

***CRYPTOCURRENCIES AND THE REGULATORY CHALLENGE*, ALLAN C. HUTCHINSON (LONDON, U.K.: ROUTLEDGE, 2022)**

By now, Bitcoin, if not the term cryptocurrencies, is familiar to many in the legal community. The familiarity may be passing or in-depth, but everyone has an idea that there are these new fancy financial instruments floating around out there. What they are, what they do, how they work, and what should, if anything, the law say about them, is another matter. In his new book, Allan Hutchinson tackles the subject in a clear and parsimoniously detailed manner. The book is divided into ten chapters, each of which contains a packed but easy read explanation of various aspects of cryptocurrencies. The first two chapters introduce the reader to the basics of cryptocurrencies and blockchain technology. Chapters 3 and 4 provide some conceptual and legal classifications that cryptocurrencies could fall under. Chapters 5 to 8 discuss the role of regulation in maintaining an orderly cryptocurrency market. Finally, chapters 9 and 10 build on the previous chapters, and offer thoughts for the future of crypto-regulation. In this review, I will outline the basic arguments that the book makes, and then follow-up with some thoughts on Hutchinson's proposals for the regulation of cryptocurrencies.

I. CRYPTO-REGULATION: BACKGROUND (CHAPTERS 1–2)

The book starts by explaining why cryptocurrencies emerged today. They emerged as a response to a perceived inefficiency in the current monetary and banking system, a system that “still resembles the early institutions set up by the Medici family in fifteenth century Florence.”¹ Banks emerged from that era as trusted intermediaries that allowed trade and commerce to flourish by managing the “risks that are inherent in the use of money as a unit of account, a repository of value, and a medium of exchange.”² Back then, money, regardless of who issued it, was backed by specie, especially gold. Today, governments issue paper currencies, known as fiat money, unbacked by any commodity.³ Nonetheless, banks continue to perform as intermediaries generating large profits without any transparency or, especially in light of the various financial meltdowns, accountability.⁴ This is where Satoshi Nakamoto came in.

In 2008, the yet unknown Nakamoto authored a white paper, in which they outlined a technically feasible way to bypass central banks and commercial banks in the management of currencies. Rather than having a centralized banking system with the power to manipulate and profit with a monopoly over the supply of money, a new system would supplant the old. In this new decentralized system, users all over the world could observe and verify transactions among other users in a manner that was secure and hard to hack.⁵ Suddenly, a new form of currency was created, Bitcoin, and opportunities sprang up everywhere. Other cryptocurrencies were created, and all sorts of other investment and commercial opportunities presented themselves on the various crypto-platforms.⁶

¹ Allan C Hutchinson, *Cryptocurrencies and the Regulatory Challenge* (London, UK: Routledge, 2022) at 14.

² *Ibid.*

³ *Ibid.*

⁴ *Ibid.* at 14–15.

⁵ *Ibid.* at 16–18.

⁶ *Ibid.* at 18–19.

But, as Hutchinson points out, not all platforms are truly secure. There is also always the “continuing possibility of fraud and corruption.”⁷ He cites examples such as the infamous “debacle of Mt Gox in 2014,” an event that resulted in the bankruptcy of what was then the largest Bitcoin exchange in Japan.⁸ In Canada, he notes, we too have seen such fraud when the Canadian exchange Quadriga CX collapsed and resulted in the loss of “100s of million dollars by investors.”⁹ Other concerns are the usual ones relating to the use of cryptocurrencies as a means for “criminal and money laundering purposes.”¹⁰ The high cost of mining for Bitcoin has also, in addition to environmental and energy consumption concerns, meant that a small number of industry players now control much of the crypto-space. In some ways, the system that was supposed to give power to individual users over the big banks is now being controlled by large entities, once again.¹¹ This creates new sets of regulatory challenges. For example, when Facebook announced that it was interested in launching its own digital currency, that meant that Facebook, with its 2.4 billion users worldwide, could now bypass traditional domestic and international banking and currency controls.¹²

II. CRYPTOCURRENCIES AND DIGITAL ASSETS: POSSIBLE CLASSIFICATIONS (CHAPTERS 3–5)

What should regulators do? That is the question that the rest of the book dedicates itself to investigating. Hutchinson starts by observing that the crypto-markets are really two worlds: the primary and secondary.¹³ The secondary markets are where cryptocurrencies are bought, sold, and traded on crypto-exchanges. As such, they are closer to traditional financial markets in nature. This also means that they are easier to classify and regulate using traditional regulatory tools.¹⁴

It is the primary market where things are more difficult. Unlike stocks, bonds, and traditional currencies, the cryptocurrencies reside on a blockchain, something that is, by design, decentralized.¹⁵ This means that the governance of the blockchain is by the users through various consensus mechanisms. On the blockchain exist tokens, which are at the end of the day just pieces of code. So how should the law classify these tokens?

