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Trustees' investment duties and cryptoassets

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In depth

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Tang Hang Wu*

Abstract

This article considers the legal and practical concerns for trustees regarding cryptocurrencies and other related instruments, which will be referred to as ''cryptoassets''. It will briefly introduce the various types of cryptoassets and explore the risks involved when trustees decide to (or not to) invest in these instruments. This article provides a framework on how trustees should approach the issue of cryptoassets.

Introduction

Cryptoassets have been touted as a potentially disrupting force which will forever change the world of finance, banking and various other industries. While some of these claims are certainly overhyped,[1] trustees who oversee large trust funds should be thinking and formulating policies in relation to cryptoassets even if they ultimately decide not to invest in them. *Prima facie*, the topic of trustees' investment duties and cryptoassets might seem like an oxymoron. Trustees are supposed to act like an ordinary prudent person acting for people for whom they feel morally bound to provide.[2] How then can an ordinary prudent person invest in cryptoassets bearing in mind its well-known risky nature? This article does not take the position that trustees should necessarily invest in cryptoassets. But the argument advanced here is that trustees should familiarise themselves with the broad nature of cryptoassets and consider their investment duties in relation to cryptoassets. This is especially acute for trustees operating in jurisdictions like the Cayman Islands, British Virgin Islands and Singapore where billions of dollars of investments have been poured into cryptoassets. A 2018 PWC report states that Initial Coin Offerings (ICO),[3] a form of cryptoasset, have raised USD 4 billion in Cayman Islands, USD 2 billion in British Virgin Islands and USD 1 billion in Singapore.[4] Thus, in these jurisdictions, cryptoassets are a form of potential investment which is readily available in the market and not just a faraway theoretical concept. Even if trustees ultimately take the position not to invest in cryptoassets, such a choice should be reached via a considered decision based on their legal duties. Otherwise, beneficiaries of trusts may allege that the trustees have

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1. Cf. KFK Low & E Mik, ''Pause the Blockchain Revolution'' (2019) ICLQ *forthcoming* for a sceptical view.

2. *Re Whiteley* (1886) 33 Ch D 347 at 355.

3. On ICO see DA Zetzsche, RP Buckley, DW Arner, & L Föhr, ''The ICO Gold Rush: It's a Scam, It's a Bubble, It's a Super Challenge for Regulators'' (24 July 2018) University of Luxembourg Law Working Paper No. 11/2017; UNSW Law Research Paper No. 17-83; University of Hong Kong Faculty of Law Research Paper No. 2017/035; European Banking Institute Working Paper Series 18/2018; Harvard International Law Journal, Vol. 63, No. 2, 2019. Available at SSRN: https://ssrn.com/abstract=3072298 or http://dx.doi.org/10.2139/ssrn.3072298.

4. PWC, ''Initial Coin Offerings: A Strategic Perspective'' (June 2018). Available at https://www.pwc.ch/en/publications/2018/20180628_PwC%20S&%20CVA%20ICO%20Report_EN.pdf. However, the exuberance in relation to ICOs have died down recently.

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breached their duties by missing out on numerous profit opportunities and not growing the trust fund.[5] The issue of investing in cryptoassets may also arise if a number of beneficiaries request the trustees to invest in cryptoassets. Or it could arise in a trust where the investment power was reserved by the settlor and the settlor directs the trustee to invest in cryptoassets. In these circumstances, the trustees would have to grapple with the law of trustees' investment duties in relation to cryptoassets.

This article considers the legal and practical concerns for trustees regarding cryptocurrencies and other related instruments, which will be referred to as ''cryptoassets''. It will briefly introduce the various types of cryptoassets and explore the risks involved when trustees decide to (or not to) invest in these instruments. This article provides a framework on how trustees should approach the issue of cryptoassets.

This article does not take the position that trustees should necessarily invest in cryptoassets. But the argument advanced here is that trustees should familiarise themselves with the broad nature of cryptoassets and consider their investment duties in relation to cryptoassets

A short introduction to cryptoassets

A ''cryptoasset'' is one of the umbrella terms for the innovative instruments which encompass the well-known cryptocurrencies including Bitcoin and Ethereum all the way down to a digital token to purchase. A cryptoasset is built out of a digital ledger technology.[6] This is a category of technologies which enable decentralised synchronisation of data across a number of machines, without the need for a centralised master data source. The most well-known of such technologies is the blockchain; each new ''block'' of data encodes data about the previous block, and so the entire chain of data is theoretically protected from error or alteration. Among other things, this chain of data can store information such as ''tokens''—units of assigned value—which can be tied to an ''address''. A user can access tokens in a blockchain address assigned to them through a ''private key''—essentially a password, and transfer tokens to other addresses. Hence, it is theoretically possible for such tokens to take on the function which would traditionally be taken on by a national currency; it is touted by supporters as being more secure, confidential and efficient.

