## ACCEPTED VERSION

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# Cryptocurrency and the Consideration Conundrum: Does Crypto Have Legal Value under Contract Law?

### Dr Mark A Giancaspro\*

Cryptocurrency is a flagship technology of the Fourth Industrial Revolution. Millions of crypto trades are occurring daily, with the global crypto market now having an estimated capitalisation of US\$2.47 trillion. It was inevitable that cryptocurrency's compatibility with existing legal frameworks would be questioned, though close to no attention has been devoted to its inherent legal value. Without a sufficient measure of such value, it cannot be consideration to support a contract for its sale. This article argues that contract law principles do not comfortably recognise value in cryptocurrency and calls for the conception of a comprehensive and detailed regulatory framework to resolve this and other conundrums afflicting cryptocurrency.

#### INTRODUCTION

Despite being a relatively recent innovation, the term "cryptocurrency" has already entered common parlance. People outside of the finance or technology sectors generally recognise it as describing both a form of digital money and a vehicle of investment. While this is broadly accurate, the more technical definition is naturally more complex. For the purposes of this article, cryptocurrency – also known as "digital currency" or "virtual currency" – is broadly described as "a medium of exchange that functions like money (in that it can be exchanged for goods and services) but, unlike traditional currency, is untethered to, and independent from, national borders, central banks, sovereigns, or fiats". Cryptocurrencies are entirely decentralised, exclusively controlled by users, and securely traded through cryptography. They operate within and are exchanged through a distributed ledger system spread across a network of "nodes" (computers or servers), with each node housing a complete copy of the ledger. This system is known as the "blockchain", so named because it consists of a chain of immutable blocks of time-stamped data, with each data entry representing a single verified transaction posted by a member of the petwork.

Cryptocurrency's capacity to rapidly increase in value within its own market has driven its current hype. The news media is replete with "success" stories of people making their fortunes from speculative historical cryptocurrency investments. Cryptocurrency and its underlying blockchain infrastructure have

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<sup>&</sup>lt;sup>1</sup> Speaking specifically of the world's most valuable and well-known cryptocurrency, Bitcoin, Paul Vigna and Michael J Casey note that people tend to confuse the asset's fiscal and practical functions: Paul Vigna and Michael J Casey, Cryptocurrency: The Future of Money? (Vintage, 2016) 8–9.

<sup>&</sup>lt;sup>2</sup> Vivian A Maese et al, "Cryptocurrency: A Primer" (2016) 133(8) Banking Law Journal 468, 468.

<sup>&</sup>lt;sup>3</sup> Cryptography describes the science of protecting digital data or information through encryption. See generally Arvind Matharu, Understanding Cryptocurrencies: The Money of the Future (Business Expert Press, 2018).

<sup>&</sup>lt;sup>4</sup> Guido Governatori et al, "On Legal Contracts, Imperative and Declarative Smart Contracts, and Blockchain Systems" (2018) 26 Artificial Intelligence Law 377, 385–386. See also Adhiraj Pal, Cryptomania: An Essential Guide to Cryptocurrency (Notion Press, 2021) Ch 1.

<sup>&</sup>lt;sup>5</sup> See, eg, Suzy Weiss, "Meet the Bitcoin Investors Who Got Insanely Rich Off Crypto", New York Post, 13 January 2021 <a href="https://nypost.com/2021/01/13/meet-the-bitcoin-investors-who-got-insanely-rich-off-crypto/">https://nypost.com/2021/01/13/meet-the-bitcoin-investors-who-got-insanely-rich-off-crypto/</a>.

also been hailed as offering a host of benefits from reduction of costs and processing delays associated with orthodox "non-crypto" transactions to the improvement of security for digital transactions. Of course, being disintermediated technologies that operate upon a consensus model, they threaten the roles and significance of traditional financial intermediaries such as banks. As expected, those intermediaries have responded by actively exploring ways to implement the blockchain and harness its capacity to create efficiencies, reduce costs, expand service offerings and, most importantly, stay relevant.

Cryptocurrencies and blockchains have been scrutinised with suspicion by academics, governments, and other stakeholders, with most questioning the capacity of such technologies to adapt to existing legal frameworks. It is therefore unsurprising that, with the exception of El Salvador, "cryptocurrencies are not accepted as legal tender anywhere in the world. Indeed, some countries have gone further, either all but rejecting the possibility of cryptocurrency being accepted as legal tender or outright banning cryptocurrency mining." And while courts in common law jurisdictions have generally accepted cryptocurrency as property at law," they (along with proponents of cryptocurrency) have largely left open the very important question of whether it can be sufficient consideration under contract law. This fundamental query is the subject of this article and one which has, quite remarkably, been consistently neglected. The answer is important because, if in the negative, it undermines what appears to be the universally accepted position in commerce and, more significantly, compromises countless crypto transactions which have already been processed and are to come. This article therefore makes a valuable and timely contribution to the literature.

Part I of this article explains in greater detail what a cryptocurrency is and the manner in, and purposes for, which it is exchanged in the market. This background provides the basis for Part II, which explains

<sup>&</sup>lt;sup>6</sup> See, eg, Melanie Swan, "Anticipating the Economic Benefits of Blockchain" (2017) 7(1) Technology Innovation Management Review 6; Flamur Bunjakul, Olivera Gjorgieva-Trajkovska and Emilija Miteva-Kacarski, "Cryptocurrencies – Advantages and Disadvantages" (2017) 2(1) Journal of Economics 31; David Kuo Chuen Lee, Li Guo and Yu Wang, "Cryptocurrency: A New Investment Opportunity?" (2018) 20(3) Journal of Alternative Investments 16.

<sup>&</sup>lt;sup>7</sup> Alex Tapscott and Don Tapscott, "How Blockchain Is Changing Finance" (2017) 1 Harvard Business Review 2, 4.

<sup>&</sup>lt;sup>8</sup> See, eg, Akanksha Singh and Sharan Chawla, "Cryptocurrency Regulation: Legal Issues and Challenges" (2019) 7(2) International Journal of Reviews and Research in Social Sciences 365; Mark Giancaspro, "Is a 'Smart Contract' Really a Smart Idea? Insights from a Legal Perspective" (2017) 33 Computer Law and Security Review 825; Nathan Fulmer, "Exploring the Legal Issues of Blockchain Applications" (2018) 52(1) Akron Law Review 161; Trevor I Kiviat, "Beyond Bitcoin: Issues in Regulating Blockchain Transactions" (2015) 65(3) Duke Law Journal 569; Vrajlal Sapovadia, "Legal Issues in Cryptocurrency" in David Lee Kuo Chen (ed), Handbook of Digital Currency: Bitcoin, Innovation, Financial Instruments, and Big Data (Elsevier, 2015) Ch 13.

<sup>&</sup>lt;sup>9</sup> On 8 June 2021, the El Salvador legislature voted in favour of making Bitcoin, the most popular cryptocurrency, legal tender in the country: "El Salvador Approves Bitcoin as Legal Tender", Aljazeera, 9 June 2021 <a href="https://www.aljazeera.com/news/2021/6/9/el-salvador-congress-approves-bitcoin-as-legal-tender">https://www.aljazeera.com/news/2021/6/9/el-salvador-congress-approves-bitcoin-as-legal-tender</a>.

<sup>&</sup>lt;sup>10</sup> For example, Australia: David Braue, "The RBA Says There's No Chance Cryptocurrencies Will Become Legal Tender in Australia", StartUpDaily, 4 August 2021 <a href="https://www.startupdaily.net/2021/08/the-rba-says-theres-no-chance-cryptocurrencies-will-become-legal-tender-in-australia/?utm\_source-organic&utm\_medium=startupdaily&utm\_id=facebook>. However, as discussed in Part III of this article, there may presently be legal implications associated with the use and disposal of cryptocurrency.

<sup>11</sup> For example, several provinces of China: Johnathan Ponciano, China's Crypto Crackdown Intensifies with New Mining Ban Censorship But Bitcoin Rallying June <a href="https://www.forbes.com/sites/jonathanponciano/2021/06/09/chinas-crypto-crackdown-intensifies-with-new-mining-ban-and-type-decay-type-d censorship-but-bitcoin-is-rallying/?sh=7f1b1867150f>; Coco Feng, "China Sends Another Warning on Cryptocurrency Risks 'Wild South Fluctuations". China Morning Post. 19 May <a href="https://www.scmp.com/tech/policy/article/3133967/beijing-sends-another-warning-cryptocurrency-risks-amid-recent-elon">https://www.scmp.com/tech/policy/article/3133967/beijing-sends-another-warning-cryptocurrency-risks-amid-recent-elon</a>>. Mining describes the process of providing computational power to verify transactions posted to the blockchain, including those involving the exchange of cryptocurrency: Hossein Hassani, Xu Huang and Emmanuel Sirimal Silva, Fusing Big Data, Blockchain and Cryptocurrency: Their Individual and Combined Importance in the Digital Economy (Springer, 2019) 51. Miners are rewarded for their efforts with cryptocurrency.

<sup>&</sup>lt;sup>12</sup> For example, in New Zealand (Ruscoe and Moore v Cryptopia Ltd (in liq) [2020] NZLR 728), Singapore (B2C2 Ltd v Quoine Pte Ltd [2019] SGHC(I) 03), and England (AA v Persons Unknown, Re Bitcoin [2019] EWHC 3556 (Comm)).

the principles of contract law relevant to this and all commercial exchanges in common law jurisdictions. In particular, the thresholds set for the legal sufficiency of things exchanged through contract under the doctrine of consideration (and its equivalent in civil law jurisdictions, *causa promissionis*) are closely considered. Part III then forensically examines the application of these principles to contracts for the purchase or sale of cryptocurrency. It is ultimately concluded that those principles do not comfortably recognise cryptocurrency as legally sufficient consideration. This lays the foundation to Part IV, which offers some suggestions for how the uncertainties identified in the previous Part can be addressed, before Part V concludes.

