

Should Cryptocurrencies and Initial Coin Offerings (ICOs) be Regulated under Australian Financial Services Laws?

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Abstract

The rise of the popularity of cryptocurrencies in the last few years has sparked international debate as to the characterization of cryptocurrencies and tokens issued by ICOs. The decentralized nature of cryptocurrencies and ICOs raises fundamental challenges as to the parties and tokens that should be regulated and how they should be regulated. This Article proposes that tokens which are similar to securities should be regulated like securities. Under Australian law, this Article proposes that digital currencies should be categorized as financial products with the exception of utility tokens. Entities issuing ICOs and cryptocurrency exchanges should be subject to disclosure regimes in order for cryptocurrency purchasers to receive a prospectus or product disclosure statement. Additionally, this Article suggests that issuing entities have ongoing obligations to maintain the security of such platforms.

I. Introduction

Over the last few years, the exponential rise of the value of cryptocurrencies, the Decentralized Autonomous Organization (“DAO”) attack, and the total worldwide raising of US\$3.6 billion in Initial Coin Offerings (“ICOs”)¹ have provoked international debates on the legal status of cryptocurrencies and tokens issued in ICOs.

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1. Dirk A. Zetsche, Ross P. Buckley, Douglas W. Arner & Linus Fohr, *The ICO Gold Rush: It's A Scam, It's A Bubble, It's A Super Challenge For Regulators* 1, 19 (Univ. of Lux., Law Working Paper No. 2017-011, 2017), available at https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3072298##.

The decentralized nature of cryptocurrencies and ICOs raises fundamental regulatory challenges of who to regulate, what type of tokens to regulate, and how to regulate the tokens. This Article posits that the structure of a securities offering does not change the substance of the transaction, so the regulation of cryptocurrencies that are closer in nature to securities is essential to ensure proper disclosure.² However, since different cryptocurrencies have diverse purposes of use (such as investment tools, mediums of exchange, and ability to use products and services on a particular platform), it can be difficult to characterize cryptocurrencies without overstepping the boundaries of securities regulation. Even if such regulatory challenges are overcome and regulations are introduced, such regulations will be difficult to enforce due to the anonymity of cryptocurrency transactions and the cross-jurisdictional nature of trading digital currencies and tokens over the Internet.

Despite the inevitable challenges of enforcing any regulatory regime on digital currencies and ICOs, this Article recommends three aspects of regulation which should clarify regulatory uncertainty for participants and protect consumers against the risks of investing in cryptocurrencies and tokens. First, digital currencies should be specifically recognized as financial products under the Australian Corporations Act 2001 (the “Corporations Act”)³ with a carveout for utility tokens. Second, a disclosure regime should apply to both the entity behind the ICO and the cryptocurrency exchanges so that all purchasers of cryptocurrencies receive prospectuses or product disclosure statements. Such disclosure statements should include disclosure of the platform’s underlying code and the security measures in place to protect against cyberattacks.⁴ Lastly, financial services law must require the entity behind the ICO and secondary exchanges to have ongoing obligations to maintain the security of their platforms.

This Article is divided into three parts. Part II examines the current status of regulation of cryptocurrencies and ICOs. Part III discusses for and against cryptocurrency regulation under Australian financial services laws. Lastly, Part IV recommends how existing laws can be amended to regulate cryptocurrencies and ICOs.

2. See Jay Clayton, Chairman, SEC, *Statement on Cryptocurrencies and Initial Coin Offerings*, HARV. L. SCH. F. ON CORP. GOVERNANCE & FIN. REG. (Dec. 13, 2017), <https://corp.gov.law.harvard.edu/2017/12/13/state-ment-on-cryptocurrencies-and-initial-coin-offerings/>.

3. See generally *Corporations Act 2001* (Austl.).

4. Philipp Hacker & Chris Thomale, *Crypto-Securities Regulation: ICOs, Token Sales and Cryptocurrencies Under EU Financial Law* 1, 41 (Nov. 11, 2017), available at https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3075820 (discussing developers’ tendency to voluntarily disclose code).

II. Current Status of Regulation of Cryptocurrencies and ICOs

A. What Are Cryptocurrencies and ICOs?

Cryptocurrency is a type of digital currency that operates on distributed ledger technology known as blockchain.⁵ Blockchain is a decentralized system that does not rely on central administering authorities to verify transactions and is a peer-to-peer network where all users have a real-time copy of the ledger, and can view every transaction which has occurred on the blockchain.⁶ Users buying cryptocurrencies can trade anonymously, although there has been research indicating that public keys can be linked to the identity of forty percent of Bitcoin users.⁷ The cryptocurrencies that are major players in the market are Bitcoin, Ethereum and Ripple.⁸

A digital currency was recently defined in the Anti-Money Laundering and Counter-Terrorism Financing Amendment Act 2017 as a digital representation of value that functions as a medium of exchange, a store of economic value or unit of account, and is not issued under the authority of a government body, and is interchangeable with money and may be used as consideration for the supply of goods or services and is generally available to the public without any restriction on its use as consideration.⁹ As recognized in this definition, a digital currency may be used to buy goods or services. However, digital currencies can also be used for speculative purposes. In fact, recent evidence indicates that more than fifty percent of users on the well-known digital currency exchange, Coinbase, use Bitcoin strictly for investment purposes.¹⁰ The extreme price volatility suggests that cryptocurrencies are not primarily used as a medium of exchange.¹¹

An ordinary consumer can buy cryptocurrencies at an exchange by exchanging their domestic currency for a cryptocurrency such as Bitcoin.¹² Exchanges are secondary markets which can be used to buy, sell and trade cryptocurrencies for other cryptocurrencies and/or national currencies, and is the

5. See *What is Cryptocurrency: Guide for Beginners*, COIN TELEGRAPH, <https://cointelegraph.com/bitcoin-for-beginners/what-are-cryptocurrencies#history> (last visited Mar. 16, 2019).

6. Gerard Comizio, *Virtual Currencies: Growing Regulatory Framework and Challenges in the Fintech Ecosystem*, 21 N.C. BANKING INST. 133, 134 (2017).

7. Misha Tsukerman, *The Block is Hot: A Survey of the State of Bitcoin Regulation and Suggestions For the Future*, 30 BERKELEY TECH. L.J. 1127, 1137 (2015).

8. *Top 100 Cryptocurrencies by Market Capitalizations*, COIN MARKET CAP, <https://coinmarketcap.com/> (last visited Mar. 16, 2019).

9. *Anti-Money Laundering and Counter-Terrorism Financing Amendment Act 2017* (Cth) s 5 (Austl.).

10. DR. GARRICK HILEMAN & MICHEL RAUCHS, CAMBRIDGE CTR. FOR ALT. FIN., UNIV. OF CAMBRIDGE, *GLOBAL CRYPTOCURRENCY BENCHMARKING STUDY 23* (2017).

