Insolvency in the Digital Age: Cryptocurrency and its Impact on the Law

*Written by: Lin Shuang Ju

I. Introduction

1 Cryptocurrency exchanges such as Binance have drawn scrutiny from regulators worldwide as public concerns over the use of cryptocurrency in money laundering and its high-risk nature emerge.¹ Binance, the world's largest cryptocurrency exchange, was recently banned from offering services in Singapore after the Monetary Authority of Singapore ("**MAS**") found a potential breach of local payment rules.²

With the increasing popularity of cryptocurrency such as Bitcoin, a question that arises is what happens when a cryptocurrency exchange goes into liquidation. Will the users of the exchange be able to recover their cryptocurrencies, or will they form part of the exchange's assets to be distributed to the creditors?³ The answer to this depends on whether cryptocurrency constitutes "property".⁴ If so, then the exchange is merely holding the cryptocurrencies *on behalf* of the users. The users retain ownership over the cryptocurrencies, and they do not form part of the exchange's assets. Legally, such a relationship is called a "trust".⁵

3 For a trust to be found, cryptocurrencies must first be recognised as "property". This article will focus on this issue. In this regard, Singapore's position is largely unclear. Nevertheless, there is an emerging consensus among other countries in recognising cryptocurrencies as "property". In this writer's view, this trend is the correct one and should be followed by Singapore courts.

^{*} Year 4 LL.B. student from the Singapore Management University, Yong Pung How School of Law.

¹ Zinnia Lee, "Binance to ban Singapore Users from Crypto Trading and Buying on its Platform", *Forbes* (28 September 2021) <<u>https://www.forbes.com/sites/zinnialee/2021/09/28/binance-to-ban-singapore-users-from-crypto-trading-and-buying-on-its-global-platform/?sh=1fab33ed7e17</u>> (accessed 3 October 2021); see also *supra* n 1: Binance has also drawn scrutiny from regulators in the U.S., the U.K., Thailand, Malaysia and Japan.

² Chanyaporn Chanjaroen, "Singapore tells Binance to halt service in Latest Crypto Hit", *Bloomberg* (2 September 2021) <<u>https://www.bloomberg.com/news/articles/2021-09-02/singapore-says-binance-may-be-in-breach-of-payment-services-act-kt2qux32</u>> (accessed 3 October 2021).

³ Ruscoe v Crptopia Ltd (in liquidation) [2020] NZHC 728 ("Ruscoe") at [191].

⁴ Kelvin F.K. Low, "Trusts of Cryptocurrency" (2021) 4 TL at p 193.

⁵ Ruscoe v Crptopia Ltd (in liquidation) [2020] NZHC 728 ("Ruscoe") at [55].

II. Discussion

To understand the property question surrounding cryptocurrency, one must first understand the nature of cryptocurrency.

A. What is Cryptocurrency and How does it work?

A cryptocurrency is a digital currency that can be transferred from one party to another without the oversight of financial authorities such as governments or banks.⁶ It is a "peer-topeer version of electronic cash".⁷ Cryptocurrencies work using a technology called blockchain.⁸ Blockchain technology supports the exchange of cryptocurrencies.⁹ As its name implies, transactions of cryptocurrencies are recorded in "blocks" and linked to a "chain" of past transactions.¹⁰

5 It is perhaps easier to think of blockchain as a type of database.¹¹ A database is a collection of information that is stored electronically on a computer system. However, unlike a typical database, blockchain works in a *decentralised* manner.¹² To better illustrate this difference, imagine a company that owns a database comprising 10,000 computers holding all its clients' information. In such a conventional database, the company has a warehouse storing all the computers in one place. In contrast, blockchain also requires thousands of computers, but each computer is in a different geographic location and operated by different people.¹³ These computers are called "nodes".

6 In a blockchain, each node has a full record of all the transaction data of the cryptocurrency.¹⁴ If one tries to tamper with the transaction records, the nodes will cross-

⁸ https://www.nerdwallet.com/article/investing/cryptocurrency-7-things-to-know#1.-what-is-cryptocurrency

⁶ The Times, "Should you invest in Bitcoin?" (2 September 2021) <<u>https://www.thetimes.co.uk/money-mentor/article/invest-bitcoin-cryptocurrencies/</u>> (accessed 18 September 2021).

⁷ Lam Pak Nian and David Lee Kuo Chuen, 'Introduction to Bitcoin' in David Lee Kuo Chen (ed), Handbook of Digital Currency: Bitcoin, Innovation, Financial Instruments, and Big Data (Academic Press, 2015) 5, 8.

⁹ Babie, Brow, Catterwell & Giancaspro, Cryptocurrency as Property: Ruscoe v Cryptopia Ltd (in Liq) [2020] NZHC 728 – (2020) 28 APLJ 106 at 107.
¹⁰ *Ibid*.