#### I. Understanding Cryptocurrency Exchange

To fully comprehend the legal uncertainty surrounding the recognition of cryptocurrency as sufficient consideration under contract law, one requires a rudimentary understanding of cryptocurrency and the process by which it is exchanged. As explained earlier, cryptocurrency is a type of digital, non-fiat currency, denominated virtually in "tokens" (or "coins"). These tokens are fungible assets not unlike tech stocks in that each essentially represents a tradeable "share" of the respective cryptocurrency's total market capitalisation. Nowadays, tokens of cryptocurrency can be bought and sold across multiple online trading platforms, known as centralised exchanges (CEXs), decentralised exchanges (DEXs) or, collectively, digital currency exchanges (DCEs). Most exchanges are privately owned and administered (centralised exchanges), with their administrators charging nominal fees to facilitate trades, though entirely decentralised exchanges are becoming more mainstream, with the largest DEXs now trading nearly four times as many tokens as the largest CEXs. Tokens attained through these exchanges – through a payment of either flat currency or a cryptocurrency – can be used to make purchases, store value, or as a tool of investment.

Cryptocurrencies are ordinarily traded against one another given they are not generally accepted worldwide. "Despite this lack of acceptance, however, millions of active investors are currently utilising several hundred online cryptocurrency exchanges," with each transaction ostensibly constituting a contract. The nature of those contracts varies depending upon whether one is using a CEX or DEX. Cryptocurrency transactions through CEXs are a little more orthodox in that they involve payment to the exchange administrators who manually process the transactions and take custody of the buyer's purchased tokens. This is in contrast to DEXs which, being entirely decentralised, outsource payments directly to a blockchain through autonomous "smart contracts". The tokens purchased through a DEX are not held by some custodial exchange administrator but rather within the buyer's digital "wallet"."

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<sup>&</sup>lt;sup>13</sup> Christopher Blackburn, Cryptocurrency Blockchain Revolution Technology Explained (Christopher Blackburn, 2020) 14.

<sup>&</sup>lt;sup>14</sup> Kristin N Johnson, "Decentralized Finance: Regulating Cryptocurrency Exchanges" (2021) 62(6) William and Mary Law Review 1911, 1955.

<sup>15</sup> Johnson, n 14, 1953.

<sup>&</sup>lt;sup>16</sup> Angelo Aspris et al, "Decentralized Exchanges: The 'Wild West' of Cryptocurrency Trading" (2021) 77 International Review of Financial Analysis 1, 1–2.

<sup>&</sup>lt;sup>17</sup> As Jahani explains, those who attain cryptocurrency tend to fall into one of two categories: (1) those primarily driven by market hype and who view it as an investment; and (2) those dedicated to "the technological advancement of the cryptocurrency ecosystem" and who view cryptocurrencies as a legitimate form of currency: Eaman Jahani, "ScamCoins, S\*\*\* Posters, and the Search for the Next Bitcoin<sup>TM</sup>: Collective Sensemaking in Cryptocurrency Discussions" (2018) 2 (79) Proceedings of the ACM on Human-Computer Interaction 1, 21.

<sup>&</sup>lt;sup>18</sup> Christian Janze and Ilya Gvozdevskiy, "What Drives the Competition of Cryptocurrency Exchanges? Examining the Role of the Market and Community" (Conference Paper, International Conference on Information Systems, 2017) 3. Some cryptocurrencies are, however, also exchanged against fiat currencies.

<sup>&</sup>lt;sup>19</sup> Venkata Marella et al, "Rebuilding Trust in Cryptocurrency Exchanges after Cyber-Attacks" (Conference Paper, Hawaii International Conference on System Sciences, 2021) 5636.

<sup>&</sup>lt;sup>20</sup> A digital wallet is essentially an electronic device that permits an individual to make electronic transactions. They come in various forms, with the most commonly recognised example being contactless payment technology embedded into smartphones whereby a person pays for goods or services by bringing their device into close proximity of the other party's designated

The feature common to both CEXs and DEXs is that both involve contractual exchange as understood at common law. That is, transactions occurring through digital currency exchanges represent an agreement or set of promises between the parties which carries the force of the law. Such a definition is commensurate with those offered by civil legal systems. It therefore becomes essential to consider how the law of contract applies to transactions for the purchase or sale of cryptocurrency.

#### II. THE RELEVANCE OF THE LAW OF CONTRACT

For any agreement to constitute an enforceable contract, it must possess four characteristics: (1) involve an offer from one party and an acceptance by the other; (2) be founded upon an exchange of lawful consideration; (3) have been intended by the parties to attract legal consequences; and (4) be sufficiently certain and complete in its terms. If these characteristics are all present in any private arrangement, the state attributes significance to this and offers legal enforcement of the arrangement. That is, the law of contract impresses itself upon the private ordering of society and provides a framework through which the parties can enforce their rights and access a range of state remedies. Accordingly, contract law is ubiquitous, such that parties may inadvertently "drift" into a contractual relationship without even meaning to do so. Of course, notwithstanding the pervasive nature of contract law, parties are at liberty to abandon it. A host of empirical studies have demonstrated a tendency for parties to shun legal frameworks when structuring their commercial agreements and resolving disputes. Many parties rely instead upon informal relations or their own private systems of rules. Regardless, the law of contract, whether consciously engaged or not, applies to cryptocurrency transactions via DCEs of any nature.

In an agreement for the purchase or sale of cryptocurrency via a DCE, it would be simple enough to satisfy the four "elements" of contractual validity. For example, an offer to purchase cryptocurrency from a seller via a DCE would, depending on the circumstances, amount either to an offer in response to an invitation to treat or to a conventional offer (solicited or unsolicited)." If the vendor unequivocally accepted the offer to buy, there would be *consensus ad idem.*" Being a commercial sale, the parties will be presumed to have intended to create legal relations." The terms of the arrangement would be

payment point. For further discussion see Rajesh Krishna Balan and Narayan Ramasubbu, "The Digital Wallet: Opportunities and Prototypes" (2009) 42(4) IEEE Computer 100.

<sup>&</sup>lt;sup>21</sup> Dunlop Pneumatic Tyre Co Ltd v Selfridge and Co Ltd [1915] AC 847, 855; Ermogenous v Greek Orthodox Community of SA Inc (2002) 209 CLR 95, 105; [2002] HCA 8; B Coote, "The Essence of Contract: Part 1" (1988) 1 Journal of Contract Law 91, 94–97. The Restatement (Second) of Contracts 1981 (US) §1 defines a contract as "a promise or a set of promises for the breach of which the law gives a remedy, or the performance of which the law in some way recognizes as a duty".

<sup>&</sup>lt;sup>22</sup> For example, France (Code Civil des Français 1804 (France) Art 1101), Italy (Il Codice Civil Italiano Art 1321), Belgium (Code Civil Art 1101).

<sup>&</sup>lt;sup>23</sup> Mark Giancaspro and Colette Langos, Contract Law: Principles and Practice (LexisNexis, 2022) 27.

<sup>&</sup>lt;sup>24</sup> Hugh Collins, Regulating Contracts (OUP, 1999) 56-57.

<sup>&</sup>lt;sup>25</sup> Husain v O & S Holdings (Vic) Pty Ltd [2005] VSCA 269, [51].

<sup>&</sup>lt;sup>26</sup> See, eg, Stewart Macaulay, "Non-contractual Relations in Business: A Preliminary Study" (1963) 28(1) American Sociological Review 55; Hugh Beale and Tony Dugdale, "Contracts Between Businessmen: Planning and the Use of Contractual Remedies" (1975) 2 British Journal of Law and Society 45; Thomas M Palay, "Comparative Institutional Economics: The Governance of Rail Freight Contracting" (1984) 13 Journal of Legal Studies 265; Lisa Bernstein, "Private Commercial Law in the Cotton Industry: Creating Cooperation Through Rules, Norms and Institutions" (2001) 99 Michigan Law Review 1724. See also Mark Giancaspro, "Testing Stewart Macaulay's Theory down under: A Study of Australian Small to Medium-sized Enterprises' Understandings of, and Experiences with, Contract Law" in John Eldridge and Timothy Pilkington (eds), Australian Contract Law in the 21st Century (Federation Press, 2020) 273.

<sup>&</sup>lt;sup>27</sup> Even if abandoned, however, the law of contract is perpetual and can be invoked at any stage during the commercial relationship: Collins, n 24, 137.

<sup>&</sup>lt;sup>28</sup> See Mateja Durovic and André Janssen, "The Formation of Blockchain-based Smart Contracts in the Light of Contract Law" (2019) 6 European Review of Private Law 753, 762; Electronic Transactions Act 1999 (Cth) s 15B.

<sup>&</sup>lt;sup>29</sup> Paal Wilson & Co A/S v Partenreederei Hannah Blumenthal [1983] 1 All ER 34

 $<sup>^{30}</sup>$  Edwards v Skywards [1964] 1 WLR 349; Helmos Enterprises Pty Ltd v Jaylor Pty Ltd (2005) 12 BPR 23,021; [2005] NSWCA 235.

straightforward: seller agrees to sell X cryptocurrency to buyer for Y amount. There would be no obvious concerns as to the certainty of this arrangement. That leaves consideration. This common law doctrine has a most convoluted history." Deriving from the ancient writs of covenant, debt, and assumpsit, the doctrine emerged as the gauge by which to distinguish enforceable from unenforceable promises." It does so by seeking out two key features within the exchange: (1) benefit or detriment and (2) bargain.

The first requirement of "benefit or detriment" originates from the judgment of Lush J in *Currie v Misa*, where his Lordship stated that "[a] valuable consideration, in the sense of the law, may consist in some right, interest, profit, or benefit accruing to the one party, or some forbearance, detriment, loss, or responsibility, given, suffered, or undertaken by the other". The considerable latitude in Lush J's proposition means that finding valid consideration supporting the agreement will seldom be difficult. As will be discussed further on, however, the proposition is constrained to an extent by other principles.