There is no agreed definition for what qualifies as a cryptoasset, and how cryptoassets are classified. The United Kingdom's Financial Conduct Authority, for example, uses the following definition:

> ... generally, cryptoassets are a cryptographically secured digital representation of value or contractual rights that is powered by forms of [Digital Ledger Technology] and can be stored, transferred or traded electronically ...[7]

That is, a ''digital ledger technology'', e.g. a blockchain, is the basis for a virtual token, e.g. Ethereum, which is meant to have some general or specific purpose.

The United Kingdom's Financial Conduct Authority[8] classifies cryptoassets as follows: ''exchange tokens'', which are similar in function to a currency and are meant to be used as a medium of exchange; ''security tokens'', which resemble securities similar to shares or debt instruments; and ''utility tokens'', where the tokens are essentially coupons

5. See e.g. *Nestlé v National Westminister Bank plc* [1993] 1 WLR 1260.

6. S Nakomoto, 'Bitcoin: A Peer-To-Peer Electronic Cash System'' (2008) 1. Available at https://bitcoin.org/bitcoin.pdf. See also S Green, ''Cryptocurrencies: The Underlying Technology'' in *Cryptocurrencies in Public and Private Law* (D Fox & S Green, eds), (OUP, 2019) Ch 1; SJ Hughes & Stephen Middlebrook, ''Advancing a Framework for Regulating Cryptocurrency Payments Intermediaries'' (2015) 32 Yale Journal on Regulation 495, 504–505.

7. Financial Conduct Authority, ''Guidance on Cryptoassets'' Consultation Paper, CP 19/3 (January 2019). Available at https://www.fca.org.uk/publication/consultation/cp19-03.pdf.

8. Ibid at 2.5.

used to purchase specific (digital) goods or services. However, these categories might not be neat categories as it may be possible for certain instruments to be ''hybrid tokens'' as they may fulfil more than the requirements of one of the categories described. In fact, this three-fold categorisation is not universal. The University of Cambridge Centre for Alternative Finance, for example, highlights that this classification may not cover all forms of cryptoassets and has suggested a more nuanced and multi-dimensional approach towards classification.[9] For the purpose of this article, the common regulatory approach of ''exchange, security, utility'' will be used; however, there may be more nuance required when it comes to ''hybrid tokens'', or categories of cryptoassets which may fall outside all three.

Exchange tokens: cryptoassets as medium of exchange

A number of tokens attempt to position themselves as a medium of exchange. These tokens will be referred to as ''cryptocurrencies'' or ''exchange tokens''. A further distinction should be made between cryptocurrencies which have the primary function of a currency replacement and are platform-independent, e.g. Bitcoin, and cryptocurrencies which are the basis for transactions on particular platforms, e.g. Ether (on the Ethereum network), which is meant to facilitate ''smart contracts'', theoretically self-executing substitutes for the enforcement mechanisms of contract law.

The baseline for comparison for cryptocurrencies in their function as currency substitutes, as represented by Bitcoin, is the national currency in a stable economy. Persons in that economy are willing to hold cash, or bank balances denominated in that currency. An offer of cash must legally be accepted as payment for debt, and is willingly accepted in exchange for goods and service. It is, in the words of the *Oxford English Dictionary*, ''A system of money in general use in a particular country.''

At present, however, cryptocurrencies do not appear to function well as currency. In a speech on 2 March 2018, the governor of the Bank of England, Mark Carney, described cryptocurrencies as ''failing'' in this function.[10] He identified three major problems with cryptocurrencies as currency: First, a cryptocurrency is a poor store of value due to extreme volatility. Most have no intrinsic value. Secondly, cryptocurrencies are a poor medium of exchange. The fact that users must pay fees for transactions to be processed speedily seriously diminishes their value as a currency; in contrast, an exchange of banknotes has zero transaction fees and is instantaneous. Thirdly, cryptocurrencies are not used as units of account, in part due to the first two problems.

In part to mitigate some of these issues, the ''stablecoin'' has attracted attention in recent months. This is a token which is backed by a pool of other assets in order to minimise volatility in the price of that token. Facebook's proposed Libra is an example of this; the value of Libra is to be backed by short-term government securities and bank deposits in national currencies.[11] Stablecoins are envisaged to be convertible into national currencies through centralised exchanges, unlike the diverse exchanges (with potential fraud risks) with other tokens in this category. However, the potential money laundering and regulatory risks involved with such a project have attracted regulatory disapproval.[12] Even some states have floated the idea of creating asset-backed cryptocurrencies for these advantages. For example, Venezuela has purported to launch a cryptocurrency backed by its commodities production and reserves to mitigate the effects of the ongoing economic crisis

9. A Blandin et al, ''Global Cryptoasset Regulatory Landscape Study'' (16 April 2019). University of Cambridge Faculty of Law Research Paper No. 23/2019. Available at SSRN: https://ssrn.com/abstract=3379219 or http://dx.doi.org/10.2139/ssrn.3379219.