Hutchison spends some time in chapter 3 explaining various legal tests, including the test for new and novel forms of property, to see if these tokens on the blockchain can be classified as property.¹⁶ He concludes that cryptocurrencies and other digital tokens can be considered property in some form. Specifically, he suggests that they could be considered a “chose-in-action,” with the closest analogue being “bank money.”¹⁷ That being said,

⁷ *Ibid* at 20.

⁸ *Ibid*.

⁹ *Ibid*. The Collapse of Quadriga CX is the subject of a Netflix documentary: “Trust No One: The Hunt for the Crypto King” (30 March 2022), online (video): *Netflix*.

¹⁰ Hutchinson, *ibid*.

¹¹ *Ibid* at 22.

¹² *Ibid* at 25.

¹³ *Ibid* at 27.

¹⁴ *Ibid*.

¹⁵ *Ibid*.

¹⁶ *Ibid* at 35–36.

¹⁷ *Ibid* at 40.

Hutchinson discusses some of the drawbacks of using traditional legal analogies as a means for pigeonholing cryptocurrencies.¹⁸ Instead, he proposes a new category of property law that should be created, which he calls “a chose-in-virtuality.”¹⁹ This would then allow regulators to properly tailor causes of action and remedies based on the unique characteristics of cryptocurrencies. He discusses examples of where the new classification would be helpful for the regulation of cryptocurrencies and other digital assets. Some of these examples involve stolen or misplaced crypto-assets.²⁰

Crypto-assets, generally, are at one level secure, due to the costly process of verification, but once the asset has been transferred, even if by fraud or deceit or mistake, on the blockchain, it is hard to reverse even by a court order. This means that if someone ‘stole’ someone’s crypto-assets, it may not be easy to recover the assets, and damages therefore could be the only remedy.²¹ Should damages be paid in equivalent crypto-assets or in dollars? If the latter, this raises the question of how to value the stolen assets. Valuation of cryptocurrencies and crypto-assets can be very tricky. Anyone who has followed the price of Bitcoin can attest to this. The book discusses some of these concerns when dealing with legal remedies in the crypto-sphere.²² The cause of the divergence between traditional remedies and remedies for the crypto-sphere comes from the difference between traditional currencies being backed by the state and crypto-currencies being backed by no official agency.²³ Cryptocurrencies also have no defining geography or state. However, they do share some characteristics with traditional currencies, at least legally speaking. They are subject to taxes of various sorts. Sometimes they are treated as money, sometimes as commodities, and sometimes as securities.²⁴

Notwithstanding their various legal treatments, Hutchinson argues that “cryptocurrencies do not fit neatly or well into the existing regulatory fabric.”²⁵ Yet, regulation, nonetheless, is coming for a variety of reasons. Cryptocurrencies are now experiencing the usual troubles that afflict regular financial services.²⁶ Governments are becoming suspicious of cryptocurrencies both as a threat to their sovereignty, and as a source of criminal activity.²⁷ Despite the security of the blockchain, the system is only as secure as the code and integrity of the coders.²⁸ Hutchinson notes that today the Bitcoin system, notwithstanding the existence of protocols for governance, is effectively controlled by a handful of coders.²⁹

¹⁸ *Ibid* at 40–41.

¹⁹ *Ibid* at 42.

²⁰ *Ibid* at 44–46.

²¹ *Ibid*.

²² *Ibid*.

²³ *Ibid* at 46–57.

²⁴ *Ibid* at 48–62.

²⁵ *Ibid* at 61.

²⁶ *Ibid* at 68.

²⁷ *Ibid*.

²⁸ *Ibid* at 70–71.