The second requirement of "bargain" mandates that the relevant benefit or detriment be given in return for the other party's promise. The point was famously expressed in *Dunlop Pneumatic Tyre Co Ltd v Selfridge and Co Ltd*, where Lord Dunedin said the following as to consideration: "An act or forbearance of one party, or the promise thereof, is the price for which the promise of the other is bought, and the promise thus given for value is enforceable." Accordingly, not only must each party proffer legally valid consideration, they must also exchange the same as part of a bargain. There must, as the High Court of Australia has noted, be evidence of quid pro quo."

Whatever form consideration takes, it must be legally sufficient though it need not be adequate. That is, it must have some measure of legal value but does not have to be a "fair" price for whatever is purchased. This rule has come to be known as the "peppercorn principle" given that "it is legally sufficient to agree, for example, to sell a valuable object or to let commercial premises in exchange for a nominal consideration, such as a peppercorn". The reference is often said to derive from Lord Somervell's judgment in Chappell & Co Ltd v Nestlé Co Ltd (Chappell), where his Lordship stated: "A peppercorn does not cease to be good consideration if it is established that the promisee does not like pepper and will throw away the corn." The principle appears, however, to have far older lineage and derive from Blackstone's famed commentaries on the laws of England.

The critical point is that a peppercorn, though clearly of nominal legal value, "will suffice to support a contract. This is because it is impractical and improper for the courts to scrutinise the adequacy of a

<sup>&</sup>lt;sup>31</sup> See JL Barton, "The Early History of Consideration" (1969) 85 Law Quarterly Review 372.

<sup>32</sup> A Simpson, A History of the Common Law of Contract (Clarendon Press, 1975) 316.

<sup>33</sup> Currie v Misa (1875) LR 10 Ex 153, 162. This definition maintains judicial support throughout the common law world. See, eg. York House (Chelsea) Ltd v Thompson [2019] EWHC 2203 (Ch), [55]; Pharmanet Group Ltd v Primeland Pty Ltd [2015] FCA 208, [32]; Voce Enterprises Ltd v SHE Apparel Inc [2016] BCSC 1080, [29]; Luks Industrial Co Ltd v Ocean Palace International Holdings Ltd [2017] HKCU 221, [51]–[52].

<sup>&</sup>lt;sup>34</sup> Dunlop Pneumatic Tyre Co Ltd v Selfridge and Co Ltd [1915] AC 847, 855.

 $<sup>^{\</sup>rm 35}$  Australian Woollen Mills Pty Ltd v Commonwealth (1954) 92 CLR 424, 456–457.

<sup>&</sup>lt;sup>36</sup> Haigh v Brooks (1839) 10 Ad & E 309, 320; 113 ER 119, 123 (Lord Denman CJ); Westlake v Adams (1858) 5 CB (NS) 248, 265; 141 ER 99, 106 (Byles J): "It is an elementary principle, that the law will not enter into an inquiry as to the adequacy of the consideration"; Chappell & Co Ltd v Nestlé Co Ltd [1960] AC 87, 114 (Lord Somervell).

<sup>37</sup> Wolfe v Permanent Custodians Ltd [2012] VSC 275, [108].

 $<sup>^{38}</sup>$  Chappell & Co Ltd v Nestlé Co Ltd [1960] AC 87, 114.

<sup>&</sup>lt;sup>39</sup> William Blackstone, Commentaries on the Laws of England (1765–1770) bk 2, 440; reproduced in Wilfrid Prest (ed), The Oxford Edition of Blackstone's: Commentaries on the Laws of England: Book II: Of the Rights of Things (OUP, 2016) 298. Blackstone stated: "[I]n case of leases, always reserving a rent, though it be but a peppercorn [this] ... will in the eye of the law, convert the gift ... into a contract."

<sup>&</sup>lt;sup>40</sup> Interestingly, in Blackstone's time, the price of pepper was actually quite high (or, at least, certainly not as low as it is today): Kevin H O'Rourke and Jeffrey G. Williamson, "After Columbus: Explaining Europe's Overseas Trade Boom, 1500-1800" (2002) 62(2) Journal of Economic History 417.

bargain which parties regard as satisfactory. As Kirby P explained in *Woolworths Ltd v Kelly*, a parties subjectively attribute value to things for all manner of sentimental or other – sometimes irrational – reasons, and the courts simply do not have the expertise or resources to be auditing every bargain that has been struck. This would not only open floodgates and promote inconsistent decision-making by judges but also undermine the fundamental principle of freedom of contract.

A paramount inquiry relevant to the forthcoming analysis of cryptocurrency is how legal sufficiency is measured. We know that it is not equivalent to adequacy, for reasons such as those canvassed by Kirby P in Woolworths Ltd v Kelly. Chappell is itself a helpful example of this. In that case, the respondent (chocolate manufacturer) sold gramophone records for one shilling and sixpence, plus three wrappers from their sixpence chocolate bars. The purpose of the scheme was to advertise and promote the sale of their chocolate bars. The wrappers in themselves were ostensibly of no value and were thrown away on receipt. The court held that the wrappers formed part of the consideration payable for the gramophone records, notwithstanding that they had little or no value and were thus proportionately inadequate. The question left unanswered in Chappell and countless other cases which have accepted nominal consideration as legally sufficient is how legal sufficiency is actually measured. This question has largely been shirked by courts and textbook writers, perhaps because arguments that a contract is unsupported by sufficient consideration are rare (save for situations of renegotiation). In other cases, the question may simply not have arisen due to the novel nature of the consideration. Cryptocurrency falls squarely into this category.

There appears to be no consistent method by which the courts assess the sufficiency of consideration. The unhelpful direction from the common law courts has been that consideration must have "some value in the eye of the law". 22 But what does the law see value in? Some prominent contract law scholars submit that legal sufficiency is equivalent to economic value, a such that the law will only recognise consideration in things that have some measurable fiscal worth. Others have similarly observed that the courts have generally interpreted the established requirement of legal sufficiency by reference to the economic value of the consideration under examination." The trouble with these assertions is that the case law does not consistently support them. Cases such as Hamer v Sidways plainly demonstrate that consideration can be found in things lacking any obvious economic value. In that case, it was a promise from a nephew to his uncle not to smoke tobacco, drink alcohol, use foul language, or play billiards until reaching 21 years of age, in return for a payment of \$5,000. The promisee's detriment was obvious in his abstinence from indulgences, as was the benefit in the reward promised to him. It is far less clear what benefit the promisor enjoyed. The court merely concluded that the promisor benefited from the arrangement without explaining why. Arguably, the promisor benefited from seeing his nephew grow up in a refined manner, but this is a subjective and sentimental benefit and has no economic value whatsoever.

Other cases pour even more cold water on the "economic value" rationale for consideration. In *Jamieson v Renwick*, "the promisee agreed not to live in an area designated by the promisor and to avoid visiting or annoying them in return for an annual payment of £25. Again, the benefit to the promisor here is clearly a personal one but cannot be said to have any kind of financial worth. We should also

<sup>41</sup> Woolworths Ltd v Kelly (1991) 22 NSWLR 189, 193-194.

<sup>42</sup> Thomas v Thomas (1842) 2 QB 851, 859; 114 ER 330, 333-334.

<sup>&</sup>lt;sup>43</sup> Edwin Peel, Treitel: The Law of Contract (Sweet & Maxwell, 13th ed, 2011) 85.

<sup>&</sup>lt;sup>44</sup> Richard Stone, *The Modern Law of Contract* (Routledge, 10<sup>th</sup> ed, 2013) 97.

<sup>45</sup> Hamer v Sidway, 124 NY 538 (1891).

<sup>46</sup> Hamer v Sidway, 124 NY 538, 546 (1891).

<sup>&</sup>lt;sup>47</sup> The concept of the moral basis of consideration is discussed further in Part III of this article.

<sup>48</sup> Jamieson v Renwick (1891) 17 VLR 124.

remember that humble pepper corns and empty chocolate wrappers have also passed muster and been deemed to have sufficient legal value.  $^{\circ}$ 

What is clear is that the courts embark on a highly subjective and opaque balancing exercise when establishing the worth of consideration. They appear to test the detriment to the promisee against the benefit to the promisor in an abstract manner and without any prescriptive guidance. Corbin famously suggested that there was no discernible method to gauging sufficiency and that the only effective way to construct one was to analyse decided cases and draw arbitrary (and blurred) lines distinguishing those things having value "in the eye of the law" from those lacking such value:

How are we to define "legal" value, or "technical" value or "legal eye" value? It is believed that the only way is to observe the working of the technical legal eye, to list the decisions and thus discover what considerations (some with economic value and some without) have been held to be sufficient. Thus the cart is put before the horse; and instead of "value" determining the decisions, the decisions determine "value".

Attempts to define sufficient legal value are further complicated by the law's longstanding recognition of mere promises as consideration for one another. Of course, those promises must have content and not consist of illusory or otherwise unenforceable obligations. If the law were otherwise and any promise at all could be consideration, the doctrine would be worthless because a promise to sell an air guitar for a unicorn would constitute a valid contract purely due to the use of promissory language. As such, in cases such as Placer Development Ltd v Commonwealth (Placer), where a party has an overarching discretion whether to perform a contractual obligation or not, that party's promise is an empty one, for performance is never assured. In Placer, the Commonwealth had an unfettered prerogative to make payments to the contractor. Similarly, the financial services provider in Evans v Davantage Group Pty Ltd\* included in its motor vehicle warranty agreement a clause stipulating that the provider would consider, but was entitled to reject or pay any amount of, any claims coming within the scope of the warranty terms. The court determined that this overriding discretion qualified the provider's promise to pay consumers to such a substantial extent that it rendered the promise illusory.