10. M Carney, ''The Future of Money'' Speech Given to the Inaugural Scottish Economics Conference, Edinburgh University (2 March 2018). Available at https://www.bankofengland.co.uk/speech/2018/mark-carney-speech-to-the-inaugural-scottish-economics-conference.

11. Libra Association Members, Libra Whitepaper. Available at https://libra.org/en-US/wp-content/uploads/sites/23/2019/06/LibraWhitePaper_en_US.pdf

12. L Frost, ''France and Germany Agree to Block Facebook's Libra'' *Reuters* (13 September 2019). Available at https://www.reuters.com/article/us-facebook-cryptocurrency-france-german/france-and-germany-agree-to-block-facebooks-libra-idUSKCN1VY1XU.

and hyperinflation, though these tokens do not appear to be trading and have been described as a failure.[13]

The second category of cryptocurrencies, as represented by Ether, function as the medium of exchange for smart contracts. A smart contract is essentially a computer program (which will often be associated with a digital ledger/blockchain) which facilitates a contract. The Ethereum blockchain, which distributes the Ether token, is itself a platform for such software applications, and the Ether tokens can be used to fulfil obligations under the smart contract and/or pay for computation time.

Security tokens: cryptoassets as securities

Another form of cryptoasset is what has been broadly termed ''security tokens''. These are tokens which have similar functions to a financial security, e.g. a share in the company issuing the cryptoasset, or proof of a loan, and are largely regulated in similar (if not the same) manner. For example, the Monetary Authority of Singapore requires any digital token which falls within the definition of a ''capital markets product'' as defined in legislation to comply with existing securities regulation rules.[14] The value of such a token is its function as an investment product. The holder of such a token may have a right to demand repayment of a specified sum of money from the company, or to receive dividends.

Utility tokens: cryptoassets as coupons

A utility token is essentially pre-payment for a service. Such tokens permit holders to access a particular service, which is usually distributed and decentralised in some way. For example, a file storage service could operate as follows:

- Persons with data storage available offer their free space.
- Tokens are generated and sold to persons (the ''Initial Coin Offering'').
- These tokens are traded (perhaps for national currencies or other cryptoassets) until a person who wishes to use data storage uses the token to access the service.
- The token is paid to the person providing the file storage.
- The person providing the file storage sells the token on.

The value of the token is essentially the value of the service which the token is to be exchanged for, and in theory, is tradeable for other tokens or national currencies based on that valuation.

A preliminary question: what is the legal nature of a cryptoasset?

A preliminary question that is often asked is this: what is the legal nature of a cryptoasset? Is cryptoasset a form of property in law? More specifically, if a cryptoasset is not legally considered to be a form of property, then does it mean trustees must necessarily be precluded from investing in cryptoassets? The issue whether a cryptoasset is considered to be property is presently a contested question in the legal world and this article does not propose to resolve the debate. Ultimately, whether cryptoassets are regarded as property may differ from one jurisdiction to the next. However, it is this author's contention that that the correct question to be asked is not whether cryptoassets are a form of property but whether the trust deed permits an investment in cryptoassets. If this is the correct analysis, then the issue of whether a cryptoasset is a form of property is a red herring, at least in this context. In this section, the author will outline the current controversy in relation to this

13. A Brown, ''Venezuela's Failed Cryptocurrency Is the Future of Money'' *Bloomberg* (10 May 2019). Available at https://www.bloomberg.com/news/articles/2019-05-10/venezuela-s-failed-cryptocurrency-is-the-future-of-money.

14. Monetary Authority of Singapore, *A Guide to Digital Token Offerings* (5 April 2019). Available at https://www.mas.gov.sg/-/media/MAS/Regulations-and-Financial-Stability/Regulations-Guidance-and-Licensing/Guide-to-Digital-Tokens-Offering-last-updated-on-5-April-2019.pdf

issue and develop the argument that this thorny question is not relevant in terms of the trustees' investment powers if the trust deed specifically permits the investment in cryptoassets.

Is cryptoasset a form of property in law? More specifically, if a cryptoasset is not legally considered to be a form of property, then does it mean trustees must necessarily be precluded from investing in cryptoassets?

