator were coded as ‘interactions’ and not reputational beliefs (e.g. It was very helpful when the FCA gave us that contact at the SEC). Statements were initially coded according to which dimension of reputation they represented using Carpenter’s definitions.[[23]](#footnote-23) Carpenter’s definitions match – but are more encompassing - than the measures for dimensions used by Lee & van Ryzin[[24]](#footnote-24), a difference discussed further below.

The initial codebook was piloted on several interview transcripts to determine whether it was sufficient and parsimonious to reflect all relevant information from the interviews.[[25]](#footnote-25) Interview transcripts did include some specific perceptions not originally anticipated by the codebook (e.g. negative characterizations of the regulator as bureaucratic). The codebook was revised to include all relevant codes, and all transcripts coded.

TABLE 5. Conceptualization of reputation dimensions in codebook, from Carpenter 2010

|  |  |
| --- | --- |
| Performative | Statement refers to capacity of the agency to achieve desired outputs and outcomes; the extent to which it is substantively successful – including efficiency. |
| Technical | Statement refers to the expertise of the agency relevant to its capacity to perform its role; examples: “scientific accuracy, methodological prowess, and analytical capacity”.[[26]](#footnote-26) |
| Procedural | Statement refers to the use of correct procedures associated with decision making:* Procedural fairness
* Adequate evidence collection and provision
* Decisions based on evidence
* Meeting consultation requirements
* The thoroughness of procedures.
 |
| Moral | Statement refers to the ethics or morality of the agency’s goals or means, including:* Protecting the interests of stakeholders
* Honesty
* Kindness
* Compassion
* ‘Humanity’.
 |

### 4. Coding and analysis

In analysis, I first checked transcripts against recordings to ensure quality, and removed personally identifying details. I then read through each transcript and recorded my initial thoughts as to how the respondent’s answered the research questions. I categorized each respondent according to whether they were sandbox participants or not, which cohort they were in, and how willing they were to apply to a future sandbox. I then used ‘bucket’ coding[[27]](#footnote-27), breaking up transcripts by topic and the time period being discussed (pre-authorization, post-authorization, and during authorization). From there, I qualitatively coded each topic using the codebook. Where respondents stated or implied a link between reputation and motivation to apply, and explained what these links were, these were coded separately.[[28]](#footnote-28)

At each stage, validity was checked through reviewing and re-coding transcripts. For example, once all transcripts were coded I would return to the code and ensure that all coded comments matched the description of a code (and thus concept). Some codes related to ‘valence’ (e.g. how likely firms were to apply, how positively they viewed the regulator). In that case, I would examine all coded comments at each level (most negative to most positive) to ensure that each comment was placed in the right category, and each firm was categorized at the right level overall.[[29]](#footnote-29)

 For comparability with the survey, I originally attempted to create classifications using statements which exactly matched the questions from the survey (i.e. the Bureaucratic Reputation Scale). This was possible, but created misleading classifications. Many statements about FCA reputation were not counted toward the classification because they did not match Lee & van Ryzin’s precise measures. The measures for performative and technical reputation worked well, but not those for moral and procedural. Lee & van Ryzin’s questions regarding procedural reputation exclude perceptions to do with the potential downsides and tradeoffs of procedural correctness (i.e. over rule-orientation; bureaucracy, inflexibility). Their measures capture the ethical and trustworthy aspects of moral reputation well but exclude perceptions to do with morally favorable characteristics i.e. being facilitative.[[30]](#footnote-30) Strictly recreating the Scale, thus, led to less accurate classifications of the actual valence of the regulator’s reputation with respondents. This is not to critique Lee & van Ryzin’s approach. I consider the problem to have arisen from applying a Scale developed for and tested with citizen perceptions of agencies to regulated firms. Regulated firms have a different relationship to regulators than citizens. This study provides yet more empirical support that firm perceptions and priorities of agencies are almost certainly different than other regulator audiences.[[31]](#footnote-31) Further, that bespoke instruments may be required in future to measure the strength of a regulator’s reputations specifically with firms.