Williston has attempted to identify the two essential indicia of sufficient legal value "in the eye of the law". First, the performance of the promised obligation must genuinely have the asserted value. Second, this promise must be legally enforceable. In Williston's view, "mutual promises each of which possesses the first requisite, as a general rule possess the second." This is clearly correct, for if a promise is unenforceable, it can have no legal value. A contract founded upon a promise to perform an illegal service is therefore void. Such performance may have some value in fact but will ultimately lack sufficient value in law. Regrettably, this brings us no closer to identifying whether consideration actually has the legal value it is said to have.

<sup>49</sup> See Chappell & Co Ltd v Nestlé Co Ltd [1960] AC 87.

<sup>&</sup>lt;sup>50</sup> W Jack Grosse, "Moral Obligation as Consideration in Contracts" (1971) 17(1) Villanova Law Review 1, 25.

<sup>&</sup>lt;sup>51</sup> Arthur L Corbin, "Non-binding Promises as Consideration" (1926) 26 Columbia Law Review 550, 553-554.

<sup>&</sup>lt;sup>52</sup> "[A] promise against a promise is a sufficient ground for an action": Gower v Capper (1596) Cro Eliz 543, 543; 78 ER 790, 790

<sup>53</sup> Evans v Davantage Group Pty Ltd [2019] FCA 884, [68]-[69].

<sup>54</sup> Placer Development Ltd v Commonwealth (1969) 121 CLR 353.

<sup>55</sup> Evans v Davantage Group Pty Ltd [2019] FCA 884.

<sup>&</sup>lt;sup>56</sup> See also Biotechnology Australia Pty Ltd v Pace (1988) 15 NSWLR 130.

<sup>&</sup>lt;sup>57</sup> Samuel Williston, "The Effect of One Void Promise in a Bilateral Agreement" (1925) 25(7) Columbia Law Review 857, 866–867.

<sup>58</sup> Williston, n 57, 867.

<sup>&</sup>lt;sup>59</sup> Re Mahmoud and Ispahani [1921] 2 KB 138; Pham v Doan (2005) 63 NSWLR 370; [2005] NSWSC 601.

It is perhaps most accurate to say that legal sufficiency is measured by reference to consideration's *intrinsic* value, as determined objectively (and spontaneously) by the courts. Intrinsic value may be determined in part by reference to economic value but appears more broadly to be informed by judicial intuition and opinion. Something will have sufficient legal value if the courts determine that it does in light of a nebulous range of factors which, alongside economic value, would seem to include the nature of the impugned consideration, the relevant factual matrix, and public policy. According to the "hunt and peck" theory of consideration, judicial idiosyncrasy and personal views as to the desirability of contractual enforcement must also play a role. This theory was best described by the New Brunswick Court of Appeal in *Harrity and Northeast Yachts 1998 Ltd v Kennedy.* The theory posits that the courts are swayed by what they see as the "fairest" result. In practical terms:

judges will rummage through trial and appeal records to find the necessary consideration if that is what is needed to achieve a just result. If they believe that enforcement would lead to an unjust result, the same judges will declare there is an absence of meaningful consideration and, therefore, the promise is gratuitous and unenforceable.

Many a prominent scholar have agreed with this theory. Reynolds and Treitel, for example, similarly suggested that a court "will tend to stress the factual benefit or detriment when it thinks that the agreement should be upheld, and the lack of legal benefit or detriment when it thinks that it should not" "

If intrinsic value is the yardstick, then it is a brittle one which is hard to grasp. This is why scholars such as Treiblmaier condemn intrinsic value as the measure of legal value. Nonetheless, it appears to be the judiciary's tool of choice when measuring legal sufficiency of consideration. Armed with this yardstick, this article now turns to elucidating the legal "value" of cryptocurrency.

## III. ELUCIDATING THE LEGAL "VALUE" OF CRYPTOCURRENCY

Cryptocurrencies basically have no value, and they don't produce anything. They don't reproduce, they can't mail you a check, they can't do anything, and what you hope is that somebody else comes along and pays you more money for them later on, but then that person's got the problem. In terms of value: zero. \*\*

The above quote from famed investor and notable crypto critic Warren Buffet reflects one extreme view as to the legal value of cryptocurrency. The Reserve Bank of Australia has similarly suggested that cryptocurrencies "have no intrinsic value" and are effectively dependent on user trust, "a view with which

<sup>&</sup>lt;sup>60</sup> Some scholars seem to agree. See, eg, Stephen Graw, An Introduction to the Law of Contract (Lawbook Co, 10<sup>th</sup> ed, 2021) 148: "Things such as old bottle caps and smiles have no intrinsic value and, hence, will not normally be good and sufficient consideration."

<sup>&</sup>lt;sup>61</sup> The idea that value is not absolute but rather relative and contingent upon situational need or desire is persuasively discussed in John Dewey, *Theory of Valuation* (University of Chicago Press, 1939).

<sup>62</sup> Harrity and Northeast Yachts 1998 Ltd v Kennedy [2009] NBCA 60.

<sup>63</sup> Harrity and Northeast Yachts 1998 Ltd v Kennedy [2009] NBCA 60, [28].

<sup>&</sup>lt;sup>64</sup> FMB Reynolds and G H Treitel, "Consideration for the Modification of Contracts" (1965) 7 Malaya Law Review 1, 14. See also BJ Reiter, "Courts, Consideration and Common Sense" (1977) 27 University of Toronto Law Journal 439, 445 ("orthodox doctrine and the independent policy considerations which encourage non-enforcement travel parallel paths").

<sup>65 &</sup>quot;Intrinsic value is a vague concept and obfuscates rather than illuminates the properties of cryptocurrencies": Horst Treiblmaier, "Do Cryptocurrencies Really Have (No) Intrinsic Value?" (2021) Electronic Markets <a href="https://doi.org/10.1007/s12525-021-00491-2">https://doi.org/10.1007/s12525-021-00491-2</a>.

<sup>&</sup>lt;sup>66</sup> Warren Buffet (2020). Quote cited in Theron Mohamed, "Warren Buffet Blasted Bitcoin as a Worthless Delusion and 'Rat Poison Squared'. Here Are His 16 Best Quotes About Crypto" (16 January 2021) <a href="https://www.businessinsider.com.au/warren-buffett-best-quotes-bitcoin-cryptocurrencies-investing-rat-poison-squared-2021-1">https://www.businessinsider.com.au/warren-buffett-best-quotes-bitcoin-cryptocurrencies-investing-rat-poison-squared-2021-1</a>.

<sup>&</sup>lt;sup>67</sup> Reserve Bank of Australia, Submission No 37 to Senate Select Committee on Australia as a Technology and Financial Centre. Cited in Senate Select Committee on Australia as a Technology and Financial Centre, Parliament of Australia, *Final Report* (October 2021) 4 [2.8].

many academics agree.<sup>®</sup> The same denial of intrinsic value in cryptocurrency was uttered in more measured terms by the UK's Financial Policy Committee in 2018. The Committee stated that cryptocurrencies had "no intrinsic value beyond their currently limited potential to be adopted as money in the future, and hence could prove worthless".<sup>®</sup> Other stakeholders are quite unsure what to make of cryptocurrency. The Australian Securities and Investments Commission (ASIC), for example, recently indicated ambivalence on the point, noting that cryptocurrency "may or may not have identifiable economic features that reflect fundamental or intrinsic value".<sup>™</sup>

The opposing view to that held by detractors, of course, is that cryptocurrency has obvious legal value and that any contrarian view is plainly misconceived. Arguments at this end of the spectrum emphasise that value is a social construct, and that traditional currencies and commodities only bear their relative values due to communal acceptance. Even fiat currencies, it is said, retain their legitimacy and assigned values only because the market recognises the same and willingly uses such currencies as the primary medium of exchange. If fiat currencies are seen as intrinsically valuable because they are made of useful materials (such as minerals for coins and paper for notes), then cryptocurrency, opponents say, has no value. But as Harari observes, even then, the microscopic quantities of precious minerals in coins and paper in currency notes means they themselves can scarcely be said to have true intrinsic value, and whatever value they do supposedly have is still reliant upon recognition of the same from members of society. Whatever one's own belief, legal value is defined by the common law, and it is that law this article now turns to applying.

Let us start with cryptocurrency as an object. In Part I, it was explained what a cryptocurrency is and the manner in which it is exchanged. It is denominated in virtual tokens or coins, representing a tradeable portion of its total market capitalisation, and traded across DCEs. A crypto token is essentially "a private key which gives control of a ledger entry on the relevant blockchain relating to the token purchased". Private keys are the cryptographic strings of alphanumeric code protecting access to the underlying cryptocurrency. They are functionally synonymous with passwords.

If cryptocurrency was recognised as legal tender, its value would be far simpler to define. Fiat currencies are government-issued and their inherent value derives from the issuing government's recognition of, and trust in, the same as mediums of exchange.<sup>35</sup> The actual fiscal value of a fiat currency depends on whether it is fixed or "pegged" to another national currency (in which case its value is equivalent to the value of the currency to which it is pegged) or it is floated on international exchange markets (in which case its value is determined by various factors including demand for the currency in private markets). In either case, the issuing government legally recognises the currency, and its value can be determined by

<sup>&</sup>lt;sup>68</sup> See, eg, Kent Anderson, "Can Blockchain Withstand Criticism? An Inquiry" (2018) 38 Information Services and Use 153, 156

<sup>&</sup>lt;sup>69</sup> HM Treasury, "UK Regulatory Approach to Cryptoassets and Stablecoins: Consultation and Call for Evidence" (January 2021) [1.14].

<sup>&</sup>lt;sup>70</sup> Australian Securities and Investments Commission, Submission No 61 to Senate Select Committee on Australia as a Technology and Financial Centre. Cited in Senate Select Committee on Australia as a Technology and Financial Centre, Parliament of Australia. a 67, 3 12.51

<sup>&</sup>lt;sup>71</sup> See, eg, Sunny Ahonsi, World-Changing Blockchain Opportunities (Brand for Speakers Book Publishing, 2021) 54.

