

Bureaucratic reputation, reputation management, financial regulation, regulatory agencies, innovation, cryptocurrency

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Invented in 2008 with Bitcoin, cryptocurrencies represent a radical technological innovation in finance and banking; one which threatened to disrupt the existing regulatory regimes governing those sectors. This article examines, from a reputation management perspective, how regulatory agencies framed their response. Through a content analysis, we compare communications from financial conduct regulators in the UK, US, and Australia. Despite the risks, challenges, and uncertainties involved in cryptocurrency supervision, we find regulators treat the technology as an opportunity to bolster their reputation in the immediate wake of the Global Financial Crisis. Regulators frame their response to cryptocurrencies in ways which reinforce the agency's ingenuity and societal importance. We discuss differences in framing between agencies, illustrating how historical, political, and legal differences between regulators can shape their responses to radical innovations.

## 1. Introduction

The financial sector is experiencing a wave of radical innovation unmatched since the popular adoption of the Internet. Innovation can drive economic growth and better quality of life.<sup>1</sup> Yet, its disruptive nature poses challenges for regulators.<sup>2</sup> Cryptocurrencies are a case in point. Emerging in 2008, cryptocurrencies like Bitcoin have brought new types of technically complex and ever-evolving products into financial markets. Cryptocurrencies exacerbated risks financial regulators typically supervise and introduced new risks. Cryptocurrencies work very differently to traditional forms of currency, payment, and money transfer. It was not immediately clear whether their use was legal, and whether it should be.<sup>3</sup> How do regulatory agencies respond to this kind of radical innovation?<sup>4</sup>

Legal and regulatory governance scholarship often focuses its analysis of this question, fittingly, on legal and operational responses. These are the ways regulators reform rules and practices to continue to efficiently manage market risks e.g. revising regulations. There is a rich literature describing, analysing, and evaluating such responses.<sup>5</sup> Prior studies, however, also show a 'political' dimension to how regulators respond. Different stakeholders have different economic interests in, and ideological positions on, how innovation will be regulated.<sup>6</sup> Regulators are sensitive to these tensions. They want to build stakeholder support for, or at least avoid criticism about, their legal and operational responses.<sup>7</sup> Agencies may do so through choosing legal/operational responses which are broadly acceptable to the public.<sup>8</sup> They may also try to maintain/build stakeholder support through strategic communications about those responses.<sup>9</sup> Research,

1 Cristie Ford, *Innovation and the State: Finance, Regulation, and Justice* (Cambridge University Press 2017) 7.

2 Ford (n 1) 16–17.

3 Douglas W Arner, Janos Barberis and Ross P Buckley, 'The Evolution of FinTech: A New Post-Crisis Paradigm' (2015) 47 *Georgetown Journal of International Law* 1271.

4 Radical innovations, here, are inventions which significantly reduce the costs of key inputs in a way that significantly transforms sectors, economies, or societies (as opposed to gradual, 'incremental' innovations) (C. Freeman and L. Soete, *The Economics of Industrial Revolution* (London: Pinter 1997)). Cryptocurrencies, and the underlying technology of blockchain, have the potential to reduce the costs of financial products and services and are proving disruptive to financial markets, as well as adjacent markets like financial law and accounting (Ford (n1) 49; Arner et

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al. ((n2)) 7).

5 e.g. R Brownsword, E Scotford and E Yeung, 'Law, Regulation, and Technology: The Field, Frame, and Focal Questions' in R Brownsword, E Scotford and Yeung (eds), *The Oxford Handbook of Law, Regulation and Technology* (Oxford University Press 2017); Karen Yeung, 'How Is the UK Responding to the Technologies of the Fourth Industrial Revolution?' [2017] *Ethics, Law, & Society* 102; Gregory N Mandel, 'Emerging Technology Governance', *Innovative governance models for emerging technologies* (Edward Elgar 2013).

6 ML Jones and J Millar, 'Hacking Metaphors in the Anticipatory Governance of Emerging Technology: The Case of Regulating Robots', *The Oxford Handbook of Law, Regulation, and Technology* (Oxford University Press 2017).

7 Moshe Maor, 'Organizational Reputation and Jurisdictional Claims: The Case of the U.S. Food and Drug Administration' (2010) 23 *Governance* 133.

8 Maor (n 7).

9 Amit Tzur, 'Uber Über Regulation? Regulatory Change Following the Emergence of New Technologies in the Taxi Market' (2019) 13 *Regulation & Governance* 340; EF Gerding, *Law, Bubbles, and Financial Regulation* (Routledge 2016); M Lee, 'The Legal Institutionalization of Public Participation in the EU Governance of Technology', *The Oxford handbook of law, regulation, and technology* (Oxford University Press 2017).

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however, has not yet systematically and empirically analysed the kinds of communication strategies agencies use, and why.

Reputational theory has been increasingly applied to analyse political dimensions of regulatory agency behaviour.<sup>10</sup> Reputation is the image of the agency held in the minds of its audiences (e.g. the public, politicians, companies). Reputation is what those audiences imagine the agency to be like; “a set of symbolic beliefs about the unique or separable capacities, roles, and obligations of an organization, where these beliefs are embedded in audience networks”.<sup>11</sup> Reputational theories argue that, when faced with a new problem or task, agencies will consider how their response will be perceived. In responding, they seek to manage their reputation so that they maintain audience support.<sup>12</sup> Agencies manage their reputation in various ways, including ‘symbolic’ strategies; through the use of public relations, communications, and marketing.<sup>13</sup>

How, though, do regulatory agencies symbolically manage their reputation in response to the specific challenges posed by radical technological innovation? To answer this question, we draw primarily on bureaucratic reputation theory.<sup>14</sup> This theory provides a framework to describe and compare the symbolic strategies agencies use<sup>15</sup> and explain why agencies choose some strategies over others.<sup>16</sup> Bureaucratic reputation thus provides a strong basis to analyse agency reputation management in the face of new kinds of regulatory challenge. The unique features of innovation governance as a regulatory task are little discussed in theory and rarely empirically examined.<sup>17</sup> This study aims to begin to address this gap.

In this study, we compare communications about cryptocurrencies from three financial conduct regulators in the United Kingdom, United States, and Australia. We use quantitative and qualitative content analysis to determine what kind of symbolic reputation management strategies these agencies used. We then apply a bureaucratic reputation theoretical framework to draw out possible explanations as to why regulators chose the responses they did, analysing responses in historical, political, and legal context.

This study contributes to theory by presenting a more comprehensive framework for describing and explaining how regulatory agencies manage reputation in the face of radical innovation. Through the

- 10 Jan Boon, Heidi H Salomonsen and Koen Verhoest, ‘A Reputation for What, to Whom, and in Which Task Environment: A Commentary’ [Forthcoming] *Regulation & Governance*.
- 11 Daniel Carpenter, *Reputation and Power: Organizational Image and Pharmaceutical Regulation at the FDA* (Princeton University Press 2010) 45.
- 12 Moshe Maor, ‘Theorizing Bureaucratic Reputation’ in A Waeraas and Maor, Moshe (eds), *Organizational Reputation in the Public Sector* (Routledge 2015).
- 13 Carpenter (n 11) 70.
- 14 Daniel Carpenter, *The Forging of Bureaucratic Autonomy: Reputations, Networks, and Policy Innovation in Executive Agencies, 1862-1928* (Princeton University Press 2001); (n 11).
- 15 Sharon Gilad and T Yogev, ‘How Reputation Regulates Regulators: Illustrations from the Regulation of Retail Finance’, *Oxford Handbook of Corporate Reputation* (Oxford University Press 2012); Saar Alon-Barkat, ‘Can Government Public Communications Elicit Undue Trust? Exploring the Interaction between Symbols and Substantive Information in Communications’ (2020) 30 *Journal of Public Administration Research and Theory* 77; Dovil Rimkut, ‘Organizational Reputation and Risk Regulation: The Effect of Reputational Threats on Agency Scientific Outputs’ (2018) 96 *Public Administration* 70.
- 16 Daniel Carpenter and George A Krause, ‘Transactional Authority and Bureaucratic Politics’ (2015) 25 *Journal of Public Administration Research and Theory* 5; Moshe Maor, Sharon Gilad and Pazit Ben-Nun Bloom, ‘Organizational Reputation, Regulatory Talk, and Strategic Silence’ (2013) 23 *Journal of Public Administration Research and Theory* 581.
- 17 Maor (n 7).

case study, we illustrate how such a framework helps us understand the political dimension of regulator responses to innovation. The study illuminates that reputational considerations can deter regulators from intervening to govern radical innovations. Under certain circumstances, however, and — as the cryptocurrency case shows — a desire to bolster agency reputation can actually drive regulators to involve themselves in even the most risky, uncertain, and challenging radical innovations.

## 2. Case background

Cryptocurrencies began with Bitcoin. In 2008, Satoshi Nakaomoto (a pseudonym for a group of individuals) released Bitcoin’s open-source code. Alongside, Nakaomoto published a paper. It argued that, in the Internet age, relying on financial institutions to pay one another was inefficient and risky. Bitcoin would eliminate the need.<sup>18</sup> Cryptocurrencies are systems by which to send and receive payments through an encryption system run on a decentralized network of computers. They allow users to pay one another through digital transfers in (more or less) real time, like cash, and without mediation by a bank or any third party.<sup>19</sup>

Today cryptocurrencies have become more mainstream and commercial. Some people use cryptocurrencies as originally intended: as an online payment system. Others buy cryptocurrencies as an investment or as speculation. Some uses of cryptocurrencies — or uses in some jurisdictions — are illegal, some legally ambiguous, and some fully legal (for example, the regulated Gemini exchange in New York).<sup>20</sup> We can now understand cryptocurrencies as part of a large wave of radical innovation in finance in the post-Global Financial Crisis period (along with the rise of other ‘fintech’ like crowdfunding and financial AI). We are still in the midst of this wave, which is introducing new kinds of businesses, products, and ideas to the market.<sup>21</sup>

This study, however, is concerned with how regulators respond to radical innovations as they emerge. Our analysis looks to the first decade after cryptocurrencies were invented. Our case study focuses on three financial conduct regulators: the New York State Department of Financial Services (NY DFS), the Financial Conduct Authority of United Kingdom (UK FCA), and the Australian Securities and Investments Commission (AUS ASIC). These regulators began to publicly acknowledge cryptocurrency trading in their jurisdictions around 2012. At that time, cryptocurrencies were a strange, fringe development. As cryptocurrencies were different to existing financial technologies, they fell outside many legal definitions such as ‘currency’, ‘financial institution’, and ‘derivative’.<sup>22</sup> Governments, regulators, and courts were still determining how they should be defined and regulated. Such questions were legally complex, and difficult to answer given the novelty and technical complexity of cryptocurrencies.<sup>23</sup> Regulatory agencies had to consider whether and how to intervene on cryptocurrencies given (typically) gaps in policy and law. Cryptocurrencies, however, were also a controversial topic, of interest to con-

- 18 Joshua Davis, ‘The Crypto-Currency’ (*The New Yorker*, 3 October 2011) <https://www.newyorker.com/magazine/2011/10/10/the-crypto-currency> (accessed 21 December 2020).
- 19 A Narayan and others, *Bitcoin and Cryptocurrency Technologies: A Comprehensive Introduction* (Princeton University Press 2016) ix–xxiii.
- 20 Nate Lanxon and Olga Kharif, ‘Winklevoss Twins’ Crypto Exchange Is Expanding Into the U.K.’ *Bloomberg.com* (24 September 2020) <https://www.bloomberg.com/news/articles/2020-09-24/winklevoss-twins-crypto-exchange-is-expanding-into-the-u-k> (accessed 21 December 2020).
- 21 Arner, Barberis and Buckley (n 3).
- 22 Ford (n 1) 143.
- 23 Davis (n 18).

sumers, politicians, and business.<sup>24</sup> As the next section outlines, we would expect regulators under these circumstances to manage their reputation very carefully as they respond to this radical innovation.