In my second attempt at classification, I took a broader approach. When classifying each dimension of reputation, I looked at all statements I had coded to that dimension. In effect: using Carpenter’s wider conceptualization rather than Lee & van Ryzin’s narrower operationalization. With this coding and classification, it is possible to examine links between reputation and motivation to apply. First, because one can compare differences in the nature and valence of perceptions between those firms which are motivated and those which are unmotivated and, second, because one can identify where firms state or imply that the regulator’s reputation played a role.

To analyze potential links between perceptions and motivation, I compared the perceptions of firms who were motivated to apply to the sandbox to those who were less motivated. These were compared at two points in time: early impressions of the regulator and the extent and nature of motivation to apply in the past (T1), and current impressions of the regulator and motivation to apply today (T2). I looked for patterned differences in perceptions between these groups, and for outliers who did not fit the pattern. My assumption was an association between certain perceptions and more motivation might imply a link. I then analyzed statements respondents had made about links between the regulator’s reputation and their motivation to apply interpretatively, analyzing what mechanisms were raised and whether they bore similarities to mechanisms previously described by theory.

### 5. Analyzing differences in interview and survey responses from the same firm

Five firms in the sample were both interviewed and responded to the survey. Comparison between results from the same firm per method (Table 7) shows broadly similar results. Respondents tend to report the regulator has a somewhat stronger reputation in interviews than in the survey. Survey results show somewhat higher beyond compliance motivation for the same firms than was found in interviews. This implies results are somewhat sensitive to method (social desirability, self-selection bias, and the greater nuance allowed for in interviews being possible explanations).

TABLE 6 – Comparison of questionnaire versus interview results from the same firms by variable

|  |  Survey Result |  Interview Result |
| --- | --- | --- |
| Level of motivation to apply for the sandbox

|  |
| --- |
| SB1 |
| SB5 |
| SB9 |
| NSB3 |
| NSB5 |

 |

|  |
| --- |
| Probably would  |
| Probably would  |
| Almost certainly would  |
| Almost certainly would  |
| Almost certainly would  |

 |

|  |
| --- |
| Almost certainly would  |
| Might apply |
| Almost certainly would  |
| Might apply |
| Probably would apply |

 |
| Performative – Agency is tough regulatory enforcer

|  |
| --- |
| SB1 |
| SB5 |
| SB9 |
| NSB3 |
| NSB5 |

 |

|  |
| --- |
|  |
| Agree |
| Disagree |
| Agree |
| Agree |
| Strongly agree |

 |

|  |
| --- |
|  |
| No stated beliefs |
| No stated beliefs |
| No stated beliefs |
| Agree |
| No stated beliefs |

 |
| Performative – Agency can help firm achieve its goals

|  |
| --- |
| SB1 |
| SB5 |
| SB9 |
| NSB3 |
| NSB5 |

 |

|  |
| --- |
|  |
| Agree |
| Agree |
| Agree |
| Neutral |
| Strongly agree |

 |

|  |
| --- |
|  |
| Strongly agree |
| Strongly agree |
| Strongly agree |
| Neutral |
| Strongly agree |

 |
| Moral – Agency generally aims to help firms achieve their goals

|  |
| --- |
| SB1 |
| SB5 |
| SB9 |
| NSB3 |
| NSB5 |

 |

|  |
| --- |
| Neutral |
| Agree |
| Strongly agree |
| Disagree |
| Strongly agree |

 |

|  |
| --- |
| Strongly agree |
| Agree |
| Strongly agree |
| Disagree |
| No stated beliefs |

 |
| Procedural – Agency is procedurally correct

|  |
| --- |
| SB1 |
| SB5 |
| SB9 |
| NSB3 |
| NSB5 |
|  |

 |

|  |
| --- |
| Agree |
| Agree |
| Strongly agree |
| Neutral |
| Disagree |

 |

|  |
| --- |
| Strongly agree |
| Disagree |
| No stated beliefs |
| Neutral |
| No stated beliefs |

 |
| Procedural – Agency is procedurally flexible

|  |
| --- |
| SB1 |
| SB5 |
| SB9 |
| NSB3 |
| NSB5 |

 |

|  |
| --- |
|  |
| Neutral |
| Missing data |
| Disagree |
| Disagree |
| Neutral |