<sup>&</sup>lt;sup>72</sup> Ahonsi, n 71, 54. See also Paul Vigna and Michael J Casey, *The Age of Cryptocurrency: How Bitcoin and Digital Money Are Challenging the Global Economic Order* (St Martin's Publishing Group, 2015) Ch 1. This logic underlies the "money illusion" famously theorised by American economist Irving Fisher, *The Money Illusion* (Adelphi Company, 1928).

<sup>&</sup>lt;sup>73</sup> Yuval Noah Harari, Sapiens: A Brief History of Humankind (Random House, 2015) Ch 10.

<sup>&</sup>lt;sup>74</sup> Michael Bacina and Sina Kassra, "Unlocking Cryptocurrency Token Sales" (2017) 37 Law Society of New South Wales Journal 79, 79.

<sup>&</sup>lt;sup>75</sup> Bikramaditya Singhal, Gautam Dhameja and Priyansu Sekhar Panda, Beginning Blockchain (Apress, 2018) 155. In times gone by, currencies were either commodity moneys (made of inherently precious metals such as gold by which the moneys were inherently valued for example by the gold standard) or representative moneys (typically in physical form and representing a claim on an inherently valuable commodity or asset).

reference to the relevant international exchange rates. In turn, the law can easily attribute value to the currency.

Cryptocurrency is not fiat (everywhere outside of El Salvador) and has no inherent value. Rather, "its value is defined by consensus from people believing in it". The law's eye cannot, therefore, see immediate fiscal value and must squint to find it elsewhere. One way of doing so might be to analogise crypto tokens with other forms of tradable token in common use. The reason, eloquently explained by Furneaux, is that "anything can be a currency if it is accepted as representing an agreed value". This is the very basis of barter economies in which goods and services are traded for one another (the value of those goods and services being negotiated by the parties). Many businesses, for example, offer point redemption schemes whereby consumers attain "points" which are redeemable for rewards, such as prizes and discounts. Others issue coupons entitling the bearer to freebies or other benefits. Casinos and gaming arcades issue their own "currencies" in the shape of customised chips or coins for users to play with. Despite these "consumer tokens" lacking traditional monetary value in the same way as fiat currency, they are still, Furneaux submits, tradable at an agreed rate by their communities of users. This might be true, though it does not bring us closer to establishing the *legal* value of such tokens. Indeed, the case law suggests such tokens lack any legal value at all.

In *Lipkin Gorman (a firm) v Karpnale (Lipkin)*," a partner in the appellant law firm stole just under £230,000 from the firm. The partner gambled this money at the defendant's club, with the club enjoying a net profit from the partner's gambling. The firm successfully brought a restitutionary claim to recover the club's profit from the rogue partner's gambling. Part of the club's defence to the claim was that it had given consideration for the money received from the rogue partner in the form of gaming chips. "The House of Lords held that the club had not provided good consideration. The use of the chips was purely a convenient mechanism for facilitating gambling and the gamblers did not "buy" them from the club. "The chips had no value outside of the gaming venue in which they were issued. Lord Templeman quoted Nicholls LJ from the trial case" in saying:

[T]he chips were not money or money's worth; they were mere counters or symbols used for the convenience of all concerned in the gaming. As tokens, the chips indicated that the holder had lodged cash with the club ... to the extent indicated by the tokens. ... I do not believe that this internal, preliminary, preparatory step, of issuing chips for cash, adopted for considerations of practical convenience, can have the effect in law that the club gave valuable consideration for the money it received.

This ratio highlights one of the major flaws in what appears to be the common logic of cryptocurrency advocates. If we simply assume that cryptocurrency has inherent legal value because it is being used like a conventional fiat currency by a large quantity of people, then the consideration doctrine loses any relevance. Those who support the view that cryptocurrency can constitute legally valid consideration appear to (wrongly) centre the spotlight on the fact that it is commonly exchanged for things of

<sup>79</sup> Lipkin Gorman (a firm) v Karpnale [1991] 2 AC 548.

<sup>&</sup>lt;sup>76</sup> Arvind Matharu, *Understanding Cryptocurrencies* (Business Expert Press, 2019) 3; Jerry Brito and Andrea Castillo, "Bitcoin: A Primer for Policymakers" (2013–2014) 29(4) *Policy* 3, 4 ("The value of [cryptocurrency] is not derived from gold or government fiat, but from the value that people assign to it"); Neil Guthrie, "The End of Cash? Bitcoin, the Regulators and the Courts" (2014) 29(2) *Banking and Finance Law Review* 355, 357 ("The value of [cryptocurrency] is what other users are prepared to accept for it"). See also Nishith Pathak and Anurag Bhandari, *1oT*, *Al*, and *Blockchain for*.Net (Apress, 2018) 195: "[Cryptocurrency] has value just because a member of the group [of users] believes it has value and ... should be used to exchange in lieu of a good just like any currency. The only difference is a normal currency's trust comes from government backine. Out here, it is from the people."

<sup>&</sup>lt;sup>77</sup> Nick Furneaux, Investigating Cryptocurrencies: Understanding, Extracting, and Analyzing Blockchain Evidence (Wiley, 2018) 6.

<sup>78</sup> Furneaux, n 77, 6.

<sup>80</sup> This would then have amounted to a "change of position", supporting the bank's defence to the firm's restitutionary claim.

<sup>&</sup>lt;sup>81</sup> Lipkin Gorman (a firm) v Karpnale [1991] 2 AC 548, 563–564, 567 (Lord Templeman), 575–577 (Lord Goff), 558 (Lords Bridge), 568 (Ackner), 567–568 (Griffiths) offered concurring judgments.

<sup>82</sup> Lipkin Gorman (a firm) v Karpnale [1987] 1 WLR 987, 1383.

established legal value, with disproportionate focus being on its own inherent value, which is the crux of the inquiry. It is for the courts, not crypto users, to determine the legal value of cryptocurrency, and that determination must involve application of the established legal principles discussed in Part II of this article

A cryptocurrency token is no different in functional terms to a casino chip in that it indicates that the buyer has tendered cash to a vendor via a DCE in the value indicated in the token. That token can then be used to participate in cryptocurrency exchanges – rather than a card table, as in *Lipkin* – and purchase other cryptocurrencies, goods, or services. One point of distinction might be that a casino chip or other consumer token's value is fixed by the issuing party, compared to cryptocurrency whose value fluctuates wildly, meaning they are not functionally equivalent. But this is a separate issue to the inherent legal value of the chip itself. As Lord Goff explained in *Lipkin*, if the issuing party refused to redeem the casino chips for the money spent to acquire them, they would be in breach of contract. Quantum of damages would be simple because the chips had a fixed value to begin with and this was not anticipated to change. In contrast, cryptocurrency's user-assigned value is known and expected to shift with its market, and quantum would be by reference to the market rate of the cryptocurrency at the time of redemption. In other words, the analysis in *Lipkin* remains relevant to the trade of cryptocurrency; its volatility is not an issue.

Without affirmative and unequivocal recognition by either legislators or the courts of value in cryptocurrency, it cannot be said to be anything more than a mark that the parties themselves consider valuable, and which is otherwise legally worthless. Attempting to justify the recognition of legal value in cryptocurrency tokens in the same way as consumer tokens is therefore prone to difficulty, because while they may have value to their users, and might be traded by those users, they seemingly have no value in the eye of the law. Moreover, as Bayern has observed in the context of Bitcoin, ownership of a crypto token "does not in itself confer a legal right against participants in the [cryptocurrency] system". Unlike other forms of intangible property such as shares or stocks, ownership of a cryptocurrency token does not imbue its owner with transactional rights (such as a right to receive a dividend). What it confers is knowledge of a private key which enables the transfer of cryptocurrency from one account to another. But that transfer is contingent on the consensus of the other participants in the relevant blockchain network. Those other participants can freely ignore your requested transaction and even dispute your ownership of crypto tokens. As Bayern explains:

[T]he [cryptocurrency] system works only because there are mathematically verifiable ways to convince other honest users of the software that my own [crypto tokens] represent a legitimate stake (and because there is a social trust that enough honest people will continue to run the [cryptocurrency] software). But, for example, if all the current participants in [the network] chose not to run the [cryptocurrency] software, or if individual participants ran modifications of the software that operated on rules different from those that I initially understood, it is unlikely I have any recourse. In this sense, a [crypto token] is not a right against the other users (qua users) of the ... network.\*

If a crypto token is essentially an unguaranteed authority to request cryptocurrency transfers, then it must be illusory, notwithstanding that its users still see it as valuable.

There is an additional and significant problem in equating the subjective value attributed to cryptocurrency by its users with its true legal value. The common law has for almost two centuries

<sup>83</sup> See, eg, Eliza Mik, "Smart Contracts: A Requiem" (2019) 36 Journal of Contract Law 70, 82: "The parties can exchange money for goods, peppercorns for cars and bitcoins for crypto-assets. Irrespective of their controversial legal status in some jurisdictions, bitcoins or tokens can constitute valid consideration."

<sup>84</sup> Lipkin Gorman (a firm) v Karpnale [1991] 2 AC 548, 576.

<sup>85</sup> Shawn Bayern, "Dynamic Common Law and Technological Change: The Classification of Bitcoin" (2014) 71(2) Washington and Lee Law Review Online 22, 31.

<sup>86</sup> Bayern, 85, 31.

<sup>87</sup> Bayern, 85, 32.

<sup>88</sup> Bayern, 85, 32-33.

rejected the "moral" basis for consideration." This contrasts with the approach in civil law jurisdictions, which do not recognise the concept of consideration and instead endorse the doctrine of *causa promissionis*. The *causa* doctrine has regard to the underlying reasons or motivations of the parties in determining whether their respective promises are worthy of legal enforcement. The decisive factor is the purpose for which each promise was made; "not the immediate, personal motive of the actual promisor, but an abstract conventional purpose recognized by the law for the type of contract promise intended". In this sense, the parties' subjective evaluations of the consideration they have put forward arguably play a more significant role under the *causa* doctrine, because that doctrine frames its analysis by reference to the parties' motives.