### 3. Theoretical framework

#### 3.1 Radical innovation: A reputational threat to be managed?

How do regulatory agencies symbolically manage their reputation in the face of innovation in their jurisdiction? Presently, bureaucratic reputation theory provides a partial answer. Two studies to date have examined the field of innovation governance.<sup>25</sup> Both examined the US Food and Drug Administration's response to innovation in the pharmaceutical sector.

In his study, Maor developed a model applying bureaucratic reputation theory to explain regulatory responses to radical innovation. Specifically: to explain and predict when agencies will and will not claim their legal authority extends over novel technologies. Claims, here, can refer to statements which explicitly or implicitly demonstrate the agency believes it has authority e.g. policy statements, issuing guidelines.<sup>26</sup>

When deciding how to respond to innovation, Maor argues, regulators do not simply consider objective, technical and legal questions (e.g. does our current legal authority cover this new biotechnology?). They will also consider how their response will be perceived by their audiences.<sup>27</sup> How will their response affect the agency's reputation? In bureaucratic reputation theory, a strong reputation is one of an agency's most important assets. A reputation is strong when most people in a group (or many groups across society) like, or at least accept the legitimate existence of, that organization.<sup>28</sup> A strong reputation helps agencies to survive and achieve their goals. A weak reputation makes agencies less effective, and at risk from having their funding cut, or being eliminated altogether.<sup>29</sup> Agencies are thus highly motivated to manage the reputation. They want to influence audience perceptions in ways that maintain or build support for the agency and its actions (rather than eliciting public questioning, criticism, or defiance).<sup>30</sup>

Regulators make decisions about responding to innovation in this context.<sup>31</sup> Maor contests that regulators are risk averse: they prioritize minimizing anticipated reputational damage over pursuing opportunities.<sup>32</sup> Regulators prefer to pursue the low hanging fruit of easy regulatory wins over tackling unwieldy problems.<sup>33</sup> Radically new technologies are uncertain, hard to regulate, and controversial.<sup>34</sup> Jurisdic-

tional claims over novel technologies can fail.<sup>35</sup> Even if regulators gain authority to act, their responses are likely to be deemed a failure in whole or in part due to the complexities of supervision and mixed public opinion about what constitutes success.

To minimize risks, agencies prefer to delay making claims over novel technologies (or never make them at all).<sup>36</sup> Regulators want time to consider and/or prepare a solid claim. They also want time to build a coalition of supporters for that claim. Agencies have different kinds of audiences who could form such a coalition (politicians, business, consumers etc.). Agencies want to build and maintain support with as many audiences as possible, especially those audiences critical to their survival and success.<sup>37</sup> Different audiences, though, often have different interests, ideologies, and preferences. It thus takes time for agencies to secure support from various audiences to make a claim.

While agencies prefer to (indefinitely) delay their response to innovation, this strategy can become untenable. Delaying a claim can do more damage to the agency's reputation if certain, other 'threats' arise. One such threat is negative publicity. New information may be published showing this novel technology is harmful e.g. this unregulated medical practice is killing people. Agency audiences then start criticizing the agency for its negligence. Negative publicity makes agencies more likely to make a timely claim.<sup>38</sup> Other bureaucratic reputation research reinforces negative public attention increases the likelihood of a quick response.<sup>39,40</sup>

The second category of threat driving claims concerns how *other* regulatory agencies respond. Novel technologies tend to potentially fall under the authority of two or more agencies. This can incentivize regulators to make a claim quickly before others can.<sup>41</sup> Agencies want to avoid a scenario where other agencies make competing claims over technologies they themselves want to supervise.<sup>42</sup> Competition can damage their relationship with professional colleagues.<sup>43</sup> Further, agencies typically do not want to risk having to share authority.<sup>44</sup> They do not want to share authority over specific technologies nor the broader regulatory field.<sup>45</sup> Sharing responsibilities means regulators have less autonomy; leaving them open to criticism about a technology whose supervision they cannot fully control.<sup>46</sup> Sharing or losing authority like this can, too, make the regulator come to be seen as less *unique*.

Agencies, ideally, want to build and then maintain a *unique* reputa-

between Sharing-Economy Practices, Public Policy, and Regulation', *The rise of the sharing economy: Exploring the challenges and opportunities of collaborative consumption* (Praeger 2018).

24 Davis (n 18).

25 Maor (n 7); Carpenter (n 11).

26 Maor (n 7) 134.

27 Maor (n 7) 134.

28 Carpenter (n 11) 45.

29 Carpenter (n 11) 727.

30 Carpenter (n 11) 752–3.

31 Maor (n 7) 134.

32 Maor (n 7) 138; see also: RK Weaver, 'The Politics of Blame Avoidance' (1986) 6 *Journal of Public Policy* 371; Christopher Hood, *The Blame Game: Spin, Bureaucracy, and Self-Preservation in Government* (Princeton University Press 2011); Judith van Erp, 'New Governance of Corporate Cybersecurity: A Case Study of the Petrochemical Industry in the Port of Rotterdam' (2017) 68 *Crime, Law and Social Change* 75.

33 Keith Hawkins, *Environment and Enforcement: Regulation and the Social Definition of Pollution* (Oxford University Press 1984) <https://oxford.universitypressscholarship.com/view/10.1093/acprof:oso/9780198275145.001.0001/acprof-9780198275145> (last accessed 21 December 2020).

34 Ford (n 1); S Ranchordás, 'On Sharing and Quasi-Sharing: The Tension

35 Maor (n 7) 137.

36 Maor (n 7) 137.

37 Maor, Gilad and Bloom (n 16) 583; Sharon Gilad, Saar Alon Barkat and Alexander Braverman, 'Large-Scale Social Protest: A Business Risk and a Bureaucratic Opportunity' (2016) 29 *Governance* 371.

38 Maor (n 7) 139.

39 In bureaucratic reputation theory, responses can be either in the form of communicating, like issuing a press releases, or substantive action, like increasing regulatory resources to address a risk.

40 Maor, Gilad and Bloom (n 16); Carpenter and Krause (n 16).

41 Maor (n 7) 140.

42 see also: JQ Wilson, *Bureaucracy: What Government Agencies Do and Why They Do It* (Basic Books 1989); Madalina Busuioc, 'Friend or Foe? Inter-Agency Cooperation, Organizational Reputation, and Turf' (2016) 94 *Public Administration* 40.

43 Maor (n 7) 141.

44 Busuioc (n 42).

45 For example, if a second agency claims authority over one biotechnology this may give them a foothold to claim authority over the supervision of medical technologies in general.

46 Wilson (n 42); Busuioc (n 42).

tion. They want to be seen as the sole provider of a public good or service in their jurisdiction. Agencies seen to make a unique contribution are more recognized, socially valued, and harder for politicians to attack or replace.<sup>47</sup> In the case of innovation, agencies are more likely to make a quick claim if they think it will build their unique reputation.<sup>48</sup> Conversely, agencies are less likely to make claims over technologies peripheral to their unique reputation. This reflects a more general tendency for agency reputation management to be path-dependent.<sup>49</sup> Once agencies establish their unique position in their society — one which elicits support from enough audiences — they tend to seek to maintain rather than change that reputation.<sup>50</sup> Maor argues, in the case of innovation, unusual claims over areas traditionally regulated by someone else upsets the business community. That audience wants agencies to stick to “traditional goals and areas of oversight, rather than innovative forms...”<sup>51</sup> One possible exception is if the agency who should be traditionally responsible does not make the obvious claim. A ‘vacuum’ can lead to more negative publicity, compelling the regulator to respond.<sup>52</sup>

Maor explored the validity of this model through an analysis of actual claims by the Food and Drug Administration over biotechnologies.<sup>53</sup> His analysis supports the expectations discussed thus far. This would imply that, when faced with innovation, regulators prefer *not* to respond or take responsibility. This argument is broadly supported by findings from scholarship on innovation law and governance.<sup>54</sup> A major limitation of such accounts, however, is they assume regulators always see innovation as a threat.

### 3.2 Expanding the framework: Innovation as a reputational opportunity

In the main, bureaucratic reputation scholarship examines agency reputation management in cases where, either: 1) events are inherently threats e.g. crises, scandals<sup>55</sup> or 2) agencies are theorized to perceive them as threats.<sup>56</sup> In his theoretical model, Maor maps these assumptions onto the field of innovation governance. Yet, we cannot assume, a priori, regulators see innovation in these terms.

Carpenter’s<sup>57</sup> research shows agencies do not always respond to

external events purely as threats. Agencies are not always risk-averse. They can recognize external events, like innovation, as opportunities to strengthen reputation. Agencies do not simply react to negative publicity to fulfil audience demands. Rather, agencies have some capacity to: 1) frame how audiences perceive external events and the agency’s response to them, and 2) choose who their audiences are. Agencies can use language and symbolism to shape how the public understands the opportunities and risks of an event, and court support from new and different audiences.<sup>58</sup>

Carpenter theorizes more directly about technological innovation in his 2010 study of the US Food and Drug Administration. Carpenter’s study shows innovation can be a reputational opportunity for regulators, first, because it creates opportunities for agencies to build their unique reputation. New technologies mean new kinds of public goods and ‘bads’ (i.e. regulatory risks to be managed).<sup>59</sup> This creates opportunities for agencies to do something new and of societal value. Second, innovation can introduce new audiences for an agency and shift the relative power of audiences (e.g. with the influx of different kinds of businesses to a market).<sup>60</sup> In his study, the Food and Drug Administration proactively cultivated support for the agency and its interventions into the development of new pharmaceuticals. They did so through their practical actions, but also through their communications: through the use of discourse, rhetoric, language, and symbolism.<sup>61</sup>

Combining Maor and Carpenter’s perspectives provides a more nuanced and realistic picture of how regulatory agencies manage their reputation in the face of innovation. Yet, neither author systematically examines what symbolic reputation management strategies agencies use and why. Further, both perspectives were developed through studies of the same regulator, in the same sector, in the same country. It is not clear how well this extends to other contexts.<sup>62</sup> This study builds upon theoretical frameworks to date, and provides an analytical framework to describe and explain symbolic reputation management in the face of innovation. Further, we explore the validity of this framework through a case study in a significantly different context (finance in the US, UK, and Australia).

### 3.3 Analytical framework

Another strand of bureaucratic reputation research provides us with the basis for our analytical framework.<sup>63</sup> This research has catalogued the kinds of symbolic reputation management strategies agencies use. Critical to this theory is that agency reputation is multi-dimensional. Audiences judge agencies on several different kinds of criteria. This study draws upon the criteria Carpenter<sup>64</sup> proposes: how well the agency delivers quality outputs and outcomes (*performative reputation*); how expert the agency is (*technical reputation*), how well it follows required or desirable processes (*procedural reputation*), and how ethical and good its goals and means are (*moral reputation*).<sup>65</sup>

47 Carpenter (n 11) 45.

48 Maor (n 7) 140.

49 Maor (n 12) 25; Wilson (n 42) 76.

50 Sharon Gilad, ‘Political Pressures, Organizational Identity, and Attention to Tasks: Illustrations from Pre-Crisis Financial Regulation’ (2015) 93 *Public Administration* 593; Arjen Boin and others, ‘Does Organizational Adaptation Really Matter? How Mission Change Affects the Survival of U.S. Federal Independent Agencies, 1933–2011’ (2017) 30 *Governance* 663.

51 Maor (n 7) 140.

52 Maor (n 7) 141.

53 Maor (n 7).

54 Erik F Gerding, ‘Code, Crash, and Open Source: The Outsourcing of Financial Regulation to Risk Models and the Global Financial Crisis’ (2009) 84 *Washington Law Review* 127(n 9); Ford (n 1) 48; Rob Frieden, ‘Adjusting the Horizontal and Vertical in Telecommunications Regulation: A Comparison of the Traditional and a New Layered Approach’ (2003) 55 *Federal Communications Law Journal* 207 (2003) <https://www.repository.law.indiana.edu/fclj/vol55/iss2/3>; RG Lee and J Petts, ‘Adaptive Governance for Responsible Innovation’, *Responsible Innovation: Managing the Responsible Emergence of Science and Innovation in Society* (Wiley 2013).