 |

|  |
| --- |
|  |
| Agree |
| Agree |
| No stated beliefs |
| No stated beliefs |
| No stated beliefs |

 |
| Technical – Agency is an expert in a given sector

|  |
| --- |
| SB1 |
| SB5 |
| SB9 |
| NSB3 |
| NSB5 |

 |

|  |
| --- |
| Agree |
| Agree |
| Strongly agree |
| Neutral |
| Strongly agree |

 |

|  |
| --- |
| No stated beliefs |
| No stated beliefs |
| No stated beliefs |
| No stated beliefs |
| No stated beliefs |

 |

## III. INTERVIEW SCHEDULES

UK FINTECH INTERVIEW TOPICS (version for ex-sandbox participants)

Introduction

Pre-sandbox

* 1. Getting started/expectations
	2. Motivation to apply for sandbox
	3. Impressions of the FCA
		1. Worked with before?

Sandbox

1. Process
2. Roles and responsibilities of company and regulator
3. Information sharing and communications
4. Nature of interactions
5. Case officer
6. How disagreements/issues were handled in testing
7. What you expected?

Post-sandbox

1. Attitudes to regulation
2. Do you find it challenging to comply with the letter of the law?
3. Impressions of the FCA today
4. Relationship with FCA today
5. Willing to apply again?
6. Anything else to add?

Conclusion

UK FINTECH INTERVIEW TOPICS (version non- sandbox participants)

Introduction

Pre-authorization

* 1. Getting started/expectations
		1. Why did you choose this authorization path?
	2. Impressions of the FCA
		1. Worked with before?

Authorization (if relevant)

1. Process
2. Roles and responsibilities of company and regulator
3. Information sharing and communications
4. Nature of interactions
5. How disagreements/issues were handled
6. What you expected?
7. Motivation to (not) apply for sandbox?

Post-authorization (if relevant)

1. Attitudes to regulation
2. Do you find it challenging to comply with the letter of the law?
3. Impressions of the FCA today?
4. Relationship with FCA today?
5. Anything else to add?

