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Computer Law & Security Review

An institutional account of responsiveness in financial regulation- Examining the fallacy and limits of 'same activity, same risks, same rules' as the answer to financial innovation and regulatory arbitrage ☆

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ARTICLE INFO

Keywords:
Financial innovation
Fintech
Same activity same risks same rules
Securities regulation
Regulatory perimeter
Initial coin offerings
Crypto-assets

ABSTRACT

Financial regulators face the persistent issue of being challenged by financial innovations and regulatory arbitrage. This article argues that a functional approach of 'same activity, same risks, same rules' is potentially vague and insufficient, and does not provide clear guidance for regulators. By critically discussing the US Securities Exchange Commission's and UK Financial Conduct Authority's approaches to cryptoasset offers, the paper argues that whether and how regulators respond to financial innovation crucially depends on regulators' institutional structures. These structural limitations provide empowering as well as constraining aspects in relation to regulatory objectives and mandates, shaping financial regulators' responsiveness in different ways. The paper argues that an institutional account of regulatory responsiveness more accurately explains policy responses. The benefits and drawbacks of such policy responsiveness are also crucially shaped by these institutional structures.

1. Introduction

Financial regulators seem to be playing catch-up to financial innovations.[1] Of late, technologically-driven financial innovations dominate regulators' radar screens. 'Fintech' is defined as '.. .. a catch-all term referring to software, mobile applications, and other technologies created to improve and automate traditional forms of finance for businesses and consumers alike'.[2] Financial products and services can be designed and delivered, by integrating technological develop-

☆ This paper was presented at the International Workshop on Financial Technology, Financial Inclusion and Competition Policy: Legal and Economic Approaches, Turin, 1 Dec 2022. I wish to thank conference participants and two anonymous reviewers for very helpful comments. All errors and omissions are mine.

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[1] Charles W Calomiris, 'Financial Innovation, Regulation and Reform' (2009) 29 Cato Journal 65.

[2] Definition offered by the Columbia Engineering Boot Camp, https://bootcamp.cvn.columbia.edu/blog/what-is-fintech/.

https://doi.org/10.1016/j.clsr.2023.105868

ments such as appification and digitalisation,[3] artificial intelligence[4] and distributed ledger technology.[5]

Financial innovation is however not an exogenous variable for financial regulation. Economists[6] and lawyers[7] alike recognise that existing financial regulation often provides the requisite stimulus for financial innovation. Financial regulation entails cost for financial transactions and activities, hence there are incentives to find ways of profitable financial intermediation that are more cost-effective. In this manner, innovation is stimulated by problem-solving,[8] some of which is derived from perceived inefficiencies of existing regulatory frameworks that are targeted at the business models of industry incumbents. Financial participants also build upon each other's innovation to outcompete one another.[9] Even if financial innovation poses disruptive threats to both incumbent business models and the regulatory frameworks that apply to them, financial innovation can, besides saving financial intermediaries cost, also lead to new efficiencies and enhanced qualities, as well as cost-saving[10] on the part of their users.[11] Further, Fintech has been observed to potentially offer benefits of financial inclusion,[12] although exclusive digitalisation can also marginalise customers who find it challenging to learn how to engage with digital interfaces.

As financial innovations are likely to work around, circumvent or challenge the application of existing financial regulation, regulators necessarily worry about the implications of regulatory arbitrage. Regulatory arbitrage, as described by Marjosola,[13] is the exploitation of a gap in incomplete contracting between the regulator and regulated entities. Regulation can be viewed as a 'bargain' struck between regulators and regulated entities in relation to their expected conduct that justifies their permission to carry out regulated activities. Regulators and regulated entities are unable to perfectly and timelessly provide for complete regulatory contracts as regulation can give rise to cost and unintended consequences. The incomplete nature of regulatory contracts is also due to the existence of private information not available to regulators, as well as the impossibility of predicting future development in the regulated arena.[14] Often regulation is also highly dependent on business models and technologies of their time, as Section B discusses. The private sector would then innovate to mitigate these perceived problems, whether by novel entrants or by incumbents, leading to new business models and paradigms where existing regulation may not fully address. In this manner, 'regulatory arbitrage' is a continuing passage for financial regulation, and the term should not automatically give rise to negative connotations in terms of law avoidance and unfair advantage. These types of perceptions often bias regulators in favour of a 'coherentist' approach to law[15] which endeavours to fit innovations within the regulatory framework so as to maintain the 'rule of law'.

Taking regulation as an incomplete and continuing social and regulatory contract would militate against strict adherence to coherentism, as regulation risks becoming ossified, stultifying innovation that can be useful. Regulators should acquire knowledge relating to new developments in order to determine the nature, importance and resolution of regulatory gaps perceived. Regulators' responses to financial innovation should therefore include an enabling approach, as the benefits of financial innovation can warrant their mobilisation.[16] Ford argues that financial regulation must be 'innovation-ready' and not merely catching up to scandals and problems in an *ex post* manner.[17] However, within the regulatory gaps, unexpected harms or externalities may occur. In this manner, regulators' assessments of how to respond to regulatory gaps often involve consid-

[3] Such as relating to payment and brokerage apps, see Iris H-Y Chiu, A New Era in Fintech Payment Innovations? A Perspective from the Institutions and Regulation of Payment Systems, (2017) 9 Law, Innovation and Technology 190; Heide & Dominik Želinský, ''Level Up Your Money Game': An Analysis of Gamification Discourse in Financial Services' Journal of Cultural Economy (2021), https://doi.org/10.1080/17530350.2021.1882537.

[4] Gudula Deipenbrock, 'Artificial Intelligence and Machine Learning in the Financial Sector' in Iris H-Y Chiu and Gudula Deipenbrock (eds), *Routledge Research Handbook of Financial Technology and the Law* (Oxford: Routledge, 2021).

[5] Rosario Girasa, *Regulation of Cryptocurrencies and Blockchain Technologies: National and International Perspectives* (Springer, 2018) on cryptocurrencies, see Iris H-Y Chiu, 'Decrypting the Trends of International Regulatory Competition in Crypto-finance (2020) European Journal of Comparative Law and Governance 1-40 on crypto-assets and 'Regulating Crypto-finance- A Policy Blueprint' (ECGI Working Paper 2021), https://ecgi.global/sites/default/files/working_papers/documents/chiufinal.pdf.

[6] Edward J Kane, 'Interaction of Financial and Regulatory Innovation' (1988) 78 American Economic Review 328.

[7] Jan Friedrich and Matthias Thiemann, 'The Economic, Legal and Social Dimension of Regulatory Arbitrage' (2021) 11 Accounting Economics and Law 81.

[8] Cristie Ford, 'Refocusing Regulation around the Challenge of Innovation' in Cristie Ford, *Innovation and the State* (Cambridge: CUP 2017), at ch6.

[9] Dan Awrey, 'Complexity, Innovation, and the Regulation of Modern Financial Markets' (2012) 2 Harvard Business Law Review 235.

[10] Lars Norden, Consuelo Silva Buston and Wolf Wagner, 'Financial Innovation and Bank Behavior: Evidence from Credit Markets' (2011) at http://ssrn.com/abstract=1800162.

[11] Chris Brummer,' Disruptive Technology and Securities Regulation' (2015) 84 Fordham Law Review 977; Ronald J Gilson, 'Locating Innovation: The Endogeneity of Technology, Organizational Structure and Financial Contracting' (2009) at http://ssrn.com/abstract=1492762.

[12] Douglas W Arner, Ross P Buckley and Dirk A Zetzsche, 'Fintech for Financial Inclusion: A Framework for Digital Financial Transformation' (2018), https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3245287.

[13] Heikki Marjosola, 'The Problem of Regulatory Arbitrage: A Transaction Cost Economics Perspective' (2021) 15 Regulation and Governance 388.

[14] Scott Baker and Kimberly D. Krawiec, 'Incomplete Contracts in a Complete Contract World' (2006) 33 Florida State University Law Review 726.

[15] Taking an approach of reasoning and framing the innovation to fit within existing legal categories, termed as 'coherentism' in Roger Brownsword, *Law, Technology and Society* (Oxford: Routledge 2019), pp191-196.

[16] Iris H-Y Chiu, *Regulating the Crypto-economy* (Oxford: Hart 2022), ch2.

[17] Ford (2017), ch9.

eration of multiple regulatory objectives and their possible trade-offs.[18]

This article argues that regulators' responses to regulatory gaps discussed above are shaped by their institutional structures. The article treats regulators as institutions providing governance (within a broader political system but specialised in certain issues or areas), and institutional structures refer to regulators' raison d'etre and objectives, mandates, scopes of jurisdiction or powers and how they fit within a broader structure of government and other governing agencies.[19] The article argues that these institutional structures frame regulators' understanding of their regulatory objectives and priorities and affects how they ultimately deal with the question of enabling financial innovation.

Through the lens of studying how the US Securities Exchange Commission (SEC) and the UK Financial Conduct Authority (FCA) dealt with the phenomenon of 'initial coin offerings' (ICO)[20] from 2015 to the date of writing, this article compares two types of institutional structures for regulators that shape their responses to regulatory gaps teased out by financial innovation.

The SEC's institutional structure that supports its regulation of securities offers is an open-ended regulatory framework based on an interpretation of 'securities' that accommodates new developments.[21] The FCA's institutional structure for its regulation of financial activities or products is based on a 'regulated activities' perimeter that explicitly sets out what activities and products are included within the perimeter.[22] This institutional structure is called in this article a 'close-ended' regulatory framework.

The SEC's utilisation of the open-ended regulatory framework has however been 'coherentist' in nature, and to a significant extent dampened the ICO market. The reduced numbers of such offers have also been funnelled down channels of exemptions.[23] The FCA has left ICOs unregulated although it has warned consumers time and again[24] of the high risks of participating in unregulated activities that engage their financial interest. Although there is now political development in the UK[25] to change the FCA's approach, the study of these different approaches sheds light on important differences between institutional conceptualisations of regulatory gaps and arbitrage.

This article argues that although the open-ended approach intuitively seems able to accommodate innovation which changes the nature of financial activities, the application of such an approach entails contrary results in the SEC example. The close-ended approach has, ironically, certain strengths if policy-makers take a responsive attitude in terms of engaging in deliberation, discourse and development of regulatory reform. The close-ended approach can achieve significant responsiveness if it also subscribes to an expectation of indefatigable dynamism.