55 e.g. Moshe Maor and Raanan Sulitzeanu Kenan, ‘The Effect of Salient Reputational Threats on the Pace of FDA Enforcement’ (2013) 26 *Governance* 31.

56 George A Krause and J Kevin Corder, ‘Explaining Bureaucratic Optimism: Theory and Evidence from U.S. Executive Agency Macroeconomic Forecasts’ (2007) 101 *The American Political Science Review* 129.

57 (n 14).

58 Carpenter (n 14) e.g. 144; 234–244; 310.

59 see also: Busuioc (n 42).

60 Carpenter (n 11) 72; see also: Kevin Young, ‘Financial Industry Groups’ Adaptation to the Post-Crisis Regulatory Environment: Changing Approaches to the Policy Cycle’ (2013) 7 *Regulation & Governance* 460.

61 Carpenter (n 11) e.g. 60; 66–67.

62 Boon, Salomonsen and Verhoest (n 10).

63 Rimkuté (n 15); Madalina Busuioc and Dovelé Rimkuté, ‘The Promise of Bureaucratic Reputation Approaches for the EU Regulatory State’ (2020) 27 *Journal of European Public Policy* 1256; Gilad and Yogev (n 15); Alon-Barkat (n 15).

64 (n 11).

65 Carpenter (n 11) 45–46.

Table 1. Carpenter’s conceptual framework of agency reputation

Competency	Description
<b>Performative</b>	Concerns agency outputs i.e. how well they are doing the task at hand or achieving their goals.
<b>Moral</b>	Concerns the normative aspects of the agency i.e. the moral value of its goals or its behaviors (e.g. demonstrating compassion).
<b>Technical</b>	Concerns the extent to which the agency has necessary expertise in relevant areas.
<b>Procedural</b>	Concerns how well the agency follows required or desirable processes e.g. administrative, legal.

In their communications, agencies try to shape how audiences perceive them and their actions.<sup>66</sup> They use language and symbols designed to ‘signal’ to audiences that they are, for example, an ethical organization whose actions are based on technical expert judgments. In this study, we refer to this behaviour as ‘image management strategy’.<sup>67</sup> Agencies may frame themselves or their actions with more emphasis on some dimensions of reputation over others.<sup>68</sup> Agencies will also emphasize more specific ‘aspects’ within dimensions. For example, while selling itself on good moral reputation, one agency might discuss the aspect of protecting consumers while another might focus on facilitating market competition.<sup>69</sup>

Agencies further try to shape how audiences perceive them through making strategic choices about whether to communicate in a high- or low- profile manner (here: ‘communications strategy’). Agencies sometimes choose a strategy of ‘positive visibility’.<sup>70</sup> They communicate a lot and in forums designed to attract public attention.

Alternatively, agencies may be ‘strategically silent’, communicate very little, and/or in forums designed to have a smaller audience.<sup>71</sup> In the context of responding to innovation, agencies also make strategic choices about image management. Centrally: whether they should frame their response as consistent with their existing image, or a departure from that image.<sup>72</sup>

Which strategies, then, would we expect regulators to choose when faced with innovation? As presented in the theoretical framework, this depends on what the agency is like, what the innovation is like, how audiences perceive the innovation and the agency, and how other agencies respond. These factors are summarized in Figure 1. Prior to a detailed analysis of the cases, we cannot make specific predictions as to which strategies each agency will choose. Our aim is not to develop universal “singular laws”<sup>73</sup> for how regulators manage reputation in the face of innovation. Rather, in the following analysis of the cryptocurrency case, we aim to illustrate how applying a reputational lens — and this framework in particular — to innovation governance can help scholars better understand how and why regulators respond as they do.

#### 4. Methodology

We chose cryptocurrency as an extreme case of innovation.<sup>74</sup> As will be discussed further, cryptocurrencies are a case of *radical innovation*.<sup>75</sup> Cryptocurrencies represent a substantial departure from previous technologies, rather than an incremental improvement.<sup>76</sup> Radical innovations are especially challenging – technically and politically – for regulators to manage.<sup>77</sup> Extreme cases are useful for exploratory research; to probe – in this case – how agencies respond and the possible reasons for those responses in an “open-ended fashion”.<sup>78</sup>

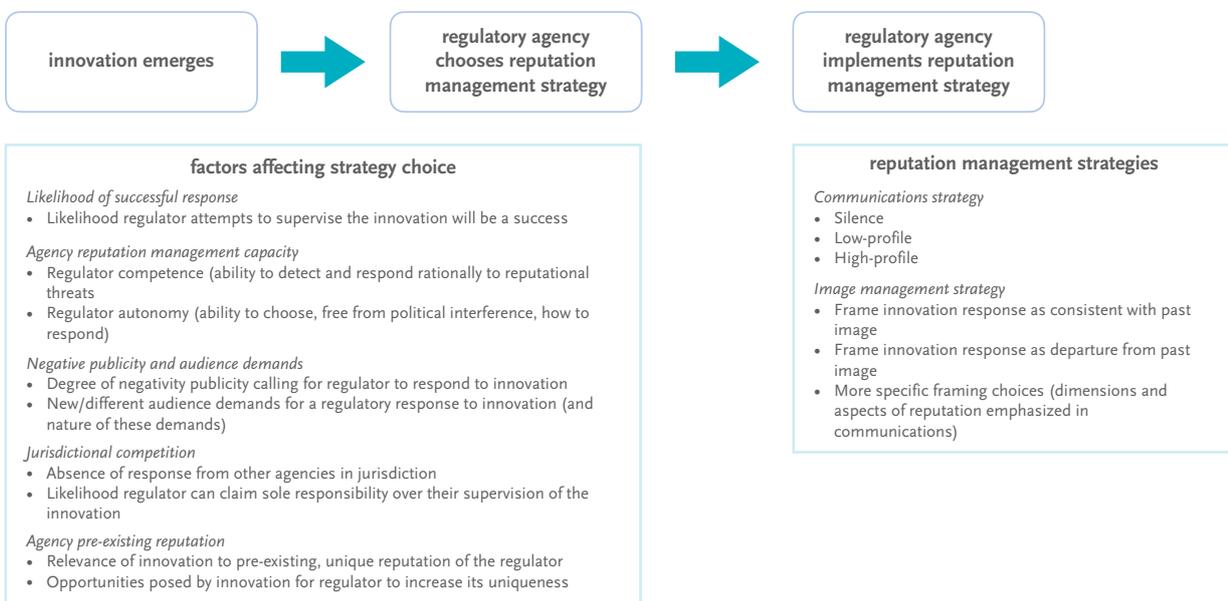


Figure 1. Regulatory agency symbolic reputation management in the face of innovation: Theoretical framework

66 Carpenter (n 11) 70; Manuela Moschella and Luca Pinto, ‘Central Banks’ Communication as Reputation Management: How the Fed Talks under Uncertainty’ (2019) 97 *Public Administration* 513.  
 67 Arild Wæraas and Haldor Byrkjeflot, ‘Public Sector Organizations and Reputation Management: Five Problems’ (2012) 15 *International Public Management Journal* 186, 190.  
 68 Rimkuté (n 15); Gilad and Yogev (n 15); Tom Christensen and Åse Gornitzka, ‘Reputation Management in Public Agencies: The Relevance of Time, Sector, Audience, and Tasks’ (2019) 51 *Administration & Society* 885.  
 69 Wæraas and Byrkjeflot (n 67) 190.  
 70 Gilad, Alon Barkat and Braverman (n 37).

71 Maor, Gilad and Bloom (n 16).  
 72 Gilad and Yogev (n 15); Maor and Sulitzeanu Kenan (n 55); Carpenter (n 11) 68; Rimkuté (n 15) 6.  
 73 Carpenter (n 11) 754.  
 74 Jason Seawright and John Gerring, ‘Case Selection Techniques in Case Study Research: A Menu of Qualitative and Quantitative Options’ (2008) 61 *Political Research Quarterly* 294, 301.  
 75 Ford (n 1) 49.  
 76 Kevin Zheng Zhou, Chi Kin (Bennett) Yim and David K Tse, ‘The Effects of Strategic Orientations on Technology- and Market-Based Breakthrough Innovations’ (2005) 69 *Journal of Marketing* 42.  
 77 Brownsword, Scotford and Yeung (n 5).  
 78 Seawright and Gerring (n 74) 302.

In this study we compare reputation management responses of three regulators (NY DFS, UK FCA, and AUS ASIC). We sought to compare a manageable number of cases which were from broadly similar contexts: Anglophone, OECD liberal democracies with large, well-established financial markets and rapidly growing fintech sectors.<sup>79</sup> We chose agencies, too, which were similar. All three agencies included are financial conduct regulators, with responsibilities including consumer protection, with formal autonomy from government.<sup>80</sup> We examined which communication strategy each agency chose and whether, and how, they engaged in image management. Image management was determined through comparing the image they presented in their communications about cryptocurrency to their image in the period immediately prior, then comparing between cases. The before and after, and inter-agency, comparisons increases our confidence agencies chose particular strategies in response to cryptocurrency trading.

The study used three methods: 1) qualitative document review of the agency's pre-existing image and 2) quantitative and 3) qualitative content analysis of cryptocurrency communications. The quantitative analysis determined communications strategy. The document analysis, with the qualitative content analysis, analysed image management.

For the document analysis, we searched Google Scholar, Westlaw, and Lexis Nexis with agency titles, acronyms, and 'reputation'. Documents were included if they were published in the three years prior to the agency's first communication about cryptocurrency. Documents included the agency's own statements, academic literature, and authoritative media and expert judgements. To determine the nature of the agency's pre-existing image, documents were interpreted using the coding schema described below.

For the quantitative content analysis, we collected all agency communications published after 2008 and before March 2018 about cryptocurrency (a total of 538 individual texts). These were imported into NVIVO and analysed to determine text type and audience.<sup>81</sup> Agencies were considered to have chosen low- or high- profile strategy based on number of texts, frequency of publishing, and high- versus low-profile fora (e.g. targeted, private speeches versus media appearances). A sample of 351 texts were then subjected to qualitative content analysis to determine what kind of image each agency presented. We developed a coding schema using Carpenter's framework of reputational competencies and informed by previous analyses using that framework.<sup>82</sup> The schema was applied to determine what overall image agencies were signalling.<sup>83</sup> This was then compared with the competencies and aspects, presented by the other two agencies, and compared to its pre-existing image. In the final stage, we compared the images agencies presented with their pre-existing reputation, and

with the reputation presented by the other two cases.

## 5. Findings and analysis

In this section, we first present findings of the quantitative and qualitative content analysis. We then move on to an interpretive analysis. We apply our theoretical framework to draw out some historical, political, and legal case factors which help to explain why regulators responded in this way, and why we see some differences between reputation management by different agencies.

### 5.1 Findings of the content analysis

#### 5.1.1 Low- or high- profile communications strategy?

The quantitative content analysis found all three regulators chose a high-profile communications strategy. Agencies published texts about cryptocurrencies frequently. Figure 2 shows regulators consistently communicate on the topic. Agencies display somewhat different preferences for specific text types (e.g. speeches versus mass media). Yet, the most common text types were those one would usually use to target mass audiences: tweets, press releases, and web pages (Figure 3). Thus, agencies can be said to have responded to cryptocurrencies in ways one would expect to draw public attention.

#### 5.1.2 (How) do agencies engage in image management?

This section discusses each regulator's image prior to cryptocurrency trading (results of the document analysis) and whether and what signals were different in cryptocurrency communications (results of the qualitative content analysis).