¹¹ Luke Conway, "Blockchain Explained" *Investopedia* (31 May 2021) <<u>https://www.investopedia.com/terms/b/blockchain.asp</u>> (accessed 3 October 2021); see also "Blockchain Database: A Comprehensive Guide" *MongoDB* (2021) <<u>https://www.mongodb.com/databases/blockchain-database</u>> (accessed 4 Jan 2022).

¹² *Ibid*.

¹³ *Ibid*.

¹⁴ Ibid.

reference each other and correct the changes.¹⁵ This ensures that all data remains exact and transparent. To add new data to the blockchain, a majority consensus of the decentralised network is needed – meaning that 51% or more of the nodes in the blockchain correspond with each other.¹⁶ This ensures that whatever changes are in the best interests of the majority.¹⁷

B. Whether Bitcoin is "Property"

As mentioned,¹⁸ the foremost issue is whether Bitcoin can be recognised as "property". If so, a trust arises in favour of the users of a cryptocurrency exchange. This is of particular importance in the context of an exchange that is undergoing liquidation, because it allows the users to have "priority over claims by the creditors".¹⁹ The following section sets out the positions in Singapore, New Zealand and the UK.

(1) Singapore's Position

8 In *Quoine*,²⁰ the Court of Appeal observed that there were cases in the Commonwealth that have implicitly accepted the view that cryptocurrency is property.²¹ While it acknowledged that there was much judicial and academic support for this view, it ultimately declined to come to a definitive conclusion on the issue as it was not critical to the dispute at hand.²²

(2) Other Countries' Position

9 The property issue concerning cryptocurrency was considered by the UK Jurisdiction Taskforce ("**UKJT**"), which has recently published a legal statement on cryptoassets and smart contracts ("**UK Legal Statement**").²³ The UKJT defined cryptocurrencies as generally having the following characteristics:²⁴ (a) intangibility; (b) cryptographic authentication; (c) use of a distributed transaction ledger; (d) decentralisation; and (e) rule by consensus.

¹⁵ *Ibid*.

¹⁶ *Ibid*.

¹⁷ *Ibid*.

¹⁸ See part I of main text.

¹⁹ UK Jurisdiction Taskforce, *Legal Statement on Cryptoassets and Smart Contracts* (November 2019) at para 36 ("UK Legal Statement").

²⁰ *Quoine Pte Ltd v B2C2 Ltd* [2020] 2 SLR 20

²¹ *Id*, at [139].

²² *Id*, at [144].

²³ *Supra* n 19.

²⁴ *Id*, at para 31.

10 The UKJT stated that cryptocurrencies have all the indicia of property, namely: (a) it must be definable; (b) identifiable by third parties; (c) capable in its nature of assumption by third parties; and (d) have some degree of permanence or stability²⁵ (the "**Four Indicia of Property**").

¹¹ Further, the UKJT considered that the novel and distinctive features of cryptocurrencies as aforementioned were not sufficient to exclude them from being property.²⁶ The UKJT thus concluded that cryptocurrencies are, in principle, property.²⁷

12 While the UK Legal Statement is not a statement of the law, UK courts have adopted the position therein. In *AA*,²⁸ the UK High Court found the UK Legal Statement's analysis was "detailed and compelling"²⁹ and held that cryptocurrencies constitute "property".

13 In New Zealand, the High Court in *Ruscoe*³⁰ reached the same conclusion on a similar basis.³¹ The court accepted that the definition of "property" in the Companies Act³² is a "wide" one.³³ Further, the court followed the approach taken by the UKJT and found that cryptocurrencies met all Four Indicia of Property.³⁴

C. The Way Forward

¹⁴ There appears to be an emerging consensus that cryptocurrencies such as Bitcoin are property.³⁵ As seen above, this view is readily adopted by the High Courts in the UK and New Zealand.³⁶ However, it must be borne in mind that the High Court decisions lack precedential value, i.e., other courts are not bound to follow these decisions and the issue remains an open

²⁵ National Provincial Bank Ltd v Ainsworth [1965] AC 1175 ("Ainsworth") at 1247-1248.

²⁶ Supra n 19, at para 85.

²⁷ *Ibid*.

²⁸ AA v Persons Unknown [2019] EWHC 3556 ("AA")

²⁹ Id, at [57].

³⁰ *Supra* n 3.

³¹ *Id*, at [120].

³² Companies Act 1993 (No 105 of 1993) (NZ) s 2.

³³ See *McIntosh v Fisk* [2017] 1 NZLR 863 at [55]. The Supreme Court accepted that it was arguable that "the payment of money by RAM would fall within s 292(3)(a) as a transfer of property by RAM due to the wide definition of "property" in s 2 of the Companies Act".

³⁴ *Supra* n 25. The four indicia of property: (a) it must be definable; (b) identifiable by third parties; (c) capable in its nature of assumption by third parties; and (d) have some degree of permanence or stability.