11. *Id.*

12. See Florian Glaser, Kai Zimmermann, Martin Haferkorn, Moritz Christian Weber & Michael Siering, Goethe University, *Bitcoin – Asset or Currency? Revealing Users' Hidden Intentions at 22nd European Conference on Information Systems*, Tel Aviv 5 (2014).

largest sector in the cryptocurrency environment.¹³ Tokens issued under ICOs can also be traded on these exchanges, although they are often listed with “wild price fluctuations”.¹⁴ As the value of cryptocurrencies are not backed by interest rates, their value is determined purely by supply and demand.¹⁵

Cryptocurrencies are often used to buy tokens issued under ICOs.¹⁶ ICOs are a new method of raising funds over the Internet through the offer and sale of tokens specifically created and issued on a blockchain for the launching of a platform usually based on blockchain technology.¹⁷ The organization selling the tokens could be a properly incorporated company or a loosely connected group of developers¹⁸ who do not have a recognized status as a legal entity. The tokens offered under ICOs have similar “characteristics of a digital voucher and grant the participants rights of some kind.”¹⁹ Some tokens mainly comprise of an investment component where buyers are promised positive future cash flows from the distribution of profits of the created platform, such as the DAO tokens.²⁰ Other tokens, known as “utility tokens” provide buyers with “access to a product that the developers . . . are creating” on the platform.²¹ An example of a utility token is Filecoin, “which launched the second-most successful ICO in 2017, collecting more than \$250 million”, and is a decentralized file sharing system allowing users to spend tokens for storing and accessing files online.²² Finally, ICOs can be used to create a new cryptocurrency²³ and therefore “function as a means of payment for goods and services external to the platform.”²⁴ For example, the ICO of Ethereum, launched in 2015, is now worth nearly \$100 billion.²⁵

This Article examines two successful ICOs launched in Australia in 2017, Power Ledger²⁶ and Canya Coin.²⁷ Power Ledger raised AUD\$34 million through its ICO and aims through its use of POWR tokens to create an energy trading platform where holders of POWR tokens can sell and buy excess energy from solar power panels.²⁸ Canya Coin raised AUD\$12 million in its ICO for the development of its peer-to-peer marketplace where coin holders can purchase services provided

13. HILEMAN & RAUCHS, *supra* note 10, at 27.

14. Jonathan Rohr & Aaron Wright, *Blockchain-Based Token Sales, Initial Coin Offerings and the Democratization of Public Capital Markets* 1 (Research Paper No. 338, 2017).

15. Glaser et al., *supra* note 12.

16. *See generally* Iris M. Barsan, *Legal Challenges of Initial Coin Offerings (ICO)*, 3 CORP. FIN. & CAP. MARKETS L. REV. 55 (2017).

17. *See generally* Stephane Blemus, *Law and Blockchain: A Legal Perspective on Current Regulatory Trends Worldwide*, 4 CORP. FIN. & CAP. MARKETS L. REV. 3 (2018).

18. *See* Rohr & Wright, *supra* note 14, at 18.

19. Zetzsche et al., *supra* note 1, at 7.

20. Hacker & Thomale, *supra* note 4, at 13.

21. *Id.* at 12.

22. *Id.*

23. *See generally* Barsan, *supra* note 16.

24. Hacker & Thomale, *supra* note 4, at 12.

25. Jeff John Roberts, *Ethereum Founder Warns of ICO Scams*, FORTUNE (Jan. 4, 2018), <http://fortune.com/2018/01/04/ico-scam/>.

26. *See generally* POWER LEDGER, <https://www.powerledger.io/> (last visited Mar. 19, 2019).

27. *See generally* CANYA, <https://canya.io/> (last visited Mar. 19, 2019).

28. *See* POWER LEDGER, *supra* note 26.

from anywhere in the world using Canya Coin.²⁹ Both Canya Coin and POWR tokens are best characterized as utility tokens, since they represent vouchers that can be used to participate in their respective platforms. As with most tokens issued under ICOs, Canya Coins and POWR tokens can be traded in secondary markets on cryptocurrency exchanges.³⁰

ICOs are generally accompanied by white papers, which describe the project and the structure in which tokens will be used to support it.³¹ However, ICOs should not be confused with prospectuses that accompany initial public offerings (IPOs) since they typically contain far less information about issuing entities than prospectuses.³²

B. Existing Regulations

The regulatory status of both cryptocurrencies and ICOs around the world is unclear. Cryptocurrencies have been characterized by regulators as “commodities”, “movable property or . . . property for tax reasons.”³³ Countries are reluctant to recognize digital currency as legal tender or currency, except Japan which “enacted a law authorizing the use of virtual currencies as a legal method of payment . . . from April 2017.”³⁴ Some judges in the United States have characterized Bitcoin as a currency or form of money.³⁵ However, there is no consistency among U.S. states in the treatment of cryptocurrencies.³⁶ Notably, New York introduced the BitLicense regime in 2015 which requires virtual currency businesses to obtain a license from the New York Department of Financial Services to operate a virtual currency exchange, transmission, custody or trading services in New York.³⁷ By creating a new and separate licensing framework, New York's BitLicense regime does not need to classify virtual currencies as either a form of currency or security in order to make it subject to existing regulations.

No European Union (“EU”) legislation exists yet on virtual currencies, and no specific regulations have been adopted by any of the EU Member States.³⁸

29. See CANYA, *supra* note 27.

30. See *CanYa White Paper*, CANYA 13, available at <https://canya.io/assets/docs/WhitePaper.pdf>; see *Power Ledger Disclosure Document*, POWER LEDGER 10, available at <https://powerledger.io/media/Power-Ledger-TGE-Disclosure-Document-v1.3.pdf>.

31. Zetzsche et al., *supra* note 1, at 10.

32. *Id.*

33. See Barsan, *supra* note 16.

34. Blemus, *supra* note 17, at 4.

35. SEC v. Shavers No. 4:13- CV 416 (2014).

36. Justin Wales & Matthew Kohen, *United States: State Regulations on Virtual Currency and Blockchain Technologies*, MONDAQ, <http://www.mondaq.com/unitedstates/x/645308/fin+tech/State+Regulations+On+Virtual+Currency+And+Blockchain+Technologies> (last visited Mar. 19, 2019).

37. See New York State Department of Financial Services, Chapter 1: Regulations of the Superintendent of Financial Services, Part 200. Virtual Currencies, https://www.dfs.ny.gov/apps_and_licensing/virtual_currency_businesses.

38. See Blemus, *supra* note 17, at 7.

Under EU case law, the European Court of Justice decided that Bitcoins resemble instruments of payment rather than securities, and therefore, be exempt from prospectus regulation.³⁹ However, the German Regulator, the *Bundesanstalt für Finanzdienstleistungsaufsicht (BaFin)* has recognized even the currency components of cryptocurrencies to be securities so that the commercial use and trading of cryptocurrencies would be considered as financial services.⁴⁰

The Australian securities regulator, the Australian Securities and Investments Commission (“ASIC”), has taken the view that digital currencies do not fall within the legal definition of either financial products or currency.⁴¹ ASIC believes that digital currencies are commodities since “the definition of ‘making a financial investment’ does not include real property or bullion and . . . similarly [does] not include digital currencies.”⁴² “ASIC also considers that a digital currency is not a facility through which a person makes a non-cash payment [because] [d]igital currencies do not afford the holder any rights to make payments using the digital currency or redeem it for cash.”⁴³ Therefore, for the purposes of section 763A of the Corporations Act, ASIC believes that digital currencies are not financial products and not subject to Australian financial services regulation.⁴⁴ ASIC did, however, recognize that some digital currency offerings may be financial products, including derivatives offered over digital currencies, and facilities which enable digital currency holders to pay for goods or services using digital currencies which could be providing a non-cash payment facility.⁴⁵

ASIC did not provide any reasons for why it likened digital currencies to real property or bullion. Cryptocurrencies are not easily comparable to real property or bullion because of cryptocurrency’s different features and purposes of use. There is a strong argument that for some cryptocurrencies such as Ether, buyers give their money’s worth to another person (e.g., the Ethereum foundation⁴⁶) to generate a financial return⁴⁷ to fall within the meaning of “making a financial investment”.⁴⁸ It also seems odd that ASIC did not consider digital currencies to be non-cash payment facilities, considering cryptocurrencies are usually used as payment to buy tokens under ICOs and there are a number of companies such as Microsoft, Reddit and Virgin Galactic that accept payments in

39. Hacker & Thomale, *supra* note 4, at 13.

40. Barsan, *supra* note 16, at 59.

41. Inquiry into Digital Currency, Submission 44 to Senate Economic References Committee, Austl. Sec. & Investments Comm’n 1, 11 (2014).