### NY DFS

The New York State Department of Financial Services was founded in 2011 in response to the perceived failure of previous regulatory arrangements to prevent the Global Financial Crisis. Perhaps as a result, NY DFS emphasized moral competencies first and foremost. The agency presented itself as a consumer protector standing up to Wall Street to ensure fair play. Performatively, the regulator portrayed itself as tough, strong, and unyielding. As having "worked aggressively to protect consumers, prevent systematic risk and encourage financial services to thrive and create jobs"<sup>84</sup>. The regulator characterized a prominent enforcement action against a large bank as protecting the United States against "terrorists, weapons dealers, drug kingpins and corrupt sectors".<sup>85</sup> Early enforcement successes led the press to characterize NY DFS as performatively "muscular",<sup>86</sup> and "the new cop"<sup>87</sup>. Superintendent Ben Lawsky was profiled as "Wall Street's Sheriff"<sup>88</sup>; a "marathon-running lawyer" with a "taste for

79 Z/Yen, 'The Global Financial Centres Index - Long Finance' (2018) <https://www.longfinance.net/programmes/financial-centre-futures/global-financial-centres-index/> (last accessed 22 December 2020); EY, 'EY FinTech Adoption Index 2017: The Rapid Emergence of Fintech' [https://www.ey.com/en\\_kw/financial-services--emeia-insights/the-rapid-emergence-of-fintech](https://www.ey.com/en_kw/financial-services--emeia-insights/the-rapid-emergence-of-fintech) (accessed 20 December 2020).

80 On this basis, we chose a US state regulator over a federal agency. US financial regulation is heavily decentralized, partially because the US market is so large (Brian Knight, *Federalism and Federalization on the Fintech Frontier*, 20 VAND. J. ENT. & TECH. L. 129 (2017)). In mandate and market size, NY DFS is more comparable to UK FCA and AUS ASIC than a federal regulator like the Securities and Exchange Commission.

81 Moschella and Pinto (n 66) 520.

82 e.g. Rimkutė (n 15), described in detailed at Appendix 1.

83 Hsiu-Fang Hsieh and Sarah E Shannon, 'Three Approaches to Qualitative Content Analysis' (2005) 15 *Qualitative Health Research* 1277, 124–5.

84 NY DFS, 'DFS Annual Reports | Department of Financial Services' (2011 *First Annual Report of the Superintendent of the Governor and Legislature*, 2012) 6 [https://www.dfs.ny.gov/reports\\_and\\_publications/dfs\\_annual\\_reports](https://www.dfs.ny.gov/reports_and_publications/dfs_annual_reports) (last accessed 23 December 2020).

85 cited in Justin O'Brien and Olivia Dixon, 'The Common Link in Failures and Scandals at the World's Leading Banks' (2013) 36 *Seattle University Law Review* 941, 960.

86 Liz Rappaport, 'Wall Street's New Watcher' *Wall Street Journal* (3 October 2011) <https://online.wsj.com/article/SB10001424052970203405504576605790712611496.html> (accessed 23 December 2020).

87 Danny Hakim, 'Expanding Reach, Cuomo Creates Second Cop on Financial Beat (Published 2012)' *The New York Times* (29 January 2012) <https://www.nytimes.com/2012/01/30/nyregion/financial-services-agencys-reach-spurs-criticism-of-cuomo.html> (last accessed 23 December 2020).

88 Jessica Silver-Greenberg and Ben Protess, 'Benjamin Lawsky, Sheriff of Wall Street, Is Taking Off His Badge (Published 2015)' *The New York Times* (20 May 2015) <https://www.nytimes.com/2015/05/21/business/dealbook/benjamin-lawsky-to-step-down-as-new-yorks-top-financial-regu->

Wall Street blood”.<sup>89</sup> Procedurally, NY DFS presented itself as willing to ‘go rogue’ in the pursuit of its objectives, even overriding norms of inter-regulator coordination.<sup>90</sup> In its cryptocurrency communications, NY DFS shows little attempt at manage its image away from this reputation.

NY DFS framed cryptocurrencies as a new area of supervisory activity in which they had obvious jurisdiction.

‘If there was money transmission going on [in cryptocurrency trading] as the state regulatory in New York we had a very specific regulatory obligation to license those entities, examine those entities, and otherwise regulate those entities in New York’.<sup>91</sup>

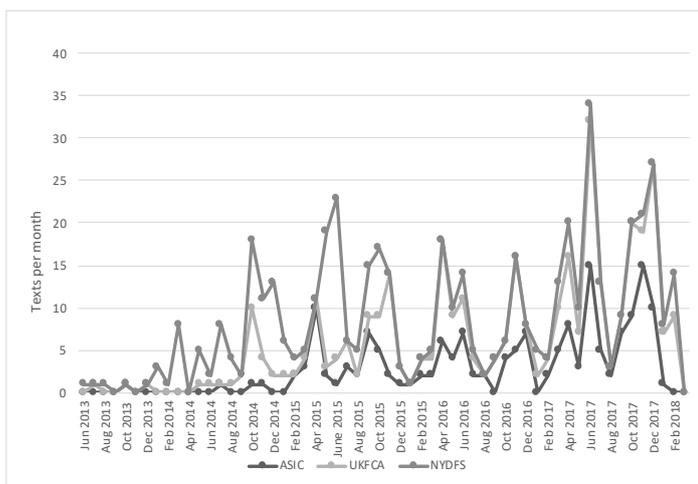


Figure 2. Relevant texts published by regulator over time

Table 3. Texts by type (as percentage)

Text type	AUS ASIC	UK FCA	NY DFS
Tweet	35.1%	46.4%	56.8%
Web page	16.8%	14.1%	1.4%
Speech	11.5%	16.1%	3.6%
Press release	14.1%	8.9%	14.4%
Mass media	2.1%	2.1%	13.7%
Other	20.3%	12.4%	9.6%
<b>total</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>

In discussing the quality of the agency’s involvement in cryptocurrency, NY DFS emphasized the moral, performative, and procedural competencies consistent with its established image. The agency presented itself as the same tough regulator, intervening to take on cryptocurrency supervision to protect consumers and combat illegal activity.

‘If virtual currencies remain a virtual Wild West for narcotraffickers and other criminals, that would not only threaten our country’s national security, but also the very existence of the virtual currency industry as a legitimate business enterprise...It is vital to put in place appropriate safeguards for consumers and law abiding citizens’.<sup>92</sup>

Also consistent with its pre-existing image, NY DFS suggests its performance on cryptocurrency regulation cannot and should not be undermined by federal regulation. The agency argues state-based regulators are more experienced than federal, and especially more experienced with regulating non-bank financial entities.<sup>93</sup>

‘DFS has proven that the state regulatory system is the best way to supervise and cultivate a thriving fintech industry, like virtual currency’.<sup>94</sup>

Some signals NY DFS sent in cryptocurrency communications, however, were different. First, NY DFS emphasized the performative uniqueness and novelty of its approach to cryptocurrency in ways not previously seen. In August 2015, NY DFS introduced the BitLicense scheme. Any firm seeking to use cryptocurrency for finance or banking purposes had to obtain a ‘BitLicense’ in order to operate legally.<sup>95</sup> The agency repeatedly emphasized they were the first in the nation (and the world) to implement this kind of system.

‘NY DFS proposed a first-in-the-nation, comprehensive regulatory framework for firms dealing in virtual currency, including Bitcoin’.<sup>96</sup>

Second, NY DFS framed its involvement not only in terms of enforcement but also facilitation. Indeed, the agency positions themselves morally as aiming to enabling financial innovation generally.

‘...We also want to make sure that we don’t clip the wings of a fledgling technology before it gets off the ground. We want to make certain that New York remains a hub for innovation and a magnet for new technology firms’.<sup>97</sup>

Performatively, the agency argued it was already regulating in ways which either did not hurt, or indirectly helped, business.

‘Numerous fintech companies have already succeeded and grown under this regulatory framework...In implementing regulations for the licensing and supervision of virtual currency entities, DFS enhanced trust and legitimacy of a promising emerging financial services technology’.<sup>98</sup>

Third, and finally, signals about NY DFS’s procedural competencies have a different emphasis in discussions of cryptocurrency supervision. Whereas the agency had previous presented itself as willing to

lator.html (accessed 23 December 2020).

89 Simon Neville, ‘Ben Lawsky: Marathon Man Who Became the Latest Scourge of Wall Street’ (*the Guardian*, 11 August 2012) <http://www.theguardian.com/business/2012/aug/12/benjamin-lawsky-profile> (last accessed 23 December 2020).

90 Jill Treanor, ‘Standard Chartered Chief Says Bank Does Not Need to Change Culture’ (*the Guardian*, 8 August 2012) <http://www.theguardian.com/business/2012/aug/08/standard-chartered-chief-defends-bank> (accessed 23 December 2020).

91 NY DFS, ‘Superintendent Lawsky Issues Notice of Intent to Hold Public Hearing Regarding Virtual Currencies on January 28 and 29 in New York City.’ 1 <https://www.dfs.ny.gov/about/press2013/memo1308121.pdf>.

92 Ben Lawsky, ‘Notice of Inquiry on Virtual Currencies’ 1 <https://dfs.ny.gov/about/press2013/memo1308121.pdf>.

93 Maria Vullo, ‘Superintendent’s Letter Comptroller’s Licensing Manual Draft Supplement: Evaluating Charter Applications from Financial Technology Companies. Letter from Maria Vullo to the Honourable Thomas J. Curry,’.

94 Vullo (n 92) 2.

95 ‘New York’s Bitcoin Hub Dreams Fade with Licensing Backlog’ (*CNBC*, 31 October 2016) <https://www.cnbc.com/2016/10/31/new-york-bitcoin-hub-dreams-fade-with-licensing-backlog.html> (last accessed 23 December 2020).

96 NY DFS, ‘2014 Annual Report of the New York State Department of Financial Services’ 6 [https://www.dfs.ny.gov/system/files/documents/2020/03/dfs\\_annualrpt\\_2014.pdf](https://www.dfs.ny.gov/system/files/documents/2020/03/dfs_annualrpt_2014.pdf).

97 NY DFS, ‘Superintendent Lawsky Issues Notice of Intent to Hold Public Hearing Regarding Virtual Currencies on January 28 and 29 in New York City.’ (n 90) 2.

98 Vullo (n 92) 6.

violate procedural norms to get results, on cryptocurrency NY DFS signals it is making decisions on cryptocurrency based on rigorous inquiry and fact-finding.

Notably, in the NY DFS case and in regard to the other two regulators, technical competencies were not significantly emphasized. NY DFS does make occasional reference to having general experience in regulating the New York financial market, and once or twice to lacking expertise on cryptocurrencies (discussed further below).

## UK FCA

Like NY DFS, the United Kingdom's Financial Conduct Authority was established to replace a regulator implicated in the Crisis (the Financial Services Authority).<sup>99</sup> The UK FCA similarly emphasized its moral, performative, and procedural competencies in the period preceding cryptocurrency trading. Morally, UK FCA presented a renewed moral mission and standards of behaviour. Procedurally, it emphasized ongoing commitment to accountability and transparency while avoiding rigid, rule-based supervision.<sup>100</sup> Performatively, the regulator emphasized the quality of its approach, rather than the strength of its regulation. In particular, that its approach was proactive, responsive, outcome-focused, and suitably flexible. The UK FCA described itself as having performative characteristics of "curiosity", being "already on the case", and demonstrating "professional excellence".<sup>101</sup> The UK FCA liked to characterize itself as leading the world in creative solutions.<sup>102</sup> Further, that the regulator was morally committed to, and performatively demonstrated, a balance in promoting competition and protecting consumers.<sup>103</sup> In communicating about cryptocurrency, UK FCA presented a largely similar image.

Formally, the UK FCA has argued that, until or unless the use of cryptocurrencies constitutes a financial product, they do not have the necessary powers to regulate.<sup>104</sup><sup>105</sup> In their communications, however, UK FCA placed cryptocurrency and fintech supervision generally front and centre in their regulatory brand.<sup>106</sup> The regulator has argued, indeed, that their statutory obligations compel them to take a role.

'So, our duty to promote competition is actually, it's full title is 'competition in the interests of consumers'. So, you know that's where we start [our approach to fintech] from'.<sup>107</sup>

In characterizing the agency's approach to cryptocurrencies, UK FCA continued to send strong performative and moral signals that it was a principles-based, outcomes-focused, flexible, and proactive regulator.