There are several excellent academic works dealing with the issue whether a cryptoasset should be regarded as property.[15] The main problem with characterising cryptoassets as a form of personal property is that it does not fit within the classic definition of personal property which comprises choses in possession or choses in action.[16] As Professor Fox explains perceptively:

> It is easy to explain why cryptocurrencies cannot be characterized as choses in possession. The data strings comprising the coins are intangible and cannot be physically possessed. The coins consisting in an unspent transactional output are just an ideational entity . . . Neither are cyber-currencies choses in action. This follows from the defining differences between cyber-currencies recorded on a distributed ledger and the conventional currencies that depend on the existence of centralized intermediaries.[17]

Thus, in order for cryptoassets to be regarded as a form of property in law, the courts must be prepared to recognise a third category of property, one which is neither strictly a chose in action or a chose in possession.[18] There are hints from cases in Canada and Singapore that this might happen in the Commonwealth courts. In *Copytrack Pte Ltd v Wall*,[19] the British Columbia Supreme Court allowed a claim for cryptocurrency to be traced. Such a holding implies that cryptocurrencies are regarded as a form of property. Similarly, in *B2C2 Ltd v Quoine Pte Ltd*,[20] a case in the Singapore International Commercial Court, it was argued that a breach of trust had occurred regarding Bitcoins. This argument was accepted by the judge Simon Thorley IJ who observed:

> Quoine was prepared to assume that cryptocurrencies may be treated as property that may be held on trust. I consider that it was right to do so. Cryptocurrencies are not legal tender in the sense of being a regulated currency issued by a government but do have the fundamental characteristic of intangible property as being an identifiable thing of value. Quoine drew my attention to the classic definition of a property right in the House of Lords decision of *National Provincial Bank v Ainsworth* [1965] 1 AC 1175 at 1248:
>
> ''it must be definable, identifiable by third parties, capable in its nature of assumption by third parties, and have some degree of permanence or stability''.
>
> Cryptocurrencies meet all these requirements.

While both these cases do not definitively establish that cryptoassets are regarded as property in law, they certainly hint at the direction which common

15. See e.g. KFK Low & EGS Teo, ''Bitcoins and Other Cryptocurrencies as Property'' (2017) 9 Law, Innovation & Technology 235; D Fox, ''Cryptocurrencies in the Common Law of Property'' in *Cryptocurrencies in Public and Private Law* (D Fox & S Green, eds), (OUP, 2019) Ch 6; M Solinas, ''Bitcoiners in Wonderland: Lessons from the Cheshire Cat'' [2019] LMCLQ 434 at 439; J Sarra & L Gullifer, ''Crypto-claimants and Bitcoin Bankruptcy: Challenges for Recognition and Realization'' (2019) 28 International *Insolvency* Review 233.

16. *Colonial Bank v Whinney* (1885) LR 30 Ch 261 at 285 – 286, adopted (1886) LR 11 App Cas 426.

17. D Fox, ''Cryptocurrencies in the Common Law of Property'' in *Cryptocurrencies in Public and Private Law* (D Fox & S Green, eds), (OUP, 2019) 149.

18. See Sir Geoffrey Vos, ''Cryptoassets as Property: How Can English Law Boost the Confidence of World-
Be Parties to Smart Legal Contracts'', a speech delivered at the Joint Northern Chancery Bar at Association and University of Liverpool Lecture (2 May 2019) at [53].

19. 2018 BCSC 1709.

20. [2019] SGHC(I) 03 at [142]. This decision is currently under on appeal. In this case, it is by no means clear whether the trust over cryptoassets exists in the present facts due to the contested issue of certainty of intention to create a trust.

law courts are likely to take. It may be more difficult to make the argument that cryptoassets are property in the civil law world. In 2015, an attempt was made by users of a bankrupt Japanese Bitcoin exchange, Mt. Gox, to argue that the remaining bitcoins were legally their property. However, the Japanese court rejected this argument, ruling that bitcoins are not regarded as property under the Japanese Civil Code.[21]

The argument advanced in this article is that the issue whether cryptoassets are regarded as property may be addressed by drafting the trustees' investment powers to allow for such investments. The starting point is that a trustee usually hold general powers of investment. Section 3(1) of the English Trustee Act,[22] for example, provides that a trustee "may make any kind of investment that he could make if he were absolutely entitled to the assets of the trust". A similar power is found in section 24 of the Trusts (Jersey) Law 1984: "Subject to the terms of the trust and subject to the trustee's duties under this Law, a trustee shall in relation to the trust property have all the same powers as a natural person acting as the beneficial owner of such property." The statute does not define the term "investment". While an argument may be made that this power of investment does not mean that trustees are permitted to only invest in things that are regarded as property in law, there are parts in the judgment of *Re Wragg*[23] which contradict this position. Lawrence J observed in *Re Wragg*:[24]

> Without attempting to give an exhaustive definition of the words "invest" and "investment" I think that the verb "to invest" when used in an investment clause may safely be said to include as one of its meanings "to apply money in the purchase of some property from which interest or profit is expected and which property is purchased in order to be held for the sake of the income which it will yield"; whilst the noun "investment" when used in such a clause may safely be said to include as one of its meanings "the property in the purchase of which the money has been so applied."