Section A provides a survey of the potential regulatory gaps exposed by technological transformations and discusses the concerns with regulatory arbitrage in light of financial regulators' multiple objectives. Section B debunks the fallacy of 'same activity, same risks, same rules' as articulated by some regulators, policy-makers and trade associations, and argues that merely adopting a functional approach to regulation is neither feasible nor straight-forward. Section C then focuses on the ICO challenge for regulators and shows how institutional structures shape regulators' 'regulatory arbitrage analysis' and their ensuing responses. This Section discusses the SEC's open-ended regulatory framework, its application and the benefits and drawbacks of its approach. The SEC's approach only deals with regulatory arbitrage in a narrow sense and provides little answer to financial innovation. Section D focuses on the FCA's close-ended regulatory approach and discusses if the irrelevance of regulatory arbitrage by reference to a narrow regulatory perimeter serves the FCA's regulatory objectives. Section E provides a conclusion, drawing together lessons from the institutionally-based accounts of regulatory responsiveness from the US and UK.

2. Financial technology and perceptions of regulatory arbitrage risks to regulatory objectives

Advances in Fintech have the potential to widen financial opportunities and inclusion as well as provide competitive financial products and services to users. For example, platformisation of finance, in relation to online crowdfunding, has mobilised access by small businesses to equity crowdfunding at a reasonable cost compared to the demands of the regulatory

[18] Iris H-Y Chiu, 'A Rational Regulatory Strategy for Governing Financial Innovation' (2017) 8 European Journal of Risk Regulation 743.

[19] Similar to how the Basel Core Principles 2012 perceives bank regulators to be located within a context of mandates, powers and governing structures.

[20] There is plenty of literature on ICOs, and their boomtime was likely between 2015-7 as unregulated token offerings. These offers dwindled since the actions taken by the US SEC from 2017. See citations in Chiu, *Regulating the Crypto-economy* (2022), ch5.

[21] The *Howey* test, and applied by the SEC in SEC, *Report of Investigation Pursuant to Section 21(a) of the Securities Exchange Act of 1934: The DAO* (25 July 2017) at https://www.sec.gov/litigation/investreport/34-81207.pdf and in 2019, https://www.sec.gov/corpfin/framework-investment-contract-analysis-digital-assets.

[22] S19, Financial Services and Markets Act 2000, Sched 2 and the Regulated Activities Order. Also see FCA, *Guidance on Cryptoassets Policy Statement* (July 2019) at https://www.fca.org.uk/publication/policy/ps19-22.pdf on delineating the regulatory perimeter in relation to crypto-assets.

[23] Discussed in Chiu, *Regulating the Crypto-economy* (2022), ch3; Yuliya Guseva, 'When the Means Undermine the End: The Leviathan of Securities Law and Enforcement in Digital-Asset Markets' (2022) 5 Stanford Journal of Blockchain Law and Policy 1.

[24] 'FCA reminds consumers of the risks of investing in cryptoassets' (11 May 2022), https://www.fca.org.uk/news/statements/fca-reminds-consumers-risks-investing-cryptoassets#:~:text=There%20are%20no%20consumer%20protections,all%20the%20money%20you%20invest, the first warning was issued in 2019.

[25] 'Britain proposes regulation of all cryptoassets' (Reuters, 27 Oct 2022), https://www.reuters.com/world/uk/britain-proposes-regulation-all-cryptoassets-2022-10-27/.

regime for securities offers.[26] Discount brokerage, notwithstanding criticism of their business models,[27] also offers retail users a cost-effective way of participating in trading in stocks and shares.[28] Innovations with app designs for financial services on mobile phones have overall promoted greater engagement of financial services by the younger generation, whether this relates to payment services or other services like brokerage.

Fintech transforms financial services and products to an extent, and it is pertinent to inquire into whether any regulatory gaps are exposed. Awrey argues that one of the key ways such technology transforms financial services is by 'unbundling' financial services often associated as a package.[29] Deposit-takers are conveniently placed for providing payment and credit services, and the bundling of these services has characterised modern retail banking, attracting bank regulation as a design that is targeted at the risks of the bundled service provider. The bundling of services has also over time allowed banks to extract enormous rents from payment services, especially cross-border payment services.[30] Although consumer credit services such as credit cards have been dominated by oligopolistic providers such as Visa and Mastercard, their partnerships with banks reinforce this oligopoly, making consumer credit highly expensive.[31]

Fintech has made certain inroads into challenging the excesses that entail from bundled financial services, such as by specialising more cheaply in a focused service. Some of these are not fully disruptive of incumbents' services, as Fintech firms still need to access bank deposit accounts and settlement/clearing infrastructure.[32] Paypal has made cross-border transfers take place at the speed of immediacy and is more cost-effective, and can also act as an account for holding cash. Payment services on apps such as WePay or Kenya's M-PESA have also revolutionised the payments services landscape.[33] Buy-now-pay-later (BNPL) services such as Klarna and Clearpay have transformed consumer credit services with their user-friendly app interfaces and potentially lower cost for consumers within a short term of borrowing (usually up to 3 or 4 months of interest free credit). However, it is clear that BNPL services have benefited from regulatory exemption in the UK from credit regulation due to the business model of offering initial interest-free period for repayment. It is arguable that this regulatory avoidance has greatly assisted in the growth of the industry, which has also ensnared vulnerable borrowers who have accumulated unsustainable levels of debt.[34]

The unbundling of financial services by Fintech has given rise to regulatory gaps. Where a payment services provider also effectively acts as a cash holding account but is not subject to the same bank regulation in terms of prudence and deposit guarantee, would a gap arise in relation to customer protection in case of insolvency?[35] Regulated electronic money services are subject to lighter prudential regulation than banks, and customers are protected to an extent by 'safeguarding' regulations rather than deposit insurance.[36] Further, BNPL services, as mentioned above, have long exploited a regulatory exemption from credit regulation and are finally now being brought within the scope of credit regulation in the UK, although details remain to be unveiled.[37] Fintech innovations, by unbundling certain financial services or creating new layers of intermediation from incumbent providers, raise questions for regulators in relation to gaps in regulatory application and the meeting of regulatory objectives.

Next, technological advancements bring new entrants to financial services and markets with whom financial regulators may be unfamiliar, especially in relation to new risks. One key example is the rise of platforms in financial services. Financial product comparison has been made easier by the processing of big data and the introduction of user interfaces on platforms that allow potential purchasers to compare financial products across key features and price. Comparison websites could however be steering customers into certain financial products based on their presentations and emphases, which can be subject to conflicts of interest.[38] Financial product comparison websites are not nec-

[26] Matthew Hollow, 'Crowdfunding and Civic Society in Europe: A Profitable Partnership?' (2013) 4 Open Citizenship 68 at http://ssrn.com/abstract=2333635.

[27] Which often engage in payment for order flow, see 'ESMA Warns Firms and Investors about Risks Arising from Payment for Order Flow' (13 July 2021), https://www.esma.europa.eu/press-news/esma-news/esma-warns-firms-and-investors-about-risks-arising-payment-order-flow.

[28] Research does not find that customers are necessarily exploited by discount brokerages engaged in payment for order flow, see Robert H. Battalio and Tim Loughran, Does Payment For Order Flow To Your Broker Help Or Hurt You? (2008) 80 Journal of Business Ethics 37; Merritt B. Fox, Lawrence R. Glosten and Gabriel V. Rauterberg, *The New Stock Market: Law, Economics and Policy* (Columbia University Press 2018), ch12.

[29] Dan Awrey, 'Unbundling Banking, Money, and Payments' (2022) 110 Geo LJ 715.

[30] 'The cost of cross-border payments needs to drop' (The Economist, 13 Apr 2019), https://www.economist.com/leaders/2019/04/13/the-cost-of-cross-border-payments-needs-to-drop.

[31] 'Can the Visa-Mastercard duopoly be broken?' (The Economist, 17 Aug 2022), https://www.economist.com/finance-and-economics/2022/08/17/can-the-visa-mastercard-duopoly-be-broken.

[32] IMF, 'E-Money: Prudential Supervision, Oversight, and User Protection' (2021) DP/2021/027, https://www.imf.org/en/Publications/Departmental-Papers-Policy-Papers/Issues/2021/12/13/E-Money-Prudential-Supervision-Oversight-and-User-Protection-464868; Iris H-Y Chiu, 'A New Era in Fintech Payment Innovations? A Perspective from the Institutions and Regulation of Payment Systems' (2017) 9 Law, Innovation and Technology 190.

[33] WePay leverages upon the popular social media platform WeChat in China to achieve network effects and remittance efficiency while M-Pesa leverages upon the network effects of mobile phone coverage to allow Safari, a telecommunications company, to diversify into remittance services.

[34] 'Buy now, pay later schemes increasingly an avenue for financial abuse, report finds' (the Guardian, 15 Nov 2022), https://www.theguardian.com/business/2022/nov/15/buy-now-pay-later-bnpl-schemes-financial-abuse-report.

[35] Dan Awrey, 'Bad Money' (2020) 106 Cornell Law Review 1.

[36] UK Electronic Money Regulations 2011 transposing the EU Electronic Money Directive 2009/110/EC.

[37] HM Treasury, Regulation of Buy-Now-Pay-Later (Feb 2023), https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/1136257/BNPL_consultation_on_draft_legislation.pdf.

[38] Known as 'hyper-nudging', where online users are being algorithmically steered based on their interactive feedback actions, see

essarily investment advisers as such in terms of their levels of personal knowledge of customers, and may not be engaging in a service of personal recommendation. Hence, the regulation of investment advice may be over-inclusive for comparison websites. But financial product comparison websites, usually for simple insurance products, raise questions for the regulator in terms whether they are new entities with new business models that raise specific risks for consumers and markets, such as in relation to conflicts of interest or misrepresentation. The UK Financial Conduct Authority (FCA) carried out a survey of price comparison website practices in 2013 and published critical findings in the year after, therefore allowing it to organically extend its supervision over these new entities as part of the insurance distribution chain.[39] Crowdfunding platforms are also a new type of entity whose roles differ from loan underwriters or investment securities underwriters. Their consumer-facing orientations demand specific considerations in terms of what responsibilities should be attached to them. Bespoke crowdfunding obligations have now been imposed on platforms as 'gatekeepers' in the UK[40] and EU. Specific forms of distance-selling consumer protections have been introduced.[41] However, where platforms like BigTech venture into financial services, from payment, credit to even investment or advisory services, these platforms pose new risks to regulators in relation to their vertical integration risks and oligopolistic powers.[42] Commentators[43] are of the view that the new risks posed by BigTechs may require policy tools beyond the realm of financial regulation, involving the governance of cyber-resilience, data collection and use as well as concentration of market power.