'In addition to supporting individual businesses, we look to add

more flexibility to our regulatory framework and identify barriers to entry for innovative firms...Our approach is typically to regulate the outcome, rather than the specific process'.<sup>108</sup>

Perhaps in this spirit, the UK FCA launched 'Project Innovate' in 2014. Project Innovate was composed of an Innovation Hub<sup>109</sup> and regulatory sandbox. The sandbox allowed new kinds of fintech including cryptocurrency and related technology to be 'tested' on the live market, with firm-bespoke licenses, to calibrate regulatory conditions for their final authorization. Performatively and morally, the UK FCA presented these instruments as representative of the fact that it is an experimental regulator (in ways largely consistent with its pre-existing image).

'The FCA's regulatory sandbox was a first for regulators worldwide and underlines our deep commitment to innovation and our willingness to think outside the usual regulatory parameters'.<sup>110</sup>

Another consistent aspect of reputation is the performative claim that UK FCA's approaches represent world-leading, unique, and novel solutions for fintechs like cryptocurrency.

'We are the first regulator to launch a programme like the sandbox anywhere in the world.... It is an experiment for all involved and we will need to learn as much as the firms engaged in it'.<sup>111</sup>

There were, however, a number of aspects of reputation signalled in cryptocurrency communications which were not present (or not emphasized) in the agency's pre-existing reputation. First, UK FCA more heavily emphasized a moral commitment to facilitating innovation and business development, respectively.<sup>112</sup> Officials overtly characterized Project Innovate as an attempt to make UK FCA more approachable to innovators.<sup>113</sup> Further, UK FCA emphasized its strong performance in developing the sector. Here, UK FCA claims far more direct credit than is seen with NY DFS.

'We have seen [sandbox] tests across the full range of sectors that we regulate and I'm pleased that the majority of firms that have tested products in the sandbox have gone on to take the innovation to market'.<sup>114</sup>

99 UK FCA, 'Journey to the FCA.' <https://www.fca.org.uk/publication/corporate/fsa-journey-to-the-fca.pdf>.

100 UK FCA, 'Business Plan 2-13/14' <https://www.fca.org.uk/publication/business-plans/bp-2013-14.pdf>.

101 UK FCA (n 99).

102 Eilís Ferran, 'The Break-up of the Financial Services Authority' (2011) 31 *Oxford Journal of Legal Studies* 455.

103 UK FCA (n 98) 44.

104 R Mashraky, 'FCA Decides Not to Enforce Regulation on Bitcoin | Finance Magnates' (*Finance Magnates | Financial and business news*, 15 December 2017) <https://www.financemagnates.com/cryptocurrency/news/fca-decides-not-enforce-regulation-bitcoin/> (last accessed 22 December 2020).

105 Since the period analysed, the FCA has begun to change this stance on cryptocurrencies Rob Davies, 'FCA Proposes Ban on Cryptocurrency Products' (*the Guardian*, 3 July 2019) <http://www.theguardian.com/technology/2019/jul/03/fca-proposes-ban-on-cryptocurrency-products> (last accessed 22 December 2020).

106 Substantively, cryptocurrencies, wallets, and blockchain applications have been present in multiple rounds of the regulatory sandbox.

107 JA Barefoot, 'Regulation Innovation: The FCA'S Christopher Woolard' 3.

108 'Financial Conduct Authority Unveils Successful Sandbox Firms on the Second Anniversary of Project Innovate' (FCA, 7 November 2016) 1 <https://www.fca.org.uk/news/press-releases/financial-conduct-authority-unveils-successful-sandbox-firms-second-anniversary> (last accessed 23 December 2020).

109 Innovation Hubs are specialized units designed for the purposes of fintech sector engagement and mutual information-sharing.

110 UK FCA, 'Financial Conduct Authority Unveils Successful Sandbox Firms on the Second Anniversary of Project Innovate' (FCA, 7 November 2016) 1 <https://www.fca.org.uk/news/press-releases/financial-conduct-authority-unveils-successful-sandbox-firms-second-anniversary> (last accessed 23 December 2020).

111 Christopher Woolard, 'Innovate Finance Global Summit' (FCA, 11 April 2016) 5 <https://www.fca.org.uk/news/speeches/innovate-finance-global-summit> (last accessed 23 December 2020).

112 This is not to say that FCA was uninterested in criminal activity and consumer protection. Rather, it is a matter of relative emphasis on these aspects in FCA's communications when describing the regulator and its actions.

113 UK FCA, 'Financial Conduct Authority Outlines Lessons Learned in Year One of Its Regulatory Sandbox' (20 October 2017) 1 <https://www.fca.org.uk/news/press-releases/financial-conduct-authority-outlines-lessons-learned-year-one-its-regulatory-sandbox> (last accessed 23 December 2020).

114 Justin O'Brien, 'Attack on ASIC Chief Draws Corporate Governance into Political Mire' (*The Conversation*, 13 July 2012) <http://theconversation.com/attack-on-asic-chief-draws-corporate-governance-into-political-mire-8251> (last accessed 23 December 2020; Greg Medcraft, 'ASIC's Outlook -the Road Ahead' (8 May 2013) <https://asic.gov.au/about-asic/>

Second, the focus on moral aspects to do with transparency and accountability were not emphasized in this period. Whether this is due to the focus on cryptocurrency communications, or changes over time, is addressed in the discussion.

## AUS ASIC

Established in 1998, Australia's Securities and Investments Commission has a longer history of image management than the other regulators. Focusing on the period immediately prior to cryptocurrency, though, we see AUS ASIC presented itself as a procedurally oriented, legalistic regulator (ASIC 2013b). The agency emphasized aspects of appropriate stakeholder consultation and cooperation with other regulators.<sup>115</sup> A focus on procedures, however, ran through all its competencies. AUS ASIC had a performative focus on enforcing financial regulation through litigation; successfully prosecuting a series of high-profile cases. While this might suggest a similar image to NY DFS, AUS ASIC and others characterized its enforcement as 'lawyerly'; cautious and rule-oriented.<sup>116</sup> Another aspect of its performative competencies emphasized was high-quality 'customer-service'. In this regard too, a focus on procedure is apparent, with AUS ASIC issuing charters with detailed standards. In its communications about cryptocurrency, the agency presents a largely similar image.

Like in the UK, cryptocurrencies in the period analysed were not inherently subject to financial regulation.<sup>117</sup> AUS ASIC claimed the regulator had relevant powers where their trade constituted certain kinds of financial goods and services.<sup>118</sup> Despite apparent limits in legal authority, ASIC indicated it had some role in supervising cryptocurrencies. In early 2015, the regulator launched its own Innovation Hub and, in 2016, a regulatory sandbox.<sup>119</sup>

In communications, AUS ASIC presented largely the same procedural, performative, and moral competencies. While AUS ASIC did somewhat reduce its focus on procedural competencies compared with its pre-existing reputation, the agency continued (and far more prominently than in the other two cases) to justify agency decisions by reference to appropriate consultation processes and legal/technical consideration.

'In considering the feedback received, we have also consulted with the insurance industry. Based on these discussions, and the submissions received, we consider that the proposed condition is generally workable'.<sup>120</sup>

[news-centre/speeches/asics-outlook-the-road-ahead](#) (last accessed 23 December 2020).

115 O'Brien (n 113); Medcraft (n 113).

116 AUS ASIC, '10-266AD ASIC Releases Stakeholder Survey' (10 December 2010) 11 <https://asic.gov.au/about-asic/news-centre/find-a-media-release/2010-releases/10-266ad-asic-releases-stakeholder-survey> (last accessed 23 December 2020).

117 David Chau, 'Bitcoin One Step Closer to Being Regulated in Australia' (22 October 2017) <https://www.abc.net.au/news/2017-10-23/bitcoin-one-step-closer-to-being-regulated-in-australia/9058582> (last accessed 23 December 2020).

118 Canberra APH, 'Digital Currency—Game Changer or Bit Player' (4 August 2015) 8 [https://www.aph.gov.au/Parliamentary\\_Business/Committees/Senate/Economics/Digital\\_currency/Report](https://www.aph.gov.au/Parliamentary_Business/Committees/Senate/Economics/Digital_currency/Report) (last accessed 23 December 2020).

119 AUS ASIC, '16-440MR ASIC Releases World-First Licensing Exemption for Fintech Businesses' (15 December 2016) <https://asic.gov.au/about-asic/news-centre/find-a-media-release/2016-releases/16-440mr-asic-releases-world-first-licensing-exemption-for-fintech-businesses> (last accessed 23 December 2020).

120 AUS ASIC, 'REP 508 Response to Submissions on CP 260 Further Measures to Facilitate Innovation in Financial Services' (Australian Government Australian Securities and Investments Commission 2016) report

In discussing cryptocurrencies, ASIC primarily focused on restating its high-quality and ever-improving performance on customer service. The regulator repeatedly discussed improvements to processes, especially in regard to fintech regulatory approvals.

'The agreement will enable innovative FinTech companies in Singapore and Australia to establish initial discussions in each other's market and faster and receive advice on required licenses, thus helping to reduce regulatory uncertainty and time to market'.<sup>121</sup>

There are, however, some notable differences in the image ASIC presents in its cryptocurrency communications compared with its pre-existing image. ASIC more heavily emphasizes its performance as a facilitator of business development. Its characterization here is more similar to NY DFS's indirect credit claiming than UK FCA's hands-on involvement.

'ASIC supports innovation and we have endeavoured to assist persons to understand their obligations under the laws [regarding digital currency trading] we are responsible for'.<sup>122</sup>

Relatedly, ASIC emphasizes a moral commitment to facilitating innovation not seen in its pre-existing image.

'ASIC's fintech licensing exemption reflects our commitment to facilitating innovation in financial services. However, we are equally committed to ensuring that innovative products and services are regulated appropriately and promote good consumer outcomes...'<sup>123</sup>

Another new aspect of its performative reputation is the repeated characterization of its specific approach to the Hub and sandbox was performatively unique and novel.

'The proposed licensing exemption compares favourably to measures in other jurisdictions as it will allow some fintech businesses to commence testing of certain product offerings in the absence of detailed assessment by the regulator'.<sup>124</sup>

Also, in regard to uniqueness, in communicating about its performance on cryptocurrency AUS ASIC presented the agency as world-leading in regard to its inter-agency coordination efforts.

'Under a new world-first agreement, innovative fintech companies in Australia and the United Kingdom will have more support from financial regulators as they attempt to enter the other's market'.<sup>125</sup>

While this framing reflects a pre-existing reputation for continuously improving procedures, the focus on uniqueness and novelty was not previously strongly emphasized.

<https://asic.gov.au/regulatory-resources/find-a-document/reports/rep-508-response-to-submissions-on-cp-260-further-measures-to-facilitate-innovation-in-financial-services> (last accessed 23 December 2020).

121 AUS ASIC, '16-440MR ASIC Releases World-First Licensing Exemption for Fintech Businesses' (n 118) 1.

122 M Saadat, 'Senate Economics References Committee Inquiry into Digital Currency: Opening Statement' 1.

123 AUS ASIC, '16-440MR ASIC Releases World-First Licensing Exemption for Fintech Businesses' (n 118) 2.

124 AUS ASIC, '16-185MR ASIC Consults on a Regulatory Sandbox Licensing Exemption' (8 June 2016) 1 <https://asic.gov.au/about-asic/news-centre/find-a-media-release/2016-releases/16-185mr-asic-consults-on-a-regulatory-sandbox-licensing-exemption> (last accessed 23 December 2020).

125 AUS ASIC, '16-194MR Singaporean and Australian Regulators Sign Agreement to Support Innovative Businesses' (16 June 2016) 1 <https://asic.gov.au/about-asic/news-centre/find-a-media-release/2016-releases/16-194mr-singaporean-and-australian-regulators-sign-agreement-to-support-innovative-businesses> (last accessed 23 December 2020).

Unlike UK FCA, AUS ASIC sought to amend legislation to accommodate the existence of a sandbox. AUS ASIC's sandbox is a sector-wide 'white list' system allowing start-ups only to test new products on temporary licenses.<sup>126</sup> The way AUS ASIC discusses its approach reflects a pre-existing reputational tension between performative responsiveness and procedural correctness. AUS ASIC characterizes its performance as proactive, but only in the sense of identifying matters to be resolved through proper legal procedure.