42. *Id.*

43. *Id.*

44. *Id.*; *Corporations Act 2001* (Cth) s 763A (Austl.).

45. Inquiry into Digital Currency, Submission 44 to Senate Economic References Committee, Austl. Sec. & Investments Comm’n 1, 15 (2014).

46. *See generally* ETHEREUM, <https://ethereum.org/> (last visited Mar. 19, 2019).

47. *See* Hadar Jabotinsky, *The Regulation of Cryptocurrencies between a Currency and a Financial Product* 1, 24 (Hebrew Univ. of Jerusalem Legal Studies Research Paper Series No 18-10, 2018).

48. *See Corporations Act 2001* (Cth) s 763B (Austl.).

bitcoin.⁴⁹ Considering ASIC took this view in 2014, before the time of ICOs, this Article recommends that digital currencies not be regulated as financial products.

Regulatory uncertainty also exists on the status of tokens issued under ICOs, particularly whether or not they should be regarded as securities. Most regulators have stated that anti-money laundering and counter-terrorism financing regulations will apply to ICOs,⁵⁰ just as many jurisdictions have forthcoming amendments to regulate cryptocurrency exchanges under money laundering and terrorist financing laws.⁵¹ With the exception of South Korea and China which have outright banned ICOs,⁵² most regulators have issued warnings targeted at consumers which highlight the risks of investing in ICOs and state that due to ICOs being largely unregulated, investors will have no recourse or protection if they lose their money.⁵³ As to whether or not tokens under ICOs should be considered securities, regulators have taken a no-size-fits-all regulatory approach. Australia, Canada, Hong Kong, Singapore and Switzerland have each taken an approach similar to that taken by the U.S. Securities and Exchange Commission (“SEC”).⁵⁴

The SEC’s approach is evident in its declaration in July 2017 that the DAO tokens were securities under the U.S. Securities Act of 1933 and that the DAO, an unincorporated organization, was the issuer of those securities.⁵⁵ The DAO was a decentralized crowdsourcing vehicle on the Ethereum blockchain launched on April 30, 2016.⁵⁶ It raised over \$150 million from more than \$11,000 in its ICO.⁵⁷ The creators of the DAO wrote smart contract code allowing the DAO to function, and for investors to collectively vote on proposals for funding projects based on their ownership of DAO tokens.⁵⁸ It was anticipated that the earnings from the projects would be distributed to the DAO token holders.⁵⁹ The DAO was

49. Jonas Chokun, *Who Accepts Bitcoins as Payment? List of Companies, Stores, Shops*, 99 BITCOINS, <https://99bitcoins.com/who-accepts-bitcoins-payment-companies-stores-take-bitcoins/> (updated Sep. 13, 2018).

50. See Zetzsche et al., *supra* note 1, at 24.

51. See David Meyer, *Here’s When Europe’s New Bitcoin Rules Come into Effect*, FORTUNE (Dec. 4, 2017), <http://fortune.com/2017/12/04/eu-bitcoin-anti-money-laundering-uk/>.

52. Zetzsche et al., *supra* note 1, at 59.

53. See *id.* at 30.

54. Blemus, *supra* note 17, at 10.

55. Report of Investigation pursuant to Section 21(a) of the Securities Exchange Act of 1934: The DAO, Exchange Act Release No. 81207, 16 (July 25, 2017).

56. See Gideon Greenspan, *Smart Contracts and the DAO Implosion: The Tragic Combination of Inevitable Bugs and Immutable Code*, MULTICHAIN (June 22, 2016), <https://www.multichain.com/blog/2016/06/smart-contracts-the-dao-implosion/>; David Siegel, *Understanding the DAO Attack*, COINDESK (June 25, 2016), <https://www.coindesk.com/understanding-dao-hack-journalists/>.

57. Siegel, *supra* note 56.

58. Andrew Hinkes, *The Law of the DAO*, COINDESK (May 19, 2016), <https://www.coindesk.com/the-law-of-the-dao>.

59. Report of Investigation pursuant to Section 21(a) of the Securities Exchange Act of 1934: The DAO, Exchange Act Release No. 81207, 4 (July 25, 2017).

infamously hacked by a hacker who managed to drain the DAO of \$70 million by taking advantage of a vulnerability in the code.⁶⁰

The SEC found that the DAO tokens were securities because they were investment contracts.⁶¹ The DAO tokens satisfied the criteria to be investment contracts because (i) the token holders had invested money's worth (i.e., Ether); (ii) a reasonable investor had a reasonable expectation of profits on their investment of Ether in the DAO; (iii) investors' profits were to be derived from the managerial efforts of others, specifically the DAO's curators who exercised significant control over the order and frequency of proposals and could exercise discretion over which proposals would be put to a vote; and (iv) the DAO token holders were geographically dispersed, limited in their ability to communicate with each other and had limited voting rights comparable to that of corporate shareholders.⁶²

The SEC emphasized that "whether or not a particular transaction involves the offer and sale of a security . . . will depend on the facts and circumstances, including the economic realities of the transaction."⁶³ This view has been taken by other regulators. For example, ASIC's guidance on ICOs states that the legal status of an ICO is dependent on the ICO's structure and operations and the rights attached to the tokens offered under the ICO.⁶⁴ For example, ASIC has stated that tokens under an ICO could be an offer of shares, units in a managed investment scheme, derivatives or non-cash payment facilities.⁶⁵

However, the SEC's approach does not provide much clarity on what other tokens would qualify as securities, particular those that differ in design from the DAO, such as utility tokens.⁶⁶ A subsequent statement by SEC Chairman, Jay Clayton, indicates that the emphasis of secondary market trading potential of tokens by promoters where prospective purchasers are being sold with the intent for the tokens to increase in value and the ability to resell them were key indicators of a securities offering.⁶⁷ This suggests that the SEC would likely treat utility tokens that have been expressly promoted under its ICO as having secondary market trading potential as securities. Yet, U.S. regulators' positions could still evolve or change if regulations are enacted.⁶⁸ The SEC's declaration on

60. Antonio Madeira, *The DAO, the Hack, the Soft Fork and the Hard Fork*, CRYPTO COMPARE (Sep. 28, 2017), <https://www.cryptocompare.com/coins/guides/the-dao-the-hack-the-soft-fork-and-the-hard-fork/>.