Further, financial services can be transformed not only by unbundling but by completely novel representations such as in crypto-tokens that are privately issued and traded in unregulated markets.[44] These tokens could combine financial services aspects such as payment (within a protocol system) with utility based services such as a subscription right, and governance rights such as voting on protocol changes in code.[45] How should regulators respond in terms of setting standards for the financial services aspects, and to what extent can financial regulatory standards apply in isolation of other non-financial aspects? Can regulatory standards be set where financial services are meant for peer-to-peer execution,[46] therefore not necessarily implicating a business-consumer relationship, even if users may be of a retail type? Crypto-finance further raises the issue of automated executions of actions based on smart contracts programmed into system protocols. Can financial regulatory standards reconcile with automated code execution in terms of ensuring that consumers remain free to decide/choose, and that the effects of automated code deployment do not entail cascades of unforeseen consequences?[47]

Where crypto-finance is concerned, questions also arise as to whom the regulator should attach obligations or responsibilities. Should token developers be responsible for financial functions of tokens, and for what aspects of financial risks incurred by others?[48] Where code development takes place in a decentralised manner, usually with the miners of the protocol system in a blockchain,[49] are those with code development abilities responsible for other peer users without such abilities? Where users, developers, miners, major stakeholders etc. are all part of the crypto-finance system, should the decentralised nature attract any regulatory standards for being self-contained?[50] Could the crypto-finance system within a blockchain app or protocol be regarded as an organisational structure[51] in which responsible nodes can be located or otherwise? Where participants include traditional financial institutions, to what extent should existing financial regulation be extended, based on new risks that may be generated?[52]

Viktorjia Morozovaite, 'Hypernudging in the changing European regulatory landscape for digital markets' (2022) 15 Policy and Internet 78; Karen Yeung, ''Hypernudge': Big Data as a mode of regulation by design' (2017) 20 Information, Communication and Society 118.

39 FCA, 'FCA Supervisory Strategy for Price Comparison Websites' (2020), https://www.fca.org.uk/publication/correspondence/portfolio-letter-price-comparison-webiste.pdf.

40 FCA, 'Loan-based ('Peer-To-Peer') and Investment-Based Crowdfunding Platforms: Feedback to CP18/20 And Final Rules' (2019), https://www.fca.org.uk/publications/policy-statements/ps19-14-loan-based-peer-to-peer-investment-based-crowdfunding-platforms-feedback-final-rules.

41 EU Crowdfunding Regulation 2020/1503.

42 Fernando Restoy, 'Fintech Regulation: How to Achieve a Level Playing Field' (Financial Stability Institute Working Paper, 2021).

43 Agustiń Carstens, Stijn Claessens, Fernando Restoy and Hyun Song Shin, 'Regulating BigTechs in Finance' (2021), https://www.bis.org/publ/bisbull45.pdf.

44 Markets like Binance which are not regulated to date as the subjects of trading are not necessarily regulated instruments.

45 Jonathan Rohr and Aaron Wright, 'Blockchain-based Token Sales, Initial Coin Offerings, and the Democratization of Public Capital Markets' (2019) 70 Hastings Law Journal 463; Carol Goforth, 'Securities Treatment of Tokenized Offerings under U.S. Law' (2018) 46 Pepperdine Law Review 405.

46 'Decentralised Finance' or DeFi, raising a host of regulatory difficulties discussed in Iris H-Y Chiu, 'Regulating Crypto-finance: A Policy Blueprint' (2020), https://ecgi.global/sites/default/files/working_papers/documents/chiufinal.pdf.

47 Hilary Allen, 'Driverless Finance' (2020) 10 Harvard Business Law Review 695.

48 The issue of whether token developers should owe a duty to issue a software patch to restore a user's access to private keys to bitcoin after the theft of those keys was decided in the UK High Court decision of *Tulip Trading Ltd v Bitcoin* [2022] EWHC 667.

49 Eg see Angela Walch, 'In Code(rs) We Trust: Software Developers as Fiduciaries in Public Blockchains' (2021), https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3203198.

50 It is often opined that permissionless blockchain systems with crypto-finance do not create financial stability risks for the mainstream economy so far, see 'European regulators will struggle to supervise crypto groups, warns ECB' (Financial Times, 13 Nov 2022).

51 Sometimes organised as 'Decentralised Autonomous Organisations' which are not/vaguely resembling recognised legal entities in many jurisdictions, see Chris Brummer and Rodrigo Seira, 'Legal Wrappers and DAOs' (2022), https://papers.ssrn.com/sol3/papers.cfm?abstract_id=4123737.

52 Such as discussed in Basel Committee, *Prudential treatment of cryptoasset exposures* (Dec 2022), https://www.bis.org/bcbs/publ/d545.pdf.

Many operations of crypto-finance in decentralised frameworks, such as UNISWAP,[53] challenge regulators in terms of identifying responsible regulable entities and responsible persons. Although the US CFTC's response to decentralised structures is to include all governance token holders in its enforcement action,[54] this does not solve the problem of practicality in enforcement and the needs for reconceptualization in law and regulation.

The exploitation of regulatory gaps by Fintech or crypto-finance developers concern regulators in relation to two respects. One is that regulatory arbitrage is a strategic evasion of regulation, hence undermining financial regulatory objectives. The other is a rational exposure of a regulatory gap in order to create a space for innovations that offer greater efficiency or competitiveness.

Regulatory arbitrage takes place motivated by multiple rationale and involves complex designs. Commentators observe that regulatory arbitrage is often motivated by the most costly regulatory rules.[55] In finance, that would be prudential regulation such as imposed on banks. Hence, complex designs are often structured in order to minimise or conceal banks' financial involvement in order to reduce their prudential regulatory cost, such as by way of securitisation of credit assets. It is not often easy for regulators to unpack exactly where efficiency gains end and where opaque risks for financial stability may accumulate.[56] Further, regulatory arbitrage in financial transactions is also motivated by tax jurisdiction arbitrage, leading to formation of complex chains of offshore structures for tax benefits.[57] The interaction of different cost-saving rationale with complex transactional and organisational designs would make it difficult for regulators whose jurisdictions and extraterritoriality may be limited. Further the opacity of complex designs obfuscates risk information for regulators. Technological innovations have only added to the complexity of tax and regulatory arbitrage, where crypto-finance also involves offshore entities, decentralised systems such as DAOs that may not have legal personality, complex investments, loans and financial transactions between related parties within groups.[58]

Regulatory arbitrage potentially challenges regulators' objectives in relation to: (a) consumer protection; (b) the maintenance of financial stability; and (c) the provision of a level playing field for activities of a similar nature.

First, regulators are concerned whether regulatory arbitrage would result in gaps in consumer protection. Major scandals or losses suffered by consumers generate significant reputation risks for regulators. The recent fallout of crypto-exchange FTX implicates consumer as well as sophisticated participants' losses. Although all participants were upfront aware of the unregulated status of FTX and its crypto-finance operations, real losses make a case for the 'unacceptability' of lack of regulation.[59]

Second, regulators are concerned that regulatory arbitrage would result in financial stability problems that require a public-sector solution or backstop, causing both disruptions in the short term and moral hazard in the longer term.[60] The case in point would be the highly unregulated securitisation market prior to the global financial crisis 2007–9 where participants were financial institutions themselves, such as pension funds purchasing such assets from special purpose vehicles formed by banks, or banks from specialist mortgage companies. Regulators were content to allow sophisticated parties to self-govern transactions, but where the private sector cannot self-govern to price and manage risks in a self-contained manner, regulators should be more prepared to make ex ante judgments rather than just ex post responses. Hence, regulators may be rightly concerned about peer-to-peer financial risks on 'DeFi' platforms, as financial institutions such as hedge funds, which are part of the conventional financial economy, may be involved in these interfaces. The demands of macroprudential and microprudential monitoring for regulators, in relation to innovation's effects on financial stability risks, can be rather intense.[61]

Third, regulators are also concerned that regulatory arbitrage creates an uneven playing field, therefore penalising regulated incumbents while benefiting innovative outfits whose risk creation is not fully determined by regulators. Although this aspect is particularly subject to lobbying by incumbents, regulators are often torn between the dilemma of ensuring that beneficial innovation is not stifled[62] while gatekeeping against risks that may become socially costly.[63] In this re-

[53] Decentralised markets for creating and maintaining liquidity for peer-to-peer trading and swapping of tokens, see https://uniswap.org/.

[54] The US CFTC has taken enforcement action against Ooki DAO whose governance token holders have taken over the rights for a pre-existing unregulated crypto-exchange business Bzx which the CFTC wishes to carry out enforcement action. Although the CFTC has extended its action to the DAO as it recognises the arbitrage strategy behind BZX's transfer of rights to Ooki DAO, the CFTC still needs to address what the nature of the DAO is and the liabilities of its token holders as a question of law. See 'Ooki DAO Case So 'Egregious,' CFTC Had No Choice, Chair Behnam Says' (Coindesk, 11 Oct 2022), https://www.coindesk.com/policy/2022/10/11/ooki-dao-case-so-egregious-cftc-had-no-choice-chair-behnam-says/.

[55] Dick Bryan, Michael Rafferty & Duncan Wigan, 'Politics, Time and Space in the Era of Shadow Banking' (2016) 23 Review of International Political Economy 941; Jan Friedrich and Matthias Thiemann, 'The Economic, Legal and Social Dimension of Regulatory Arbitrage' (2021) 11 Accounting Economics and Law 81.

[56] It is suggested that where tail risks of innovations that entail regulatory arbitrage involve a public sector backstop, they should be regulated similarly to the outfits that benefit from such a backstop, eg banks, Matthias Thiemann and Tobias Tröger, 'Detecting Tail Risks to Preclude Regulatory Arbitrage' (2021) 11 Accounting Law and Economics 233.

[57] Bryan et al (2016).

[58] Such as is being revealed in relation to the FTX empire which has filed for bankruptcy protection in the US.

[59] Frances Coppola, 'The crypto world must be made safer for investors and users' (Financial Times, 11 Nov 2022).

[60] Thiemann and Tröger (2021).

[61] Kathryn Judge, 'Fragmentation Nodes: A Study in Financial Innovation, Complexity and Systemic Risk' (2011) Stanford Law Review 101.

[62] The UK FCA also has a competition mandate to promote consumer choice in competitive markets.

[63] Michael S Knoll, 'The Ancient Roots of Modern Financial Innovation: The Early History of Regulatory Arbitrage' (2008) 87 Oregon Law Review 93; Tim Adam and Andre Guettler, 'Pitfalls and Perils of Financial Innovation: The Use of CDS by Corporate Bond Funds' (2015) 55 Journal of Banking and Finance 204; Margaret M

spect the 'regulatory sandbox' has provided a platform for regulators to learn about innovations with certain rule suspensions in order to determine the social utility of certain innovations.[64] Many sandbox processes however do not feed into potential law reform thought channels or processes, and this may limit the usefulness of sandboxes, for example in relation to radically disruptive innovation such as crypto-finance.

Further, Ford[65] argues that regulators generally cope under-whelmingly with innovations due to their behavioural limitations. Radical forms of disruptive innovation may appear in forms or sectors that regulators are not aware of, and when they become scalable, they take regulators by surprise. Incremental or 'sedimentary' forms of innovation appear insignificant and innocuous and regulators often let these slip from their monitoring, being over-confident in the application of existing regulations. In this manner, the scope of innovations that may potentially have an impact on regulatory risks should be widely monitored, and this does not make regulators' jobs easier.