'Your input [on the Innovation Hub] will also help ASIC stay on top of laws that have become impractical or inappropriate as the sector moves forward'.<sup>127</sup>

## 5.2 Analysis

In all three cases, agencies presented an image in their cryptocurrency communications largely consistent with their pre-existing reputation. In framing their response, there is little evidence regulators sought to drastically rebrand. The image agencies present, however, differs from their pre-existing image in a few, common ways. Agencies signalled new aspects of their image in regard to cryptocurrency/general fintech regulation. All three began to overtly characterize themselves as innovation regulators. To a greater extent than in their pre-existing image, regulators emphasize they are morally committed to, and performing toward, innovation and the development of innovative businesses. Finally, all three emphasize performative uniqueness and novelty in their regulatory approach in cryptocurrency communications. Overall, regulators frame supervision of cryptocurrency as a natural extension of, and bolster to, of their existing regulatory brand.

There are, however, differences between cases. As each agency framed its response in terms of its pre-existing reputation, there were differences in the nature of the image agencies signalled communications on cryptocurrency. NY DFS showed the least change in the image it presented before and after cryptocurrencies. When discussing its new role as a cryptocurrency regulator, further, NY DFS claimed to have exclusive authority over the technology in its jurisdiction, which AUS ASIC and UK FCA did not. Further, UK FCA and AUS ASIC usually discussed cryptocurrencies as part of a broader fintech phenomenon. NY DFS was more likely to refer to cryptocurrency as a stand-alone innovation, although increasingly discusses it as part of 'fintech'.

What may explain why agencies managed their reputation in these ways? To interpret their responses, we draw on the theoretical framework at Figure 1, derived from bureaucratic reputation theory.

One explanation from theory is that regulators respond to innovation, and claim a role in its supervision, when they think they can govern the technology successfully. This is, however, unlikely to be the case for cryptocurrencies. Cryptocurrencies have anonymous users, are generated and traded across borders, and are technically complex and legally ambiguous.<sup>128</sup> It is often unclear, and was certainly in cryptocurrency's early years, whether tokens are currency or financial products and thus, whether financial regulators have jurisdiction.<sup>129</sup>

Regulatory efforts to supervise cryptocurrencies were therefore likely to be difficult, with a high chance of real or perceived failure. That regulators in the case study chose to use highly public communications to claim a role, then, is surprising.

It could be the case that regulators, here, were forced by their political masters into involving themselves in a risky technology. We consider this possible, but unlikely, given each agency in the study has formal, legal autonomy from government. Another explanation is regulators are incompetent at reputation management. They have been insensitive to the risks supervising cryptocurrency posed to their reputation. Our analysis of communications, however, strongly suggests regulators were well aware of the reputational stakes.

'However, there are significant, well founded concerns that financial institutions and regulators for that matter are not keeping up with the expectations of consumers for fast, reliable digital transactions. And that's a serious problem that we all need to address with a heightened sense of urgency and focus'.<sup>130</sup>

'But I want to reiterate what I said earlier, which is that community expectations have changed. So too have the expectations of the government and the regulator, and even the black letter law. In line with this, we have set out in our Corporate Plan, released last year, our view of 'what good looks like' in the sectors we regulate'.<sup>131</sup>

'Innovation can arise from diverse sources, such as start-ups, technology providers as well as regulated firms, including large financial institutions. They all have the potential to challenge existing business models, products and methodologies to benefit consumers and markets as a whole'.<sup>132</sup>

Assuming regulators were sensitive to the considerable risks of supervising cryptocurrencies, this would suggest the risks of silence or inaction on the technology were greater. There is some evidence regulators may have experienced public pressure to act. Cryptocurrencies and their (lack of) supervision was a topic in the media at the time. Anecdotally, much of this coverage was negative; pointing out the risks to consumer protection, systematic stability, money laundering, and the funding of terrorism and the drug trade.<sup>133</sup> In all three jurisdictions, we see examples where politicians, the media, and other audiences call for more regulatory oversight by financial conduct regulators.<sup>134</sup> It would follow that their high-profile communications,

126 AUS ASIC, 'Fintech Regulatory Sandbox' (2018) <https://asic.gov.au/for-business/innovation-hub/fintech-regulatory-sandbox> (last accessed 23 December 2020).

127 AUS ASIC, '15-211MR Innovation Hub: ASIC Update' (5 August 2015) 1 <https://asic.gov.au/about-asic/news-centre/find-a-media-release/2015-releases/15-211mr-innovation-hub-asic-update> (last accessed 23 December 2020).

128 Narayan and others (n 19) ix–xxiii.

129 Saadat (n 121).

130 Ben Lawsky, 'Opening Statement. Hearings on the Regulation of Virtual Currency.' (AVC, 2014) <https://www.youtube.com/watch?v=TZW7R7FPI-JY> (last accessed 23 December 2020).

131 AUS ASIC, 'RG 257 Testing Fintech Products and Services without Holding an AFS or Credit Licence (Withdrawn)' (2017) <https://asic.gov.au/regulatory-resources/find-a-document/regulatory-guides/rg-257-testing-fintech-products-and-services-without-holding-an-afs-or-credit-licence-withdrawn> (last accessed 23 December 2020).

132 UK FCA, 'Financial Conduct Authority Outlines Lessons Learned in Year One of Its Regulatory Sandbox' (n 112).

133 Angela Monaghan, 'Bitcoin Is a Fraud That Will Blow up, Says JP Morgan Boss | Technology | The Guardian' (13 September 2017) <https://www.theguardian.com/technology/2017/sep/13/bitcoin-fraud-jp-morgan-cryptocurrency-drug-dealers> (last accessed 22 December 2020); Kim Zetter, 'FBI Fears Bitcoin's Popularity with Criminals | WIRED' (9 May 2012) <https://www.wired.com/2012/05/fbi-fears-bitcoin> (last accessed 22 December 2020).

134 Committee on Banking, Housing, and Urban Affairs, 'Virtual Currencies: The Oversight Role of the U.S. Securities and Exchange Commission and the U.S. Commodity Futures Trading Commission'; David Campbell, 'City Regulator Warns of "Reputational Risks" of Crypto' (*Wealth Manager*, 28 June 2018) <http://citywire.co.uk/wealth-manager/city-regulator-warns-of-reputational-risks-of-crypto/a1133481> (last accessed 21 December 2020); Blanca Hartge-Hazelman, 'Glenn Stevens Says Bitcoins Show Promise, but So Did Tulips' (*Australian Financial Review*, 12 De-

and taking on of responsibility, are a rational strategy designed to reassure audiences they were ‘on the case’ to manage the risks of the technology.<sup>135</sup> The use of a high-profile communications strategy in response to external threats is consistent with findings from Alon-Barkat and Gilad,<sup>136</sup> Moffitt,<sup>137</sup> and Busuioc and Lodge.<sup>138</sup>

To fully understand regulator reputation management in this case, however, one cannot just examine media coverage of cryptocurrencies. One must consider the broader reputational landscape for financial conduct regulators at the time. Cryptocurrencies emerged in the immediate wake of the Global Financial Crisis. The Crisis, it was widely argued, had been triggered by another innovation: over-the-counter derivatives. The invention of this new kind of financial product “shattered the atom of property”,<sup>139</sup> with ultimately explosive results. Financial conduct regulators, however, largely failed to detect and understand their seismic implications. Many regulators left the market for these derivatives un- or under- regulated for decades; a major contributor to the Crisis.<sup>140</sup> Most jurisdictions, and certainly those studied, had reformed or were reforming regulatory regimes in this period. This was typically toward stronger, stricter, more prescriptive regulations for financial institutions (e.g. Dodd-Frank in the US, the new Banking Act in the UK, and implementation of Basel III in Australia). Two of the regulators in this study were replacements for predecessors terminated due to their perceived failures (New York Department of Financial Services and the Financial Conduct Authority). AUS ASIC had survived, but still received some criticism for its handling of the credit market leading up to the Crisis.<sup>141</sup> Financial regulators were at this point, then, on the public mind and likely receiving more scrutiny than in more rosy economic times. It would probably have been far riskier at this moment to try to ignore cryptocurrencies or dodge responsibility.

Regulators may also have chosen high-profile communications strategies, however, in order to shape and manage audience expectations as to the nature of their response.<sup>142</sup> Agencies in our case study do appear to use communications to mitigate the risks of taking on a role in cryptocurrency regulation. There are a number of instances where agencies put boundaries on their obligations and manage expectations about regulatory capacity.

‘We are regulating financial intermediaries. We are not regulating software development. It’s not what we do’.<sup>143</sup>

‘However, we cannot mitigate every risk, nor do we aim to do so’.<sup>144</sup>

ember 2013) <https://www.afr.com/policy/economy/glenn-stevens-says-bitcoins-show-promise-but-so-did-tulips-20131213-iygau> (last accessed 21 December 2020).

135 see also: Tzur (n 9).

136 ‘Compensating for Poor Performance with Promotional Symbols: Evidence from a Survey Experiment’ (2017) 27 *Journal of Public Administration Research and Theory* 661.

137 ‘Promoting Agency Reputation through Public Advice: Advisory Committee Use in the FDA’ (2010) 72 *The Journal of Politics* 880.a

138 Madalina Busuioc and Martin Lodge, ‘The Reputational Basis of Public Accountability’ (2016) 29 *Governance* 247, 95.

139 Ford (n 1) 142.

140 Ford (n 1).

141 Hartge-Hazelman (n 133).

142 Gilad, Alon Barkat and Braverman (n 37); Moffitt (n 136) 95.

143 NY DFS, ‘Superintendent Lawsky Issues Notice of Intent to Hold Public Hearing Regarding Virtual Currencies on January 28 and 29 in New York City.’ (n 90).

144 UK FCA, ‘Financial Conduct Authority. Business Plan 2016 / 17 - PDF Free Download’ (2017) <https://docplayer.net/18378085-Financial-conduct-authority-business-plan-2016-17.html> (last accessed 23 December 2020).

‘Our response to these developments should be driven by... resisting the temptation to jump before we properly understand developments.’<sup>145</sup>

Indeed, the goal of expectations management may help to explain why all three regulators communicate so little about the technical dimension of reputation. Agencies may seek to moderate expectations about what they could be expected to know about cryptocurrencies, especially in early stages. From this perspective, regulator reputation management is a rational strategy designed to mitigate risks. To respond to media criticism about regulatory negligence, agencies seek to convince their audiences that they are taking swift action to supervise cryptocurrencies. At the same time, they frame responses in ways which temper audience expectations about what can be achieved.

In all three cases, however, in their image management regulators signal not just that they are doing ‘something’ about cryptocurrency, but that they are doing something extraordinary. The regulators all signal they are unique, novel, and highly successful innovation supervisors. This kind of strategy is irrational if agencies are just managing risks. This kind of public credit-claiming, novelty, and differentiation are high risk communication strategies.<sup>146</sup> They raise expectations. They make agencies a bigger target if anything goes wrong. To help to explain this behaviour, we need to turn to other contextual factors in our framework: agency jurisdictions and pre-existing, unique reputations.

Cryptocurrency trading supervision was relevant to all three financial conduct regulators studied due to risks to – at minimum — consumer protection. None of these regulators, though, necessarily held exclusive jurisdiction over every area of cryptocurrency supervision. NY DFS had a more extensive mandate than UK FCA and AUS ASIC, including powers over criminal investigation, enforcement, and market regulation.<sup>147</sup> In terms of actual instances of jurisdictional competition, in the UK there is little evidence of other agencies trying to claim jurisdiction over UK FCA’s traditional regulatory responsibilities (e.g. consumer protection, competition).<sup>148,149</sup> UK FCA actually collaborated with Bank of England and Treasury on a response. For AUS ASIC, we see more competition; notably with other agencies granted formal jurisdiction over certain aspects of cryptocurrency supervi-

145 Greg Medcraft, ‘ASIC’s Regulatory Approach to High-Frequency Trading and Dark Pool’ <https://download.asic.gov.au/media/4224331/greg-medcraft-speech-oxford-university-published-24-april-2017.pdf>

146 Hood (n 32); David L Deephouse, ‘To Be Different, or to Be the Same? It’s a Question (and Theory) of Strategic Balance’ (1999) 20 *Strategic Management Journal* 147.