The common law approach is by far the more restrictive in the sense that the parties' motives are wholly disregarded when deciding if a promise carries legal weight. The fact the parties themselves see value in whatever it is they are exchanging is entirely irrelevant to the question of whether the law will enforce the mutual promises facilitating that exchange. If X finds a (worthless) rock in his garden and considers it to be worth \$1 million, the fact that Y agrees with this estimation and willingly pays X the \$1 million asking price does not mean that the rock has a legal value of \$1 million; it means the parties were satisfied with the bargain they struck, no matter what the law might say about it. Adequacy, like beauty, lies in the eye of the beholder, but it is the eye of the common law through which legal sufficiency is measured, and that eye would never sensibly see \$1 million value in a rock that was not a precious mineral or gemstone, or otherwise possessing some unique quality. It might well be classifiable as property under the traditional common law tests, but something can be property without constituting valid consideration to support a contract.\*

A sale of a firearm – a tangible chattel, which is clearly property – from a licensed supplier to an unlicensed purchaser, for example, would be unlawful under the relevant gun laws in effect. It would therefore amount to illusory consideration for want of legality. Similarly, the sale of a narcotic – again, a tangible chattel, which is clearly property – without one of very few instances of authority to do so (such as where it is for analysis or research) would constitute trafficking and be entirely unlawful under controlled substances legislation. Again, though the property is exchanged through contract, such an agreement would be invalid given that narcotics are, for common sale purposes, illegal. They therefore lack sufficient legal value acconsideration to support a contract. Carter accurately summarises the relevant principle like so:

Since the law cannot contemplate as valuable something which is illegal, there is a general requirement that the consideration put forward to support a promise must, at least, be lawful. A promise the performance of which would necessarily be illegal is no consideration.  $^{\infty}$ 

The case law also reflects the axiomatic proposition that if consideration is itself unlawful then so too must be any contractual promise to exchange it. As Lord Esher explained in *Kearney v Whitehaven* 

 $<sup>^{89}</sup>$  Eastwood v Kenyon (1840) 11 Ad & E 438; 113 ER 482.

<sup>90</sup> James Gordley, The Enforceability of Promises in European Contract Law (CUP, 2001) 10.

<sup>91</sup> Malcolm S Mason, "The Utility of Consideration - A Comparative View" (1941) 41(5) Columbia Law Review 825, 826.

<sup>&</sup>lt;sup>92</sup> Paul Babie et al, "Cryptocurrency as Property: Ruscoe v Cryptopia Ltd (in liq) [2020] NZHC 728" (2020) 28 Australian Property Law Journal 106, 120.

<sup>&</sup>lt;sup>93</sup> In the Australian context, for example, State and Territory gun laws prohibit the sale of a firearm to someone who does not hold an appropriate permit. As an illustration, see Firearms Act 2015 (SA) s 22.

<sup>94</sup> See, eg, Drugs, Poisons and Controlled Substances Act 1981 (Vic) Pt V.

<sup>95</sup> It is critically important to distinguish legal value from street value. The latter is entirely subjective and attributed to the consideration in question by its users (much like cryptocurrency). It is not commensurate with legal value.

<sup>96</sup> JW Carter, Contract Law in Australia (LexisNexis, 6th ed, 2013) 124. The author uses yet another example of a contract to murder. A contract killer, he rightly points out, "could hardly put forward the promise to kill as a legally valid consideration."

<sup>&</sup>lt;sup>97</sup> See, eg, Kearney v Whitehaven Colliery Co [1893] 1 QB 700, 711; Kerridge v Simmonds (1906) 4 CLR 253, 263–264; McFarlane v Daniel (1938) 38 SR (NSW) 337, 344–345; Fullerton Nominees Pty Ltd v Darmago [2000] WASCA 4, [34]; Zhang v Yan [2021] FCA 905, [113].

Colliery Co, "[i]f the consideration, or any part of it, is illegal, then every promise contained in the agreement becomes illegal also, because in such a case every part of the consideration is consideration for the promise." Cryptocurrency is not illegal, though, as with property that is illegal, and notwithstanding that those exchanging it subjectively see value in it, it lacks sufficient value in the eyes of the law in order to constitute legal consideration.

Compounding the difficulty in elucidating the legal value of cryptocurrency is the fact that the leading authorities confirming cryptocurrency's status as legal property have not addressed, directly at least, the related consideration question. In B2C2 Ltd v Quoine Pte Ltd,<sup>50</sup> Thorley IJ, sitting in the Singapore International Commercial Court, determined that Bitcoin was a form of property but did not question its capacity to constitute consideration. His Honour did imply that no such issues presented themselves, speaking to the various contractual relationships existing in that case and the cryptocurrencies being exchanged through those contracts.<sup>50</sup> The High Court of Justice of England and Wales in AA v Persons Unknown, Re Bitcoin<sup>50</sup> reached the same conclusion as to Bitcoin's status as property but also avoided any discussion of contractual issues.

One of the most recent decisions in the common law world considering private law's application to cryptocurrency is *Ruscoe and Moore v Cryptopia Ltd (in liq)*.\*\*\* Established in 2014, Cryptopia was a New Zealand based company operating a cryptocurrency exchange which traded in more than 900 cryptocurrencies. Following a hack of its servers in January 2019, Cryptopia's shareholders resolved, four months later, to place the company into liquidation, with estimated holdings of NZ\$170 million. The liquidators (applicants) sought directions as to whether (1) the cryptocurrency holdings were an asset of the company for the purposes of the *Companies Act 1993* (NZ); (2) that cryptocurrency was held on trust for the accountholders. Cryptopia's creditors argued that both questions should be answered in the negative.

Gendall J, sitting in the High Court of New Zealand, deemed cryptocurrencies "a species of intangible personal property and clearly an identifiable thing of value" which was unquestionably "capable of being the subject matter of a trust". "His Honour was satisfied that cryptocurrency satisfied the established common law tests for identifying "property" and that it was property the kind of which could be held on trust like a range of other assets such as shares, licences and copyrighted works. "The cryptocurrency holdings were a company asset. His Honour further held that Cryptopia was indeed a trustee for the accountholders of the cryptocurrency it held for those parties." The elements of an express trust were established.

The question of whether consideration subsisted in the disputed cryptocurrency did not arise in this case and so it went unanswered. However, Gendall J made a number of pertinent observations which do imply that sufficient legal value can be found in cryptocurrency. First, as mentioned earlier, his Honour

 $<sup>^{98}</sup>$  Kearney v Whitehaven Colliery Co [1893] 1 QB 700, 711.

<sup>99</sup> B2C2 Ltd v Quoine Pte Ltd [2019] SGHC(I) 03.

 $<sup>^{100}\</sup> B2C2\ Ltd\ v\ Quoine\ Pte\ Ltd\ [2019]\ SGHC(I)\ 03, [126]-[132].$ 

<sup>101</sup> AA v Persons Unknown, Re Bitcoin [2019] EWHC 3556 (Comm).

 $<sup>^{102}\,</sup>Ruscoe$  and Moore v Cryptopia Ltd (in liq) [2020] NZLR 809.

<sup>&</sup>lt;sup>103</sup> Ruscoe and Moore v Cryptopia Ltd (in liq) [2020] NZLR 809, 843-4 ("The most that could be said is that cryptocoins might have to be classified as choses in action"). Similar statements as to cryptocurrency being a "thing of value" can be found in B2C2 Ltd v Quoine Pte Ltd [2019] SGHC(I) 03, [142] and AA v Persons Unknown, Re Bitcoin [2019] EWHC 3556 (Comm), [59].

 $<sup>^{104}</sup>$  Ruscoe and Moore v Cryptopia Ltd (in liq) [2020] NZLR 728, 831. His Honour's reasoning for these findings is contained in the subsequent pages of the judgment.

 $<sup>^{105}</sup>$  Ruscoe and Moore v Cryptopia Ltd (in liq) [2020] NZLR 728, 831-39, 843, 846 .

 $<sup>^{106}</sup>$  Ruscoe and Moore v Cryptopia Ltd (in liq) [2020] NZLR 728, 835-37.

<sup>107</sup> Ruscoe and Moore v Cryptopia Ltd (in liq) [2020] NZLR 728, 846-56.

regarded the cryptocurrency as property, branding it a "thing of value"." This seems to confirm legal value. However, his Honour's analysis was in the context of property law, not contract. As the firearm and narcotics sale examples earlier demonstrate, something can have value for the purpose of recognition as property without having value for the purpose of being consideration to support a contract. Stronger support for the notion of cryptocurrency having legal value is found in his Honour's response to the creditors' argument that cryptocurrency tokens "are just a type of information ... [which] is not property". His Honour dismissed this argument and notably spoke indirectly to their inherent

The whole purpose behind cryptocurrencies is to create an item of tradeable value not simply to record or to impart in confidence knowledge or information. Although cryptocoins are not backed by the promise of a bank, the combination of data that records their existence and affords them exclusivity is otherwise comparable to the electronic records of a bank. The use of the private key also provides a method of transferring that value. This might be seen as similar in operation to, for example, a PIN on an electronic bank account. And, generally, as I see it, cryptocoins are no more mere information than the words of a

Again, though speaking in the context of the recognition of cryptocurrency as property, Gendall J's remarks do imply that a crypto token has objective value transcending that attributed to it by its users, notwithstanding that it is not fiat currency. His Honour went on to rightly observe that crypto tokens are fundamentally comprised of data on a blockchain." That being so, it is arguable that the "right" to transfer this data meets the definition of consideration offered by Lush J in Currie v Misa" and therefore amounts to legally sufficient consideration.113 But even this commentary falls short of affirmative recognition of the legal value of cryptocurrency. In a somewhat similar vein, scholars have suggested that the inherent value of a cryptocurrency lies in the sum of its properties, such as its underlying software, the energy required to mine it, and its capacity to operate as a fiat currency does." To date, however, the courts have not explicitly considered this.