Regulators' concerns about how regulatory arbitrage affects or undermines their regulatory objectives do not mean that their next steps are easily or clearly determined. Often, policy deliberation involves mapping regulatory objectives and making choices where there may be a conflict of objectives. In this article, we argue that these framing and deliberative exercises are shaped by the institutional structures in which regulators' agencies, mandates and powers are nested. In this way, regulators' responses to innovation and potential regulatory arbitrage are not simply a product of the oft-touted 'same activity, same risks, same rules' mantra. We turn next in Section B to tease out the fallacies and limits of the 'same activity, same risks, same rules' mantra. This mantra does not reflect how regulation and policy are institutionally shaped and forged, and also arguably does not provide sound guidance for regulators in responding to innovation. In Sections C and D, this article draws on the examples of the US SEC and UK FCA's approaches to crypto-asset offers in order to tease out how regulatory approaches and policy are framed and shaped within their structural limitations. This institutional account for regulatory responsiveness provides a firmer basis for regulators in considering their next steps responding to the regulatory gaps raised by technologically-powered financial innovations.

3. Same activity, same risks, same rules?

As financial regulators grapple with Fintech innovations and crypto-finance, an oft-touted mantra for dealing with these is 'same activity, same risks, same rules'.[66] This refers to a functional approach to regulating financial services and activities, so that regulation focuses on their economic nature, and applies in a technologically-neutral manner. In this manner, existing regulation that deals with equivalent economic functions in financial services could be extended to the purported innovation that serves similar functions.

Why a functional approach is seen as important is due to the historical evolution of financial services regulation being too entity-centred, focusing on banks, capital markets intermediaries, insurers or derivatives markets, all with sectorally-delineated roles.[67] Although the US maintains a sectorally-delineated regulatory architecture,[68] many jurisdictions have moved towards more integrated forms of financial regulation.[69] This is in order to match the industry's conglomeration movements since the 1990s.[70] Functional regulation allows regulators to keep pace with industry shifts and changes, so that they may not be limited by siloed supervision of entities whose business lines and models may have changed.

The development of functional financial regulation is however a patchwork in reality, as entity-based regulations[71] continue to exist alongside functional regulatory regimes[72] that

Blair, 'Financial Innovation and the Distribution of Wealth and Income' (2010) at http://ssrn.com/abstract=1656451; Tanju Yorulmazer, 'Has Financial Innovation Made the World Riskier? CDS, Regulatory Arbitrage and Systemic Risk' (Federal Reserve Bank of NY Paper, 2013) at http://ssrn.com/abstract=2176493.

64 Deidre Ahern, 'Regulatory Lag, Regulatory Friction and Regulatory Transition as FinTech Disenablers: Calibrating an EU Response to the Regulatory Sandbox Phenomenon' (2021), https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3928615, favouring sandbox institutions, also see Dirk A Zetzsche, Ross P Buckley, Janos N Barberis and Douglas W Arner, 'Regulating a Revolution: From Regulatory Sandboxes to Smart Regulation' (2017) 23 Fordham Journal of Corporate and Financial Law 31. For more scepticism about the regulatory sandbox, see Iris H-Y Chiu, 'A Rational Regulatory Strategy for Governing Financial Innovation' (2017) 8 European Journal of Risk Regulation 743.

65 (2017), chs 7, 8.

66 Expert Group on Regulatory Obstacles to Financial Innovation (ROFIEG), *30 Recommendations on Regulation, Innovation and Finance* (Dec 2019), https://ec.europa.eu/info/sites/default/files/business_economy_euro/banking_and_finance/documents/191113-report-expert-group-regulatory-obstacles-financial-innovation_en.pdf; European Commission, A Digital Finance Strategy for the EU (Sep 2020), https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A52020DC0591; Financial Stability Board, *Global Regulatory Framework for Crypto-asset Activities* (17 July 2023), https://www.fsb.org/wp-content/uploads/P170723-1.pdf.

67 Colin Mayer, 'Finance, Wealth, Technological Innovation, and Regulation' in Kirk Hamilton and Cameron Hepburn (eds), *National Wealth: What is Missing, Why it Matters* (Cambridge: CUP 2017) at ch17.

68 See positive accounts, Howell Jackson, "Variation in the Intensity of Financial Regulation: Preliminary Evidence and Potential Implications" (2007) 24 Yale Journal on Regulation 253; Lawrence A. Cunningham & David Zaring, 'The Three or Four Approaches to Financial Regulation: A Cautionary Analysis against Exuberance in Crisis Response' (2009) 78 Geo Wash L Rev 39.

69 Eílis Ferran and Charles Goodhart (eds), *Regulating Financial Services and Markets in the 21st Century* (Oxford, Hart 2001) on the UK's institution of the single regulator the Financial Services Authority in 2000. Although the UK has now dismantled the single regulator (see Eilis Ferran, "The Break-up of the Financial Services Authority" (2011) Oxford Journal of Legal Studies 455) and adopted the 'twin peaks' approach, many jurisdictions continue to maintain a single regulator, such as Nordic jurisdictions and Germany.

70 Arthur E Wilmarth Jnr, "The Transformation of the Financial Services Industry: 1975-2000, Competition, Consolidation and Increased Risks" (2002) University of Illinois Law Rev 215.

71 Such as applicable to banks and insurers.

72 Such as consumer protection across a variety of financial products overseen in the US under the Consumer Financial Protection Bureau, or financial stability risks monitored by the US Financial

provide cross-cutting rules for economically-equivalent financial activities. Since the rise of financial supermarkets in the 1990s (which are financial services firms that have multiple lines of businesses across banking, insurance and investment services), regulators are learning to grapple with integrated oversight of financial institutions that engage in bundling, cross-selling of services and firm conglomeration. At the turn of this century, regulators are dealing with a completely different phenomenon- the disruption of existing conglomerates' business models by technological advancements that bring in 'unbundling' of services and new entrants (that may not be quintessentially 'financial services firms') into financial regulators' sights. Financial regulators not only have to cope with the implications of new knowledge regarding how technology transforms financial services and products, they also have to cope with how such knowledge is to be analysed and acted upon within their existing regulatory structures. In particular, are institutional structures sufficiently adept for regulators to deal with new types of business models? In this manner, the mantra of 'same activity, same risks, same rules' provides a comforting anchor for regulators in terms of a starting point and coping mechanism.

One example of successful functional regulation can be seen in the EU Markets in Financial Instruments Directive 2014 (MiFID) regime. The MiFID specifies the application of conduct of business rules to activities defined in accordance with their economic functions, such as where client assets or monies are handled, across all investment intermediaries that engage in this function. All relevant investment intermediaries thus have to comply with the duties of account segregation and safekeeping to protect clients' rights. This functional approach is justified by the similar risks that exist in every custodial arrangement whether the custodial arrangement is carried out by a broker, an investment platform, a portfolio manager etc. Indeed, most of the MiFID's customer protection approaches apply across all types of investment entities according to their economic functions.[73]

However, it is arguably fallacious to perceive the functional approach in 'same activity, same risks, same rules' as universally applicable to all areas of financial regulation. This is because different aspects of financial regulation serve different objectives. Through the lens of a regulatory objective other than customer protection, the same activity need not produce the same risks, or even where the same risks exists, it may sometimes be disproportionate to apply the same rules.

For example, financial regulators readily consider that offers of securities to the public market and to the private market (usually to accredited investors or to only a small group of investors) should attract completely different regulatory treatment.[74] Public offers attract full mandatory disclosure requirements that are expensive to comply with, entail significant legal risk, and pose high barriers to capital markets access.[75] This is because an overriding investor protection objective exists. Private market offers are however exempt from the 'prospectus regime', and disclosure documents are only voluntary although they attract civil litigation for misrepresentation.[76] The same activities do not attract all of the same rules because regulators have made the assumption that the same risks do not arise. It is assumed private market participants are usually able to bargain for themselves. The overriding concern therefore is promoting the efficiency of market bargains between equally-pitted participants. However, do the same investor protection risks really not arise in the private market?[77] This assumption has been questioned where complex securitised products are concerned[78] and continue to be questioned in relation to technologically-transformed financial products.[79] However, regulators' limited resources may be better deployed to protect retail-level and vulnerable consumers than those who have greater levels of experience or net worth. Hence, regulators' judgment of the 'sameness' of risks is underpinned by a fabric of multiple objectives which give rise to different assumptions and determinations.

Where questions of proportionality arise, such as where business fund-raising is on a small scale,[80] we may perceive that these do not entail the 'same risks' as in an initial public offer scenario. Some small businesses that carry out online equity crowdfunding raise far smaller amounts,[81] while some crypto-asset offers could be self-regulated by voluntary forms of control mechanisms such as founders' lock-up commitments, hard or soft caps, escrow arrangements etc.[82] Should these different characteristics in business fund-raising 'count' towards mitigating the perception of 'same risks' that attract the 'same rules' in securities regulation? As will be discussed

Stability Oversight Council and their equivalents in the EU and UK- the European Systemic Risk Board and the Bank of England's Financial Policy Committee.

[73] Restoy (2021).

[74] Regulation D under federal securities regulation in the US, and similar exemption under Art 4, EU Prospectus Regulation 2017.

[75] Lachlan Burn, 'Capital Markets Union and Regulation of the EU's Capital Markets' (2016) 11 Capital Markets Law Journal 352 discusses open-ended gold standards that entail high legal risks for issuers; Elizabeth Howell, 'An Analysis of the Prospectus Regime: The EU Reforms and the 'Brexit' Factor' (2018) European Company and Financial Law Review 69.

[76] Bankia SA v Unión Mutua Asistencial de Seguros (UMAS) 2021, at https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A62019CC0910&qid=1613578613204.

[77] 'SEC commissioner urges private placement reform after FTX failures' (31 Jan 2023), https://coingeek.com/sec-commissioner-urges-private-placement-reform-after-ftx-failures/.

[78] Steven M Davidoff and Claire A Hill, 'Limits of Disclosure' (2013) 36 Seattle Law Review 599.

[79] Yuliya Guseva, 'When the Means Undermine the End: The Leviathan of Securities Law and Enforcement in Digital-Asset Markets' (2022) 5 Stanford Journal of Blockchain Law and Policy 1.

[80] Lucia Pacheco, 'Implementing the Principle of "Same Activity, Same Risk, Same Regulation And Supervision": Activity Vs Entity-Based Frameworks' (BBVA, 2021).