The argument advanced in this article is that the issue whether cryptoassets are regarded as property may be addressed by drafting the trustees' investment powers to allow for such investments

The passage above refers to investment in the context of "purchase of some property". *Prima facie*, this part of the judgment supports the view that trustees are only entitled to invest in things that are considered property. However, Lawrence J was careful to say that this was not an exhaustive definition. Thus, for settlors who wish for their trustees to have the power to invest in cryptoassets, it would be advisable to provide for the trust deed to explicitly allow for investments in cryptoassets regardless whether they are considered to be property or not in law. In order to do so, the trust deed must also allow the trustees to invest in assets which have the potential to appreciate in capital value but does not produce any income. This is because cryptoassets are unlikely to produce income and usually bought for capital appreciation.

Even if trustees are given the power to invest in cryptoassets, this does not mean that they should invest in cryptoassets. Any investments in cryptoassets ought to be made with careful consideration of their usual duties as trustees. In other words, any investment in cryptoassets will be subject to all the usual duties that a trustee has when investing, e.g. portfolio suitability and diversification and ensuring that any appointed investment managers are suitable.

21. The English translation of the judgment is available at https://www.law.ox.ac.uk/sites/files/oxlaw/mtgox_judgment_final.pdf.
22. Trustees Act 2000. Singapore has a similar provision. See section 4(1) of the Trustees Act (Cap 337, 2005 Rev Edn).
23. [1919] 2 Ch 58.
24. [1919] 2 Ch 58 at 64–65.

These duties will be explored in a later part of this article.

Should settlors permit or prohibit investments in cryptoassets?

In light of the uncertainty surrounding the property issue, those who draft trust deeds should have a serious conversation with intended settlors as to whether their trust deeds should explicitly permit or prohibit investments into cryptoassets. For intended settlors who wish for their trustees to have the power to invest in cryptoassets, the trust deed should contain provisions explicitly providing for such an avenue of investment. A clause permitting investments in cryptoassets should make it clear that these investments are allowed notwithstanding the legal uncertainty whether cryptoassets are regarded as a form of property or not. Properly drafted, such a clause should arguably render the property debate otiose in the context of trustees' power to invest in cryptoassets. However, until we have a definitive ruling from the courts, there is some legal risk that the courts may still regard cryptoassets as an unauthorised investment notwithstanding such a clause.

For unadventurous settlors, should those who draft trust deeds advise them to take the conservative approach and prohibit all investments in cryptoassets? While cryptoassets might be seen as a risky venture today, it could become commonplace in the future. As Streisand and Rees observe:

> The authors believe that cryptos and blockchain eventually will be akin to other forms of new technologies and investments that became a part of our daily lives, and could no longer be brushed aside as only for geeks, or at least only something our kids could grasp ... Soon, people will be investing indirectly in cryptos and blockchains as more hedge funds and companies take the plunge. In relatively short order, we believe investment managers will recommend cryptos due to the untapped growth potential in the same that it became difficult to avoid tech stocks during their boom as part of a diversified portfolio.[25]

In future, cryptoassets could become a commonplace investment with less risk associated. Thus, it is the present author's view that it might be unwise to exclude all investments in cryptoassets as this will unnecessarily restrict the trustees' future actions especially if the trust is envisaged to last for a long time.

In future, cryptoassets could become a commonplace investment with less risk associated. Thus, it is the present author's view that it might be unwise to exclude all investments in cryptoassets as this will unnecessarily restrict the trustees' future actions especially if the trust is envisaged to last for a long time

Trustees' investment duties and cryptoassets

Assuming that cryptoassets are legitimate investments in which a trustee is permitted to invest under the trust deed, this brings us back to the question that this article started with: What should a trustee think about when considering any investments in cryptoassets? As a starting principle, trustees are expected to act with diligence and care as an ordinary prudent person of business would exercise in the management of their affairs.[26] Alternatively, a trustee's duties are sometimes stated as the standard an ordinary prudent person would adopt for the benefit of other people he or she felt morally bound to provide.[27] For professional trustees, a higher standard of care is expected i.e. such professional trustees are judged in relation to "any special knowledge or experience that it is

25. See AF Streisand & JD Rees, "Cryptocurrencies and Trustees Duties to Invest Prudently: Navigating Fiduciary Duties in the Age of Decentralization" (2018) 24(3) California Trusts and Estates Quarterly 11 at 17.
26. *Speight v Gaunt* (1883) App Cas 1.
27. *Re Whiteley* (1886) 33 Ch D 347 at 355.

reasonable to expect of a person acting in the course of that kind of business or profession''.[28]

How should professional trustees approach cryptoassets? Streisand & Rees wisely recommend the following approach:

> At a minimum, a trustee must demonstrate, and preferably document, a cogent, prudent thought process that led to the ultimate investment decision. The trustee should be able to explain how the decision to invest in blockchain technology generally was a wise choice, and why the particular crypto or other assets invested in were sensible options.[29]

In formulating a cogent and prudent thought process, it is suggested that the following framework might be useful for trustees contemplating investments in cryptoassets:

- How would a reasonable professional trustee view cryptoassets as an investment?
- Are investments into cryptoassets consistent with the purposes, terms and circumstances of the trust?
- Can cryptoassets be accommodated within the modern portfolio theory?
- How should a proper assessment of the particular cryptoasset be conducted?
- What is the trustees' scope of responsibility if a settlor directs the trustee to invest in cryptoassets pursuant to a reserved power of investment or if a company owned by the trust invests in cryptoassets?
- What is the correct approach if some of the beneficiaries request the trustees to invest cryptoassets?
- What are the steps the trustees should take to ensure that the cryptoassets are in proper custody?
- Are the pre-existing exclusion clauses in the trust deed sufficient to protect trustees who invest in cryptoassets?