Conclusion

1. (n 68). [↑](#footnote-ref-1)
2. Nielsen and Parker (n 83). [↑](#footnote-ref-2)
3. A Graham Peace, Dennis F Galletta and James YL Thong, ‘Software Piracy in the Workplace: A Model and Empirical Test’ (2003) 20 Journal of Management Information Systems 153. [↑](#footnote-ref-3)
4. Peter J May and Robert S Wood, ‘At the Regulatory Front Lines: Inspectors’ Enforcement Styles and Regulatory Compliance’ (2003) 13 Journal of Public Administration Research and Theory 117. [↑](#footnote-ref-4)
5. Lee and Ryzin (n 68). [↑](#footnote-ref-5)
6. May and Wood (n 128). [↑](#footnote-ref-6)
7. Lee and Ryzin (n 68). [↑](#footnote-ref-7)
8. Huiqi Yan, Benjamin van Rooij and Jeroen van der Heijden, ‘Contextual Compliance: Situational and Subjective Cost-Benefit Decisions about Pesticides by Chinese Farmers’ (2015) 37 Law & Policy 240. [↑](#footnote-ref-8)
9. Kilkon Ko, John Mendeloff and Wayne Gray, ‘The Role of Inspection Sequence in Compliance with the US Occupational Safety and Health Administration’s (OSHA) Standards: Interpretations and Implications’ (2010) 4 Regulation & Governance 48; Gunningham, Thornton and Kagan (n 78); F Corneliussen, ‘Justifying Non-Compliance. A Case Study of Norwegian Biotech Firm’ (London School of Economics and Political Science Centre for Analysis of Risk and Regulation 2004). [↑](#footnote-ref-9)
10. Yan, Rooij and Heijden (n 131); R Kent Weaver, ‘Getting People to Behave: Research Lessons for Policy Makers’ (2015) 75 Public Administration Review 806. [↑](#footnote-ref-10)
11. Yan, Rooij and Heijden (n 131). [↑](#footnote-ref-11)
12. Erich Kirchler and others, ‘Why Pay Taxes? A Review of Tax Compliance Decisions’ (International Center for Public Policy, Andrew Young School of Policy Studies, Georgia State University 2007) paper0730 <https://ideas.repec.org/p/ays/ispwps/paper0730.html> accessed 7 December 2020; Lin Mei Tan and Valerie Braithwaite, ‘Motivations for Tax Compliance: The Case of Small Business Taxpayers in New Zealand’ (Social Science Research Network 2018) SSRN Scholarly Paper ID 3215528 <https://papers.ssrn.com/abstract=3215528> accessed 7 December 2020; Peter J May, ‘Compliance Motivations: Perspectives of Farmers, Homebuilders, and Marine Facilities\*’ (2005) 27 Law & Policy 317. [↑](#footnote-ref-12)
13. Gregory Porumbescu and others, ‘Translating Policy Transparency into Policy Understanding and Policy Support: Evidence from a Survey Experiment’ (2017) 95 Public Administration 990. [↑](#footnote-ref-13)
14. Gunningham, Thornton and Kagan (n 78). [↑](#footnote-ref-14)
15. Christine H Roch, John T Scholz and Kathleen M McGraw, ‘Social Networks and Citizen Response to Legal Change’ (2000) 44 American Journal of Political Science 777; Anthony Bottoms and others, ‘Towards Desistance: Theoretical Underpinnings for an Empirical Study’ (2004) 43 The Howard Journal of Criminal Justice 368; Stephan Farral and Adam Calverley, *Understanding Desistance From Crime* (McGraw-Hill Education (UK) 2005); Shadd Maruna, *Making Good: How Ex-Convicts Reform and Rebuild Their Lives* (American Psychological Association 2007). [↑](#footnote-ref-15)
16. RS Burt, ‘The Network Structure of Social Capital’ in RJ Sutton and BM Staw (eds), *Research in Organizational Behavior* (JAI Press 2000). [↑](#footnote-ref-16)
17. May (n 135); Valerie Braithwaite and Monika Reinhart, ‘Deterrence, Coping Styles and Defiance’ (2013) 69 FinanzArchiv / Public Finance Analysis 439; Kirchler and others (n 135). [↑](#footnote-ref-17)
18. Kirchler and others (n 135); Corneliussen (n 132); Saba Siddiki, Xavier Basurto and Christopher M Weible, ‘Using the Institutional Grammar Tool to Understand Regulatory Compliance: The Case of Colorado Aquaculture’ (2012) 6 Regulation & Governance 167. [↑](#footnote-ref-18)
19. May (n 135). [↑](#footnote-ref-19)
20. Ahmad Alaassar, Anne-Laure Mention and Tor Helge Aas, ‘Exploring How Social Interactions Influence Regulators and Innovators: The Case of Regulatory Sandboxes’ (2020) 160 Technological Forecasting and Social Change 120257. [↑](#footnote-ref-20)
21. Don A Dillman, *Mail and Telephone Surveys: The Total Design Method* (Wiley 1978). [↑](#footnote-ref-21)
22. In addition to piloting the survey, recommended techniques were used to make the questionnaire easy to read and use. Firms were sent email reminders halfway through the survey period and again three days before it closed. Firms were also contacted over the phone, where possible, to follow up. [↑](#footnote-ref-22)
23. Carpenter, *Reputation and Power* (n 31) 45. [↑](#footnote-ref-23)
24. (n 68). [↑](#footnote-ref-24)
25. Patricia Bazeley and Kristi Jackson, *Qualitative Data Analysis with NVivo* (SAGE 2013) 95. [↑](#footnote-ref-25)
26. Carpenter, *Reputation and Power* (n 31) 72. [↑](#footnote-ref-26)
27. Bazeley and Jackson (n 148) 34. [↑](#footnote-ref-27)
28. Bazeley and Jackson (n 148) 108. [↑](#footnote-ref-28)
29. Áine M Humble, ‘Technique Triangulation for Validation in Directed Content Analysis’ (2009) 8 International Journal of Qualitative Methods 34. [↑](#footnote-ref-29)
30. Carpenter, *Reputation and Power* (n 31) 45. [↑](#footnote-ref-30)
31. e.g. Overman, Busuioc and Wood (n 115). [↑](#footnote-ref-31)