[81] Kevin Boudreau, Lars Bo Jeppesen, Toke Reichstein and Francesco Rullani, 'Entrepreneurial Crowdfunding without Private Claims' (2018), https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2669545; Ethan R Mollick and Venkat Kuppuswamy, 'After the Campaign: Outcomes of Crowdfunding' (2014), https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2376997. The treatment of equity crowdfunding as securities offers would by default be the case if not for bespoke regulatory exemptions in the US, EU and UK.

[82] Chiu, *Regulating the Crypto-economy* (2022), ch5 contains a discussion and citations.

shortly, the US SEC's approach to many crypto-asset offers is in the vein of 'same activity, same risks, same rules' based on its open-ended regulatory structure. This approach has however attracted criticism that the regulatory judgment for the 'sameness' of risk is not often clear or objective. Further, focusing on justifying the 'sameness' of risks allows regulators to merely defend current regulation. Regulators thus do not fully and fairly appraise how new features in business fund-raising activity may affect the perception of risks.[83] In this manner, extending the same regulatory framework can be over-inclusive in dealing with the risks that are reasoned to be the 'same' while under-inclusive in relation to different/new risks that may be ignored.[84]

Further, financial regulators have not consistently applied 'same activity, same risks, same rules' in many areas of financial activity. In an earlier article[85] I argued that money market funds could at a functional level be treated as equivalent to bank deposits based on their short-term liabilities and fixed net asset value promises, but in both the US and EU, bespoke regulatory regimes have been carved out for them.[86] Regulators monitor liquidity issues for such funds and aim at moderating investors' expectations in relation to net asset value. Regulators seem to refrain from treating money market fund activities as 'same activity', although similar run risks arise which could make a case for having similar rules. This may be due to the perception that similar application of the full gamut of bank prudential regulation to money market funds would seem disproportionate as these funds do not engage in long-term lending.[87] In a similar vein, it is arguable that the regulation of credit rating agencies, the largest of which form an oligopoly, is designed with those considerations in mind and should perhaps not be extended wholesale to other information intermediaries such as rating agencies which specialise in 'environmental, social and governance' ratings for corporations. In considering 'same activity, same risks, same rules', nuances of differences such as scale of activity, extent of bundling or nature of investors/users often change perceptions of risks. Although similar activities share characteristics that could be susceptible to cross-cutting and consistent rules, the mantra of 'same activity, same risks, same rules' is too crude to admit of nuances needed in regulatory analysis and deliberations, in order to determine a suitable policy forward.

The mantra of 'same activity, same risks, same rules' can also be used by financial institution incumbents to lobby for the extension of the most costly or over-inclusive forms of regulation, such as prudential regulation applicable to banks, to competitors that are smaller or of a more focused nature. For example, UK Finance, the trade association for banks in the UK, has lobbied for the mantra to be applied to electronic money or stablecoin institutions that perform money transmission services.[88]

The mantra of 'same activity, same risks, same rules' is prone to excluding nuances and differences in underlying objectives, risk characterisation and proportionality. It may obscure regulators from considering if policy adjustments are needed in the face of innovative developments. Holding onto the mantra could be disadvantageous to regulators' open-ness and responsiveness to learning and adopting change where such is warranted. This does not mean that a 'functional' approach to financial regulation is unwarranted, as I have earlier argued to the contrary,[89] that a functional approach still yields perspective and knowledge-building for regulators, but regulators need to map new learning against regulatory objectives, while being open to considering regulatory reform. The next two Sections turn to two different applications of the functional approach to regulation, in relation to the US SEC's response to crypto-asset offers, and the UK FCA's response. These different functional approaches to regulation are shaped by regulators' structural limitations. This institutional account of financial regulators' responses shows that there is no 'objective' functional approach to regulation, and that regulators should mind the structural limitations that shape their regulatory responsiveness to innovations.

4. The SEC's approach to crypto-asset offers

'Initial coin offerings' (ICOs) are offers of pre-development tokens by application developers who wish to build out a project on a permissionless blockchain such as Ethereum. Application developers offer supporters digital tokens embodying future rights that would be coded and executable when the application becomes live. In this manner, developers obtain funding for their code development, while supporters look forward to participating in a decentralised application or network which supports peer-to-peer functionalities when the development becomes live. To make token offers attractive, developers would also seek to 'list' the token in one or more crypto-exchanges so that investors have the opportunity to exit if they wish. The first ICO was made by the founder of Mastercoin, JR Willett, who wished to create a protocol layer upon the bitcoin blockchain so that the bitcoin blockchain could facilitate the creation of digital assets and other applications much like how the Ethereum blockchain supports various applications.[90] 5000 mastercoin tokens were sold raising Willett USD$500,000. This project has now become live and is known as Omni, which is a distributed layer upon the bitcoin

[83] Taking an approach of reasoning and framing the innovation to fit within existing legal categories, termed as 'coherentism' in Roger Brownsword, *Law, Technology and Society* (Oxford: Routledge 2019), pp191-196.

[84] More on this relating to cryptoasset offers in Section C.

[85] Iris H-Y Chiu, 'Transcending Regulatory Fragmentation and the Construction of an Economy-Society Discourse: Implications for Regulatory Policy Derived from a Functional Approach to Understanding Shadow Banking' (2016) 42 Journal of Corporation Law 327.

[86] US' Money Market Fund Reforms, https://www.sec.gov/rules/proposed/2021/ic-34441-fact-sheet.pdf; EU Money Market Fund Regulation 2017/1131.

[87] The US proposal to apply a liquidity rule and the EU's regulation of portfolio composition based on assumptions of liquidity of certain asset classes distinguish prudential regulation of money market funds from banks.

[88] UK Finance, *Same Activity, Same Risk, Same Regulation* (Jan 2021).

[89] Chiu (2016).

[90] 'Here is the Man who Created ICOs and This is the New Token He is Backing' (Forbes, 21 Sep 2017).

blockchain.[91] Pre-development tokens are a unique form of early stage financing for businesses which usually have little or no track record, and are based on an idea that requires subsequent endeavours at programming. Holders of such tokens may speculate on their secondary market prices[92] or may look forward to the completed project and participate in its functionalities. It is not clearly the case that token offers, usually in return for cryptocurrency, fall within conventional securities regulation,[93] and ICOs thrived in a regulatory lacuna for a short time before the US SEC decided to clarify its stance.

It is not exactly clear that ICOs would fall squarely within securities regulation in the US. In relation to the subject matter of 'security' defined in the Securities Act 1933,[94] it could be argued that ICOs are an 'investment contract'.[95] As to what would be considered an investment contract, the Howey test[96] was formulated by courts in order to capture any form of solicitation for participation in opportunities based on an expectation of future profit. Such expectation should also be based on a common enterprise which is managed by the efforts of others (other than the investors) to realise investors' investment expectations. Investment opportunities relating to art, beavers, tulips etc. that have been curated by all manners of investment entrepreneurs have been articulated to be offers of investment contracts, hence securities. The definition of 'security' in relation to the 'investment contract' is open-ended in nature and the *Howey* test provides key aspects of the characteristics of investment contracts. In this way, the SEC is able to develop its interpretation of the nature of ICOs within the definition of 'security'.

In 2017, the SEC took its first enforcement action for an unregistered securities offering. The SEC characterised the ICO made by DAO (Decentralised Autonomous Organisation) as an unregistered securities offering.[97] DAO was hosted on the Ethereum permissionless blockchain, and governed by automated transaction protocols programmed for it. Digital tokens were issued by DAO to participants who contributed ether, the native currency of the Ethereum blockchain, to a pool which would be allocated to fund particular investment opportunities. The DAO tokens were programmed with protocols that allow participants to vote on investment decisions, and the investment protocol would only be executed upon consensus at voting. The DAO suffered a hack and lost a substantial amount of its funds, but a technological reversal of this was carried out by the developers and miners of the Ethereum blockchain, forking the chain off to its pre-hack state.[98] The incident, although resolved through the self-regulatory efforts of the Ethereum community, attracted the SEC's attention, which proceeded to classify the DAO's issuance of tokens to investors as an unregistered securities offering.

The SEC applied the *Howey* test to classify the issue of tokens as an unlawful investment contract, pursuant to a 'common enterprise' ie the DAO, which gave rise to participants' investment expectations. This decision was however criticised by Oren[99] and Metjahic[100] as they found more resemblance between the DAO and private partnerships. DAOs were arguably not the same as the type of 'common enterprise' that gave rise to investors' investment expectations under the *Howey* test. Investors each made disparate voting choices and were not passive or dependent on the 'efforts of others'. The DAO as a whole worked on automatic code which achieved narrowly defined purposes, and was not broadly managed by 'others' as an 'enterprise'. It may be argued that the organisational structure was developed by 'others'. Investors' reasonable expectations of profit were however based on their own preference or informed voting for funding particular projects.

Despite the imperfect fit between ICOs and the conception of 'investment contracts', the SEC has further launched into a mode of regulation by enforcement,[101] extending existing securities regulation to a number of ICOs,[102] labelling them as unregistered offerings and therefore to be unwound. The SEC took enforcement against Munchee, an ICO for tokens to be used in a food review application under development. The reason for enforcement was that Munchee's disclosure made reference to appreciation of token value by developers' efforts, hence making the token 'investment contracts'.[103] The SEC also took action against Ripple Labs Ltd and its senior ex-

[91] https://www.omnilayer.org.

[92] Rüdiger Fahlenbrach & Marc Frattaroli, 'ICO Investors' (2021) 35 Financial Markets and Portfolio Management 1; Hugo Benedetti, Leonard Kostovetsky, 'Digital Tulips? Returns to Investors in Initial Coin Offerings' (2021) 66 Journal of Corporate Finance 101786 on levels of spectacular returns for investors in secondary markets, but this does not apply to every token.

[93] See L Rinaudo Cohen, 'Ain't Misbehavin': An Examination of Broadway Tickets and Blockchain Tokens' (2019) 65 Wayne Law Review 81; as opposed to U Rodrigues, 'Semi-Public Offerings? Pushing the Boundaries of Securities Law' (2018) at https://ssrn.com/abstract=3242205. In the EU see A Collomb, P de Fillippi and K Sok, 'Blockchain Technology and Financial Regulation: A Risk-Based Approach to the Regulation of ICOs' (2019) 10 European Journal of Risk Regulation 263; D Boreiko, G Ferrarini & P Giudici, 'Blockchain Startups and Prospectus Regulation' (2019) 20 European Business Organisations and Law Review 665.

[94] s2(a)(1).

[95] This is the SEC's argument in its action against Ripple Labs, see summary judgment in the NY district court, SEC v Ripple Labs et al (13 July 2023), 20 Civ 10832 (AT), https://www.nysd.uscourts.gov/sites/default/files/2023-07/SEC%20vs%20Ripple%207-13-23.pdf.