There is no Australian case directly addressing the issue of the legal value of cryptocurrency. However, the Australian Taxation Office (ATO) has confirmed that disposals of cryptocurrency and resulting in profit are subject to capital gains tax. 115 In addition, the provision of cryptocurrency by an employer to an employee in respect of their employment is a property fringe benefit and attracts fringe benefit tax." When held for the purposes of sale or exchange in the ordinary course of business, cryptocurrency is "trading stock" for the purposes of the Income Tax Assessment Act 1997 (Cth) and is subject to trading stock rules.117 In terms of employment, employers can only remunerate employees in cryptocurrency if

<sup>108</sup> Ruscoe and Moore v Cryptopia Ltd (in liq) [2020] NZLR 728, 831.

<sup>109</sup> Ruscoe and Moore v Cryptopia Ltd (in liq) [2020] NZLR 728, 844.

<sup>110</sup> Ruscoe and Moore v Cryptopia Ltd (in liq) [2020] NZLR 728, 844 (emphasis added).

<sup>111</sup> Ruscoe and Moore v Cryptopia Ltd (in liq) [2020] NZLR 728, 844-5.

<sup>112</sup> Recall his Honour's words: "[a] valuable consideration, in the sense of the law, may consist in some right" (emphasis added).

<sup>113</sup> For academic support for the idea of data constituting legal consideration, see, eg, Carmen Langhanke and Martin Schmidt-Kessel, "Consumer Data as Consideration" (2015) 4(6) Journal of European Consumer and Market Law 218; Cemre Bedir, "Contract Law in the Age of Big Data" (2020) 16(3) European Review of Contract Law 347.

<sup>114</sup> Treiblmaier, n 65.

<sup>115</sup> Australian Taxation Office, Transacting with Cryptocurrency (30 March 2020) <a href="https://www.ato.gov.au/general/gen/tax-1020">https://www.ato.gov.au/general/gen/tax-1020</a> treatment-of-crypto-currencies-in-australia---specificallybitcoin/?anchor=Transactingwithcryptocurrency#Transactingwithcryptocurrency≥; Australian Taxation Office, TD 2014/26 (17

<sup>&</sup>lt;sup>116</sup> Australian Taxation Office, TD 2014/28 (17 December 2014).

<sup>117</sup> Australian Taxation Office, TD 2014/27 (17 December 2014).

the employee has a valid salary sacrifice arrangement in place. <sup>118</sup> ASIC has analogised certain types of cryptocurrency with common financial instruments, such as shares and derivatives, and accordingly issued rules governing their use. <sup>19</sup> All of this bespeaks the law's recognition of cryptocurrency as a form of property which can *attain* value, but it does not necessarily recognise value in the cryptocurrency itself. <sup>19</sup>

It is clearly onerous to attempt to elucidate the inherent legal value (if any) of cryptocurrency. Judicial scrutiny of cryptocurrency to date has been framed within the separate inquiry as to its status as legal property. While inferences can be drawn from some of the case law, there is no authoritative attestation of cryptocurrency's legal value. There appears to be a collective assumption among the more than 100 million global users of cryptocurrency: that it holds such value, meaning the question does not arise in pleadings when disputes reach the courts. This alone supports the case for clarification by any of the arms of government. "[W]e cannot", Straus and Cleary submit, "simply throw our hands up and say that something that is being valued in the market is really nothing at all." The next Part of this article considers the importance of attaining clarity and how it might be effectuated.

#### IV. TIMELY CAUTION AND IDEAS FOR REFORM

The question of whether cryptocurrency has intrinsic legal value is not purely academic; it has substantial and far-reaching implications. If cryptocurrency has no legal value at common law, then any contracts for its exchange are unenforceable. For the most popular cryptocurrencies alone, some eight million trades occur each day, and the global crypto market encompassing all cryptocurrencies has an estimated capitalisation of US\$2.47 trillion at October 2021. A judicial finding that cryptocurrency does not amount to sufficient consideration would therefore clearly have extraordinary fiscal consequences. It would retrospectively invalidate countless transfers and dismantle the theoretical framework supporting the cryptocurrency market.

Moreover, if cryptocurrency is to be seen as a legitimate alternative to fiat currencies, then the consideration conundrum must be overcome. Even those who deny the conundrum is real would accept that a clearer and more uniform approach to crypto regulation is both necessary and desirable. The consideration conundrum is just one of many uncertainties surrounding cryptocurrency and its compatibility with existing legal frameworks. These uncertainties are growing in number, as are the calls for urgent law reform in this space, particularly in the Australian context. In its Second Interim Report of April 2021, the Senate Select Committee on Australia as a Technology and Financial Centre recognised the "clear appetite for improved clarity and certainty in the regulatory landscape applicable to digital

<sup>&</sup>lt;sup>118</sup> Australian Taxation Office, Transacting with Cryptocurrency, n 115. It is highly doubtful that ordinary wages can be paid in cryptocurrency under current laws: see Craig Cameron, "The Regulation of Cryptocurrency to Remunerate Employees in Australia" (2020) 33 Australian Journal of Labour Law 157.

<sup>&</sup>lt;sup>119</sup> See Michael Bacina and Sina Kassra, "ASIC Guidance on Cryptocurrency Sales: A Ban or Sensible Regulation?" (2017) 39
Banking and Technology Law 86. See also Australian Securities and Investments Commission, "Initial Coin Offerings and Crypto Assets" (Information Sheet 225, May 2019).

<sup>120</sup> Speaking in the context of Bitcoin, the Australian Taxation Office noted in TD 2014/26 (17 December 2014), [18] that this cryptocurrency is generally either used "as a means of exchanging it for something of value", or kept as a tool for "speculative investment".

<sup>121</sup> Harry Robertson, The Estimated Number of Global Crypto Users Has Passed 100 Million – and Boomers Are Now Getting Drawn to Bitcoin too, Reports Find (25 February 2021) Business Insider <a href="https://www.businessinsider.com.au/crypto-users-pass-100-million-boomers-gen-x-bitcoin-btc-ethereum-2021-2">https://www.businessinsider.com.au/crypto-users-pass-100-million-boomers-gen-x-bitcoin-btc-ethereum-2021-2</a>.

<sup>122</sup> This is to be expected given the parties to such disputes would have interests in cryptocurrency and would therefore avoid seeking to challenge its legitimacy.

<sup>123</sup> Ryan J Straus and Matthew J Cleary, "The United States" in Stuart Hoegner (ed), The Law of Bitcoin (iUniverse, 2015) 178.

<sup>124</sup> Statista, Number of Daily Transactions in Bitcoin, Ethereum and 11 Other Cryptocurrencies From January 2017 to September 13, 2021 (14 September 2021) <a href="https://www.statista.com/statistics/730838/number-of-daily-cryptocurrency-transactions-by-type/">https://www.statista.com/statistics/730838/number-of-daily-cryptocurrency-transactions-by-type/>.

<sup>125</sup> CoinMarketCap, Total Cryptocurrency Market Cap (17 October 2021) <a href="https://coinmarketcap.com/charts/">https://coinmarketcap.com/charts/</a>>.

assets, cryptocurrencies and related areas" and acknowledged the need for regulation. However, it also lamented the lack of "concrete ideas" for how to best craft this regulation, indicating it would make this a focus of its deliberations during the final phase of the inquiry. The Committee's final report, published in October 2021, noted Australia's need for "a robust policy and regulatory framework for digital assets, in order to protect consumers, promote investment in Australia and deliver enhanced market competition".

A helpful review of international approaches to cryptocurrency regulation published by the UN's Economic and Social Commission for Asia and the Pacific in 2018<sup>10</sup> identified a typology of five general regulatory options from most to least permissive: (1) provision of information and use of moral suasion (eg distribution of research, guidance, and warnings to the market); (2) regulation of specific entities (eg introduction of rules concerning financial reporting, consumer protection etc. and applying to regulatory authorities); (3) interpretation of existing regulations (eg adaptation of current laws to accommodate cryptocurrency); (4) broader regulation (eg development of custom regulations that "cover the field" of financial regulation generally and encompass cryptocurrency as a part of this); and (5) prohibition (eg outright ban on cryptocurrency transactions and exchanges, and a broader denial of any form of legal recognition).

Global regulatory approaches differ greatly and endorse any number of these options, with countries such as the United States attempting regulation of specific entities and application of existing legal frameworks and others such as China favouring prohibition. Common to all is the struggle to bring digital assets such as cryptocurrency within a suitable regulatory framework. \*\* Australia appears to have endorsed the second option described above and proactively regulated specific entities, such as by extension of anti-money laundering and counter-terrorism financing laws to include cryptocurrency providers as reporting entities. \*\* As discussed earlier in this article, the ATO and ASIC, among others, have also issued their own rules around the use of cryptocurrency, though there remains \*no legitimate regulatory framework around cryptocurrencies in Australia\*\*. \*\* Influential international NGO the World Economic Forum (WEF) recently observed that an increasing number of countries are introducing more permissive laws and regulations. \*\* It added that the creation of more precise and clear rules would not only promote legal certainty but also foster market confidence in cryptocurrency and encourage investment, leading to economic growth. \*\* Any regulatory model, it submits, should be proportionate, flexible, and risk-based.

Some commentators advocate for a self-regulatory approach to cryptocurrency regulation. Lim, for example, recommends a model involving "the setting, policing, and enforcement of standards governing firms or individuals within an industry by private actors or industry professionals, rather than by external

<sup>&</sup>lt;sup>126</sup> Senate Select Committee on Australia as a Technology and Financial Centre, Parliament of Australia, Second Interim Report (April 2021) 138.

<sup>&</sup>lt;sup>127</sup> Senate Select Committee on Australia as a Technology and Financial Centre, n 126.