²⁹ *Ibid* at 71–72.

The urge by regulators to regulate the crypto-sphere, Hutchinson cautions, can lead to a ham-fisted approach, which will ultimately stifle innovation and drive the crypto-sphere elsewhere. What, therefore, is needed is a very different approach to regulating the crypto-sphere, an approach that he calls Regtech.³⁰ This is the focus of the second half of the book.

III. CRYPTO-REGULATION: POSSIBLE APPROACHES (CHAPTERS 6–10)

The proposed Regtech is a regulatory approach that involves all stakeholders in the regulation of the crypto-sphere instead of the traditional top-down approach.³¹ It is here that Hutchinson displays his accumulated wisdom in anticipating various objections to his approach by both those in favour of more regulation and those opposed to any regulation at all. As I read the details of his proposals, I found myself thinking of possible objections only to see him address them a few sentences later. The reader will not just come away from the second half of the book well-informed with ideas of how to regulate the crypto-sphere, but also with an appreciation of various insights from the political economy of regulation. In this regard, the book shines as an excellent example of bridging technical and legal analysis with practical insights about how the regulatory space operates.

Hutchinson makes it clear that any non-traditional model of regulation, such as his Regtech, needs to have well-defined objectives, tools, identifiable stakeholders, as well as enforcement mechanisms.³² He suggests a non-traditional agency, perhaps called the “Crypto-Services Agency” (CSA), a sort of self-regulated organization.³³ The agency would be populated by a range of stakeholders from government officials to coders.³⁴ It is important, he notes, that in addition to protecting consumers and users, regulation should not threaten the technology that underlies the crypto-sphere. As such, “the automated networks and algorithms of cryptocurrency must be met by a regulatory process that itself incorporates automated networks and algorithms.”³⁵

Hutchinson goes into considerable detail explaining how the agency will be populated, how their values and principles will be developed, as well as how its procedures and enforcement will operate.³⁶ He proposes various techniques for encouraging innovation while at the same time guarding the public interest. One idea is the use of “regulatory sandboxes,” something that “can be used both to encourage and protect innovation by providing a virtual haven that is safe and secure; technological innovations ... can be developed and tested without fear of regulatory infringement or discipline.”³⁷ The goal is ultimately to attract the widest support and buy-in from the crypto-community.³⁸ To achieve this, the key goal of any agency, such as the CSA, is to “remember that one of its primary tasks is to avoid turning the

³⁰ *Ibid* at 81.

³¹ *Ibid* at 84.

³² *Ibid* at 92.

³³ *Ibid* at 93.

³⁴ *Ibid* at 94.

³⁵ *Ibid* at 108.

³⁶ *Ibid* at 111.

³⁷ *Ibid* at 109.

³⁸ *Ibid* at 111.

present off-the-grid, decentralised and distributed scheme into a future on-the-grid, centralised and undistributed scheme.”³⁹

Hutchinson provides a thoughtful approach to any regulatory evolution, something he calls the “regulatory ladder.”⁴⁰ The approach is not necessarily slow and cautious on all fronts. For example, the approach could “be treading slowly and softly with code-makers as regards certification and registration” but also “proceeding more strenuously” when regulating competition in the crypto-sphere.⁴¹ Another approach is to use the existing set of “smart contracts” as a regulatory tool. Smart contracts are self-executing contracts that require no central authority as they are pieces of code that go into action when certain conditions are fulfilled.⁴² By putting an official stamp on these contracts, smart contracts can also be deployed to monitor activities on the blockchain as a tool for ensuring regulatory compliance.⁴³

Another innovative and interesting idea that Hutchinson explores is the idea of having the coders and developers of the crypto-systems deemed legal fiduciaries, much akin to directors of corporations.⁴⁴ Coders would be expected to “act in the best interests of crypto-users” collectively, and not just their own private interests.⁴⁵ He explores the practicalities as well as the merits of this idea in some detail, using the experiences of the law with respect to corporate directors.⁴⁶ The main challenge for imposing any fiduciary obligations is identifying the group to whom these duties would be owed.⁴⁷