[96] HB Shadab, 'Regulation of Blockchain Token Sales in the United States' in I Lianos, P Hacker, S Eich and G Dimitropoulos (eds), *Regulating Blockchain* (Oxford: OUP 2019) at ch13.

[97] SEC, *Report of Investigation Pursuant to Section 21(a) of the Securities Exchange Act of 1934: The DAO* (25 July 2017) at https://www.sec.gov/litigation/investreport/34-81207.pdf.

[98] 'What was the DAO Hack?' (16 March 2022), https://www.gemini.com/cryptopedia/the-dao-hack-makerdao.

[99] O Oren, 'ICO's, DAO'S, and the SEC: A Partnership Solution' (2018) 2018 Columbia Business Law Review 617.

[100] L Metjahic, 'Deconstructing the DAO: The Need for Legal Recognition and the Application of Securities Laws to Decentralized Organizations' (2018) 39 Cardozo Law Review 1533.

[101] Carol Goforth, 'Regulation by Enforcement: Problems with the SEC's Approach to Cryptoasset Regulation' (2022), https://ssrn.com/abstract=4084033; Douglas S Eakeley and Yuliya Guseva, 'Crypto-Enforcement Around the World' (2021) South California Law Review Postscript, https://ssrn.com/abstract=3713198; Andrew Bull & Tyler Harttraft, 'Cryptocurrency and Blockchain Law: SEC's Heightened Enforcement against Digital Assets' (2021) 27 Rich JL & Tech 1.

[102] SEC, Framework for "Investment Contract" Analysis of Digital Assets (2019), https://www.sec.gov/corpfin/framework-investment-contract-analysis-digital-assets#_edn6.

[103] https://www.sec.gov/litigation/admin/2017/33-10445.pdf.

ecutives for its ICO of XRP tokens, which the SEC regards as an unregistered public offering of securities.[104] This has been challenged by Ripple Labs, giving the courts an opportunity to clarify the application of the *Howey* Test to ICOs. However, the New York district court's summary judgment only reinforces the questions surrounding the aptness of applying the *Howey* test to ICOs as novel form of fund-raising, and also highlights the hazards of 'regulation by enforcement'.

On the application of the *Howey* test to ICOs, it is arguable that the test has certain open-ended characteristics targeted towards protecting investors enticed into schemes that are managed under someone else's control. However, both the SEC's enforcement guidance and the New York district court's summary judgment highlight the challenges of applying an old legal test for the developments of today.

ICOs are for pre-development tokens envisaged to embody a range of functionalities, including financial type functionalities such as payment. The SEC's guidance indicates that, the more dominantly functional tokens are to be, in comparison to their tradeability or potential to provide gain, the more likely they are not securities. However, the SEC's presumption of functionality versus financialisation for characterising ICOs as securities offers can arguably be misplaced, as tokens have both sets of characteristics.[105] Financialisation need not undercut the functional characteristics that exist in an asset, as we think about residential property as being both fully functional and financialised in many developed economies. It also seems unduly restrictive to prevent tokens from being successful both functionally and financially. The approach presumes that genuinely functional tokens would be niche in nature and this presumption artificially delimits the prospects of blockchain-based businesses. Further, by focusing on the 'investment contract' fit of certain token aspects, the SEC also sidelines the payment functions that all tokens would be programmed for. This would be an aspect of 'financial services' that would be unaccounted for by the extension of an existing regulatory regime dealing with securities. Further, some ICOs are issued by developers who wish to mobilise a decentralised project in due course. The nature of such a project is fundamentally different from a for-profit corporate organisation, which is the subject of securities regulation. Although the New York district court rejected Ripple Labs' argument that an essential ingredient of 'securities' would be post-sale rights such as shareholder and corporate governance rights, preferring to stick to the literal confines of the *Howey* test, the three prongs of the test can also be regarded as inadequate for accommodating modern developments that have come to shape securities. For example the EU Prospectus Regulation 2017 regards mandatory disclosure for securities offers to essentially refer to the 'rights attaching to the securities'.[106] This goes to show that not only are securities investment contracts made by investors, entrusting capital to be mobilised by the efforts of others, this exchange usually entails certain rights for investors as well, principally in relation to monitoring and residual governance.[107] In this manner, the 'open-ended' nature of investment contract in the *Howey* test arguably suffers from gaps where courts are unwilling to organically consider interpretive developments that incorporate modern phenomena that have become widely practised.

Further, the New York district court's summary judgment[108] for the SEC and Ripple Labs delivered a result that arguably adds to the uncertainty regarding the characterisation of ICOs. Applying the *Howey* test, the judge held that XRP tokens sold to institutional investors fell within all three prongs of the *Howey* test as investors clearly participated in a common enterprise that would be realised by Ripple Labs' efforts for the purposes of investment gain. However, sales made to retail investors through algorithmic trading platforms, ie 'Programmatic sales' as well as employee distributions did not meet the requirements of the *Howey* test. The retail investors in particular did not know if they were buying from Ripple or other third parties so could not be seen to be channelling capital to Ripple Labs in order to make investment gains out of the efforts of Ripple Labs. Applying the *Howey* test in this manner, the nature of an 'investment contract' is not only product-based, relating to the characteristics and rights attached to the XRP token, but based on the sale context, which arguably adds another dimension to the *Howey* test. Blockchain-based sale contexts have fundamentally changed the intermediary-led sale and distribution contexts for securities, as direct distribution can be achieved, breaking down the distinction between primary and secondary securities markets. However, it can be argued that however the market structures are for distribution, surely investor protection revolves around the product that is aimed to be distributed. It is unclear whether the court has, in coming to its conclusion, fully interrogated the nature of market structural change in blockchain-based sales, as it is tantamount to exempting peer-to-peer sale contexts from securities regulation. Indeed, by way of contrast, the EU regards 'transferability' or tradeability on secondary markets as being key to the characteristic of a security,[109] this position arguably contrary to the one taken by the district court. This is unlikely the 'clarity' for the *Howey* test sought for by the SEC.

It is uncertain to what extent the SEC's accelerated endeavours to extend its jurisdiction to ICOs would be affected by the New York district court summary judgment. The SEC has recently extended its regulation by enforcement approach to marketplaces for crypto-tokens, now regarded as unregu-

[104] 'SEC Charges Ripple and Two Executives with Conducting $1.3 Billion Unregistered Securities Offering' (22 Dec 2020), https://www.sec.gov/news/press-release/2020-338. The summary judgments for the SEC'a suit and Ripple's counterclaim were handed down on 13 July 2023, SEC v Ripple Labs et al (13 July 2023), 20 Civ 10832 (AT), https://www.nysd.uscourts.gov/sites/default/files/2023-07/SEC%20vs%20Ripple%207-13-23.pdf. The matter is still proceeding to trial.

[105] Rohr and Wright (2019).

[106] Art 6.

[107] Armen A Alchian and Harold Demsetz, "Production, Information Costs and Economic Organisation" (1972) 62 The American Economic Rev 777.

[108] SEC v Ripple Labs et al (13 July 2023), 20 Civ 10832 (AT), https://www.nysd.uscourts.gov/sites/default/files/2023-07/SEC%20vs%20Ripple%207-13-23.pdf.

[109] Philipp Maume and Matthias Fromberger, "Regulation of Initial Coin Offerings: Reconciling U.S. and E.U. Securities Laws" (2019) 19 Chicago Journal of International Law 548.

lated securities exchanges which needed to be registered with the SEC.[110] Although it has been commented that the SEC's ability to extend its enforcement based an open-ended regulatory definition quickly secures investor protection against scams,[111] 'regulation by enforcement' may suffer from the hazard of illegitimacy as a means of policy-making.[112] The New York district court's summary judgment highlights the limitations of this apparently 'open-ended approach' in the face of modern developments, raising queries as to whether the 'coherentist' interpretation of enforcement jurisdiction is itself legally justified. In this manner, the SEC's mode of regulation by enforcement is arguably checked by judicial challenge, but this case has scarcely clarified the application of securities regulation. It goes to show that attempting to establish policy chiefly by enforcement action in an emerging area of development can stultify the production of more complete information and debate regarding policy choices, especially policy reform. There is also empirical research establishing that many ICOs are pre-development projects that are not downright scams.[113] The reality remains that they are speculative and may not succeed. Nevertheless, we are now in greater doubt that the SEC is rightly extending the definition of 'investment contract' to cover ICOs. More policy debate is needed regarding differences between ICOs and equity or debt securities offered in traditional forms of corporate fund-raising, and how ICOs should be appropriately regulated.

It may further be argued that the SEC's defensive approach to its jurisdiction flows from its constitutional establishment. The SEC has been set up as a dedicated agency for investor protection with extensive powers under the Securities Exchange Act 1934. Its constitutional independence has however been tested a number of times with regard to the extent of Presidential and executive power that can interfere with its powers.[114] The ongoing dynamism regarding its independence can foster a need for the agency to defend its jurisdiction, purpose and existence. In this manner, the SEC's responsiveness to new developments is important for continued importance and relevance, and open-ended legislation enhances such responsiveness. Applying open-ended legislation in a manner consistent and coherent with existing regulation helps to reinforce the SEC's sufficiency. However, one can regard the SEC's approach as not so much motivated by public choice,[115] but rather simply following from the ironic 'curse' of open-ended legal mandates. Even the New York district court's approach seems shackled to this ironic 'curse'. It is possible for open-ended regulatory structures to be dominated by previously created legal baggage so that innovations are forced to fit within certain interpretive categories, while their different or new characteristics are ignored. This leads to greater interpretive uncertainty[116] in the face of disconnect from real modern developments. Ultimately, such a coherentist approach seems unable to address the imperfections in 'regulatory gap-filling' and to deal with regulatory arbitrage.

Although the SEC has utilised an open-ended regulatory structure to show responsiveness in functionally addressing the ICO phenomenon, such responsiveness is ultimately limited and shaped by the institutional structures in which the SEC is located, such as the constitutional positioning of the SEC. The second limitation is the sectorally-delineated regulatory architecture at federal level, of which the SEC is part.

The US federal oversight of financial services is sectorally-delineated,[117] hence the SEC is unable to take into account of other 'bundled' financial characteristics that are not 'securities' in nature. In this way its functional regulatory application has been over and under-inclusive at the same time. Over-including ICOs as securities is an attempt to meet investor protection objectives to an extent, but the regulatory application is arguably disproportionate and over-inclusive. Meanwhile, the under-inclusiveness of the SEC's approach points to other risks and regulatory objectives that remain unaddressed.