In the sections below, some of these questions will be explored.

How would a reasonable professional trustee view cryptoassets as an investment?

At this point in time, it is fair to say that investment into cryptoassets is a risky business. Cryptoassets are subject to hacking risk, 'theft' or loss of private keys and volatile change in value.[30] Given all these risks, cryptoassets may be seen as a form of hazardous investments. Thus, trustees may legitimately take the position that currently it may be too risky to invest directly in cryptoassets. This is consistent with the trustees' duty not to invest in hazardous investments.[31] Therefore, trustees are *prima facie* not entitled to invest in cryptoassets unless there are specific clauses permitting them to invest in cryptoassets and hazardous investments. As Christopher McCall QC, writing in this journal, observed perceptively:

> there are two questions which any trustee has to address in considering whether an investment is a proper investment; he has to consider first the scope of his powers and then as a separate matter the question whether assuming they have sufficient scope to permit the transaction in question it is proper to effect that transaction.[32]

Given all these risks, cryptoassets may be seen as a form of hazardous investments. Thus, trustees may legitimately take the position that currently it may be too risky to invest directly in cryptoassets

28. Section 1(1) Trustees Act 2000. See also *Re Waterman's Will Trust* [1952] 2 All ER 1054.
29. AF Streisand & JD Rees, ''Cryptocurrencies and Trustees Duties to Invest Prudently: Navigating Fiduciary Duties in the Age of Decentralization'' (2018) 24(3) California Trusts and Estates Quarterly 11 at 18.
30. KFK Low & E Teo, ''Legal Risk of Owning Cryptocurrencies'' in *Handbook of Blockchain, Digital Finance and Inclusion* (D Lee & R Deng, eds), (Elsevier, 2017) 225.
31. *Learoyd v Whiteley* (1887) 12 App Cas 727; *Bartlett v Barclays Bank Trust Co Ltd* [1980] Ch 515.
32. C McCall QC, ''A Fine Romance—The Union of Prudence and Risk'' (2009) 15(2) *Trusts & Trustees* 60 at 63.

Thus, to invest in cryptoassets, trustees must ensure that the trust deed permits an investment in cryptoasset *and* hazardous investments. However, even if there are clauses in the trust deed specifically permitting for investments in cryptoassets and allowing for hazardous investments, trustees must then carefully consider the purposes, terms and circumstances of the trust before making such investments. It is to this issue that this article now turns.

Are investments in cryptoassets consistent with the purposes, terms and circumstances of the trust? Can cryptoassets be accommodated within the modern portfolio theory?

The trustees must consider the present and future beneficiaries and the size of the trust fund to determine whether cryptoassets are indeed suitable investments. As Sir Robert Megarry VC observed in *Cowan v. Scargill*:

> The starting point is the duty of trustees to exercise their powers in the best interests of the present and future beneficiaries of the trust ... When the purpose of the trust is to provide financial benefits for the beneficiaries, as is usually the case, the best interests of the beneficiaries are normally their best financial interests. In the case of a power of investment ... the power must be exercised so as to yield the best return for the beneficiaries, judged in relation to the risks of the investments in question ... [33]

Thus, if the trust fund is modest in quantum and the trust is required to maintain a stable source of income for the current beneficiaries without much need for growth, it may not be prudent for trustees to invest in cryptoassets. Investments into cryptoassets may only arguably be justified if the trust portfolio is very large and risk is considered to be acceptable in light of the entire portfolio. As Hoffmann J (as he then was) said in *Nestlé v. National Westminster Bank plc*[34] that an investment is "to be judged by the standard of current portfolio theory, which emphasises the risk level of the entire portfolio rather than the risk attaching to each investment taken in isolation". More recently, the Privy Council in *Dominica Social Security Board v Nature Island Investment Company* observed:

> [T]he law recognises that when very large investment funds are available, the degree of risk acceptable to fiduciaries should to some extent be judged by reference to the entirety of the holdings in a diversified portfolio, rather than by reference to individual holdings.[35]

In a large portfolio of investments, trustees may be justified in putting a small percentage of the investments in speculative investments like cryptoassets.

How should trustees do a proper assessment of the cryptoasset?