Other challenges to any regulatory agency include the global nature of the crypto-sphere. As such, any regulatory approach will have to develop co-operatively on an international stage.⁴⁸ Hutchinson points out that there is already some movement in that direction, for instance by the “International Organization of Securities Commissions (IOSCO),” which “has been developing an important set of initiatives to standardise the treatment of crypto-assets as part of the broad sweep of securities regulation.”⁴⁹ Hutchinson also discusses the idea of central banks developing their own digital currencies, an idea that seems to be gaining traction around the world.⁵⁰ He discusses the advantages and dangers of central banks creating digital currencies that will compete with decentralized cryptocurrencies. He suggests that governments stay out of the crypto-sphere, and instead “cultivate a mode of regulation that maintains the advantages of a non-governmental process of digital finance without the pitfalls of an entirely privately controlled world of non-public behaviour.”⁵¹

³⁹ *Ibid* at 112.

⁴⁰ *Ibid*.

⁴¹ *Ibid* at 114.

⁴² *Ibid* at 116.

⁴³ *Ibid* at 117.

⁴⁴ *Ibid* at 123.

⁴⁵ *Ibid* at 124.

⁴⁶ *Ibid* at 124–27.

⁴⁷ *Ibid* at 127.

⁴⁸ *Ibid* at 136–37.

⁴⁹ *Ibid* at 137.

⁵⁰ *Ibid* at 138. See also Maria Eloisa Capurro & Shannon Sims, “Brazil’s Central Bank Built on a Mobile Payment System with 110 Million Users,” *Bloomberg* (6 October 2021), online: <www.bloomberg.com/news/articles/2021-10-06/pix-mobile-payment-how-brazil-s-central-bank-launched-platform>.

⁵¹ Hutchinson, *ibid* at 141.

IV. CRYPTO-REGULATION: SOME THOUGHTS

As mentioned above, the book's main contribution is Hutchinson's proposal for regulating the crypto-sphere, or what he calls Regtech. The book is written in a clear style that allows the novice to grasp the basic concepts, but also provides much for experts to chew on. I have found, when reading other works, discussions of crypto and blockchain technologies either jargon-ladled or highly conceptual but lacking in technical detail. This book manages to strike a delicate balance between the two. All in all, the book is an excellent read with a practical roadmap for how best to regulate the crypto-sphere in a manner that is not a threat to innovation, but that also avoids dominance by one group of market players.

Furthermore, Hutchinson manages to weave in legal concepts as well as the political economy of regulation with great ease and facility. His canvassing of various legal pigeonholes that cryptocurrencies fall under is a good example of his clear exposition. Starting with examining whether cryptocurrencies are closer to traditional legal categories of property and choses in action, he then moves on to other regulatory categories, such as securities and commodities. He eventually proposes that cryptocurrencies be treated as a new legal category. This then allows him to develop his proposals for a collaborative regulatory model.

In the later chapters of the book Hutchinson, for the lack of a better word, wastes his earlier discussion of the crypto-sphere being classified as property or chose-in-action (or even his idea of chose-in-virtuality). Had he pursued the idea of the crypto-sphere not only being a form of property, but possibly a commonly owned property (something he rejects with little discussion),⁵² Hutchinson might have developed several other proposals for regulation or strengthened his existing proposals.

Consider that many years ago, prior to the existence of the vast swath of legislation governing cyber-practices, courts already had no trouble applying common law legal categories to digital fact patterns. For example, a Trial Court in Ohio in the late 1990s dredged up the once dead paradigm of trespass to chattel and applied it in a lawsuit by an Internet Service Provider (ISP) against a spammer.⁵³ The Court reasoned that electronic signals were "sufficiently physically tangible to support a trespass cause of action."⁵⁴ The Court then held that the spam was causing an inconvenience to the users of the ISP, and thus, a diminution in the value of the ISP's chattel.⁵⁵ The Court analogized the ISP to physical property where there is chattel that can be interfered with. When an outside party sends an unwanted email, this can be seen as an intentional physical intrusion onto the ISP's property.⁵⁶ Today, trespass to chattel is also being used in cases involving blockchain

⁵² *Ibid* at 37, n 16.

⁵³ *CompuServe Inc v Cyber Promotions, Inc*, 962 F Supp 1015 (SD Ohio 1997). The Court noted that the law on trespass to chattel in Ohio was "extremely meager": *ibid* at 1021.

⁵⁴ *Ibid*.