The SEC's enforcement approach has led to a significant decline in ICOs offered to the public, as developers choose exemptions such as making offers to private markets. This has not necessarily improved the quality of offers as the information environment in private markets seems poorer.[118] In this manner, regulation by enforcement does not help to build up a market for fund-raising to support early-stage code development, in relation to price formation. Fund-raisers' as well as investors' needs remain subject to a self-governing landscape. Further, stringent regulatory applications such as

[110] 'SEC Files 13 Charges Against Binance Entities and Founder Changpeng Zhao' (5 June 2023), https://www.sec.gov/news/press-release/2023-101; 'SEC Charges Crypto Asset Trading Platform Bittrex and its Former CEO for Operating an Unregistered Exchange, Broker, and Clearing Agency' (17 April 2023), https://www.sec.gov/news/press-release/2023-78.

[111] James J. Park & Howard H. Park, 'Regulation by Selective Enforcement: The SEC and Initial Coin Offerings' (2020) 61 Wash U J L & Pol'y 99.

[112] Chris Brummer, Yesha Yadav and David Zaring, 'Regulation by Enforcement' (2023) Southern California Law Review, https://ssrn.com/abstract=4405036.

[113] Anca Mirela Toma and Paola Cerchiello, 'Initial Coin Offering: Risk or Opportunity?' (2020) 3 Frontiers in Artificial Intelligence Article 18, doi: 10.3389/frai.2020.00018.

[114] Marshall J Breger and Gary J Edles, *Independent Agencies in the United States: Law, Structure, and Politics* (New York: OUP, 2015), ch3; Kevin M Stack, 'Obama's equivocal defense of agency independence' (2010) 26 Constitutional Commentary. On the disadvantages of the lack of clarity between executive power and agency independence, particularly for the SEC, see Lisa Schultz Bressman and Robert B Thompson, 'The Future of Agency Independence' (2010) 63 Vanderbilt Law Review.

[115] Discussed in Steven P Croley, "Theories Of Regulation: Incorporating The Administrative Process" (1998) 98 Columbia Law Review 1.

[116] Yuliya Guseva, 'The SEC, Digital Assets, and Game Theory' (2021) 46 Journal of Corporation Law 629.

[117] Howell Jackson, 'Regulation in a Multisectored Financial Services Industry: An Exploratory Essay' (1999) 77 Washington University Law Review 319.

[118] Lennart Ante and Ingo Fiedler, 'Cheap Signals in Security Token Offerings' (2020) 4 Quantitative Finance and Economics 608; but see Jingxing (Rowena) Gan, Gerry Tsoukalas, Serguei Netessine, 'Initial Coin Offerings, Speculation, and Asset Tokenization' (2022) 67 Management Science 914 on higher quality of security token offerings made to accredited investors.

against Kik[119] reinforce the effect that the SEC's interest in the ICO market is to marginalise it rather than meet market-building or efficiency needs. It should be questioned if these consequences are in entrepreneurs' and investors interests.

Why should there be the assumption that marginalising the ICO market best protects investors? Why not consider investor protection in terms of ensuring that their 'utility' expectations are being met by developers undertaking genuine and good faith efforts in blockchain development and governance? The SEC should appraise what developments are new and whether a case for new policy should be made. I have elsewhere argued for cryptoasset offers to be looked at holistically from the points of view of business governance, fund-raising and the execution of various functionalities including payment.[120] The SEC's approach has been met with market disapproval, as the SEC's approach is seen as excessive and beyond anti-fraud needs.[121] It has also been met with disapproval by a significant number of Congressmen.[122]

Further, the SEC's approach focuses only on securities distribution and investor protection, and sidelines other financial risks that emanate from crypto-token developments, such as their functions in payment and remittance substitution and decentralised peer-to-peer forms of leveraging and speculation. It can however be argued that the lacunae cannot be addressed within the SEC's mandate alone. Policy-makers should consider what other regulatory objectives are engaged, such as where an offering of a stablecoin is made which implicates not only fund-raising aspects but also the aspects of payment functionalities, and financial stability risks if the stablecoin becomes widely scalable.[123] US policy-makers need to engage with a broader agenda regarding the crypto-economy, one that leverages upon, but is not limited by, current institutional structures. The structural limitations surrounding the SEC makes for a rather deceptive account of its regulatory responsiveness and achievements.

5. The FCA's approach to crypto-asset offers

In contrast to the US, the FCA's approach to cryptoasset offers has been subject to the 'regulatory perimeter' framework in the UK that governs what is subject to financial regulation. The Treasury determines the activities that are to be subject to financial regulation, and only those are required to be authorised and overseen by the FCA.[124] The list of financial activities subject to financial regulation are precisely determined instead of being open-ended. For example, in Schedule 2 of the Financial Services and Markets Act, one of the regulated activities is 'arranging deals in investments'. When read with the Regulated Activities Order, 'investments' are precisely specified in Part III and are not an open-ended term. These refer to deposits, contracts of insurance, shares, debentures, government and public securities, instruments that give rise to entitlements to securities, units in a collective investment scheme, rights in a stakeholder pension scheme, options, futures contracts, contracts for differences, underwriting in the capacity of the Lloyd's Syndicate, funeral plan contracts, regulated mortgage contracts and other rights or interests in the above list. In this manner, unless expressly included in this list, interests in crypto-assets or pre-development tokens would not be regarded as regulated investments for the FCA's regulatory perimeter.

The regulatory perimeter is the institutional context within which the FCA operates, and there are clear inclusions of what constitute regulated financial activities. Where unregulated activities that engage citizens' financial interest arise as forms of innovation, the 'regulatory arbitrage analysis' is essentially a policy choice that has to be made by the Treasury. Hence, the FCA issued in 2019 a guidance clarifying that only crypto-assets that are essentially the same as securities or payment instruments would fall within their respective regulatory regimes already within the regulatory perimeter.[125] The FCA also made major efforts to clarify the unregulated nature of many crypto-asset offers. It may not however be satisfying[126] for consumers that the FCA merely strongly clarify that they do not oversee certain activities. By maintaining a clear regulatory perimeter, incentives are introduced for innovative products that are beyond the regulatory perimeter to be offered, such as unregulated private companies' shares[127] and crypto-assets. Financial citizens may consider it increasingly untenable that the FCA's defence against perceived regulatory arbitrage is its lack of regulatory perimeter over unregulated activities, especially in the face of unregulated activities rising in scale that engage financial consumers' risks.[128]

[119] 'SEC Obtains Final Judgment Against Kik Interactive For Unregistered Offering' (21 Oct 2020), https://www.sec.gov/news/press-release/2020-262. Kik has offered pre-development tokens under a Regulation D exemption but sold tokens for the live project publicly, as it is believed that they are utility and functional tokens.

[120] Chiu, *Regulating the Crypto-economy* (2022), chs 4-6.

[121] Yuliya Guseva & Irena Hutton, 'Digital Asset Innovations and Regulatory Fragmentation: The SEC Versus the CFTC' (2022), https://ssrn.com/abstract=4249503.

[122] See joint letter to Gary Gensler, Chair of the SEC, https://financialservices.house.gov/uploadedfiles/2023-04-17_all_fsc_gop_letter_to_sec_on_nse_registration_final.pdf.

[123] There is copious literature on stablecoins as implicating different financial risks and there is more international agreement to subject important stablecoins to regulation, see FSB (2022), also DA Zetzsche, RP Buckley and DW Arner, 'Regulating LIBRA: The Transformative Potential of Facebook's Cryptocurrency and Possible Regulatory Responses' (2020) Oxford Journal of Legal Studies, https://doi.org/10.1093/ojls/gqaa036; and at https://ssrn.com/abstract=3414401.

[124] S19, Financial Services and Markets Act 2000.

[125] FCA, *Guidance on Cryptoassets Policy Statement* (July 2019) at https://www.fca.org.uk/publication/policy/ps19-22.pdf.

[126] 'Complex and volatile': cryptocurrencies should be regulated by financial watchdogs, say consumer advocates' (The Guardian, 30 May 2022) reflecting a consumer survey in Australia that is feeding into reform considerations there.

[127] The subject of a scandal with the London and Capital Finance collapse triggering an independent inquiry, see Dame Elizabeth Gloster DBE, *Report of the Independent Investigation into theFinancial Conduct Authority's Regulation of London Capital & Finance plc* (Dec 2020), https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/945247/Gloster_Report_FINAL.pdf.

[128] FCA, *Research Note: Cryptoasset Consumer Research 2021* (17 June 2021), https://www.fca.org.uk/publications/research/research-note-cryptoasset-consumer-research-2021.

The FCA has attempted to warn consumers of the risks of unregulated crypto-assets,[129] and banned crypto-derivatives from being sold to retail investors.[130] It has also attempted to extend some of its regulatory powers to protect consumers from crypto-asset marketing although it has, until legislation was passed for the FCA to regulate crypto-assets,[131] been unable to either regulate offers and their processes. The FCA had considered whether the regulation of financial promotion could be extended to crypto-assets even if they were not securities tokens.[132] The UK regulates the marketing of promotions for financial products and services by requiring that such communications be made in a responsible and regulated manner by authorised financial intermediaries,[133] their delegates or by exempt persons.[134] This consultation ultimately resulted in the exclusion of crypto-asset marketing from financial promotion reforms,[135] as the FCA recognised that it could not exceed its regulatory perimeter unless changes were made at the legislative level, which eventually took place.

The UK Treasury, in light of the EU's initiative to offer crypto-assets a bespoke regulatory regime,[136] caught up with introducing new legislation for the regulation of crypto-assets. A consultation[137] took place on whether crypto-assets should be regulated and to what extent. Although the consultation was framed in open-ended terms, the Treasury was then influenced very much by the international focus on stablecoins posing the greatest possible threat to financial stability risk.[138] This focus found its way into the Financial Services and Markets Bill debated in parliament at the end of 2022. In this manner, the UK would embark on two phases of crypto-asset regulation. First, reforms regarding fiat-backed stablecoins will be implemented, under a regime for digital settlement assets. Next, following the introduction of the EU Markets in Crypto-assets Regulation,[139] as well as the Financial Stability Board's exhortation to look into regulation of crypto-assets more broadly,[140] crypto-asset regulation in the UK will be finalised with more general application.[141]

In February 2023,[142] the Treasury, in anticipation of conferring on the FCA formal powers to regulate the crypto-asset industry, consulted again on the broad contours of regulatory policy, to be eventually finalised by the FCA. The consultation adopts as a starting point, Cunliffe's technologically-neutral stance in relation to 'same risks, same regulatory outcomes'.[143] This articulation differs from 'same risks, same activity, same rules' as 'same regulatory outcomes' need not emanate from 'same rules'. However, this articulation still suffers from the broad brush illusion of 'sufficiency' that is conveyed by 'same risks, same activity, same rules', as the assessment of 'same risks' with regard to any financial innovation is necessarily a nuanced exercise. It remains uncertain how distinguishing factors are treated, or how 'other interacting risks' are mapped or traded off. That said, the substance of the consultation paper seems exploratory in nature, therefore allowing for genuine consultation and information gathering amongst stakeholders.