³⁵ Ewan McKendrick and Roy Goode, *Goode and McKendrick On Commercial Law* (Butterworths, 6th Ed, 2020) at para 17.26.

³⁶ *Supra* n 3 and 28.

one. Indeed, the Supreme Courts of both the UK and New Zealand have yet to make a definitive pronouncement on this issue.

15 Nevertheless, there are strong policy reasons in recognising cryptocurrencies as property. For one, there is a need for greater protection of people who buy or invest in cryptocurrencies. While cryptocurrencies were once dismissed as a passing fad, they appear to be forging an enduring place in society today.³⁷ This is seen in the recent approval granted by MAS to DBS, Singapore's central bank, to provide digital payment token services.³⁸ This move is reflective of MAS's intention to ramp up Singapore's status as a crypto hub as it expands its financial services for cryptocurrencies.³⁹

16 Recognising cryptocurrencies as property also gives greater certainty and stability to businesses and individuals. This is especially important in the context of liquidation, where competing interests between creditors and users of the cryptocurrency exchange come to the fore. Indeed, in the recent decade, news of major cryptocurrency exchanges filing for liquidation is not uncommon.

17 In Japan, following the liquidation of Mt Gox, one of the world's largest Bitcoin exchanges, a user who sought repayment of his Bitcoin kept in an account at the exchange was denied from asserting ownership over the Bitcoin,⁴⁰ since Bitcoin is not a "thing" capable of ownership under Japanese law.⁴¹ Accordingly, the Bitcoin formed part of Mt Gox's assets which would be sold and distributed to the rest of its creditors.⁴²

18 This outcome seems overly harsh for the user, as it indicated that he simply had no means of protecting or recovering his Bitcoin. Such a state of affairs is hardly satisfactory. As pointed out in *Ruscoe*, a strict adherence to the wording of the law will have "profound and unsatisfactory implications".⁴³ With the rise of cryptocurrency as an increasingly popular

³⁷ Myles Bayliss, "Insolvency in the Digital Age" (2020) 20(7) INSLB 135 at 135.

³⁸ Bloomberg and Reuters, "Singapore gives cryptocurrency licences to DBS unit, Australia's Independent Reserve" *South China Morning Post* (1 October 2021) <<u>https://www.scmp.com/news/asia/southeast-asia/article/3150892/singapore-gives-cryptocurrency-licences-dbs-</u>

<u>unit?module=perpetual_scroll&pgtype=article&campaign=3150892</u>> (accessed 3 October 2021). ³⁹ *Ibid*.

 ⁴⁰ Charles Draper, "Cryptocurrencies and insolvency: practical considerations for IPs" (2019) 5 CRI 198 at p 203.
 ⁴¹ Civil Code (Act 89 of 1896) (Japan) Art 85.

⁴² Susan Poll Klaessy and Joanne Molinaro, "Crypto as Commodity, and the Bankruptcy Implications" *Jdsupra* (19 October 2018) <<u>https://www.jdsupra.com/legalnews/crypto-as-commodity-and-the-bankruptcy-40735/</u>> (accessed 3 October 2021).

⁴³ Supra n 3, at [52] and [66].

method of payment and investing,⁴⁴ a clear legal framework will ensure that consumers are given adequate protection and they no longer need to navigate ambiguous rules.

¹⁹ While Singapore has yet to experience an insolvency involving large amounts of cryptocurrencies, it is not an exaggeration to say that they are a pressing reality.⁴⁵ In fact, there appears to be a trend of greater regulation by the authorities. For instance, the tougher frameworks and regulatory bans imposed on Binance by Singapore, the US, the UK, and other countries are a sign of market maturity offering greater protection for people that buy cryptocurrencies.⁴⁶ Seen in this light, recognising cryptocurrencies as property would be in line with the greater regulatory control over major cryptocurrency exchanges, as the underlying purpose is to protect individuals and businesses that buy cryptocurrencies.

III. Conclusion

20 The rise of cryptocurrency has brought about new challenges that require an adjustment of the established principles of the law.⁴⁷ While the nature of cryptocurrency may create some practical obstacles to legal intervention, that does not mean that cryptocurrency is outside the law.⁴⁸ The tough stance undertaken by many countries is a positive sign that the authorities have recognised the increasing use of cryptocurrencies and therefore, a need for greater regulation if this trend is to continue in the long-term.

21 Hence, rather than denying the status of cryptocurrency, Singapore courts should recognise it as property capable of forming the subject matter of a trust. Such a position is commercially sound. Furthermore, it will bolster Singapore's position in becoming the leading Asian centre for cryptocurrency, and a key player on the global stage.

⁴⁴ *Id*, at [129].

⁴⁵ Ibid.

⁴⁶ *Supra* n 1.

⁴⁷ *Supra* n 37.

⁴⁸ *Supra* n 19, at para 41.