61. Report of Investigation pursuant to Section 21(a) of the Securities Exchange Act of 1934: The DAO, Exchange Act Release No. 81207, 11 (July 25, 2017). "An investment contract is an investment of money in a common enterprise with a reasonable expectation of profits to be derived from the entrepreneurial or managerial efforts of others." *Id.*

62. *Id.*

63. *Id.* at 17.

64. See *Initial Coin Offerings and Crypto-Assets Info 225*, AUSTL. SEC. & INVESTMENTS COMM'N, available at <https://asic.gov.au/regulatory-resources/digital-transformation/initial-coin-offerings-and-crypto-assets/> (last visited Mar. 19, 2019).

65. *Id.*

66. Hacker & Thomale, *supra* note 4, at 6.

67. Clayton, *supra* note 2.

68. See Blemus, *supra* note 17, at 10.

DAO tokens does not eliminate the need for ICO developers and investors to carefully analyze the purpose of issuing the tokens and the rights attached to the tokens to determine if securities laws will apply to the particular ICO.

III. Why Cryptocurrencies and ICOs Should Be Regulated under Australian Financial Services Laws

A. Reasons for Regulation

In the absence of regulation under a country's securities laws, ICOs will generally be regulated by such country's consumer protection legislation.⁶⁹ For example, Australian consumer law guarantees that misleading and deceptive conduct prohibitions and general laws regarding fraud in Australia would still apply.⁷⁰ The difference, however, between a consumer and an investor, as explained by the Wallis Report, is that a seller of a product or service usually guarantees the performance of what they sell, whereas an issuer does not guarantee performance, so the investor is paid for taking the risk that the capital paid will not be returned, will not earn income, or both.⁷¹ Therefore, for tokens offered under ICOs that do not guarantee performance, their investment-like features should be regulated under securities laws, which offer disclosure regimes and compensation arrangements which consumer law does not.

The key argument for regulating cryptocurrency and tokens under securities law is that a change in the structure of a securities offering does not change the fundamental point that when a security is being offered, securities laws must be followed.⁷² This requires the recognition that cryptocurrencies and tokens are closer in nature to securities than legal currency.

Cryptocurrencies should be regulated as securities rather than legal currency for the following reasons. First, evidence suggests that most people buy cryptocurrencies for investment purposes, rather than for use as methods of payment.⁷³ Second, "high price volatility of virtual currencies is not related to economic or financial factors, and impedes their ability to serve as a reliable store of value."⁷⁴ Third, "virtual currencies are not an independent unit of account because they do not measure the value of goods and services directly;" rather, "they represent the value of goods and services measured" by legal currency based on an exchange rate.⁷⁵ Furthermore, if tokens under ICOs were treated like legal currency, they would not be subject to much existing regulation, as the

69. Zetzsche et al., *supra* note 1, at 21.

70. *Id.*

71. Dimity Kingsford Smith, *ASIC Regulation for the Investor as Consumer*, 29 CSLJ 327, 333 (2011).

72. Clayton, *supra* note 2.

73. HILEMAN & RAUCHS, *supra* note 10, at 23.

74. *See generally* Barsan, *supra* note 16; *Revue Trimestrielle de Droit Financier (RTDF)*, n° 3, 57 (2017).

75. *See generally* Barsan, *supra* note 16; *Revue Trimestrielle de Droit Financier (RTDF)*, n° 3, 57 (2017).

government is the party which issues money.⁷⁶ Consequently, although it is undeniable that cryptocurrencies have some currency-like features, their recognition as securities would provide the best protection to consumers.

Regulation which imposes disclosure requirements on cryptocurrencies which are closer in nature to financial products is essential, particularly due to the problems of asymmetric information and a consumer's lack of ability to assess the financial product and cybersecurity risks with cryptocurrencies. Imposing a disclosure regime before cryptocurrencies are sold to consumers and before tokens are issued under an ICO will ensure market integrity. Particularly where the value of cryptocurrencies is so volatile and affected by changes in demand, regulation under securities laws will help ensure that the price of cryptocurrencies reflects the information that has been provided about them through the disclosure regimes.

Regulating ICOs under a prospectus regime which sets out information which must be disclosed to investors is essential for fixing the existing information asymmetry of ICOs. Research indicates that in many ICOs "potential participants are given so little financial information that their decision to fund the ICO cannot be based on a rational calculus."⁷⁷ Nearly a quarter of ICO white papers fail to convey any information at all about the issuing entity, and in almost a third of the cases, the author of the white paper is different from the entity specified as the ICO's issuer.⁷⁸ Without basic information about the entity standing behind the ICO, investors are not able to take legal action against them.

A disclosure regime for cryptocurrencies and ICOs would help inform investors on the risks of trading so that they can make informed decisions as to whether to invest. In addition to the usual risks of a speculative investment, a significant risk of buying cryptocurrencies and tokens under an ICO is cybersecurity.⁷⁹ ICOs are frequently the target of cyberattacks and without proper disclosure rules, investors sometimes pay for tokens that are left with nothing.⁸⁰ For example, vulnerabilities in the DAO's code allowed the attacker to drain the DAO of \$70 million.⁸¹ Cryptocurrency exchanges are also highly vulnerable to cybersecurity problems, with one 2013 study showing that over twenty-two percent of exchanges had experienced security breaches, forcing fifty-six percent of exchanges to go out of business.⁸² An infamous example is Mt. Gox—the world's largest bitcoin exchange which collapsed in 2014 because its platform was hacked and approximately 750,000 of its customer's bitcoins had been stolen.⁸³

76. See generally Barsan, *supra* note 16; Revue Trimestrielle de Droit Financier (RTDF), n° 3, 59 (2017).

77. Zetzsche et al., *supra* note 1, at 15.

78. *Id.*

79. See generally Barsan, *supra* note 16; Revue Trimestrielle de Droit Financier (RTDF), n° 3, 55 (2017).

80. Jabotinsky, *supra* note 47, at 4.

81. Siegel, *supra* note 56.

82. HILEMAN & RAUCHS, *supra* note 10, at 36.

83. Darryn Pollock, *The Mess That Was Mt Gox: Four Years On*, COIN TELEGRAPH (Mar. 9, 2018), <https://cointelegraph.com/news/the-mess-that-was-mt-gox-four-years-on>.

A prospectus regime for an ICO would be able to mandate the disclosure of the code underlying the platform (if it is not open source) and information on how the platform would manage crises, detect bugs and resolve any vulnerabilities in the code.⁸⁴ Similarly, disclosure statements by cryptocurrency exchanges could highlight key risks of buying cryptocurrencies from such exchanges, such as risk of cyberattacks.

However, it can also be argued that disclosure regimes are ineffective at informing investors of the risks associated with investing in cryptocurrencies and tokens. Most retail investors do not read prospectuses or product disclosure statements.⁸⁵ ASIC's recent report on prospectuses indicates "most retail investors feel comfortable ignoring large sections of the [prospectus]" and prospectuses are challenging because they are lengthy and too technical or legalistic.⁸⁶ In fact, in ASIC's study, "some retail investors only mentioned the prospectus when prompted by the researcher, suggesting that it may not have had a significant influence on their investment decision."⁸⁷

Yet, mandating a disclosure regime for ICOs should have some effect on protecting retail investors from information asymmetry and ICO scams. "A recent study found that the best predictor for the success of a token sale is the quality of the white paper," indicating that investors do seek and value substantial information on token sales.⁸⁸ Furthermore, ASIC has the power to issue a stop order to prevent the offer, issue, sale or transfer of securities where a prospectus lodged with ASIC contains a misleading or deceptive statement or where there has been an omission of information required to be provided under the legislation.⁸⁹ ASIC's power to prevent an IPO from taking place in these circumstances would act as a screening mechanism to minimize fraudulent or negligent ICOs being offered to the public. While ASIC does not review every disclosure document for compliance,⁹⁰ this Article recommends, considering the new and untested nature of ICOs, ASIC should review all ICO white papers that are lodged with ASIC to ensure maximum protection for retail investors.