147 In Australia, competition is the responsibility of the Australian Competition and Consumer Commission. In New York it is an obligation of the Antitrust Bureau. Investor protection in the UK and the US is governed by private law, whereas it is public in Australia (and in ASIC’s remit). In Australia, money laundering and counter terrorism issues related to currency are the responsibility of the Australian Transaction Reports and Analysis Centre. In the UK, the UK FCA is formally responsible for anti-money laundering but does so as a supervisor of private and professional bodies who engage in the actual enforcement. Counter-terrorism in relation to currency is primarily managed by the Treasury. Both money laundering and counter terrorism matters regarding cryptocurrency are also shared jurisdictions with European Union regulators.

148 Anthony Cuthbertson, ‘UK Authorities Lay out What They Will Do about Bitcoin’ (*The Independent*, 10 April 2018) <https://www.independent.co.uk/life-style/gadgets-and-tech/news/cryptocurrency-bitcoin-regulation-fca-price-updates-market-a8296411.html> (last accessed 21 December 2020).

149 UK HM Revenue & Customs did assume responsibility to administer laws about tax and money laundering.

sion.<sup>150</sup> NY DFS experienced jurisdictional incursion from above. The Office of the Comptroller of the Currency discussed offering cryptocurrency companies charters at the federal level, going over heads of state regulators. NY DFS fought this; successfully challenging OCC's charters in court.<sup>151</sup>

That cryptocurrencies were relevant to the core business of financial conduct regulators may help to explain why all three regulators chose a high-profile communication strategy and sought to integrate a role for its supervision into their existing public image. Differences in the nature of NY DFS's jurisdiction and mandate to that of UK FCA and AUS ASIC may also help us to understand how each framed their response. UK FCA and AUS ASIC framed their response in ways that acknowledge the agencies' limited mandate and jurisdiction. They present themselves as having a partial role in the regulation and facilitation of high-tech financial innovation, but lacking legal jurisdiction to singlehandedly regulate cryptocurrencies.<sup>152</sup> NY DFS made a far stronger claim, arguing they were the obvious, exclusive regulator of cryptocurrency trading in its financial conduct aspects. NY DFS may well have communicated as early as it did on cryptocurrencies because of its – obviously founded – fear that other agencies would try to make claims first. It is notable here that NY DFS had more potential competition than AUS ASIC or UFGA. As a state regulator, NY DFS did not only have to guard against encroachments from other agencies in their state but also from federal regulators. Whereas UK FCA and AUS ASIC would likely have had to share authority with other agencies over cryptocurrencies, NY DFS had the potential to supervise largely autonomously. There were, however, other differences in the exact image the three regulators presented; in which dimensions and aspects of reputation they signalled. Bureaucratic reputation theory suggests such differences are likely to arise from differences in their pre-existing reputations.

In our case study, despite the disruptions of cryptocurrency, and its differences to traditional payments, currencies etc., agencies tend to frame their response as an extension of the agency's existing brand. This helps to explain differences in image management between agencies. Why NY DFS presented its responses – certainly initially – as tough, enforcement measures against terrorists and money launderers. Why UK FCA presented its response as part of a broader flexible and world-leading strategy on fintech. Why ASIC signalled procedural caution, and a willingness to wait for a new legal mandate to act.

These differences in image management also reflect differences in the unique reputation of each regulator. UK FCA emphasizes that the agency promotes competition through its response to cryptocurrencies, while NY DFS and AUS ASIC do not. Indeed, its role as a competition regulator may help to explain UK FCA's greater focus on innovation and business facilitation in framing its response compared to the other regulators. AUS ASIC repeatedly claims it protects investors, while NY DFS and UK FCA do not directly address investor interests. NY DFS presents itself as a part of the fight against global money laundering and terrorism, a competency to which the other two regulators do not commonly refer. In all cases, these obligations

(competition, anti-terrorism, and investor protection) are important parts of each agency's mission statements. These were priorities their governments intended the agencies to address.

In these cases, then, agencies have sought to frame their response to cryptocurrencies to bolster their pre-existing image. In bureaucratic reputation theory, as discussed, this is typically rational behaviour. Agencies have established a reputation which appeals to their audiences prior to innovation and will be reluctant to change a winning formula.<sup>153</sup> In this case, we can make informed speculations about the role of agency audiences in shaping how regulators framed their response to cryptocurrencies. In fact, the composition of audiences for financial conduct regulators helps to explain the new and different aspects of reputation all three agencies do demonstrate.

Finance and banking are sectors dominated by medium-large, highly professionalized institutions (banks, credit unions, corporations etc.) This is what regulators were accustomed to and what regulatory regimes had been designed around. Cryptocurrencies were one of the first fintechs to bring tech start-ups into finance.<sup>154</sup> One might expect this audience has different priorities and preferences for their regulator than large, professional institutional incumbents. The introduction of these new audiences could help to explain why regulators signal they are now innovation supervisors, and why all regulators moved toward a more positive, facilitative tone over time.<sup>155</sup> Regulators may also be trying to frame responses to appeal to existing financial institutions seeking to exploit the opportunities of tech like cryptocurrency.<sup>156</sup> As cryptocurrency proponents become more powerful and influential relative to detractors, one would expect more of the pro-innovation, pro-business framings we do indeed see in this case.<sup>157</sup>

Agency image management, then, could be an attempt to respond to the demands of a burgeoning pro-cryptocurrency coalition. Alternatively, agencies may have been using their communications to construct such a coalition. They framed their response to cryptocurrencies to proactively build support for the agency's preferred course of action, rather in capitulation to audience demands.<sup>158</sup> There are a number of reputational opportunities which may explain such behaviour.

As discussed, novel technologies provide agencies the opportunity to be seen as more unique and valuable to their society. Cryptocurrencies were an opportunity, in particular, for regulators to bolster their reputation in post-Global Financial Crisis period. As discussed, this was a time of reduced trust in traditional financial institutions and their regulators. While this meant that regulators were facing greater scrutiny at this time, it also may have meant they were looking for opportunities to prove themselves. For NY DFS and UK FCA specif-

<sup>153</sup> Busuioc and Lodge (n 137).

<sup>154</sup> Arner, Barberis and Buckley (n 3) 1305.

<sup>155</sup> Maor (n 12); Carpenter (n 11) 33.

<sup>156</sup> The payments and money transfer sectors are not monolithic in this regard. One of the most disruptive aspects of cryptocurrencies is their challenge to the hegemonic power of banks and other large financial institutions. Some institutions have responded by demanding regulators ban their competitor. Others sought the freedom to pursue cryptocurrency's commercial applications. Phillip Inman, 'Bank of England to Consider Adopting Cryptocurrency' *The Guardian* (21 January 2020) <https://www.theguardian.com/technology/2020/jan/21/bank-of-england-to-consider-adopting-cryptocurrency> (last accessed 22 December 2020).

<sup>157</sup> Young (n 60); Rimkut (n 15); Donald P Moynihan, 'Extra-Network Organizational Reputation and Blame Avoidance in Networks: The Hurricane Katrina Example' (2012) 25 *Governance* 567.

<sup>158</sup> Mark C Suchman, 'Managing Legitimacy: Strategic and Institutional Approaches' (1995) 20 *Academy of Management Review* 571.

<sup>150</sup> AUSTRAC, 'New Australian Laws to Regulate Cryptocurrency Providers | AUSTRAC' (11 April 2018) <https://www.austrac.gov.au/new-australian-laws-regulate-cryptocurrency-providers> (last accessed 21 December 2020).

<sup>151</sup> Finextra Research, 'New York Defeats OCC in Legal Battle over Bank Charters' (23 October 2019) <https://www.finextra.com/newsarticle/34626/new-york-defeats-occ-in-legal-battle-over-bank-charters> (last accessed 21 December 2020).

<sup>152</sup> Saadat (n 121); Mashraky (n 103).

ically, cryptocurrencies were an area where they could demonstrate success where their predecessors were seen to have failed. Cryptocurrencies offered an opportunity to demonstrate these agencies could competently manage complex regulatory challenges.

It is notable, further, that regulators tended to frame their responses to cryptocurrency regulation as having a role in *innovation supervision*. Economically, this was a period of high interest and investment in digital technology in general and financial technology in particular.<sup>159</sup> There is evidence that the US, UK, and Australia were all interested in attracting and keeping financial technology in their jurisdiction.<sup>160</sup> Financial technology firms are relatively mobile, not as tethered to geographic locations as businesses with more of a physical presence. Such firms, then, were well placed to engage in regulatory arbitrage.<sup>161</sup> Culturally, technology and ‘innovation’ have largely positive connotations in those societies (progress, modernity, ‘cool’).<sup>162</sup> In societies which value innovation, regulators perpetually stand a lot to gain reputationally from being seen as making a unique, irreplaceable contribution to facilitating the safe and legal trade of novel technologies.<sup>163</sup> The period in which regulators were responding to cryptocurrencies aligns, though, with a renaissance of public interest in – and romanticism of — ‘tech’ (after the disillusionment of the dotcom bubble bursting in the 1990s).<sup>164</sup> In terms of fintech in particular, the wave of innovation in this period was highly consumer-facing. Unlike previous waves, which mostly affected financial professionals, ordinary people were using and enjoying fintech products. After all, anyone can buy cryptocurrency tokens.<sup>165</sup> The enthusiasm for fintech and public faith in its ability to bring about growth and better quality of life stands in stark contrast to the banal image and lack of public trust in traditional finance. Cryptocurrencies are emblematic of these differences; designed as a decentralized, democratized, reliable, and high-tech replacement for centralized, elite, untrustworthy, unstable, and old-fashioned banking.<sup>166</sup> Public opinion on tech, fintech, and mainstream finance, therefore, may have created a disincentive for regulators to be perceived as opposed to or undermining innovation and growth. Thus, there are historic, economic, cultural, and political reasons that financial conduct regulators might have wanted to realign their public image to include a role in innovation supervision.

This goal would explain why – in our findings — regulators were signalling unique and novel regulatory performance. They were willing to bear the risks of a high-profile failure on cryptocurrencies in order to forge a reputation as an effective innovation supervisor. This goal also explains why all three regulators came to – over time — discuss cryptocurrency more often as part of the broader phenomena of

‘fintech’ and ‘innovation’. Innovation is both a more expansive, and more PR-friendly, framing. Analysing the cryptocurrency case with a bureaucratic reputation framework, then, we see several factors which may explain why regulators chose the reputation management strategies they did. Our findings have implications for both theory and practice.

## 6. Discussion and conclusion

In this study we examined how regulatory agencies manage their reputation in the face of innovation through a case study of three financial regulators responding to the emergence of cryptocurrency trading. We find all three agencies managed their reputation through a high-profile communications strategy where they discussed their response to cryptocurrency often and in very public fora. In those communications, agencies frame their response as largely consistent with — rather than a radical departure from — their existing public image. Our analysis suggests regulators in this case did not purely see cryptocurrencies as a threat. Rather, they saw opportunities to bolster their reputation in the wake of the Global Financial Crisis.

This paper makes a theoretical contribution by bridging bureaucratic reputation and innovation governance scholarship. We present a theoretical framework to describe and compare how regulators manage their reputation in the face of innovation, and why. Our case study illustrates how — theoretically and methodologically — such a framework can be applied to provide insight into the political motivations and tactics of regulators responding to innovation.<sup>167</sup> Our findings contradict a common assumption that regulators always see innovation in terms of threats.<sup>168</sup> Conversely: that reputational concerns will make regulators reluctant to get involved in the supervision of complex, uncertain new technologies.<sup>169</sup> In the case study, further, we find regulators do not simply react to public demands about technology supervision, but seek to shape those demands. Regulators are independent political actors who use discourse and rhetoric to shape how we see new technologies; their risks, and their opportunities.<sup>170</sup> This demonstrates the value of our theoretical framework over earlier accounts which assume regulators only consider innovation in terms of its risks.<sup>171</sup> Our findings, however, suggest our own theoretical framework should be further expanded. We find that the way regulators responded to cryptocurrency was not just about that technology. It was seemingly about the regulators’ broader strategies to build reputation after the damage of the Global Financial Crisis. Thus, in explaining regulator reputation management in response to innovation, we suggest one must also consider the wider political context.