Even if the circumstances of the trust and size of the portfolio justify investments in cryptoassets, the trustees must undertake the task of assessing whether the cryptoasset in question is in fact a prudent investment. The following questions need to be considered. Is this type of cryptoasset suitable in the first place? Which investment manager or expert on cryptoasset should the trustee consult? Is this an appropriate risk-to-reward ratio? Cryptoassets have their own specific risks and a number of these risks are considered below.

It is far more likely that trustees will either purchase tokens off a platform, or participate in an ICO. Trustees should be cognisant of the fact that ICO being essentially a start-up is statistically likely to fail. Trading tokens on a platform also carries its risks. Platform insolvencies carry the risk that the entire investment will be lost. The Mt. Gox bankruptcy in Japan demonstrates the importance of the legal domicile of the platform; under Japanese law,

33. [1985] Ch. 270 at 286–287.
34. [1988] (1996) 10(1) Trust Law International 113 at 115.
35. [2008] UKPC 19 at [31].

investors could not assert proprietary rights in the remaining cryptoassets.[36]

Exchange tokens also carry its own unique risks. The primary concern that trustees should have regarding investing in exchange tokens is their potential convertibility into national currencies. Exchange tokens are often illiquid and hence are difficult to convert into national currencies. Trading them for other tokens is relatively straightforward, but conversion back into a national currency may not be possible on a given trading platform, or may entail long wait times as the platform will rarely have enough cash to satisfy all persons who want to redeem. Stablecoins, which are linked to fiat currency or assets, may help mitigate this issue, but it is still too soon to tell if stablecoins will succeed given the significant regulatory challenges due to anti-money laundering concerns.

In terms of security tokens, these are functionally securities, and often will be regulated as securities. They can be treated as shares in a fund, or a loan, as appropriate; similar principles will apply. But one thing that trustees should consider is *how* any dividends or repayments will be made and what other rights are associated with the token—will they be paid in a national currency, or in other cryptoassets? Are they linked with an equity stake? All these will have an impact on the suitability of the token as an investment. Finally, in relation to utility tokens, these tokens allow one to access a service in the future. Trustees would have to tackle the following questions. What is the projected future demand for the service? How liquid is the market? Is the counterparty trustworthy? The investor is buying the hope that the service will be developed, and will be popular. This, quite obviously, carries additional risks as compared to commodity futures trading in a mature market, e.g. buying a future right to a barrel of oil.

Rees and Streisand suggest that a deep-dive on a particular cryptoasset investment being considered needs to be undertaken.[37] They propose that in evaluating an investment, the trustees need to consider *inter alia* the following questions: (a) What is the problem the cryptoasset is addressing?; (b) What is the proposed solution to the problem?; (c) Who is on the management team?; (d) How large is the market?; (e) Are there any existing competitors? (f) What is the business plan?; (g) How will investors see a return on investments? (h) How transparent is the management team?; and (i) How likely is the product to achieve critical mass? All these are certainly sensible questions in evaluating an investment into cryptoassets.

Settlor directing trustees to invest in cryptoassets or a wholly owned company owned by the trust investing in cryptoassets

Thorny issues may arise where there is a settlor reserved power of investment and the settlor directs the trustee to invest in cryptoassets. Should the trustees override the settlor's direction in appropriate circumstances or are the trustees absolved from all liability by following the settlor' direction? The trustees' liability in this context would depend on the law governing the trust. In some jurisdictions, trustees are not liable if they act in accordance with the exercise of the reserved power of investment.[38] However, in other jurisdictions, the legislation is not clear whether there is a residuary duty of supervision in the context of the settlor's reserved power of investment.[39] If such

36. See generally J Sarra & L Gullifer, ''Crypto-claimants and Bitcoin Bankruptcy: Challenges for Recognition and Realization'' (2019) 28 International *Insolvency* Review 233.

37. AF Streisand & JD Rees, ''Cryptocurrencies and Trustees Duties to Invest Prudently: Navigating Fiduciary Duties in the Age of Decentralization'' (2018) 24(3) California Trusts and Estates Quarterly 11 at 20.

38. See e.g. section 41X of Hong Kong's Trustee Ordinance (Cap 29).

39. See e.g. section 90(5) of Singapore's Trustees Act (Cap 337, 2005 Rev Edn) which merely provides that a reservation of power of investment by the settlor does not invalidate the trust. See also *Re Duke of Northumberland, decd* [1951] 1 Ch. 202 at 207 which suggests that the trustees have a residuary duty to consider whether an investment is a prudent one.

a duty of supervision exists, then it is incumbent on the trustees to override the settlor's directions if cryptoassets are not a suitable investment for the trust.