Regulation of cryptocurrencies under financial services laws would also protect consumers against poorly run cryptocurrency exchanges. If these exchanges are unregulated and have dishonest "business practices and fail, the consumer bears the risk of non-payment and the loss of investment."⁹¹ However, recognizing cryptocurrencies and tokens as securities will require cryptocurrency

84. Hacker & Thomale, *supra* note 4, at 40.

85. Jabotinsky, *supra* note 47, at 25.

86. Investors in Initial Public Offerings, Report 540, Austl. Sec. & Investments Comm'n 30 (Aug. 31, 2017).

87. *Id.*

88. Hacker & Thomale, *supra* note 4, at 43.

89. *Corporations Act 2001* (Cth) s 739 (Austl.).

90. Offering Securities under a Disclosure Document, Reg. Guide 254, Austl. Sec. & Investments Comm'n, 1, 79 (2016).

91. Sean McLeod, *Bitcoin: The Utopia or Nightmare of Regulation*, 9 ELON L. REV. 553, 570 (2017).

exchanges to hold an Australian Financial Services License (“AFSL”) or Market License (“AML”).⁹² To initially obtain an AFSL or AML and to meet continuing obligations, an entity must show that it has access to sufficient financial, human and IT resources to carry out its responsibilities under its license and the law.⁹³ AFSL or AML applicants must also demonstrate that they have adequate compensation arrangements, which translates to minimum professional indemnity insurance.⁹⁴ This becomes an ongoing obligation to ensure that they are able to compensate retail clients for losses they suffer as a result of a breach by the licensee of their obligations under the Corporations Act.⁹⁵ ASIC has stated that its “objective in administering the compensation requirements is to reduce the risk that a retail client’s losses cannot be compensated by a licensee due to a lack of financial resources.”⁹⁶ Therefore, requiring cryptocurrency exchanges to obtain an AML to operate a cryptocurrency platform in Australia would give assurance to investors that those exchanges have sufficient financial resources to compensate them for losses. Investors would be entitled to compensation if a cryptocurrency exchange breached its obligations to “do all things necessary to ensure that [its] financial services . . . are provided efficiently, honestly and fairly.”⁹⁷

It is worth considering self-regulation of cryptocurrencies as an alternative to regulation under financial services laws. A voluntary code of conduct (“Code”) for Australian digital currency businesses has been developed by the Australian Digital Commerce Association (“ADCA”).⁹⁸ This Code allows digital currency businesses to seek certification by the ADCA by subscribing to the Code which acts as a contract between the ADCA and the digital currency business. The Code details consumer protections such as requiring businesses to adopt specified security measures to maintain the security of their systems, maintaining membership of an external dispute resolution scheme, and maintaining professional indemnity insurance of at least \$1 million.⁹⁹

The Code, however, does not obligate businesses to provide disclosure statements regarding the risks of purchasing cryptocurrency nor does it prohibit an AML holder from having a conflict of duty.¹⁰⁰ As financial products,

92. Inquiry into Digital Currency, Submission 44 to Senate Economic References Committee, Austl. Sec. & Investments Comm’n 23 (2014).

93. See *id.*; see also *eLicensing: Sample Application, “List of All Questions That May be Asked in the AFS License Application”*, AUSTRAL. SEC. & INVESTMENTS COMM’N, available at <http://download.asic.gov.au/media/4501249/elicensing-sample-application-september-2017.pdf>; see also *Corporations Act 2001* (Cth) s 912A(1)(d) (Austl.).

94. *eLicensing*, *supra* note 93, at 41.

95. *Corporations Act 2001* (Cth) s 912B (Austl.).

96. Compensation and Insurance Arrangements for AFS Licensees, Reg. Guide 125, Austl. Sec. & Investments Comm’n 9 (Aug. 29, 2017).

97. *Corporations Act 2001* (Cth) s 912A (Austl.).

98. See generally Australian Digital Currency Industry Code of Conduct, Austl. Digital Commerce Ass’n (July 31, 2017).

99. *Id.*

100. *Id.*; see also *Corporations Act 2001* (Cth) s 792A (Austl.).

cryptocurrencies should attract at least the same level of regulation as existing financial products under the Corporations Act. For these reasons, and for the obvious reason that voluntary industry codes of conduct are less effective to enforce because they are not binding under the law, cryptocurrencies would still be best regulated through amendments to Australia's financial services laws. Furthermore, when issues arising from the cross-border nature of cryptocurrencies require international coordination, having formal regulatory oversight of cryptocurrency businesses would make ASIC's dialogue with other countries' regulators more effective. However, the voluntary Code could complement any future statutory obligations on cryptocurrency businesses and ASIC could administer the Code in the same way that it administers the e-Payments Code.

Lastly, regulation will clarify the legal status of cryptocurrencies. Settling the uncertainty of the legal status of cryptocurrencies and tokens would be beneficial to innovation and provide clarity to developers as to the extent of their regulatory obligations when issuing an ICO. Currently, developers face significant risks of either choosing to disregard securities regulations altogether and being "vulnerable to prospectus liability" and potentially sued if the tokens are found to be securities, or they may decide to comply with various countries' securities regulations which entails significant delay and compliance costs.¹⁰¹ Clarifying cryptocurrencies' legal statuses would ensure that ICO developers and cryptocurrency exchanges can better structure their businesses and assess their compliance costs, and will not be vulnerable to fines and even imprisonment for issuing or trading tokens in breach of the Corporations Act. It would also provide more clarity to consumers on the exact nature of the tokens they are purchasing. Both the white papers of Canya and Power Ledger cite one of the risks of buying their tokens as the uncertain regulatory status and that any change in regulations could significantly impact the operation and development of their respective platforms.¹⁰² Certainty in their legal statuses would help consumers make more informed decisions on whether to buy Canya Coins and POWR tokens. Furthermore, as the value of cryptocurrencies and tokens are directly linked to demand, "clarifying the regulatory approach to [these cryptocurrencies] could reduce exchange rate volatility."¹⁰³

101. Hacker & Thomale, *supra* note 4, at 40–41.

102. See CANYA WHITE PAPER, *supra* note 30; POWER LEDGER DISCLOSURE DOCUMENT, *supra* note 30, at 12.

103. William Luther, *Regulating Bitcoin – On What Grounds?, Reframing Financial Regulation: Enhancing Stability and Protecting Consumers*, in REFRAMING FINANCIAL REGULATION: ENHANCING STABILITY AND PROTECTING CONSUMERS 394 (Hester Peirce & Benjamin Klutsey eds., 2016).