<sup>128</sup> Senate Select Committee on Australia as a Technology and Financial Centre, Parliament of Australia, n 67, 133 [6.5].

<sup>&</sup>lt;sup>129</sup> Yasmin Winther De Araujo Consolino Almeida and Jose Antonio Pedrosa-Garcia, "Regulation of Cryptocurrencies: Evidence from Asia and the Pacific" (Working Paper Series, Macroeconomic Policy and Financing for Development Division, UN Economic and Social Commission for Asia and the Pacific, August 2018).

<sup>130</sup> Senate Select Committee on Australia as a Technology and Financial Centre, Parliament of Australia, n 67, 134 [6.7].

<sup>&</sup>lt;sup>131</sup> For example, Anti-Money Laundering and Counter-Terrorism Financing Act 2006 (Cth) Pt 6A requires providers of DCE services to be registered and comply with associated obligations under the Act. Section 76A also makes it an offence for a person to provide a registrable DCE service to another person if they are unregistered.

<sup>&</sup>lt;sup>132</sup> Arthur Marusevich, "The Uncertainty of Cryptocurrency Regulation" (2021) 260 Ethos: Law Society of the ACT Journal 26, 29.

<sup>&</sup>lt;sup>133</sup> World Economic Forum, Global Future Council on Cryptocurrencies, "Navigating Cryptocurrency Regulation: An Industry Perspective on the Insights and Tools Needed to Shape Balanced Crypto Regulation" (Community Paper, September 2021) 18– 23

<sup>134</sup> World Economic Forum, n 133, 23.

public regulators". Lim's view is that such a model lowers monitoring and enforcement costs, vests control in self-regulatory bodies with more technical expertise compared to external regulators, and incentivises voluntary compliance by, and collaborative efforts from, the industry. Others are not so confident in this approach. Spithoven forcefully recommends regulation and supervision of cryptocurrency through external institutions, largely because the industry participants which would otherwise be vested with regulatory authority (such as financial institutions) are subject to many failures and vulnerable to criminal attack. The supervision of the s

The courts, restrained both by their constitutional authority and by the pleadings of the cases that come before them, are clearly not a viable option to drive change. Any significant legal reform seeking to regulate cryptocurrency should be statutory in nature and derive from the Parliament. One issue with this is adaptability. Turpin has observed how legislatures the world over are struggling to keep pace with the growth of cryptocurrency and its applications, stultifying regulatory efforts. The A feasible compromise might be a form of "code" or other instrument created through delegated legislation and enforced by existing regulatory bodies such as ASIC, the current financial services regulator. This code could, among other things, stipulate clearly what the status of cryptocurrency is and categorically resolve the consideration conundrum.

It is argued that this is the most viable option. Delegated legislation is far simpler to create and amend than primary legislation, <sup>150</sup> and conferring responsibility for any regulatory instrument governing cryptocurrency upon ASIC harnesses its expertise. As Tsindeliani and Egorova note, cryptocurrency uniquely crosses a number of fiscally-oriented fields, such as payments, securities and property, meaning appropriately equipped regulatory bodies with relevant jurisdiction are best placed to manage it. <sup>150</sup> Presumably, having ASIC lead crypto regulation would ensure prudent oversight and enable the more expedient investigation and resolution of disputes. An added advantage is the avoidance of painfully trying to amend and retrofit countless existing statutes which might indirectly provide a basis for reform (such as the various financial, corporate, tax, and technology laws). Sitting idle and attempting to fashion some amorphous framework from the context-specific rules that have been developed to date is inefficient and reactive.

In whatever form regulation comes, it is imperative that the consideration conundrum be addressed. Any legal instrument with statutory force designed to comprehensively regulate the status and use of cryptocurrency in the Australian context should prioritise explicitly stipulating how cryptocurrency is to be legally treated. The common law courts have already accepted cryptocurrency as property, but as discussed in this article, none have specifically and unambiguously resolved the consideration conundrum and stated that cryptocurrency also has sufficient legal value to constitute consideration to support a contract. It is certainly implied in the only cases examining cryptocurrency contracts to date, <sup>10</sup>

<sup>135</sup> Jonathan W Lim, "A Facilitative Model for Cryptocurrency Regulation in Singapore" in Lee Kuo Chen, n 8, 376–377.

<sup>&</sup>lt;sup>136</sup> Antoon Spithoven, "Theory and Reality of Cryptocurrency Governance" (2019) 53(2) Journal of Economic Issues 385.
Compare Nabilou, who supports vesting regulatory authority in financial intermediaries: Hossein Nabilou, "How to Regulate Bitcoin? Decentralized Regulation for a Decentralized Cryptocurrency" (2019) 27 International Journal of Law and Information Technology 266.

<sup>&</sup>lt;sup>137</sup> Jonathan B Turpin, "Bitcoin: The Economic Case for a Global, Virtual Currency Operating in an Unexplored Legal Framework Operating in an Unexplored Legal Framework" (2014) 21(1) Indiana Journal of Global Legal Studies 335. See also Cecilia Anthony Das, Krishna Prasad and Shibley Sadique, "Cryptocurrency: A Bit Unregulated?" (Conference Paper, International Conference on Business and Banking, 19 July 2018) 3.

<sup>&</sup>lt;sup>138</sup> ASIC already enforces and monitors compliance with codes governing various aspects of finance, such as the Banking Code of Practice and the ePayments Code.

<sup>&</sup>lt;sup>139</sup> Stephen Argument, "Delegated Legislation" in Matthew Groves (ed), Australian Administrative Law (CUP, 2007) 134, 134–135.

<sup>&</sup>lt;sup>140</sup> I Tsindeliani and M Egorova, "Cryptocurrency as Object of Regulation by Public and Private Law" (2020) 11(3) Journal of Advanced Research in Law and Economics 1060, 1068.

<sup>&</sup>lt;sup>141</sup> This is indirectly by the courts' acceptance of cryptocurrency as property which, as traditionally defined, is a thing "of value". See Ruscoe and Moore v Cryptopia Ltd (in liq) [2020] NZLR 728; B2C2 Ltd v Quoine Pte Ltd [2019] SGHC(I) 03); AA

but the precise question has not been raised nor answered. Even detractors who reject the consideration conundrum would accept that a clearer and more uniform approach to crypto regulation, and one which clarifies the many legal uncertainties surrounding this new technology (even if they feel the answers to particular problems suggests themselves), is both necessary and desirable.

Parliament is not at all unfamiliar with introducing targeted statutory reforms that clarify lingering uncertainties arising at the intersection of technology and contract law. For example, in February 2011, the *Electronic Transactions Amendment Bill 2011* (Cth) was introduced to amend the *Electronic Transactions Act 1999* (Cth) (*ETA*) and provide "legal certainty" in the response to the "challenges of existing, new and emerging technologies". The consequent suite of amendments addressed specific questions that had arisen in practice and remained unanswered for the decade that had passed since the passage of the *ETA*. One such question was whether a contract could still be legally valid where it was formed by a computer without the intervention of a natural person. Section 15C was therefore introduced to specifically answer this question and clarify that a contract formed by (1) the interaction of an automated message systems" and a natural person; or (2) the interaction of automated message systems "is not invalid, void or unenforceable on the sole ground that no natural person reviewed or intervened in each of the individual actions carried out by the automated message systems or the resulting contract".

It is envisaged that a regulatory "code" or similarly structured instrument – perhaps ideally created through delegated legislation, as suggested above – could provide specific and meaningful guidance in this manner and sweep up as many of the known questions and uncertainties regarding cryptocurrency as possible. Alongside the consideration conundrum, other questions which beg for incontrovertible answers include whether and how the many unique types of cryptocurrencies that exist are to be taxed, which parties can create and trade cryptocurrencies and under what conditions, what sort of "property" cryptocurrency actually is, how cryptocurrencies can be legally used, and what protections and remedial options are available to aggrieved cryptocurrency users. Given the rapidly growing popularity of cryptocurrencies and the central place of contracts in modern commerce, it is submitted that the consideration conundrum is at the forefront of these issues.

#### V. CONCLUSION

This article has sought to challenge the blind assumption that cryptocurrency has legal value which is sufficient in the eye of the law and enables it to constitute consideration supporting a contract. The common law's methodology for quantifying legal value is, admittedly, obscure, though it has always stressed objectivity. Cryptocurrency does not appear to comfortably satisfy the various common law principles informing this evaluative process; its value would seem to derive exclusively from its users, which is not ample. This conundrum is one of many uncertainties plaguing cryptocurrency and leaving the law in a state of incertitude. The Senate Select Committee on Australia as a Technology and Financial Centre's final report contains a total of 12 recommendations, all of which propose unique prefatory measures that pave the way for the development of a more refined regulatory framework.<sup>16</sup>

v Persons Unknown, Re Bitcoin [2019] EWHC 3556 (Comm). These cases, and the relevant aspects of the respective judgments in each speaking to this point, are discussed in Part III.

<sup>&</sup>lt;sup>142</sup> Commonwealth, Parliamentary Debates, House of Representatives, 9 February 2011, 134 (Robert McClelland, Attorney-General). The suite of amendments was said to reflect the "better understanding of the use of electronic communications" that had developed since the initial Act was introduced.

<sup>&</sup>lt;sup>143</sup> Commonwealth, Parliamentary Debates, House of Representatives, 9 February 2011, 134 (Robert McClelland, Attorney-General).

<sup>&</sup>lt;sup>144</sup> This term is defined in *Electronic Transactions Act 1999* (Cth) s 5 as "a computer program or an electronic or other automated means used to initiate an action or respond to data messages in whole or in part, without review or intervention by a natural person each time an action is initiated or a response is generated by the system".

<sup>145</sup> Senate Select Committee on Australia as a Technology and Financial Centre, Parliament of Australia, n 67, 133–145.
Although none of the recommendations seem to precisely address the consideration conundrum, the proposed "token mapping