The Treasury's consultation maps out a range of crypto instruments that could be engaged with financial purposes or interest, including the algorithmic stablecoin, non-fungible tokens etc. This relatively up-to-date list is open for discussion in terms of scope of inclusion. The consultation then proceeds to draw attention to a range of specific financial activities, including the public offers of crypto-assets, the operation of centralised trading exchanges for crypto-assets, the intermediation of crypto-assets for investors, lending against crypto-collateral, custodial business for crypto-assets, decentralised finance and a catch-all category of any other crypto-asset activities. Although specific proposals have been made for crypto-asset offers, less specific proposals are made for the rest of the crypto-asset intermediation or financial activities.

129 FCA, 'Consumer warning about the risks of investing in cryptocurrency CFDs' (Nov 2017) at https://www.fca.org.uk/news/news-stories/consumer-warning-about-risks-investing-cryptocurrency-cfds; 'FCA reminds consumers of the risks of investing in cryptoassets' (11 May 2022), https://www.fca.org.uk/news/statements/fca-reminds-consumers-risks-investing-cryptoassets#:~:text=There%20are%20no%20consumer%20protections,all%20the%20money%20you%20invest.

130 'FCA bans the sale of crypto-derivatives to retail consumers' (6 Oct 2020), https://www.fca.org.uk/news/press-releases/fca-bans-sale-crypto-derivatives-retail-consumers.

131 See s71K(5), Financial Services and Markets Act 2000 as amended in 2023.

132 FCA, 'Strengthening our financial promotion rules for high risk investments, including cryptoassets: Consultation Paper' (Jan 2022), https://www.fca.org.uk/publication/consultation/cp22-2.pdf.

133 S21, Financial Services and Markets Act 2000; FCA Handbook COBS 4.2-4.10.

134 Exempt persons in the Financial Promotions Order 2005, but exempt persons are subject to the same standards of communications and conduct governing authorised financial intermediaries, see *Atlantic Law LLP v FSA* (Upper Tribunal March 2010).

135 FCA, 'Strengthening our financial promotion rules for high-risk investments and firms approving financial promotions: Policy Statement' (Aug 2022), https://www.fca.org.uk/publications/policy-statements/ps22-10-strengthening-our-financial-promotion-rules-high-risk-investments-firms-approving-financial-promotions.

136 Note 135 below..

137 HM Treasury, *Regulatory Approach to Cryptoassets and Stablecoins* (Jan 2021), https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/950206/HM_Treasury_Cryptoasset_and_Stablecoin_consultation.pdf.

138 FSB, 'Regulatory Issues of Stablecoins' (Oct 2019) at https://www.fsb.org/wp-content/uploads/P181019.pdf.

139 EU Markets in Crypto-assets Regulation 2023/1114.

140 'FSB proposes framework for the international regulation of crypto-asset activities' (Oct 2022), https://www.fsb.org/2022/10/fsb-proposes-framework-for-the-international-regulation-of-crypto-asset-activities/.

141 'Amendment to UK financial services bill provides regulation for crypto activities' (Cointelegraph, 21 Oct 2022), https://cointelegraph.com/news/amendment-to-uk-financial-services-bill-provides-regulation-for-crypto-activities; section 71K (5), Financial Services and Markets Act 2000 amended in 2023.

142 HM Treasury, *Future Financial Services Regulatory Regime for Crypto-assets* (Feb 2023), https://www.gov.uk/government/consultations/future-financial-services-regulatory-regime-for-cryptoassets.

143 See also Jon Cunliffe's preferred 'same risks, same regulatory outcomes', 'Some Lessons from the Crypto Winter' (12 July 2022), https://www.bankofengland.co.uk/speech/2022/july/jon-cunliffe-speech-on-crypto-market-developments-at-the-british-high-commission-singapore.

Broad contours in relation to prudential, conduct or organisational governance are proposed, leaving the detail very much up for input and debate.

In relation to crypto-asset offers, it is proposed that issuers are only able to make such offers through regulated platforms or markets, and issuers' disclosure would be governed by market requirements although subject to baseline standards regarding negligence and civil liability. This proposal is yet to be shaped by consultation but at first glance, it is capable of being enabling in nature, tying issuers to a proportionate form of regulation, given that crypto-asset issuers are often pre-development project leaders, at an earlier stage than start-up companies.[144] This position is not dissimilar to, and possibly as attractive as, the enabling regime in the EU's Markets in Crypto-assets Regulation.[145] Further, such enabling regime for issuers' fund-raising that is distinguished from the 'gold standard' of securities regulation[146] follows on from a modern development in securities regulation becoming more proportionate in order to cater for small and medium-sized business needs. The FCA has in 2014 introduced a regime for online equity crowdfunding by small business issuers[147] that is less demanding in terms of mandatory disclosure, and investor protection responsibilities are shared with crowdfunding platform operators and investors themselves.[148] In the same vein, the proposals for regulating crypto-asset offers for fund-raising reflect the government's policy intentions of being robust in regulation yet agile and flexible to respond to modern developments.[149]

In this manner, although the FCA seemed initially straitjacketed by its regulatory perimeter, the regulatory treatment of financial innovations is potentially subject to a fuller political and legislative process in the UK. The regulatory perimeter is thus politically and socially negotiated, although this could mean slowness in response to financial innovations where debates become protracted. This also means that the Treasury's initiative is key to starting discussion of reform and the regulator's policy space is limited. However, where the government is motivated to be responsive, public consultations provide an opportunity for wider discourse and civic engagement. In this manner one can treat the regulatory perimeter approach as reflective of a social contract approach to financial regulation. Where innovations arise outside of the regulatory perimeter, it has to be determined as a matter of social contract whether the FCA should extend its oversight- this is a matter for public and civic debate reflecting social demand, political choices and accountability. In this manner, the UK's approach creates some benefit in terms of making transparent the regulatory objectives to be met in addressing financial innovations and the risks they give rise to. Further, such a level of discourse allows policy actions to be taken that change or adjust institutional structures in response to regulatory need. Institutional structures in the UK have to date been more nimble than observed in the US. An example of recent institutional response to the rise of fintech payment service providers is the establishment of a separate payment services regulator to oversee them.[150]

Although a regulatory perimeter seems close-ended and potentially unresponsive to new developments, responsive government policy can overcome its apparent disadvantage. This means that a regulatory perimeter should not merely be 'defended' but should be constantly reviewed for 'extension'. A dynamic regulatory perimeter would be the institutional response to financial innovation and regulatory arbitrage. Although the UK government has now embarked on crypto-regulation, there is still a deep scepticism against regulation in general. The Financial Services and Markets Act 2023 contains a provision allowing the Treasury to require the FCA to review rules that are in force for at least 12 months to justify their continued existence. In light of the needs for the regulatory perimeter approach to be responsive to financial innovations, what should be really provided for the FCA is the power to review and recommend for periodic reform, instead of being nudged towards cutting back on regulation. The FCA's continuous engagement with market research on financial consumers' engagement with crypto-assets,[151] a voluntary endeavour for the FCA until the regulatory perimeter is changed, reflects the regulator's willingness to anticipate trends and future developments for its regulatory perimeter. However, an important implication needs to be addressed: there should also be clearer discussions on the implications for the FCA's resources, staffing and training needs should there be needs for the regulatory perimeter to be extended. Indeed the regulator's resources and competence would be crucial in order to successfully deliver on a regulatory framework that anticipates responsive and dynamic changes to its regulatory perimeter.

144 Chiu, *Regulating the Crypto-economy* (2022), ch5.

145 Also Iris H-Y Chiu, 'Regulating Crypto-asset Offerings- A More Nuanced Discussion of Regulatory Competition?' in Edoardo Martino and Alessio Pacces (ed), *Elgar Research Handbook in Comparative Law Series- Comparative Financial Regulation* (Cheltenham: Edward Elgar, 2024 forthcoming); see however more sceptical account regarding the cost for crypto-asset offers, David Florysiak, 'Utility Tokens, Markets in Crypto Assets Regulation (MiCAR), and the Costs of Being Public' (2023), https://papers.ssrn.com/sol3/papers.cfm?abstract_id=4295913.

146 The demanding standards of securities regulation deterring small and medium sized issuers has long been acknowledged in the EU for example, whose standards are transposed in the UK. See European Commission, Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions: A Capital Markets Union for People And Businesses-New Action Plan, COM/2020/590 final, https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=COM:2020:590:FIN, summary: CMU Action Plan 2020, https://finance.ec.europa.eu/capital-markets-union-and-financial-markets/capital-markets-union/capital-markets-union-2020-action-plan_en.

147 FCA Handbook COBS 4.7.6C- 6O, as amended in 2019.

148 See discussion in Joseph Lee, 'Investor Protection on Crowdfunding Platforms' in Pietro Ortolani and Marije Louisse (eds), *EU Crowdfunding Regulation* (OUP, 2022), ch12, also at https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3968572.

149 HM Treasury (2023), para 1.12.

150 Payment Services Regulator, *A New Regulatory Framework For Payment Systems in the UK* (2015), https://www.psr.org.uk/publications/policy-statements/psr-ps-15-1-a-new-regulatory-framework-for-payment-systems-in-the-uk/.

151 See note 124.

6. Concluding remarks

Financial regulators face the persistent issue of being challenged by financial innovations and the incompleteness of their regulatory frameworks- the problem of regulatory arbitrage and regulatory gaps. This article argues that a functional approach of 'same activity, same risks, same rules' is potentially vague and insufficient, and does not provide clear guidance for regulators. Whether and how a functional approach to financial innovation is taken is crucially dependent on regulators' institutional architectures. These structural limitations often provide empowering as well as constraining aspects in relation to regulatory objectives and mandates.

In the US, the open-ended approach to treating financial innovations as securities potentially allows the investor protection objective to be quickly addressed, but the SEC has tended to use this approach in a manner that is path dependent and coherentist, a phenomenon which perhaps cannot be avoided because of the broader institutional structures in which it is located. The US needs to seek a modernised and holistic approach to crypto-regulation, and regulators should find a way to mobilise open-minded and cross-sectoral policy discussions despite their sectorally-delineated regulatory architecture and mandates. Policy thinking also needs to be mobilised at the federal level in case of fragmented and competitive policies offered by different states.

In the UK, the limitation of the FCA's regulatory perimeter seems strait-jacketing, but this limitation gives rise to opportunities for political choices to be made for policy reform. Such opportunities can be maximised so that the nature and risks of innovation can be fully appraised in light of regulatory objectives. The government should pave the way for policy development, genuine debate and address present needs for regulatory governance instead of being obsessed with deregulation. In this way, regulators can be crucially responsibilised and capabilised to respond to the highly dynamic landscape that is the financial services industry.

Declaration of Competing Interest

There are no interests to declare.

Data availability

No data was used for the research described in the article.