B. Challenges of Regulation

The most challenging part of regulating cryptocurrencies and tokens is determining which tokens would be considered financial products. It does not seem appropriate to treat all cryptocurrencies as financial products as this would extend “financial law beyond its natural limits.”¹⁰⁴ For example, both Canya and Power Ledger’s white papers state that their tokens are not offered or structured as securities, do not grant token holders any ownership rights or rights to receive dividends, and only grant token holders the right to use their respective platforms.¹⁰⁵ If these tokens were regulated under Australian financial services laws, then “all license-based business models such as online music stores, software licenses, etc.” would also be considered financial services businesses “unless expressly exempted.”¹⁰⁶ It has been recognized that consumer law would be better suited to address the functionality and consumption risks of utility tokens than securities laws.¹⁰⁷

However, the fact that “all utility tokens . . . can be traded on . . . secondary market can also be sold for profit” suggests that investors could “have an expectation of profits” when they buy utility tokens issued under ICOs.¹⁰⁸ Canya’s white paper, for example, states that the company intends on having Canya Coins listed on exchanges and that token holders can choose to use the coins on exchanges.¹⁰⁹ Therefore, it is evident that the profit-making motive of utility tokens should be regulated under securities laws, particularly when those tokens are sold on secondary markets. Determining when investment components of utility tokens should be subject to securities regulation is a key area of uncertainty recognized by researchers both in the E.U.¹¹⁰ and the United States.¹¹¹

This Article argues that the investment components of utility tokens should be regulated under Australian financial services laws, because the risks of buying utility tokens under ICOs are comparable to the risks listed by ASIC of using non-cash payment facilities, which is a type of recognized financial product.¹¹² According to ASIC, a key risk of non-cash payment facilities is that “consumers will choose inappropriate financial products because they are inadequately informed about key features of [a non-cash payment] facility, such as an issuer’s right to unilaterally change the terms and conditions of the product without notice.”¹¹³ This is also a key risk for tokens, since platform developers can also

104. Zetzsche et al., *supra* note 1, at 37.

105. CANYA WHITE PAPER, *supra* note 30, at 6; POWER LEDGER DISCLOSURE DOCUMENT, *supra* note 30, at 8.

106. Zetzsche et al., *supra* note 1, at 37.

107. Hacker & Thomale, *supra* note 4, at 29.

108. *Id.* at 33.

109. CANYA WHITE PAPER, *supra* note 30; POWER LEDGER DISCLOSURE DOCUMENT, *supra* note 30.

110. *See* Hacker & Thomale, *supra* note 4, at 33.

111. *See* Rohr & Wright, *supra* note 14, at 54.

112. *See Corporations Act 2001* (Cth) s 763D (Austl.).

113. Non-cash Payment Facilities, Reg. Guide 185, Austl. Sec. & Investments Comm’n 7 (Nov. 15, 2005).

unilaterally change the rights attached to utility tokens to use the platform. For example, Power Ledger's disclosure document expressly states that Power Ledger may have to make changes to the specifications of POWR tokens or the platform, which could result in the POWR tokens not meeting buyers' expectations at the time of purchasing the tokens.¹¹⁴

As the risks of utility tokens resemble those of non-cash payment facilities, utility tokens could be considered non-cash payment facilities and, therefore, financial products under Australian financial services law. However, the Corporations Act provides a carve-out for facilities where "there is only one person to whom payments can be made."¹¹⁵ So, a utility token that can only be used within the particular platform for which it is designed would not technically qualify as a non-cash payment facility. Nevertheless, the Corporations Act could be amended to regulate the investment components of utility tokens. In doing so, an appropriate balance must be struck between regulating a token whose investment component is only incidental to its utility aspect.

Another significant challenge of regulating cryptocurrencies in any country is the cross-border nature of cryptocurrencies. In Australia, entities will require an AML if they are making a financial market in Australia.¹¹⁶ As ASIC has pointed out, operators and ASIC may not be able to "accurately identify" if cryptocurrency exchanges and platforms that only operate offshore meet the test for operating a financial market in Australia;¹¹⁷ particularly since blockchain technology enables buyers and sellers to trade anonymously, making it difficult for cryptocurrency exchanges and ICO platforms to determine if the regular users of their platform are people located in Australia. Perhaps, however, the difficulty of identifying users' residencies will be made easier by Australia's amendments to its Anti-Money Laundering and Counter-Terrorism Financing Act of 2016 (the "AML/CTF Act"),¹¹⁸ which requires cryptocurrency exchanges to conduct customer identification.

Lastly, cryptocurrencies are difficult to regulate because extending the application of existing securities regulations to cryptocurrencies does not really work. Product disclosure obligations do not fit neatly with cryptocurrencies, because cryptocurrencies, such as Bitcoin, do not have an "identifiable issuer" or a "centralized authority responsible for their creation."¹¹⁹ New bitcoins are automatically issued to miners as a reward for verifying transactions on the

114. See POWER LEDGER DISCLOSURE DOCUMENT, *supra* note 102, at 8.

115. *Corporations Act 2001* (Cth) s 763D (Austl.).

116. Doing Financial Services Business in Australia, Reg. Guide 121, Austl. Sec. & Investments Comm'n 13 (July 30, 2013).

117. Inquiry into Digital Currency, Submission 44 to Senate Economic References Committee, Austl. Sec. & Investments Comm'n 23 (2014).

118. See generally *Anti-Money Laundering and Counter-Terrorism Financing Act 2006* (Austl.).

119. Inquiry into Digital Currency, Submission 44 to Senate Economic References Committee, Austl. Sec. & Investments Comm'n 24 (2014).

blockchain.¹²⁰ The difficulty and expense of mining bitcoin has given rise to mining pools consisting of individuals who work together to mine bitcoin and the promoter of the pool who combines the work product of these individuals to generate profits.¹²¹ “Miners [or promoters of mining pools] who acquire new units of bitcoin with the purpose of selling or transferring it, and who do so within one year of acquiring the bitcoin, may be required to prepare and provide a [product disclosure statement] to the person to whom they sell the bitcoin.”¹²² This obligation would, however, be difficult to enforce, particularly if mining pools are comprised of miners from different countries and are trading anonymously. It would also mean that not all purchasers of cryptocurrencies would receive a product disclosure statement, only purchasers acquiring cryptocurrencies from the original holder.¹²³ Consequently, ASIC has recommended that if digital currencies were included in the financial services regulatory regime, product disclosure obligations would need to be tailored to clarify that digital currencies do not have an identifiable issuer.¹²⁴

IV. Recommended Regulation

A. Declaring Cryptocurrencies to be Financial Products

This Article recommends that cryptocurrencies be listed under section 764A of the Corporations Act¹²⁵ as financial products. Expressly declaring cryptocurrencies to be a category of financial product will provide certainty to consumers, cryptocurrency exchanges, and entities issuing tokens under ICOs. Cryptocurrency could be defined using the same definition of “digital currency” in the AML/CTF Act,¹²⁶ although the definition must expressly capture tokens issued for the purposes of investment (investment tokens). Recognition of cryptocurrency as a distinct category of financial product will also remove the uncertainty of determining in every instance whether cryptocurrency meets the general definition of a financial product under section 763A of the Corporations Act. This approach also avoids classifying a diverse range of tokens as a particular type of financial product when some tokens under ICOs may be units in a managed investment scheme, while others may resemble securities or even derivatives.¹²⁷ However, there must be a carve-out for utility tokens, which should not be automatically considered cryptocurrencies. Although it may be challenging to

120. Jason Gordon, Jennifer Chapman & Benjamin Akins, *The Case for the Regulation of Bitcoin Mining as A Security*, 19 VA. J.L. & TECH. 669, 676 (2015).