A similar problem may arise in the context of trust-owned companies investing in cryptoassets.[40] Most trust deeds contain 'anti-*Bartlett*' clauses in relation to shares of a company held on trust.[41] 'Anti-*Bartlett*' clauses ostensibly allow the trustees not to interfere with the management of the company even though the trust holds the majority of the shareholding of the company. What happens if the management of the company decides to invest in cryptoassets? Following the recent decision of the Hong Kong Court of Appeal in *Zhang Hong Li v DBS Bank (Hong Kong) Ltd and others*,[42] trustees may have a high-level supervisory duty to override the management of the company, despite an 'anti-Bartlett' clause and veto the investments into cryptoassets. If trustees do not do so, they may be in breach of this supervisory duty.

In terms of beneficiaries who request for trustees to invest in cryptoassets, this is an easier issue to deal with. As a general rule, a trustee is not bound to obey the instructions of the beneficiaries in a discretionary trust.[43] It is unlikely that a trustee will be penalised for being *too* cautious in this context even if the cryptoasset turned out to be extremely profitable. For the trustees to be liable, the trustees must be shown to have been negligent. A mere disagreement over investment strategy is likely not to be a form of negligence.

What are the steps the trustees should take to ensure that the trust assets are in proper custody?

One of the fundamental duties of trustees is that they should ensure that the trust assets are in proper custody.[44] In the context of cryptoassets, this concern is especially acute since access and transfer of the cryptoassets rely entirely on data strings which are known as 'private keys'. Once these 'private keys' are lost or stolen, access to the cryptoassets become next to impossible. There are two well-known examples of loss of ''private keys'' resulting in a corresponding loss of the cryptoassets. First, an Australian man inadvertently threw away his hard drive containing the 'private keys' to his bitcoins which was worth $80 million.[45] Secondly, a co-founder of a cryptocurrency exchange tragically died unexpectedly, leaving all his investors without access to the ''private keys'' to cryptoassets worth C$190 million.[46]

Hence, trustees who hold cryptoassets must be careful that their ''private keys'' are held safely. If the cryptoassets are on trading platforms, the selection of these platforms is critical—in the event of a hack or a collapse, the trustee must be able to justify why they originally chose that platform. The same issue is present if the cryptoassets are held in a digital ''wallet'' on the cloud; if there is a hack, trustees must be able to justify their decision. The custody of the ''private keys'' to cryptoassets must also be given a serious thought. For example, if the ''private keys'' are written on a piece of paper, there is a risk of loss or ''theft'' of the ''private keys''. Similarly, if the ''private keys'' are stored on a hard drive, there is the risk of hacking. Since the peril of loss of the ''private keys'' is an omnipresent danger, trustees should engage reputable technical experts to advise them on how to store the ''private keys'' to minimise such risk. Ideally, the ''private keys'' should be stored on ''cold storage'', i.e. kept in a form without Internet connection to prevent hacking risk. Additionally, the ''private keys'' should be accessible by more than one person. Where possible, the trustees

40. On trust owned companies see M Yip, 'Trust-owned Companies: Understanding the Trustee's Duties' (2017) 31 TLI 185.
41. These clauses are meant to overturn the effect of *Bartlett v Barclays Bank Trust Co Ltd* [1980] 2 WLR 430.
42. [2018] HKCA 435. The literature commenting on this case is voluminous. See e.g. the insightful analysis of T Graham and A Tan, 'Prudence in Practice: *Bartlett* and Beyond' (2019) *Trusts and Trustees forthcoming*. Cf. R Davern, 'Trustee Residual Obligation: Is There a Basis for It?' (2019) 25(3) *Trusts & Trustees* 285. See also *Appleby Corporate Services (BVI) Ltd v Citco Trustees (BVI) Ltd* [2016] WTLR 373.
43. *X v A* [2000] 1 All ER 490 at 496.
44. *Re Miller's Deed Trust* (1978) 75 LS Gaz 454.
45. A Sulleyman, ''Man Who 'Threw Away' Bitcoin Haul Now Worth over $80m Wants To Dig Up Landfill Site'' *The Independent*, 4 December 2017.
46. ''Quadriga Cryptocurrency Exchange Founder Filed Will 12 days Before He Died' *Bloomberg* (6 February 2019).

should also insure against the loss of the ''private keys''.

Trustees' exemption clauses

Trustees who invest in cryptoassets should also review their pre-existing exemption clauses in the trust deed to ensure that their liability is limited. The standard exemption clauses commonly found in trust deeds should adequately deal with such situations e.g. clauses exonerating the trustee from mistakes made or losses incurred in good faith. Sweeping trustee exemption clauses are already common in the professional trust industry and there should not be any need to go further than standard templates.

Conclusion

This article has explored trustees' investment duties in relation to cryptoassets. While cryptoassets are currently much talked about, trustees should approach investments in cryptoassets with extreme circumspection. Trustees who wish to invest in cryptoassets should ensure that the trust deed permits such investments and the circumstances of the trust and size of the trust portfolio justify such investment. In addition, for brave trustees who venture into this space, they would have to do the necessary due diligence in relation to cryptoassets and ensure that technical experts are engaged to advise them on how the ''private keys'' are to be kept.

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