From a practical perspective, regulatory practitioners responding to innovation in their jurisdiction need to be aware of the kind of image they present. When innovative companies see regulators as tough and combative, for instance, this can undermine their willingness to share information and otherwise cooperate with those regulators.<sup>172</sup> Regulatory reputation is a factor which explains why some regulators succeed, and others fail, in their interventions to supervise innovation.<sup>173</sup> From our findings, practitioners should note, in particular, that agencies tend to frame responses as an extension of the regulator’s

159 EY (n 79).

160 Philipp Maume, ‘Reducing Legal Uncertainty and Regulatory Arbitrage for Robo-Advice’ (2019) 16 *European Company and Financial Law Review* 622; Stijn Claessens and others, ‘Fintech Credit Markets Around the World: Size, Drivers and Policy Issues’ (Social Science Research Network 2018) SSRN Scholarly Paper ID 3288096 <https://papers.ssrn.com/abstract=3288096> (last accessed 22 December 2020).

161 Heikki Marjosola, ‘The Problem of Regulatory Arbitrage: A Transaction Cost Economics Perspective’ [2019] *Regulation & Governance* <http://onlinelibrary.wiley.com/doi/abs/10.1111/rego.12287> (last accessed 18 February 2021).

162 Ford (n 1) 7–9.

163 Carpenter (n 14).

164 Sara M Smyth, ‘The Facebook Conundrum: Is It Time to Usher in a New Era of Regulation for Big Tech?’ (2019) 13 *International Journal of Cyber Criminology* 578.

165 Other kinds of fintech in the current innovation wave – apps, platforms, crowdfunding, roboadvice – are similarly technologies used by ordinary people and not just financial professionals.

166 Davis (n 18).

167 Carpenter (n 11) 754.

168 Maor (n 7); Weaver (n 32); van Erp (n 32); Hood (n 32).

169 Gerding (n 54); Ford (n 1).

170 Carpenter (n 14); Carpenter (n 11); Suchman (n 157); Jones and Millar (n 6).

171 Maor (n 7).

172 Mandel (n 5).

173 Gregory N Mandel, ‘Regulating Emerging Technologies’ (2009) 1 *Law, Innovation and Technology* 75; Carpenter (n 11).

existing brand. This may, however, be counter-productive if one's existing brand is at odds with the demands of innovation supervision.

## 6.1 Limitations and topics for future research

Limitations of the study are, first, its methodological focus on communications about cryptocurrencies rather than all communications published by the agency. While it would have been impractical to qualitatively analyse a decade's worth of agency communications, this allows for the possibility agencies decided to rebrand generally and not just in cryptocurrency communications. Another limitation is that, because Twitter archives tweets, some may not have been available at the time of data collection. Some issues also arose from the coding method. Our method intentionally only captures explicit statements,<sup>174</sup> and not more 'implicit' signalling agencies may have used.<sup>175</sup> This may explain why technical competencies were not commonly signalled: because technical competency is more often 'shown' than it is 'told'. This study collected communications about cryptocurrency in a set period of time, but cryptocurrencies and their regulation are an ongoing and evolving field. Many new developments have emerged since analysis was completed (for example, Her Majesty's Treasury in the UK has launched a consultation on cryptocurrencies in January 2021). The agencies chosen for the case study are not perfectly identical to one another. While we intentionally chose a state over national regulator for the US case to make the cases more comparable in some regards, differences between these two types of regulators could potentially account for differences in NY DFS's choices of reputation management strategy. Finally, responses to radical innovation by three financial regulators may not be representative of all responses by all kinds of agencies in all domains.

Further studies could seek to apply this theoretical framework, and the expectations it implies, to the study of reputation management by other regulators responding to radical innovation in other fields (beyond finance and pharmaceuticals). Theory and research on this topic is still in early stages. More exploratory work is required in a range of regulatory contexts (in-depth case studies, ethnography, discourse analysis etc.). A central question for future research is the extent to which regulatory agencies manage reputation in the face of radical innovation reactively (in response to audience demands) or proactively (attempting to shape audience demands). For the regulators discussed here, a valuable future study would be a media analysis examining of what demands were being made by which stakeholders in these three jurisdictions as a potential explanation for their choice of reputation management strategies. Interview studies with regulator staff could further test the findings of this study, and examine possible reactive and proactive explanations.

<sup>174</sup> ASIC, for example, had a pre-existing reputation for procedural correctness. Its communications used far more distant, technical language; more commonly entered around questions of law. This implicit signalling of procedural competency could not be captured in this study.

<sup>175</sup> e.g. Kjersti Thorbjørnsrud, 'Mediatization of Public Bureaucracies: Administrative versus Political Loyalty' (2015) 38 *Scandinavian Political Studies* 179.

## APPENDIX A Detailed methodology and results of coding

In this study we compare reputation management responses of three financial regulators (NY DFS, UK FCA, and AUS ASIC). We examined which communication strategy each agency chose and whether, and how, they engaged in image management. Image management was determined through comparing the image they presented in their communications about cryptocurrency to their image in the period immediately prior, then comparing between cases.

The study used three methods: 1) qualitative document review of the agency's pre-existing image and 2) quantitative and 3) qualitative content analysis of cryptocurrency communications. The quantitative analysis determined communications strategy. The document analysis, with the qualitative content analysis, analysed image management.

For the document analysis, we searched Google Scholar, Westlaw, and Lexis Nexis with agency titles, acronyms, and 'reputation'. Documents were included if they were published in the three years prior to the agency's first communication about cryptocurrency. Documents included the agency's own statements, academic literature, and authoritative media and expert judgements. To determine the nature of the agency's pre-existing image, documents were interpreted using the coding schema described below.

For the quantitative content analysis, we collected all agency communications published after 2008 and before March 2018 about cryptocurrency or closely related topics like general statements about fintech (where cryptocurrency was a technology under that label). We searched agency websites and official Twitter account(s)<sup>176</sup> with the word cryptocurrency and closely associated terms. We collected 538 individual texts. These were imported into NVIVO and analysed to determine text type (e.g. speech, tweet) and audience (e.g. mass, private).<sup>177</sup> Agencies were considered to have chosen low- or high- profile strategy based on number of texts, frequency of publishing, and high-versus low- profile fora (e.g. targeted, private speeches versus media appearances).

A stratified (by type) random sample of 351 texts were then subjected to qualitative content analysis to determine what kind of image each agency presented. We developed a coding schema using Carpenter's framework of reputational competencies and informed by previous analyses using that framework<sup>178</sup> This is summarized in Table A1. After coding we conducted a summative analysis of the documents. We determined roughly which kinds of competencies and aspects agencies raised most often. These aspects were then interpreted qualitatively to determine the overall image the agency was constructing.<sup>179</sup> This was then compared with the competencies and aspects presented by the other two agencies, and compared to its pre-existing image. Summary results by agency are presented in Tables 2-4.

176 @DFS, @TheFCA, @ASICMedia, @ASIC\_Connect, @MoneySmartTeam

177 Moschella and Pinto (n 66) 520.

178 e.g. Rimkut (n 15).

179 Hsieh and Shannon (n 82) 124-5.

Table A1 Coding schema

	Description	Agency examples	'Action' examples	'Goal' examples
Performative	Phrase refers to capacity of the agency to achieve desired outputs and outcomes; the extent to which it is substantively successful – including efficiency.	We are an effective and efficient market regulator.	Improvements to the regulatory framework has attracted foreign investment.  By updating our procedures, we have reduced financial licensing fees by 10%.	Increasing market competition is our central goal.  We will publish regulatory guidance in the next quarter.
Technical	Phrase refers to the expertise of the agency relevant to its capacity to perform its role; examples: "scientific accuracy, methodological prowess, and analytical capacity".	The staff of our innovation unit are experts in fintech.  The agency is still learning about fintech.	The current policy is based on a quantitative analysis of market trends in 8 jurisdictions.  We are implementing a sandbox to gather evidence about regulatory effectiveness.	The agency aims to increase its analytical capacity by establishing a specialist 'market scanning' unit.
Procedural	Phrase refers to the use of correct procedures associated with decision making: <ul style="list-style-type: none"> <li>Procedural fairness</li> <li>Adequate evidence collection and provision</li> <li>Decisions based on evidence</li> <li>Meeting consultation requirements</li> <li>The thoroughness of procedures.</li> </ul>	The agency acts in accordance with the requirements of the Administrative Proceedings Act 1959.	Our enforcement decision against [company X] was made in accordance with Guidelines v3.1.	The agency will increase consultation periods from 2 to 4 weeks.
Moral	Phrase refers to the ethics or morality of the agency's goals or means, including: <ul style="list-style-type: none"> <li>Protecting the interests of stakeholders</li> <li>Honesty</li> <li>Kindness</li> <li>Compassion</li> <li>'Humanity'.</li> </ul>	We consider ourselves a guardian of competitive markets.  The agency considers itself a partner to industry, helping firms to comply.	We have published the risk analytics to enable transparent debate about the risks of [policy X].	We are committed to maintaining an even playing field for all firms.  Our goal is to protect consumers.

Table A2. Image signalled by NY DFS in cryptocurrency communications

	Aspects From Pre-Existing Image	Additional Aspects
<b>Performative</b>	Is tough, stringent, and comprehensive in market supervision; gets results Is more effective than federal regulators	Performs well in regulating cryptocurrency/financial innovation Implements unique and novel regulatory solutions Regulation not hindering (indirectly helps) facilitate business development Regulation not hindering (indirectly helps) facilitate financial innovation
<b>Moral</b>	Primarily aims to protect consumers of financial products from fraud and other harm Aims to combat illegal activity in New York, the US, and internationally (money laundering and terrorism) Promotes fairness in financial markets; setting appropriate and consistent regulatory standards	Aims to protect consumers/combat illegal activity in regard to cryptocurrency Aims to facilitate financial innovation
<b>Procedural</b>		Makes decisions based on rigorous fact finding and inquiry
<b>Technical</b>	[Not emphasized, rarely discussed]	[Not emphasized, rarely discussed]

Table A3. Image signalled by UK FCA in cryptocurrency communications

	Aspects From Pre-Existing Image	Additional Aspects
<b>Performative</b>	Employs principles/outcomes-based regulation; flexible and adaptable Regulates in ways which promote competition in financial markets, but also protect consumers Supervises proactively; addressing new regulatory issues early Leads the world in creative regulatory solutions	Directly facilitates business development Performs well in regulating cryptocurrency/financial innovation Regulator directly facilitates financial innovation
<b>Moral</b>	Has a role in promoting market integrity and consumer protection Has a central role in promoting competition, which is balanced with protecting consumers	Aims to facilitate financial innovation
<b>Procedural</b>	Not rigidly rule bound Coordinates their actions with other regulators/agencies	
<b>Technical</b>	[Not emphasized, rarely discussed]	[Not emphasized, rarely discussed]

Table A4. Image signalled by AUS ASIC in cryptocurrency communications

	Aspects From Pre-Existing Image	Additional Aspects
<b>Performative</b>	Supervises proactively, addressing new regulatory issues early through legal procedures Provides high quality 'customer' service to individuals and businesses it regulates or advises	Performs well in regulating cryptocurrency/financial innovation Regulator indirectly facilitates business development Regulator indirectly facilitates innovation Implements unique and novel regulatory solutions Leads the world in inter-regulator coordination on fintech
<b>Moral</b>	Aims to promote the interests of shareholders/other investors Aims to promote fairness in financial markets; setting appropriate and consistent regulatory standards	Aims to facilitate innovation
<b>Procedural</b>	Coordinates appropriately with other regulators Facilitates stakeholder deliberation where issues not resolved in law	
<b>Technical</b>	[Not emphasized, rarely discussed]	[Not emphasized, rarely discussed]