121. *Id.* at 675.

122. Inquiry into Digital Currency, Submission 44 to Senate Economic References Committee, Austl. Sec. & Investments Comm'n 24 (2014).

123. *Id.*

124. *Id.*

125. *See Corporations Act 2001* (Cth) s 674A (Austl.).

126. *See Anti-Money Laundering and Counter-Terrorism Financing Act 2006* (Austl.).

127. *See Initial Coin Offerings and Crypto-Assets Info 225*, *supra* note 64.

characterize utility tokens which may have investment components, the Corporations Act has already dealt with a facility that has components which would be considered financial products, and components which would not. The Corporations Act states that only the components of the facility which are financial products will be regulated as financial products.¹²⁸

With respect to regulating utility tokens, the Australian Parliament could take a similar approach as used with credit facilities. Credit facilities are listed under section 765A as facilities that are not financial products.¹²⁹ The regulations operate to define credit facilities as not financial products mentioned in s763A(1)(a).¹³⁰ If a person makes a financial investment within the meaning of section 763A(1)(a), then he will acquire a financial product, even if the facility would otherwise be a credit facility. Essentially, the regulations operate to ensure that the credit aspects of credit facilities are excluded from regulation while the investment aspects remain appropriately regulated.¹³¹

Similarly, a utility token could be listed under section 765A as a facility that is not a financial product. The definition of utility token can then expressly exclude those products which would fall within the meaning of s763A(1)(a). Consequently, if a person is purchasing a utility token for the purpose of making a financial investment (as defined in section 763B), then that utility token would be a financial product.

To clarify the meaning of “making a financial investment” for utility tokens, this Article recommends that the regulations provide a list of relevant factors for determining whether a person has made a financial investment in buying utility tokens. It has been recommended with respect to E.U. law, that utility tokens offered in an ICO should not be considered securities unless two conditions have been satisfied: (1) the issuers, through their promotional materials and communication with investors raise significant expectations of profits; and (2) most investors buy the specific tokens to sell them for profit and the issuer knows or ought to have known this.¹³² It has also been suggested with regards to U.S. law, that the SEC publish guidance which focuses on objective indicators that the seller is emphasizing or otherwise advertising a profit potential, including any affirmative efforts to list a token in regulated U.S. marketplaces prior to the sale and whether formal waivers or other agreements where token purchasers affirmatively acknowledged they were not purchasing the tokens for speculative purposes.¹³³ Both recommendations emphasize that the conduct of the promoter must be considered for determining if buyers are purchasing utility tokens for speculative purposes.

128. *Corporations Act 2001* (Cth) s 762B (Austl.).

129. *Corporations Act 2001* (Cth) s 765A (Austl.).

130. *Corporations Regs.* 7.1.06(1)(a) (Austl.).

131. Dr. Kevin Lewis, *When is a Financial Product not a Financial Product?*, 22 C. & SL J. 103, 108 (2004).

132. Hacker & Thomale, *supra* note 4, at 29.

133. Rohr & Wright, *supra* note 14, at 55, 103.

Under Australian law, the meaning of “making a financial investment” has been interpreted by courts using a subjective test, that is, the actual intentions of the parties.¹³⁴ This is reflected in section 763B which indicates one of the factors in determining if an investor is making a financial investment will be the actual intentions of the promoter to generate a return for the investor.¹³⁵ In line with the above recommendations, this Article recommends that regulations should contain an objective test for the intentions of the ICO developer/promoter.

As an alternative to where investors are actually buying utility tokens for speculative purposes (which would satisfy section 763B(a)(ii)¹³⁶), the following factors could be relevant for indicating that a token purchaser is making a financial investment:

- whether the other person (the promoter/developer) has expressly communicated the potential for these tokens to be traded at a profit in secondary markets;
- in the case of tokens bought after an ICO, whether these tokens are listed on and actively traded on secondary markets;
- the significance of the token’s role for using the platform, and whether the platform can be operated or used without the token;¹³⁷ and
- whether, in the particular circumstances, the other person (the promoter/developer) otherwise ought to have intended that the token be used to generate a financial return or other benefit for the investor.

For example, upon review of the Canya and Power Ledger white papers, it is unlikely that an investor would be “making a financial investment” for the tokens under these ICOs in order to be considered financial products. These white papers specifically emphasize that investors will choose to list the tokens on cryptocurrency exchanges at their own risk.¹³⁸ Canya’s white paper goes one step further by emphasizing that the tokens issued carry no guarantee, representation or promise of any return or profitability as to what price the tokens may trade at in the future.¹³⁹ The Canya Coins and the POWR tokens function like software licenses to use the platform, so their respective platforms cannot be used unless people hold their tokens.¹⁴⁰ Therefore, Canya Coins and POWR tokens do not satisfy any of the above relevant factors, and would be utility tokens excluded as financial products under section 765A of the Corporations Act.

134. See *Casaclang v WealthSure Ltd* [2015] FCA 761 (Austl.); *International Litigation Partners Pte Ltd v Chameleon Mining NL* [2011] NSWCA 50 (Austl.).

135. *Corporations Act 2001* (Cth) s 763B (Austl.).

136. *Id.*

137. Rohr & Wright, *supra* note 14, at 55.

138. See CANYA WHITE PAPER, *supra* note 30; POWER LEDGER DISCLOSURE DOCUMENT, *supra* note 30.

139. See CANYA WHITE PAPER, *supra* note 30, at 4.

140. See *generally* CANYA WHITE PAPER, *supra* note 30; POWER LEDGER DISCLOSURE DOCUMENT, *supra* note 30.

B. Amending Disclosure Obligations

Existing product disclosure obligations in the Corporations Act need to be amended to ensure that all purchasers of cryptocurrencies receive disclosure documents before or at the time of purchasing cryptocurrency. Consequently, disclosure obligations should be imposed on (1) the entity standing behind the ICO at the point of issuance of tokens, and (2) the cryptocurrency exchange when these tokens are traded on secondary markets.

“The basic mandated disclosures [for cryptocurrencies] should be the same as for all other securities.¹⁴¹ In order to provide more clarity, this Article recommends that ASIC issue guidance on content to be specifically included in prospectuses and product disclosure statements for cryptocurrencies. ASIC’s guidance can state that it expects that a disclosure document for the issue of investment tokens under ICOs to:

- clearly describe the rights attached to the tokens;
- publish the code underlying the platform (if it is not open source);
- provide information on how the platform would manage crises, detect bugs and resolve any vulnerabilities in the code;¹⁴²
- provide a detailed description of governance issues, such as how the company will decide whether to add new features to the platform and how rights or functional aspects of the token may be amended, including whether the company can unilaterally vary the rights attached to the token; and
- provide a detailed description of the security measures taken to protect the platform from cyberattacks.¹⁴³

It is proposed that cryptocurrency exchanges must provide prospective purchasers with disclosure documents detailing the key risks of purchasing cryptocurrencies, in line with the approach taken under New York’s Bitlicense Rules.¹⁴⁴ The BitLicense Rules require that a virtual currency business, “as part of establishing a relationship with a customer, and prior to entering into a transaction with a customer,” must “disclose . . . all material risks associated with . . . virtual currency.”¹⁴⁵ The rules then list the minimum information that must be included, such as “virtual currency is not legal tender,” the “volatility . . . of virtual currency” which can lead to significant losses, “transactions in virtual currency may be irreversible, [which can lead] to fraudulent or accidental transactions [which are]

141. Jabotinsky, *supra* note 47, at 26.

142. Hacker & Thomale, *supra* note 4, at 40.

143. Jabotinsky, *supra* note 47, at 28.

144. *See generally* Virtual Currencies, Financial Services 23 CRR-NY I § 200 (2018).