⁵⁵ *Ibid* at 1021–23.

⁵⁶ Although several courts used this analogy to stop spammers, the Supreme Court of California rejected the trespass to chattel analogy in its landmark case of *Intel Corp v Hamidi*, 71 P.3d 296 (Cal 2003). See also Joshua AT Fairfield, "Bitproperty" (2015) 88:4 S Cal L Rev 805.

disputes, which means that the legal machinery developed in these early cases have a lot of insights to offer any discussion of regulation.⁵⁷

Pursuing the idea of the blockchain as common property has led several other researchers to examine the works of the Nobel Laureate in Economics Elinor Ostrom and apply her ideas to the blockchain.⁵⁸ Ostrom had studied the governance of common properties. Based on her observations of when communities successfully manage common properties, she came up with a series of rules to ensure efficient management and avoidance of the tragedy of the commons. These rules include the need for the commons having defined boundaries, rules fitting local circumstances, decision-making carried out in a participatory manner, the ability to monitor the commons, and having an effective dispute resolution mechanism.⁵⁹

Many of Ostrom's rules for managing the commons exist in many of the current blockchain-based cryptocurrencies and other digital assets. As such, it may be that current cyber-governance mechanisms are sufficient to ensure efficient self-management, an idea that Hutchinson discusses when dealing with possible objections to his ideas of regulation. On the other hand, not all cryptocurrency platforms may have all of Ostrom's ideal rules. These platforms may be the ones that require external regulation.⁶⁰ Ultimately, it is an empirical question whether self-governance is sufficient or external regulation will ultimately be needed. Cryptocurrencies and other blockchain-based platforms, as Hutchinson points out, have managed to survive for over a decade with no sign of slowing down. Notwithstanding the internal governance mechanisms that are built into each of these platforms, disputes take place over various infractions and these disputes are not resolved inside the blockchain. Rather, the disputes are settled using traditional mechanisms such as litigation or arbitration.⁶¹ This suggests that, despite the efforts to remove cryptocurrencies from the clutches of external regulation, designers of these platforms, as well as their users, continue to appeal to existing legal pigeonholes.

⁵⁷ See e.g. *Schober v Thompson*, 2022 WL 136907 (D Colo); *Shin v ICON Foundation*, 2021 WL 6117508 (ND Cal).

⁵⁸ See e.g. David Rozas et al, "When Ostrom Meets Blockchain: Exploring the Potentials of Blockchain for Commons Governance" (2021) 11:1 Sage Open 1; Herminio Bodon et al, "Ostrom Amongst the Machines: Blockchain as a Knowledge Commons" (2019) 10:3&4 Cosmos + Taxis 1; Antoon Spithoven, "Theory and Reality of Cryptocurrency Governance" (2019) 53:2 J Economic Issues 385. The other area of law to which the blockchain could be analogized is the Constitution and the process of amending it. This idea is not pursued in the book, and the reader can look for more details to Eric Alston, "Constitutions and Blockchains: Competitive Governance of Fundamental Rule Sets" (2020) 11:5 JL Technology & Internet 131.

⁵⁹ Elinor Ostrom, *Governing the Commons: The Evolution of Institutions for Collective Action* (Cambridge, UK: Cambridge University Press, 1990).

⁶⁰ This is the conclusion of Spithoven, *supra* note 58.

⁶¹ Hutchinson provides several examples of these disputes throughout the book. See also the study of almost 300 cryptocurrencies and exchanges, where most of the platforms used litigation or arbitration as the method for dispute resolution. Tamar Meshel & Moin A Yahya, "Crypto Dispute Resolution: An Empirical Study" (2021) 2021:2 JL Technology & Policy 187.

It was interesting to me to observe that the institutional design features that Hutchinson proposes in his Regtech share many of the features in Ostrom's ideal rules for managing the commons, such as the involvement of stakeholders and having defined rules, roles, and enforcement mechanisms. Perhaps Hutchinson could develop Ostrom's principles in any new works of his where he further develops his Regtech proposals. As regulation seems inevitable, more issues will emerge necessitating more research. In that regard, this book may be just the start of many that Hutchinson writes on the subject. Anyone wishing to build their understanding of what lies ahead would be well-advised to give his book a thoughtful read.

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