145. *Id.* at § 200.19.

not recoverable,” and “the nature of virtual currency may lead to an increased risk of fraud or cyberattack.”¹⁴⁶

The Corporations Act should also be amended to ensure that all disclosure documents for the purchase of cryptocurrencies must be lodged with ASIC before their release to consumers. Due to the volatile value and high cybersecurity risks of purchasing cryptocurrency, this Article recommends that ASIC should review all disclosure documents to ensure maximum protection for consumers.

ASIC recognizes the increasing influence of social media and online investor forums for providing information about IPOs and stated that it plans to proactively monitor social media and online forums.¹⁴⁷ ASIC should increase its monitoring of social media and online forums if cryptocurrencies are expressly declared as financial products, as most sources of information regarding cryptocurrencies will be published over the Internet.

C. Imposing Security Obligations on Platforms

How can regulation prevent the loss of cryptocurrencies in wallets and exchanges? And, further, how can security be used to block increasingly sophisticated hackers?¹⁴⁸ Cryptocurrency exchanges are popular targets for criminals, both outside server breaches and inside theft, since they handle and store large amounts of cryptocurrencies.¹⁴⁹ For this reason, cryptocurrency exchanges must have ongoing obligations to maintain effective cybersecurity programs and conduct annual penetration testing and audits of their IT systems. While ASIC has previously stated that cybersecurity is one of its key focuses,¹⁵⁰ currently it is not a specific condition of AFSL or AML that licensees ensure the adequacy of their IT systems. Guidance from ASIC states that a duty to ensure adequate security arrangements to protect their IT systems would form part of an AML licensee’s duty under section 792A to do all things necessary to ensure that the market they operate is “fair, orderly and transparent.”¹⁵¹ However, the ASX Market Integrity Rules deal with security arrangements specific to electronic trading by requiring that a market participant’s AOP system has “security arrangements to monitor for and prevent unauthorized [access] to a gateway or an open interface device.”¹⁵²

This Article recommends that ASIC either impose an additional condition on a cryptocurrency exchange’s AML to maintain an effective cybersecurity program and annual testing, or obligate the cryptocurrency exchange in new rules

146. *Id.*

147. Investors in Initial Public Offerings, Report 540, Austl. Sec. & Investments Comm’n 50 (2017).

148. *See* McLeod, *supra* note 91, at 573.

149. *See* Hileman & Rauchs, *supra* note 10, at 36.

150. Embedding Cyber Resilience within Company Culture, Austl. Sec. & Investments Comm’n (2016).

151. Australian Market Licences: Australian Operators, Addendum, Reg. Guide 172, Austl. Sec. & Investments Comm’n 5 (revised Nov. 2012).

152. ASIC Market Integrity Rules, Securities Markets § 5.6.3(1)(c) (2017).

which specifically apply to secondary cryptocurrency markets. ASIC does have the power to vary or impose additional conditions on a license holder's AML or AFSL;¹⁵³ however, ASIC usually only takes this action where it has serious concerns about the licensee or how the licensee's business is conducted.¹⁵⁴ This power only imposes an additional condition on each AML holder, and not all AML holders. It would be more effective then, for ASIC to issue integrity rules for cryptocurrency markets which would include obligations to take security measures which are tailored to the nature of cryptocurrency exchanges.

As a starting point, the cybersecurity obligations under the ADCA's Code of Conduct could be included in ASIC's cryptocurrency market integrity rules. These obligations include that digital currency businesses must, with regards to customers' wallet addresses, IP addresses, digital currency identifiers or credit card information:

- build and maintain a secure network;
- securely store such data and encrypting any transmission of data across open, public networks;
- maintain a vulnerability management program;
- implement strong access control measures;
- regularly monitor and test networks; and
- maintain an information security policy.¹⁵⁵

Additional security obligations which are included in New York's Bitlicense Rules are:

- detect attempts at unauthorized access to electronic systems and data;
- "respond to detected [cyberattacks] to mitigate any negative effects; and
- recover from [cyberattacks] and restore normal . . . services."¹⁵⁶

ASIC's cryptocurrency market integrity rules could also require cryptocurrencies to have certified compliance with the globally recognized best practice standard ISO27001.

In imposing any additional license conditions or developing specific rules for cryptocurrency exchanges, an appropriate balance must be struck between consumer protection and encouraging innovation. It should be noted that New York's BitLicense Rules have attracted criticism for imposing onerous operational burdens such as anti-fraud and cybersecurity requirements which have driven some virtual currency businesses away from operating in New York.¹⁵⁷ However, given the Australian government's widely announced fintech priorities such as its

153. *Corporations Act 2001* (Cth) s 796A, 914A(1) (Austl.).

154. Licensing: Administrative Action Against Financial Services Providers, Reg. Guide 98, Austl. Sec. & Investments Comm'n 9 (2012).

155. Austl. Digital Currency Industry Code of Conduct § 4.2.2 (July 31, 2017).

156. Virtual Currencies, Financial Services 23 CRR-NY I § 200.16 (2018).

157. See Sarah Brennan, *Contortions For Compliance: Life Under New York's BitLicense*, COINDESK (Jan. 22, 2018), <https://www.coindesk.com/contortions-compliance-life-new-yorks-bitlicense/>.

FinTech regulatory sandbox,¹⁵⁸ it is likely that the government will be more than willing to encourage the growth of cryptocurrency exchanges while appropriately ensuring consumer protection.

V. Conclusion

ASIC has previously stated that it is not straightforward to regulate digital currencies like financial products, and to do so would require solving a number of unique issues associated with digital currencies.¹⁵⁹ While that is certainly the case, the challenges in regulating cryptocurrencies should not be a reason to avoid regulating them altogether. It has been more than three years since the Senate's Economic References Committee recommended that further research be conducted before designating digital currency as either a foreign currency or a financial product.¹⁶⁰ Since then, cryptocurrencies have gained even more popularity with exponential rise in value and the introduction of ICOs, raising altogether US\$3.2 billion, putting the overall market volume of cryptocurrencies to be in the US\$ 200 billion range.¹⁶¹

This Article demonstrates that financial services laws are best suited to protect Australian consumers against the risks of investing in cryptocurrencies and tokens issued under ICOs. The Corporations Act can be amended to address the specific regulatory challenges of cryptocurrencies, recognize cryptocurrencies as a separate category of financial product, ensure that all purchasers of cryptocurrencies receive a disclosure statement, and require the entity behind the ICO and cryptocurrency exchanges to take rigorous security measures. The time to act is now.

158. See *Australia's Fintech Priorities*, AUSTL. GOV'T, TREASURY, <http://fintech.treasury.gov.au/australias-fintech-priorities/> (last visited Mar. 19, 2019).

159. Digital Currency – Game Changer or Bit Player, Senate Econ. References Comm., Austl. Commonwealth Parliament 5.23 (2015).

160. *Id.*, at 5.27.

161. Zetzsche et al., *supra* note 1, at 17.